



FIRE & SAFETY AUDIT REPORT OF ALL THE BULDINGS AT NABA DIGANTA

I



Fire and Safety Audit Report of all the Buildings at Naba Diganta

Volume I



Naba Diganta Industrial Township Authority

Firhad Hakim



MINISTER-IN-CHARGE
MUNICIPAL AFFAIRS DEPARTMENT
AND
URBAN DEVELOPMENT DEPARTMENT

GOVERNMENT OF WEST BENGAL
WRITERS' BUILDINGS
KOLKATA 700 001
Ph. No. : 2214 - 5497

Kolkata, the 12/02/2014
No. 24/MIC/2014(M)

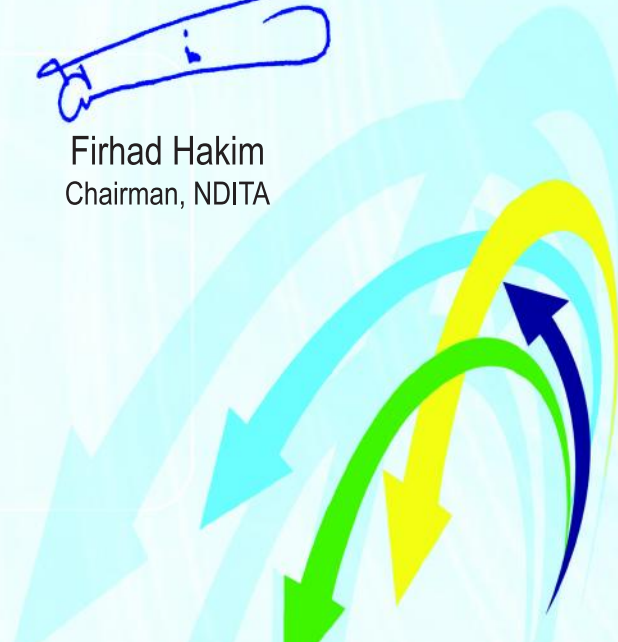


M E S S A G E

Fire in all kinds of buildings, residential or otherwise, has of late become a cause of serious concern in cities particularly because of increase in the number of high-rise buildings making attempts to contain it difficult. The alarming consequences have aroused considerable public interest about auditing fire-fighting arrangements in public and private buildings. Our Government under the able and dynamic leadership of the Hon'ble Chief Minister Mamata Banerjee is seized of the problem and NDITA has been the torchbearer in this regard by getting prepared with the help of professional agencies, useful fire-audit reports on all the buildings under the administrative jurisdiction of the Authority. It is a very commendable exercise of paramount importance in view of the character and activities of the Township. I understand it is the first of its kind in the country and, therefore, a matter of great pride for all of us. The painstaking efforts of the NDITA deserve deep appreciation.

I hope and trust that this innovative exercise will be a trend-setter in respect of tackling fire hazards in the country and would go a long way in motivating urban public agencies, including the constitutionalised local self-governing institutions in urban areas to emulate this model in their respective areas. I am sure that the NDITA will do its best to keep on updating the reports not only in terms of assessing the existing situation but also in terms of ensuring that the remedial actions suggested are being taken by the owners of the building so that the occurrence of fire can be prevented.

Firhad Hakim
Chairman, NDITA





Foreword

Some recent fire disasters led us in the Nabadiganta Industrial Township Authority to think radically. We realised that, sitting in this highly congested industrial township that Nabadiganta admittedly is, we must think afresh, and at once. The fire audit report that we present now is a result of the re-engineering of thought that we have triggered in our township.

It is a trend-setting study. Probably for the first time in history, an entire township, howsoever small, has organised its community will en bloc in order to survive better. Probably for the first time ever, 100% buildings of a town have subjected themselves to such a rigorous fire audit in order to evolve effective solutions.

We thank all the owners of the diverse buildings for co-operating with us in this elaborate fire audit which was spread over several weeks in each case. I thank Shri B N Kar, WBCS (Exe), Executive Officer, NDITA for effectively leading the team and the exercises.

Alapan Bandyopadhyay, *IAS*
(Vice-Chairman, Nabadiganta
Industrial Township Authority)



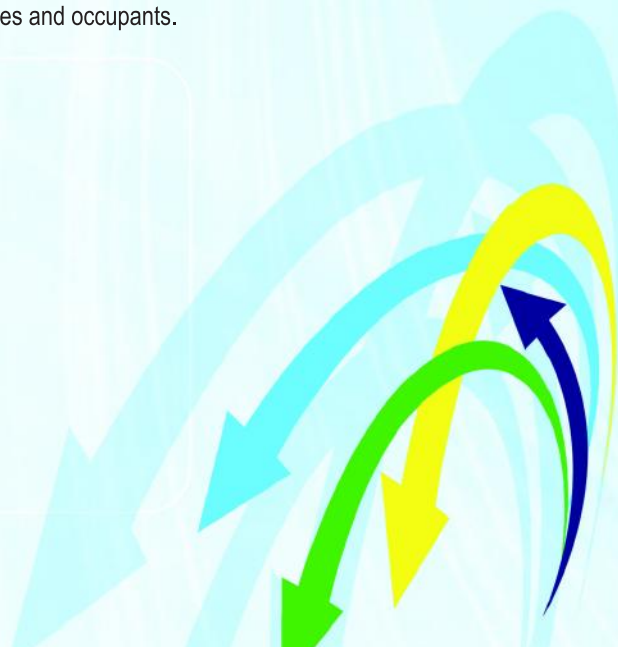


Introduction

Fire causes tremendous damage to human lives and property including flora and fauna. The victims of fire can either be individuals or organisations. It can take place at any point of time or at any space where people reside or offices are housed unless and until necessary and adequate preventive arrangements are taken in time. The damage it causes is more often enormous and irreparable. The magnitude of the problem can be reduced only when the structures are designed, constructed, equipped, maintained and operated with a view to saving the life and property of its occupants. In India, the 2005 version of the National Building Code (NBC) is regarded as the basic document on various aspects of building construction, which is followed by almost all parts of the country. NBC recommends for periodical fire safety inspection by the key personnel of the occupants of the building to ensure fire safety standards. In case of industrial buildings the statutory authorities insist for fire safety audits by external agencies depending on the type of activity and nature of materials handled in the buildings. The NBC as a whole is the basic model code for all other codes in the country and by and large most of the states and local bodies in India have adopted many of the code provisions in their own building regulations.

Fire Safety Audit which has received considerable attention in recent times, is an examination of the buildings/ structures and relevant documents to ascertain whether the building has been constructed in keeping with the NBC code, Indian standards and or in conformity with the rules, regulations, laws and bye-laws framed by the Central, State or Local governments . Broadly speaking Fire Safety Audit is done to :

- Identify all significant fire hazards.
- Identify the people who are at risk from each hazard.
- Evaluate the existing control measures.
- Determine the additional control measures required.
- Examine the availability of suitable emergency plan detailing responsibility and action of key personnel.
- Review the availability of suitable fire alarm and detection system.
- Review the availability of suitable fire fighting facilities, such as hydrants, sprinklers, extinguishers, etc.
- Evaluate passive fire protection systems provided.
- Evaluate the general awareness of occupants and security personnel on matters relating to fire safety and rescue operations.
- Evaluate the training and instructions on fire safety imparted to the employees and occupants.
- Testing of all fire safety equipments and systems.



Fire Safety Audit is widely regarded as an effective tool for assessing fire safety standards of an organization or occupancy. It helps the people to identify the areas for improvement and prepare a road map for necessary action. The audit findings are generally published in a report which also provides recommendations for remedial action to deal with non-compliance. Thus the fire safety audits enable us to identify any non-compliance(s) and/or provide recommendations to the client allowing them to attend to these matters and therefore seek to achieve compliance with relevant legislation. Evidently, the fire safety audits are not limited to a desk top review of available documentations or a visual inspection.

Initially Sector-V of the Salt Lake City covering an area of 432 acres earmarked for Small and Medium Enterprises was placed under the charge of Bidhannagar Municipality. The infrastructural arrangements were made to meet this requirement. Later on, the State Govt. decided to develop Information Technology Industry in this area and in this process Nabadiganta Industrial Township Authority (NDITA) was born for providing civic services and necessary infrastructures. In course of time many high rise buildings were constructed to house the offices of 600 companies & provide operational spaces to about 1 lakh employees.

Against this backdrop NDITA decided to conduct the Fire Safety Audit of all the buildings under its jurisdiction. The Authority engaged two professional agencies namely Cease Fire Extinguishers & Systems India Pvt. Ltd. and MS Certification Services Pvt. Ltd. to conduct the Fire Safety Survey. The survey involves a thorough checking of the structural aspects of the buildings and examination of the level of compliance with all legal requirements including installation, functioning and maintenance of fire safety devices.

The Fire Audit Report has been prepared on the basis of the fire risk analysis and the findings of the survey. Generally speaking, each of the reports contains the following :

1. Assessment and identification of potential risks arising out of Fire Hazards in the occupancy
2. Taking stock of existing fire & life safety measures implemented in the building, if any.
3. Ascertaining whether implemented safety measures are adequate vis-à-vis identified potential risk
4. Evaluation and recommendation of safety measures that need to be augmented and/or undertaken by the occupancy

Specifically, the report prepared for each building starts with an Executive Summary and is divided into six parts: Part I provides general information, security set up details, vehicles' volume, general maintenance, telephone towers etc. Part II presents a picture of occupancy load and part III details out provisions of means of escape. Part IV constitutes the core of the report as it deals with provisions of fire safety. Part V focuses on electrical arrangements and ventilation and part VI gives a lot of other information including remarks. The report ends with a summary sheet which is of special importance in the sense that it carries observations vis-a-vis recommendations.

The reports on each of the buildings are being communicated to the respective owners of the buildings for necessary actions at their end. The NDITA will keep on making its periodical inspection for updating its report about the buildings.

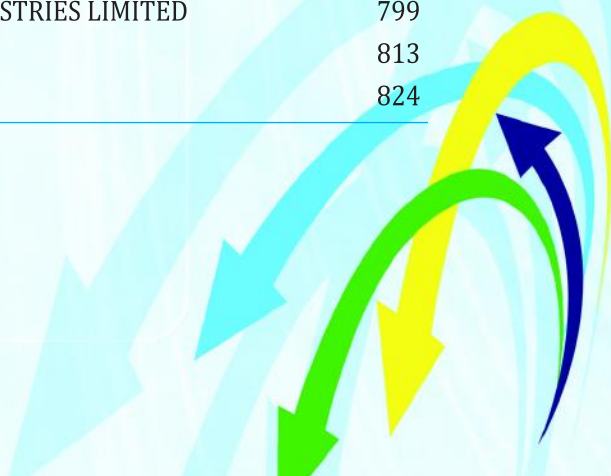
I acknowledge the supervision and guidance exercised by Shri Alapan Bandyopadhyay, IAS, Vice Chairman, NDITA in conceiving and formulating this work.

Badri Narayan Kar
Executive Officer, NDITA



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Scope of The Fire Survey



The scope of Fire risk analysis and survey would include the following

1. Assess & identify potential risks arising out of Fire Hazards in the occupancy
2. Checking of existing fire & life safety measures implemented in the building if any.
3. Ascertain whether implemented safety measures are adequate vis-a-vis identified potential risks
4. Suggest safety measures that needs to be augmented & undertaken by the occupancy
5. Verification of the measures that adopted by the building owners as per recommendation & submission of report thereafter.

The Consideration of assessment and evaluation of safety measures for the fire safety audit are existing code and standards of the following-

- ⊙ National Building code, part 4
- ⊙ National Fire Protection Association (NFPA), 101 Life Safety Code
- ⊙ NFPA13, Automatic water sprinkler system
- ⊙ NFPA72, National Fire Alarm & Signaling Code
- ⊙ NFPA25, water, Based fire protection
- ⊙ NFPA20, Stationary Fire Pumps
- ⊙ NFPA 58, Code for liquefied petroleum Gas (LPG)
- ⊙ Fire Protection Association, UK (FPA)
- ⊙ Recommendation of west Bengal Fire and emergency Services
- ⊙ Parameters that would be evaluated during the safety audit-
- ⊙ Existing Fire lode of building
- ⊙ Occupation fire lode of the building
- ⊙ Water requirement for fire fighting
- ⊙ Water base system requirement for the Occupancy
- ⊙ Mechanism requirement for early detection of fire hazard
- ⊙ Means of Egress required for evacuation in reference to calculate fire lode of the premises or unit
- ⊙ Means of Egress required for evacuation in reference to calculate fire lode of premises or unit
- ⊙ Mechanism present for Rescue operation in High rise occupancies including approach for fire vehicles
- ⊙ Status of electrical wiring including nature of Isolations present in the premises or individual occupants

OXFORD UNIVERSITY PRESS



EXECUTIVE SUMMARY

Part I & II

General Information

OXFORD UNIVERSITY PRESS is situated at Plots nos. A1 to A5 of Block GP, Sector V, Salt Lake, Kolkata 700091, The structure is G + 1 & built up area is 2646.9 sq.mtr., in total 2023.00 sq.mtr. of land.

Oxford University Press has storage of books facility (warehouse) on the ground floor, a mezzanine floor office and office in the 1st floor. They have a license to store 80 MT of books and 100 liters of diesel. The stock of books were found to exceed much more than 80 tons and blocked almost all exit routes, doors, emergency fire escape routes and the fire extinguishers,

The trade license no is 001893 dated 7.6.12 and is valid till 31.3.13

There is no central AC system in the building

The building plan was sanctioned vide memo no. V/BM/167R dated 20.9.2001 and the Clearance certificate was received on 7.12.2001 vide memo no. 4323(3) BM (P)

Last NOC from WBF & ES (Ref No WBFS/1785 dated 18.3.99). There after No Valid NOC is available. A license no 13011 under West Bengal Fire Services Act 1950, from Writers Building, Kolkata valid till 31.7.2012 duly applied for renewal on 6.9.2012 was also found.

Occupancy Load was found as

Existing -- 66 persons
Floating -- 25 persons

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two Staircases available. **There are no Lifts available.** There is no refuse area as the building is of G + 1 only.

No Evacuation Drill has been conducted so far.

There is Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers & wet risers, Sprinklers are provided only in the ground floor ware house and smoke detectors in the office only.

Wet Riser

There is an underground tank of 1,00,000 liter capacity for Fire only. There are two nos. pumps housed under the stair case. One pump capacity is 40 HP & that of Jockey pump is of 15 HP. **There is no spare pump available.**

Alternate source of water is the Water body approx. 500mtr away

NoPAS is available.

Close circuit TV monitoring is available and is monitored in Regional Manager's and Divisional Manager's room.

29 Nos. Portable fire extinguishers are found deployed near the staircase & in the working area.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

There is one 75 KVA DG supply is as alternate source of power. An UPS of 2 x 6 KVA systems is also available for the operation of computers only. The generator is operated manually

PART VI

OTHER INFORMATION

The building is insured with IFFCO TOKYO

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	A1 to A5, of Block GP	
2.	Premises Name (if any):	Oxford University Press	
3.	Name of the owner /occupier/lessee	Oxford University Press	
4.	Permanent Address	A1 to A5, Block GP, ,SectorV, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	MrNiloy Barat	
7.	Phone No of Contact Person	98831 93835	
8.	E-mail	Niloy.barat@gmail.com	
9.	Purpose of the Land Use (Office and godown)	Principal Use ☐	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
		IT/ITES	
10.	Plot Area(as informed to the Auditor)	2023.00sqmtr	
11.	Build up area(as informed to the Auditor)	2646.90 sqmtr	
12.	No of Floors	G + mezzanine + 1	
13.	Date of Sanction of Building Plan	☒ Yes ☐ No Date 20.9.2001 vide bldg plan sanction no V/BM/167R ☒ No Bidhan Nagar Municipality	
14.	Whether P.O.C/OC received from local body? Memo No: 4323(3)BM(P) dated 7.12.2001	Available	OC Issuing Authority Bidhan Nagar Municipality/NDITA Dated: 7.12.2001
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Bombay Intelligent Services	
16.	No of Security Personnel engaged	7 persons for 24 hours	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	YES	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	YES Monitored in Regional and Divisional Manager's rooms	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	Nil	
22.	No of Vehicles for which parking space is available in the premises	10	

23	Whether parking space available for visitors within the premises	Yes if available
24	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
25	Garbage Clearing	NDITA Garbage clearing system
26	Drainage System	Connected to NDITA Drainage system
27	Maintenance of Road	Internal road maintained by owner, and found satisfactory
TELEPHONE TOWER		
28	No of Towers	No of towers: NIL
29	Statutory Clearance from AAI	Not applicable
30	Any Other Clearance	Not applicable

PART - II

31	Occupancy load	(Attach floor wise details separately if required)			
	Existing	G	Mezzanine	1st	Total
	a)Regular	16	6	44	66
	b)Floating				25
32	Basement	NIL			

Part- III

Provisions of means of escape

33	Number of staircases --→ TWO Nos			
	Stairs Number		#1	#2
	a)	Width of flight	1850 mm	1420 mm
	b)	Tread width	280 mm	280 mm
	c)	Riser Height	150 mm	160 mm
	d)	Finish	Marble	Kota Stone
	e)	Width of stair door (FCD)(wooden door not FCD)	1090 mm	830
	f)	Height of stair head room	4572 mm	4572 mm
	g)	Height of stair handrail	890 mm	960 mm
	h)	Area & location & profile of Fire Refuge Area	NO Refuse Area	
	i)	Width and type of door leading to Fire refuge area	Not applicable	
	j)	Pressurization of staircase	No ☐	
	k)	Segregation of staircase	Yes ☐	
34	Number of Lifts installed→		Nil	
	Lift-Numbers		#	
	a)	Type of door	Not applicable	
	b)	Fire resistance rating	Not applicable	
	c)	Area of lift car	Not applicable	

	d)	Capacity (no of persons)	Not applicable
	e)	Capacity(in kg)	Not applicable
	f)	Company	Not applicable
	g)	Is communication system, installed in the lift car?	Not applicable
	h)	Is a fireman's switch being installed in the car?	Not applicable
	i)	Pressurization of lift	Not applicable
	j)	Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Not applicable
35		Presence of proper signage in all the exit route	Yes
36		Is it posted with illuminated signage?	Yes
37		Whether it is landing to fire assembly point?	No
38		Any form of Public address system available?	No
39		Width form of internal road within the Premises?	4000 mm
40		Width of the Entry / exit of Gate	3900 mm
41		Height of the Entry / exit of Gate	Open to sky

PART IV

Provision of Fire Safety Arrangement

42		Is any water reservoir for firefighting available ? (at ground level / overhead)	■Yes	U/G 1,00,000 ltr O/H 2 x 5000 ltr
	a)	If yes, specify the distance from the building		Adjacent to building
	b)	If yes, specify the capacity (in liters) as approved by WBF & ES.		None
	c)	Specify the condition of the reservoir		Satisfactory
43		Is any public or other water storage facility available nearby?	■Yes	■specify the distance from the building ----500Mtr.
	a)	Is it readily accessible?	■Yes	■condition and type of the reservoir—Water body
44		Are internal hydrants being provided ?	■Yes	Single
		If so, please indicate no of hydrants in each floor		■Double
45		Are first aid hose reels being provided ? If so please indicate	■Yes	■No of hose reels on each floor-----Two in each floor(both the stairs)
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	■Yes to the riser	■Bore and length of hose reel tubing on each reel----- 25 mm,30 Mtr
	b)	Size (bore) and type of nozzle fitted to each hose reel		5 mm, spray type
46		Are fire hoses being provided near each hydrant? If so, please indicate	■Yes	■Type of hose--Canvas ■Size of hose—63 mm ■Length of hose—15 mtr

	a)	Total no of hoses provided near each hydrant	One in hydrant point	
47		Have wet risers/dry risers been provided?	Yes ☐ wet riser	
48		If yes, please indicate the number of risers and internal diameter of each	One, 150 mm	
49		Has any down comer been provided? If so, please give details	No	
50		Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Yes	
	a)	Number of pumps	TWO, one main (40 HP), one jockey-15 HP	
	b)	Size of suction and delivery connection to each pump/Output/Head	■Suction:150 mm ■Delivery: 150 mm ■Output of each pump: 40ltrs/sec(main), 4 l/s (jockey) ■Max head against which the pump can operate at the output mentioned in—50 m	
	e)	Is the pump automatic in action?	Yes	
	f)	Is the water pressure sufficient at max distance from the pump?	Could not be assessed as no pressure gauge is found, also no air release valve also found	
51.		Sprinkler system	YES, only in ware house and not in office	
		Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	Yes	
	a)	Type of detectors used	Smoke detector, sprinklers	
52		Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	Yes ☐ But found not working	
	a)	Alarm receiving system	Yes	
53		Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	■Yes ■Yes 8.3.13	Number of FE Type/ Capacity DCP(5 Kg)- 13 DCP(10kg)- nos CO2(4.5kg) - 3 nos WaterCO2(50ltrs)- 9 nos Water CO2(9ltr)- 6nos ABC (5kgs) - 9 nos ABC (1kg) - 3 nos (Detailed statement is attached) 2 nos
		Location	Warehouse, 1 st Floor store, stair cases, lobby, kitchen, DG room, meter room, pump room, staff room	
54		Are Emergency Fire Alarm being provided in each floor?	■Yes _____	■No. of Fire Alarm –one in each floor ■Location of Fire Alarm— near stair case

55	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	■ Yes ☐ The security persons are trained and records for training verified
56	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min. twice a year)?	■ Yes ☐ last training was done on 20.11.12
57	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available
58	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available
59	Status of NOC from WBF&ES	NOC valid upto 17.3.2000 vide memo no. WBFS/1785 dated 18.3.99, applied for renewal on 28.1.2011, no inspection or any intimation from WBF&ES received till date.

Part-V

Electrical, Cables and Ventilation

60	If the building is Centrally air -conditioned, please indicate,	■ No Central AC
	a) Material used for construction of ducts and its fittings	Not applicable
	b) Type of tinning used for ducts	Not applicable
	c) Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d) How the lagging is secured?	Not applicable
	e) If false ceiling is there?	Not applicable
	f) Material used for false ceiling	Not applicable
	g) Is a separate AHU being provided in each floor	Not applicable
	h) Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i) Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j) Will fire dampers be provided in AC duct?	Not applicable
61	Is there any standby source of electric supply being provided?	■ Yes ☐ ■ No DG 75 KVA Capacity UPS ☐ 2 x 6 KVA
	Is the back supply automatic?	■ Yes Specify the functions that can be maintained simultaneously by such back ups ■ Fire Pump ☐ ■ Emergency Light ☐ Offices
62	Location of switch- gears and transformers	No transformer installed

63	a)	Transformer capacity	Not applicable
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable
	c)	If outside, how far is it from the building?	Not applicable
64		What precautions are taken to prevent a possible fire in the transformers from spreading?	Not applicable
65		Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	No ducting found cables pass through concealed wiring
66		Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	NO
67		Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
68		Whether natural ventilation is relied upon? If so, give details.	Yes
69		Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	YES
70		Whether mechanical ventilation is being coupled with automatic detection system?	NO
71		Whether the refuge area is being provided?	No refuse area
72		Storage of combustibles materials near electrical equipment/fuse units.	Yes
73		RCCBs available??	No
74		Master switch in warehouses	NO, there are four MCBs in the warehouse which is switched off by the security stall after the warehouse is closed
75		Proper cable joint procedures as per manufacturer	Yes
76		Earthing Pit Tested??	Records are not available
77		Use of MCB??	Yes
78		Bypassing of protection devices	NO
79		Deteriorated insulation	NO
80		Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
81		Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	NO- not done in Cable shaft
82		Tracking possibility	Yes
83		Unused opening in the panels, etc.	No
84.		Possibility of ground fault/short circuit	No
85.		Mechanical protection to cables	Yes
86.		Loose terminations due to improper supports, crimping	NO
87.		Improper gland installation, wrong lug size	NO
88.		Over-rated uses, wrongly set protection relays, etc.	NO

89.	Condition of lightning arrestor	No lightning arrestor found
90.	Periodic testing of UPS system (as applicable)	Yes done by the supplier
91.	Earthing layout & it's effectiveness	Yes but Earth pit test report not found
92.	Switch yard and sub station	No
93.	Approval of receiving station, substation and DG	No
94.	DG operation and maintenance	Yes
95.	Reliability of the fire hydrant system	Yes
96.	Emergency preparedness and response	NO
97.	Availibility of Evacuation plan	No
98.	Mock drill conducted??	Yes
99.	Awareness of the people??	Yes
100.	Sample basis validation of smoke detection system??	NO
101.	Storage if hazardous material, chemicals??	YES
102.	Use of signage??	Yes
103.	Hydrants clear, access to public thorough fare open	NO
104.	Flame & work permits (as applicable)	No
105.	Effective internal communication and public address system	No
106.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
107.	Management structure, role of safety officer, fire department etc.	NO
108.	Procedure for incident investigation and control	NO

PART- VI

Other Information

109	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	■Yes□	■Deviation from WBF&ES NOC
110	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	The ware house ,the stair cases, the mezzanine floor, exit areas	
	Is Trade License available??	YES. Enlistment for 2012-2013 no 001893 dt 07.6.12	
111	Name of the Insurance Company	Yes, by IFFCO TOKYO	
112	Remarks (if any) 1. No Evacuation drill has been conducted 2. There is no spare fire main pump 3. Escape route Passage is blocked on the fire escape route from ware house due to storage of books 4. Fire extinguishers kept in the ware house are inaccessible as they are blocked by books stacked. 5. Both the stair cases are blocked due to storage of books 6. The wet riser is not fitted with air release valve and pressure gauge on the top floor 7. No stand by pump is provided 8. Smoke detectors are not installed on the ware house 9.No evacuation plan displayed The NOC from WBF&Es has expired on 2000 but was applied for renewal on 28.1.11. 11Storage of books is surpassing the licensed capacity and has overflowed the warehouse And are found in the staircases,exit passages, the mezzanine floor and almost everywhere.		

Reviewer

Auditor

Signature & date of Inspecting and Reporting Authority With seal

NDITA

Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	The storage of books are much beyond the permissible and accomodating limit 	Quantity of books stored must not surpass the licensed limit
2	No Evacuation drill has been conducted	Evacuation drill is to be conducted periodically with all occupants. Record is to be maintained
3	There is no spare fire main pump	Spare Fire pump is to be installed
4.	The wet riser at its maximum height is not provided with air release valve and pressere gauge 	Both must be installed in both the risers
5	Glass breakers are missing in a number of MCPs 	Same to be provided
6.	Fire extinguishers are not approachable due to improper storing of books 	Books not to be stored in front of extinguishers

7.	Exit (fire escape route) is blocked	Exit route to remain free from any obstructions
8.	Both the stairs are blocked with books	Staircases must be kept free from any instructions
9.	No lightning conductor found	Same to be provided
10.	No master switch is installed in warehouse	Same to be provided
11.	The driveway is blocked by the construction of a temporary pandal for storage of excess books	The driveway must be kept free

Reviewer

Auditor

Signature & date of Inspecting and Reporting Authority With seal

BENGAL INTELLIGENT PARK



EXECUTIVE SUMMARY

Part I & II

General Information

Bengal Intelligent Park is situated at A2,M2,N2, Block EP & GP, Sector V, Salt Lake, Kolkata 700091 ,The plot has five buildings, one B + G + 18 called Omega, two G + 4 called C & D and two G + 3 caled A & B & built up area is approx. 947631 sq., in total 5.036 acres of land.

The Omega Building has a basement accommodating the generators, chiller plant for central ACs and the pump room. The ground floor has the transformers, reception and lobby. In the first floor there are shops, showrooms and some office. Two escalators are being provided between the ground floor and 1st. floor. The 2nd, 3rd. & 4th. Floors are utilized as parking place and 5th to 18th floor is rented to different companies. A, B, C and D buildings is rented to companies from the 1st floor to the 3rd or 4th floors. The pump room of the buildings A, B, C& D is separate and is situated underground with a positive pressure between the space of building A,B and C,D. in the Ground floor .The ground floor of all the buildings are generally vacant and has an occupancy of about 20 persons.

The building plan of A was sanctioned on 20.12.99 and 20.12.2000, B was sanctioned on 31.3.2000 and 27.9.02, C was sanctioned on 13.0.01, D was sanctioned on 7.6.05 and Omega was sanctioned on 20.7.06.

There is a refuse area for Omega at the 7th, 10th and 14th floors. No refuge area is provided for buildings A, B, C and D.

There are six identical staircases in Omega, two identical in A, two in B, two in C and two in building D.

There are twelve passenger lifts and two service lifts, and two escalator (between ground floor and 1st.Floor) in Omega. Buildings A &B has each two lifts and building C & D has two passenger lifts and one service lifts each.C forms for all the lifts are available.

There is no central **AC system** in the buildingA, B, C & D. Omega building is fully centrallised AC.

CC obtained directly from Bidhan Nagar Municipality copies for which are attatched.

NOC from WBF&Es is available and is valid till 7.8.13

Occupancy Load as on audit date was found as

Existing -- 6625 persons

Floating - 250 persons

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are a total of six staircases in Omega building and total eight staircases in buildings A, B, C and D (two in each). There are fourteen lifts in Omega and eight lifts in building A, B, C and D (two in each).

Evacuation Drills, and mock drills are conducted regularly ..

There are Signages available in all the EXIT Routes.

Refuge area is provided on the 7th, 10th, and 14th floors of Omega building only

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is wet riser, sprinkler, smoke detectors& portable fire extinguishers. Beam detectors are present in the parking spaces in the place of smoke detectors.

Wet riser

There is an Under- ground fire tank of 2,80,000 ltr capacity beside the Omega building and 4,00,000 ltrs capacity beside building A,B,C and D. There is a main pump of 150HP a stand by Diesel operated main pump of 149 HP & a jockey pump of 30 HP capacity for building the pressure in the pipe line of Omega Building. The other buildings A, B, C and D have a separate fire pump room having a main pump of 120 HP, diesel standby of 120 HP, and the pressure is maintained by a jockey pump of 15 HP. The pressure at the ground floor of Omega was found about 12 kgs/sq.cm. And that of A,B,C and D was 8 khs/sq cm.

A high velocity water spray type of Sprinkler system is already installed in all the floors.

Alternate source of water is the Water body approx 500 mtr away

Buildings is equipped with Fire detection system like smoke detectors

Total 156Nos Portable fire extinguishers are found deployed throughout the buildings A,B,C&D and 341 nos in Omega Building

Refuge Areas:Three refuge areas are provided in Omega building on the 7th, 10th and 14th floors. There are no refuge area in building A,B, C abd D.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB but RCCB are present in the distribution board on individual floors

Generally no combustible material is stored in the premises, near the Electrical installation

There are eight DGs (1250 KVA X 5 nos. & 1500 KVA x 3 nos.) for Omega building and two DGs for building A and B (250 KVA x 2 nos.) and two DGs for building C and D (400 KVA x 2 nos.) as an alternate source of supply

PART VI

OTHER INFORMATION

Three gas banks are found in the ground floor.

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	A2,M2,N2 of Block EP & GP																			
2.	Premises Name (if any):	Bengal Intelligent Park There are five buildings in this plot <table border="1"> <thead> <tr> <th>Bldg</th> <th>Name</th> <th>No of floors</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Omega</td> <td>B + G + 18</td> </tr> <tr> <td>2.</td> <td>AG + 3</td> <td>B</td> </tr> <tr> <td>3.</td> <td>G + 3</td> <td>C</td> </tr> <tr> <td>4.</td> <td>G + 4</td> <td>D</td> </tr> <tr> <td>5.</td> <td></td> <td>G + 4</td> </tr> </tbody> </table>		Bldg	Name	No of floors	1.	Omega	B + G + 18	2.	AG + 3	B	3.	G + 3	C	4.	G + 4	D	5.		G + 4
Bldg	Name	No of floors																			
1.	Omega	B + G + 18																			
2.	AG + 3	B																			
3.	G + 3	C																			
4.	G + 4	D																			
5.		G + 4																			
3.	Name of the owner /occupier/lessee	Bengal Intelligent Park																			
4.	Permanent Address	A2,M2,N2, EP&GP, Sector V, Salt Lake, Kolkata 700091.																			
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold																			
6.	Name of the Contact Person	Mr. Samir Sur																			
7.	Phone No of Contact Person	9830107874																			
8.	E-mail	Samir.sur@tcgre.com																			
9.	Purpose of the Land Use	<table border="1"> <tr> <td>Principal Use ☐</td> <td>Residential</td> </tr> <tr> <td>Mixed Use</td> <td>Educational</td> </tr> <tr> <td></td> <td>Institutional</td> </tr> <tr> <td></td> <td>Assembly</td> </tr> <tr> <td></td> <td>Business</td> </tr> <tr> <td></td> <td>Mercantile</td> </tr> <tr> <td></td> <td>Industrial</td> </tr> <tr> <td></td> <td>Storage</td> </tr> <tr> <td></td> <td>IT/ITES ☒</td> </tr> </table>		Principal Use ☐	Residential	Mixed Use	Educational		Institutional		Assembly		Business		Mercantile		Industrial		Storage		IT/ITES ☒
Principal Use ☐	Residential																				
Mixed Use	Educational																				
	Institutional																				
	Assembly																				
	Business																				
	Mercantile																				
	Industrial																				
	Storage																				
	IT/ITES ☒																				
10.	Plot Area(as informed to the Auditor)	5.063 acres																			
11.	Build up area(as informed to the Auditor)	88037.8007 sq.m.																			
12.	No of Floors	Bldg. 1 – B + G + 18 (Omega) Bldg 2 -- G + 3 (A) Bldg 3 - G + 3 (B) Bldg 4 - G + 4 (C) Bldg 5 - G + 4 (D)																			
13.	Date of Sanction of Building Plan	■Yes ☒ Date- Bldg 1- Omega – 20.7.06 Bldg 2 -A – 20.12.99 & 20.12.2000 Bldg 3- B – 31.3.2000 & 27.9.02 Bldg 4 – C – 13.9.01 Bldg 5 – D – 7.6.2005 ■No																			

14.	Whether P.O.C/OC received from local body?	■ Yes ✓	OC Issuing Authority Bidhan Nagar Municipality□/ NDITA Dated:Bldg 1 Omega – 22.1.2008 Bldg 2 A – 3.1.2001 Bldg 3 B – 22.10.2002 Bldg 4 C – 19.6.2004 Bldg 5 D –15.6.05
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	S & I B and GS4	
16.	No of Security Personnel engaged	7 + 16 per shift x 3 shifts	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	Yes	
19.	Whether Metal detectors are used at the entry point	Yes	
20.	Whether Monitoring System through Close circuit TV available	Yes	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	10	
22.	No of Own Vehicles engaged by Employees		
23.	No of Vehicles for which parking space is available in the premises	106 x 3 in 2 nd , 3 rd &4 th floor and 100 in the open space = Total 418	
24.	Whether parking space available for visitors within the premises	Yes as per the allotted spaces to the rented clients , the visitors are allotted space for parking by the clients	
25.	Place where excess vehicles (if any) are parked	Outside the building	
GENERAL MAINTENANCE			
26.	Garbage Clearing	NDITA garbage clearing system	
27.	Drainage System	Connected to NDITA drainage system	
28.	Maintenance of Road	Internal road is maintained by the owner and the condition of the road was found satisfactory	
TELEPHONE TOWER			
29.	No of Towers	NIL	
30.	Statutory Clearance from AAI	Not Applicable	
31.	Any Other Clearance	Not Applicable	

PART - II

32.	Occupancy load	(Attach floor wise details separately if required)																			
	Existing Bldg 1 - A	G	1		2		3		Total												
	a)Regular	4	150		150		150		454												
	b)Floating	50																			
	Existing Bldg 2 - B																				
	a)Regular	4	150		150		150		454												
	b)Floating	50																			
	Existing Bldg 3 - C	G	1	2	3	4	Total														
	a)Regular	4	150	150	150	100	554														
	b)Floating	50																			
	Existing Bldg 4 - D																				
	a)Regular	4	150	150	150	100	554														
	b)Floating	50																			
	Existing	B	G	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	a)Regular	5 4 150 V VV (300 per floor from 5 th to 18 th) Total - 4359)																			
	b)Floating	50																			

Provisions of means of escape

33.	Number of staircases --→Six identical stair cases in Omega, and eight in A,B,C and D (all identical)					
	Stairs Number		#1(omega) 6 nos		#2 for A, B, C & D- 8 nos(2 for each bldg)	
	a)	Width of flight	1880 mm		1550 mm	
	b)	Tread width	320 mm		310 mm	
	c)	Riser Height	160 mm		150 mm	
	d)	Finish	Kota Stone		Mossaic	
	e)	Width of stair door (FCD)- NOT FCD- wooden	1140 mm		1000 mm	
	f)	Height of stair head room	4572 mm		2440 mm	
	g)	Height of stair handrail	990 mm		840 mm	
	h)	Area & location & profile of Fire Refuge Area	7 th , 10 th and 14 th floor of Omega Area- 23.18 sq m each			
	i)	Width and type of door leading to Fire refugee area	1430 mm, Glass Door			
	J)	Pressurization of staircase	Yes		No	
	k)	Segregation of staircase	Yes		No	

34.	Number of Lifts installed→Omega has 12 passenger and 2 service lifts, A & B has 2 lifts each, C & D has 2passenger and 1 service lifts each – Total 24 nos							
	Lift-Numbers		# 23 & # 24	#1to #6	#7 to 12	#13 &#14	#15 to# 18	#19 to #22
	a)	Type of door	Metallic	Metallic	Metallic	Metalli c	Meta llic	Meta llic
	b)	Fire resistance rating	2 hrs	2 Hrs	2 Hrs	2 hrs	2 hrs	2 hrs
	c)	Area of lift car	900mm x 1260mm	2000 mm X1300 mm	1490mm x 1570 mm	910mm x1200 mm	1870m mx105 0mm	1650 mmx 1200 mm
	d)	Capacity (no of persons)	5	17	15	6	13	13
	e)	Capacity(in kg)	340	1156	1020	408	884	884
	f)	Company	Otis	OTIS	Mitsubitsi	Otis	Kone	Otis
	g)	Is communication system, installed in the lift car?		Yes	yes	yes	Yes	Yes
	h)	Is a fireman’s switch being installed in the car?		Yes	yes	Yes	Yes	Yes
	i)	Pressurization of lift		NO	no	No	No	No
	j)	Whether validity of “Form-C” from appropriate authority obtained? (If yes, attach a photocopy of the same)		Yes Valid upto 17.5.13	Yes valid upto 18.3.13	Yes Valid upto 6.8.13	Yes valid upto 6.5.13	Yes valid upto 23.5.13
35.	Presence of proper signage in all the exit route				Yes			
36.	Is it posted with illuminated signage ?				Yes			
37.	Whether it is landing to fire assembly point?				Yes			
38.	Any form of Public address system available ?				Yes			
39.								
40.	Width form of internal road within the Premises ?				6000 mm			
41.	Width of the Entry / exit of Gate				6900 mm			
42.	Height of the Entry / exit of Gate				Open to sky			

PART IV

Provision of Fire Safety Arrangement

43.	Is any water reservoir for fire fighting available ? (at ground level / over head)		■Yes	U/Gfor Omega 2,40,000 ltrs for A,B,C & D – 4,00,000 ltrs O/H For A- 25000ltrs B – 25000ltrs, C – 15000 ltrs,D- 15000 ltrsOmega – 20000 + 30000 ltrs
	a)	If yes, specify the distance from the building	8 metres	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	As approved by WBF&ES	
	c)	Specify the condition of the reservoir	satisfactory	
44.	Is any public or other water storage facility available nearby ?		Yes	■specify the distance from the building ---500mtr
	a)	Is it readily accessible ?	Yes	■condition and type of the reservoir --- Water body
45.	Are internal hydrants being provided ?		Yes	■single or twin outlets. --Single outlet
	If so, please indicate no of hydrants in each floor		■single ✓ ■Double	
46.	Are first aid hose reels being provided ? If so please indicate		Yes	■No of hose reels on each floor --one
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	■Bore and length of hose reel tubing on each reel --25mm, 30 mtr
	b)	Size (bore) and type of nozzle fitted to each hose reel	10 mm, SprayType	
47.	Are fire hoses being provided near each hydrant? If so, please indicate		■No Kept in separate store room for theft	■Type of hose-- Canvas ■Size of hose --- 63 mm ■Length of hose—15 mtr
	a)	Total no of hoses provided near each hydrant	No hoses are found	
48.	Have wet risers/dry risers been provided?		Yes✓ Wet Riser	No
49.	If yes, please indicate the number of risers and internal diameter of each		Omega- 6 risers for sprinkler & 6 risers for hydrants- 150 mm dia. For A,B,C &D one for sprinkler and one for hydrant each- 150 mm dia	
50.	Has any down comer been provided? If so, please give details		No	
51.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes	
	a)	Number of pumps	For Omega- Main pump 150 HPfor hydrant, 150 HP for Sprinkler, Jockey 30 hp,Diesel Stand by common for boyh hydrant and	

60.	Status of NOC from WBF&ES	Memo no.WBFS/DG/FP/2103/12/24Pgs/B2/98(12 4/98) dated 8.8.12 valid upto 7.8.13

Part-V

Electrical, Cables and Ventilation

61.	If the building is Centrally air -conditioned, please indicate,		Omega Yes✓ A,B,C & D - No	
	a)	Material used for construction of ducts and its fittings	GI sheets	
	b)	Type of tinning used for ducts		
	c)	Type of lagging used, if any for insulating any portion of the duct	Glass wool	
	d)	How the lagging is secured?	By refractory material	
	e)	If false ceiling is there?	Yes	
	f)	Material used for false ceiling	Gypsum Board	
	g)	Is a separate AHU being provided in each floor	Yes	
	h)	Whether automatic shutdown of AHU is coupled with detection system?	Yes	
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Yes	
	j)	Will fire dampers be provided in AC duct?	Yes	
62.	Is there any standby source of electric supply being provided?		Yes ✓	DG Omega- 1250KVA x 5 nos, 1500KVA x 3 nos A&B- 250 x 2 nos C&D- 400 x 2 nos Capacity UPS Capacity
	Is the back supply automatic?		Yes	Specify the functions that can be maintained simultaneously by such back ups ■ Fire Pump✓ ■ Emergency Light✓ ■ Lift✓ offices ACs and all
63.	Location of switch- gears and transformers		Inside the building with separate compartments	
64.	a)	Transformer capacity	Omega- 2500KVA x 4 nos, A,B,C&D – 1250KVA x 4 nos All are dry type	
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Yes with 15 inches RCC wall	
	c)	If outside, how far is it from the building?	NA	
65.	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Fire extinguishers CO2 type and sand buckets, Auto CO2 extinguishers are not provided	

66.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Not sealed but ducts are situated outside the building in the staircases	
67.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	No	
68.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	No	
69.	Whether natural ventilation is relied upon? If so, give details.	Yes	
70.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No	
71.	Whether mechanical ventilation is being coupled with automatic detection system?	Not Applicable	
72.	Whether the refuge area is being provided?	Yes	■On which floor— 7th,10th& 14th ■Area of Fire Refuge Area 23.18 sq,m each ■Width of Fire Refuge Area 3m
73.	Storage of combustibles materials near electrical equipment/fuse units.	No	
74.	RCCBs available??	Yes	
75.	Master switch in warehouses	Not applicable	
76.	Proper cable joint procedures as per manufacturer	Yes	
77.	Earthing Pit Tested??	Yes, report enclosed dated 6.1.13	
78.	Use of MCB??	Yes	
79.	Bypassing of protection devices	No	
80.	Deteriorated insulation	No	
81.	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes	
82.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No	
83.	Tracking possibility	No	
84.	Unused opening in the panels, etc.	Yes some are found in the gardens	
85.	Possibility of ground fault/short circuit	No	
86.	Mechanical protection to cables	Yes	
87.	Loose terminations due to improper supports, crimping	No	
88.	Improper gland installation, wrong lug size	No	
89.	Over-rated uses, wrongly set protection relays, etc.	No	
90.	Earthing layout & it's effectiveness	Yes	
91.	Switch yard and sub station	Yes	
92.	DG operation and maintenance	Yes	
93.	Reliability of the fire hydrant system	Yes	

94.	Emergency preparedness and response	Yes
95.	Availibility of Evacuation plan	Yes
96.	Mock drill conducted??	Yes conducted on 5.1.13
97.	Awareness of the people??	Yes
98.	Sample basis validation of smoke detection system??	Yes
99.	Storage if hazardous material, chemicals??	Yes three gas banks are present
100.	Use of signage??	Yes
101.	Hydrants clear, access to public thorough fare open	Yes
102.	Flame & work permits (as applicable)	Yes
103.	Effective internal communication and public address system	Yes
104.	Colour coding system of hazardous chemical gas lines etc.	No
105.	Management structure, role of safety officer, fire department etc.	Yes
106.	Procedure for incident investigation and control	Yes

PART- VI

Other Information

107.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes	■Deviation Yes given in observation
108.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	Yes the three gas banks	
109.	Is Trade License available??	Valid upto 2011-2012 not renewed	
110.	Name of the Insurance Company	Larsen &Tubro	
111.	Remarks (if any) 1. Bengal Intelligent Park was found to be a well maintained, suitably manned building .Though the ducts of the risers are not sealed, it (ducts) passes outside the building in the stair cases. 2. The Trade License was not found valid and had expired on 2012 3. Approval for DG and Transformer were available 4. Valid fire licenses for the gas banks were not available 5. Earth pit and lightning conductor tests report were found between 1.6 and 2.1 ohms		

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	Trade license has expired	To be renewed
2	The gas bank licenses are not available	Lapsed licenses are to be renewed and LPG leakage detectors must be installed .
3	No fire extinguishers are found in the lobby and car parking area of Omega Building	Same to be provided
4.	Some electrical joint boxes are found open in the garden area of ground floor	The joint boxes should be properly closed and open wires taped
5.	Transformer and switch gear room is not equipped with Automatic Co2 or DCP extinguishers (deviation with the NOC from WBF&Es)	Same to be provided
6.	The basement is being used other than car parking and chiller plant – it has Generators, Electrical Panel rooms and pump house (deviation with the NOC from WBF&Es)	Permission to be taken from WBF&Es or to be shifted elsewhere
7.	Fire check doors are not provided in A,B,C& D buildings	Same to provided

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

TECHNO INDIA GROUP



EXECUTIVE SUMMARY

Part I & II

General Information

Techno India Group is situated at Block-EM 2, Sector V Salt Lake City Pin-700091. It has two buildings, one is Regioman building, the other is Coromoman building. Though structures are G+1 & G +1, but the Regioman & Coromoman buildings are 3 storied inside with the iron structure.. The built up area is approx. 21000 Sq.Mtr in total land area of 2.5 Acre.

The Coromoman buildings has been totally renovated & they started taking possession 3 days back. The total firefighting system is being installed again. At present practically no smoke detector, MCP, Wet riser at present. All are being installed including new intelligent panel along with old panels.

In the Regioman Building Fire systems are found working satisfactorily

The company is in the business of Newspaper publication. In the Regioman Processing building Newspaper processing is on. In the Coromoman building there are paper store & offices. 1st floor is having offices & canteen. In the 2nd floor water cooling is being done

Clearance Certificate from NDITA is not available

Provisional NOC Received from WBF & ES on 30.11.12.

Estimated Occupancy Load was found as

	Existing -- 150
Floating -- 10	

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

In the Regioman building there are three nos. Staircases & Two Nos. goods lifts are available. In the Coromoman building there are three nos. Staircases & Two Nos. goods lifts are available

Evacuation drill/mock drill have been founded conducted in last Sept 2012.

Signage found inadequate in the Coromoman building.

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises are portable fire extinguishers& wet risers, Sprinklers & smoke detectors& MCPs

Wet riser, Sprinklers, are being installed in the Coromoman building.

Wet Riser

There is a Fire water tank of 10,00,000ltr capacity. There are Fournos pumps. Main pump capacity is 55kw & that of Jockey pump is of 11kw. Diesel stand by pump is of 75 KW

Alternate source of water is the Water body approx 1000 mtr away from the building.

PAS is not available Except in the regioman building where there is a PAS for Newspaper processing purpose.

Close circuit TV monitoring is being installed

109Nos Portable fire extinguishers are found deployed at the staircase ,Sub-station, offices& at production floor

PART V

ELECTRICAL FIRE HAZARDS

There are ELCB& RCCB at the distribution board of each floor.

Generally no combustible material is stored in the premises ,near the Electrical installation

There are 2 Nos D-G sets available. Transformer & switch gear are out side the building.

No Auto Co2 fire extinguisher found in the Transformer& switch gear room. Except standalone fire extinguisher

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EM 2	
2.	Premises Name (if any):	Times of India	
3.	Name of the owner /occupier/lessee	TIMES OF INDIA GROUP	
4.	Permanent Address	EM 2,SectorV, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/ Any other	Leasehold	
6.	Name of the Contact Person	Mr.SHIVAJI SEN	
7.	Phone No of Contact Person	98300 61492	
8.	E-mail	Shivaji.sen @ timesgroup.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
		IT/ITES	
10.	Plot Area(as informed to the Auditor)	2.5 Acre	
11.	Build up area(as informed to the Auditor)	21000Sq.mtr	
12.	No of Floors	G+1(Regioman) & G + 1 (Coromoman)	
13.	Date of Sanction of Building Plan	Not available	
14.	Whether P.O.C/OC received from local body?	Not available	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	ROYAL Securities	
16.	No of Security Personnel engaged	31	
17.	Whether Records of Vehicles (No & type entering into the building are kept	YES	
18.	Whether records of Visitors entering into the building are kept	Yes	
19.	Whether Metal detectors are used at the entry point	Yes.	
20.	Whether Monitoring System through Close circuit TV available	NO but it is being Reinstalled	

VEHICLES VOLUME		
21.	No of Vehicles Engaged by the Organisation	One
22.	No of Vehicles for which parking space is available in the premises	40
23.	Whether parking space available for visitors within the premises	yes
24.	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
25.	Garbage Clearing	NDITA Garbage clearing system
26.	Drainage System	Connected to NDITA Drainage system
27.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	Not applicable
30.	Any Other Clearance	Not applicable

PART - II

31.	Occupancy load	(Based on Estimates on max no in a day)		
	Existing	G	1	Total
	a)Regular	40	110	150
	b)Floating			10
32.	Basement	NIL		

Part- III

Provisions of means of escape

33.	Number of staircases - ->TWO Nos		REGIOMAN building			COROMOMAN Building		
	Stairs Number		#1	#2	#3	#1	#2	#3
	a)	Width of flight (mm)	1400	1150	1000	1020	1320	1010
	b)	Tread width (mm)	260	250	240	260	240	240
	c)	Riser Height (mm)	130	140	180	180	180	170
	d)	Finish	Marble	Iron	Iron + Cement	Iron	Iron	Iron
	e)	Width of stair door (FCD) (mm)	NIL	NIL	NIL	NIL	NIL	NIL
	f)	Height of stair head room (Ft)	10	open	10	10	10	10

	g)	Height of stair handrail (mm)	840	780	840	780	870	870
	h)	Area & location & profile of Fire Refuge Area	NIL					
	i)	Width and type of door leading to Fire refugee area	NIL					
	J)	Pressurization of staircase	No					
	k)	Segregation of staircase	Yes					
34.	Number of Lifts installed→ 4 nos GOODS LIFTS		REGIOMAN building			COROMOMAN Building		
	Lift-Numbers		#1	#2	#3	#4		
	a)	Type of door	Collapsible Both sides	Collapsible Both sides	Collapsible Both sides	Collapsible Both sides		
	b)	Fire resistance rating	NA	NA	NA	NA		
	c)	Area of lift car	3000 mm X 1440 mm	3000 mm X 1440 mm	3000 mm X 1440 mm	3000 mm X 1440 mm		
	d)	Capacity (no of persons)						
	e)	Capacity(in kg)	3000	3000	3000	3000		
	f)	Company	DattarEngg consultant	DattarEngg consultant	DattarEngg consultant	DattarEngg consultant		
	g)	Is communication system, installed in the lift car?	NO	NO	NO	NO		
	h)	Is a fireman's switch being installed in the car?	NO	NO	NO	NO		
	i)	Pressurization of lift	No	NO	NO	NO		
	j)	Whether validity of "Form-C" from appropriate authority obtained?	Not available	Not available	Not available	Not available		
35.	Presence of proper signage in all the exit route		In the Regioman Building Signage are available. But there is no signage available in Coromoman building					
36.	Is it posted with illuminated signage ?		No					
37.	Whether it is landing to fire assembly point?		No Assembly point has been identified					

38.	Any form of Public address system available ?	No except the Regioman Building where PAS is for production purpose
39.	Width form of internal road within the Premises ?	4200 mm
40.	Width of the Entry / exit of Gate	5200 mm
41.	Height of the Entry / exit of Gate	Open to sky

PART IV

Provision of Fire Safety Arrangement

42.	Is any water reservoir for firefighting available ? (at ground level / overhead)	Yes	U/G10 ,00,000 ltr open tank O/H27000 ltr
	a) If yes, specify the distance from the building	2mtr	Meter from the Main building
	b) If yes, specify the capacity (in litres)as approved by WBF & ES.		None Found
	c) Specify the condition of the reservoir		Satisfactory
43.	Is any public or other water storage facility available nearby ?	Yes	■specify the distance from the building ----1000 Mtr
	a) Is it readily accessible ?	Yes	■condition and type of the reservoir—Water body
44.	Are internal hydrants being provided ?	Yes	■single outlets in the main building only. In the College Building it is being installed
	If so, please indicate no of hydrants in each floor		Three in 3 nos riser sets (One set is one main riser & one sprinkler riser)
45.	Are first aid hose reels being provided ? If so please indicate	Yes	■No of hose reels on each floor-----Two in each floor
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes To the riser	■Bore and length of hose reel tubing on each reel-----25mm 33Mtr
	b) Size (bore) and type of nozzle fitted to each hose reel		5 mm, Jet type
46.	Are fire hoses being provided near each hydrant? If so, please indicate	Yes	■Type of hose--Canvas ■Size of hose—mm ■Length of hose—15 mtr
	a) Total no of hoses provided near each hydrant		One in hydrant point
47.	Have wet risers/dry risers been provided?		Yes_/ wet riser

48.	If yes, please indicate the number of risers and internal diameter of each	Three Riser sets (One main + one sprinkler, 150 mm at the Regioman building & one riser is being installed at coromoman building
49.	Has any down comer been provided? If so, please give details	No_/_
50.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Yes_/_
	a) Number of pumps	5 nos, one main (55 KW), one jockey main-11KW, One sprinkler main (55 KW) , one sprinkler jockey (11 KW) & one diesel stand by pump of 75 KW
	b) Size of suction and delivery connection to each pump/Output/Head	■Suction:150mm■Delivery150mm ■Output of each pump: 144 M3/Hr ■Max head against which the pump can operate at the output mentioned in 70M
	c) Is the pump automatic in action?	Yes. But on audit date this was found not working
	d) Is the water pressure sufficient at max distance from the pump?	Yes.
51.	Sprinkler system	YES
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	Yes
	a) Type of detectors used	Smoke detector
52.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	Yes_/_ in the RegeomanBuilding.In the Corormoman building this is being installed
	a) Alarm receiving system	Yes_/_ in the RegeomanBuilding.In the Corormoman building this is being installed

53.	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate whether the Fire extinguishers bear the ISI certification mark?	Yes	Number of FE Type/ Capacity	167nos
	Date of Validity	Yes Expired	CO2 (9kg) CO2 (4.5kg) CO2 (2/3kg) CO2 (22.5kg) Foam(50 Ltr) Foam(9 Ltr) Water Co2(50 Ltr) Water Co2(9 Ltr) DCP (50 Kg) DCP (10 Kg) DCP (5 Kg) ABC (5 Kg) ABC (2 Kg)	5 29 32 1 4 2 5 14 1 24 29 5 16
	Location	Stair case & in the offices Electrical installation, production floor		
54.	Are Emergency Fire Alarm being provided in each floor ?	Yes _____	■No. of Fire Alarm –Four in each floor ■Location of Fire Alarm—near stair case	
55.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	■yes_/ Security, House keeping staff, maintenance staff, Executives are trained .		
56.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (mintwice a year)?	Yes.Last done in Nov 12		
57.	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
58.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available. It is with project group		
59.	Status of NOC from WBF&ES	Provisional NOC Received from WBF & ES on 30.11.12		

Part-V

Electrical, Cables and Ventilation

60.	If the building is Centrally air -conditioned, please indicate,		YES in the Regioman Building only	
	a)	Material used for construction of ducts and its fittings	Al Sheet, glass wool	
	b)	Type of tinning used for ducts	Al Sheet	
	c)	Type of lagging used, if any for insulating any portion of the duct	Glass wool	
	d)	How the lagging is secured?	With wire mesh & Al sheet	
	e)	If false ceiling is there?	NO	
	f)	Material used for false ceiling	NIL	
	g)	Is a separate AHU being provided in each floor	Centrally there are 3 nos + 2 nos open type.	
	H)	Whether automatic shutdown of AHU is coupled with detection system?	The blowers are in closed chamber There is a heat detector which coupled with the fans	
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Yes	
	j)	Will fire dampers be provided in AC duct?	yes	
61.	Is there any standby source of electric supply being provided?		YES. 750 KVA X 2 nos DG sets & 4nos X 60 KVA	
	Is the back supply automatic?		YES	Total operation including goods lifts & Emergency lights
62.	Location of switch- gears and transformers		Outside the BLD.	
63.	a)	Transformer capacity	1499 KVA dry type	
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable	
	c)	If outside, how far is it from the building?	4 mtr	
64.	What precautions is taken to prevent a possible fire in the transformers from spreading?		Fire Extinguishers	
65.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Electrical shafts are foundsealed.	
66.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		Yes.	
67.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable	

68.	Whether natural ventilation is relied upon? If so, give details.	Yes
69.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO
70.	Whether mechanical ventilation is being coupled with automatic detection system?	Not applicable
71.	Whether the refuge area is being provided?	NIL
72.	Storage of combustibles materials near electrical equipment/fuse units.	No
73.	RCCBs available??	YES
74.	Master switch in warehouses	Not applicable
75.	Proper cable joint procedures as per manufacturer	Yes
76.	Earthing Pit Tested??	Yes. Last done on Nov 12
77.	Use of MCB??	Yes
78.	Bypassing of protection devices	None found
79.	Deteriorated insulation	None found
80.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
81.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	YES
82.	Tracking possibility	Yes
83.	Unused opening in the panels, etc.	None found
84.	Possibility of ground fault/short circuit	None found
85.	Mechanical protection to cables	Yes
86.	Loose terminations due to improper supports, crimping	None found
87.	Improper gland installation, wrong lug size	None found
88.	Over-rated uses, wrongly set protection relays, etc.	None found
89.	Earthing layout & it's effectiveness	Yes
90.	Switch yard and sub station	Yes
91.	DG operation and maintenance	Yes
92.	Reliability of the fire hydrant system	yes
93.	Emergency preparedness and response	None Found
94.	Availability of Evacuation plan	None Found
95.	Mock drill conducted??	YES
96.	Awareness of the people??	Average
97.	Sample basis validation of smoke detection system??	Yes
98.	Storage if hazardous material, chemicals??	NO
99.	Use of signage??	Insufficient signage
100.	Hydrants clear, access to public thorough fare open	Yes in one building only
101.	Flame & work permits (as applicable)	Not applicable

102.	Effective internal communication and public address system	No except in the ground floor of the main building
103.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
104.	Management structure, role of safety officer, fire department etc.	Safety officer is MrWshim Bari
105.	Procedure for incident investigation and control	None Found

PART- VI

Other Information

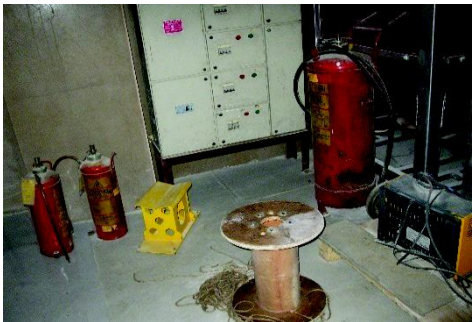
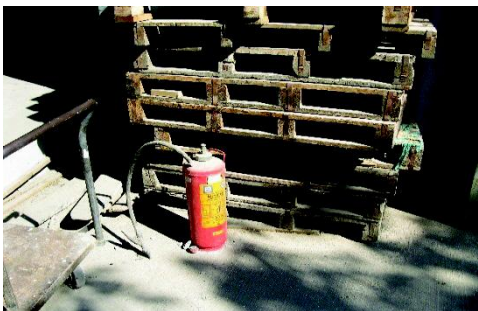
106.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	■Yes_/	■Deviation from WBF&ES NOC
107.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO	
108.	Is Trade License available??	No	
109.	Name of the Insurance Company	YES	
110.	Remarks (if any) 6. Proper illuminated signage at all exit route was not found in Coromoman building 7. No FCD found in the buildings except one in the regioman Building 8. No auto Fire Extinguishers found in the Electrical Installation 9. Fire Extinguishers are kept on floor . Access is not clear 10.No hammer in the MCP. Area is full with cob web in the floor 11.One Fire extinguisher found lying in the scrap area 12.NO fire Hose in the FHC 13.Gas cylinders are not kept chained 14.Pump room is extremely dirty. Full of unwanted material. Pumps are found not running 15.There is no assigned Assembly point 16.No Evacuation plan is available on the floor 17. No Emergency response is available		

Auditor

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	Illuminated signage at exit route not found in Coromoman buildings	Proper illuminated signage to be used in Coromoman buildings
2	No FCD found in the buildings except one in the regeoman Building	FCD to be provided
3	No auto Fire Extinguishers found in the Electrical Installation	Auto Fire extinguishers are to be provided in the electrical installation rooms
4	Fire Extinguishers are kept on floor . Access is not clear 	
5	No hammer in the MCP. Area is full with cob web in the floor 	Hammer is to be provided. Area to be kept cleaned
6	One Fire extinguisher found lying in the scrap area 	All the fire extinguishers kept on floor should be hung at 0.75 Mtr height

7	NO fire Hose in the FHC 	Fire hose to be kept in all the empty FHC
8	Gas cylinders are not kept chained 	All the gas cylinders are to be kept chained
9	Pump room is extremely dirty. Full of unwanted material. Pumps are found not running  	Pump room should be kept absolutely cleaned. It should run 24 X 7
10	There is no assigned Assembly point	Assembly point is to be marked
11	No Evacuation plan is available on the floor	Evacuation plan is to be displayed
12	No Emergency response is available	Emergency response plan is to be prepared & communicated to Employees

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

TECHNO INDIA GROUP



EXECUTIVE SUMMARY

Part I & II

General Information

Techno India Group is situated at Block-EM 4/1, Sector V Salt Lake City Pin-700091. It has two buildings, one is main building, the other is college building. Structure is G+7 & G +4 .. The buildup area is 254308 Sq. in total land area of 3.57 Acre .

The company is an educational Institution. . In the ground floor there is a swimming pool cum fire tank, Playground, Parking place, A bank, An eatery , all electrical installations. 2nd floor of the main building is rented to NIIT. 4th, 5th, 6th floor of the main building are vacant. All the floors of college building are occupied with classes. The construction is on for another multi storied building in the vacant space.

Application has been made recently for getting the Clearance Certificate

Last NOC from WBF & ES valid upto 23.10.12. Application for renewal made on 31.10.12

Estimated Occupancy Load was found as

Existing -- 300 +1050
Floating -- 600 (during Campus)

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are Fournos Staircases available in the main building. There are Fournos Lifts available in the main building. There are two nos refuse areas available at 7th floor .

There are Two nos stair cases in the college building. There is no lift available

A multi storied building is coming up in between Main building & college building

Evacuation drill/mockdrills have been founded conducted in last Dec 2012.

Signage found inadequate, In the main building emergency stair signage have been put, But no signage found at the offices or in the college building. These signage were found no illuminated

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises are portable fire extinguishers & wet risers, Sprinklers & smoke detectors & MCPs in the main building.

Wet riser, Sprinklers, Smoke detectors are being installed in the college building.

Wet Riser

There is a swimming pool cum water tank exclusively for fire of 400000ltr capacity. There are three nos pumps. Main pump capacity is 45kw & that of Jockey pump is of 11kw..

Alternate source of water is the Water body approx 1000 mtr away from the building.

PAS is available only in the ground floor of the main building

Close circuit TV monitoring is being installed

130 Nos Portable fire extinguishers are found deployed at the staircase, Sub-station, offices

PART V

ELECTRICAL FIRE HAZARDS

There is ELCB at the distribution board of each floor from Sub-Station.

Generally no combustible material is stored in the premises, near the Electrical installation

There are 3 Nos D-G sets available. Transformer & switch gear are inside the building.

No Auto Co2 fire extinguisher found in the Transformer & switches gear room.

Sealing found at cable passes at each floor.

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVAY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EM 4/1	
2.	Premises Name (if any):	TECHNO INDIA	
3.	Name of the owner /occupier/lessee	TECHNO INDIA GROUP	
4.	Permanent Address	EM 4/1,SectorV, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	Mr.Subrata Bhattacharya	
7.	Phone No of Contact Person	98317 97038	
8.	E-mail	9831797038@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use_/_	Educational_/_
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
		IT/ITES_/_	
10.	Plot Area(as informed to the Auditor)	3.57 Acre	
11.	Build up area(as informed to the Auditor)	254308Sq.Ft.	
12.	No of Floors	G+7(Main Building) & G + 4(College Building)	
13.	Date of Sanction of Building Plan	2.8.2012& 8.10.10	
14.	Whether P.O.C/OC received from local body?	Applied	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	NSIB	
16.	No of Security Personnel engaged	30	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Only Sticker Holder Cars are allowed	
18.	Whether records of Visitors entering into the building are kept	Visitor"s car are not allowed inside the building	
19.	Whether Metal detectors are used at the entry point	Yes. At present it is under repair	
20.	Whether Monitoring System through Close circuit TV available	NO but it is being installed	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	6 Buses + 6 nos cars	
22.	No of Vehicles for which parking space is available in the premises	90	
23.	Whether parking space available for visitors within the premises	NO	
24.	Place where excess vehicles (if any) are parked	Outside Road	

GENERAL MAINTENANCE		
25.	Garbage Clearing	NDITA Garbage clearing system
26.	Drainage System	Connected to NDITA Drainage system
27.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	Not applicable
30.	Any Other Clearance	Not applicable

PART - II

31.	Occupancy load	(Based on Estimates on max no in a day)								
	Existing	G	1	2	3	4	5	6	7	T
	a)Regular									
	Main Building	30	30	10	150	V	V	V	80	300
	College Building	50	250	250	250	250	X	X	X	1050
	b)Floating									600
32.	Basement	NIL								

Part- III

Provisions of means of escape

33.	Number of staircases -- → TWO Nos		MAIN BUILDING				COLLEGE	
	Stairs Number		#1	#2	#3	#4	#1	#2
	a)	Width of flight (mm)	1400	1400	1400	1400	2000	2000
	b)	Tread width (mm)	300	300	300	300	290	290
	c)	Riser Height (mm)	150	150	150	150	150	150
	d)	Finish	Kota Stone	Kota Stone	Kota Stone	Kota Stone	Marble	Marble
	e)	Width of stair door (FCD) (mm)	NIL	NIL	NIL	NIL	NIL	NIL
	f)	Height of stair head room (Ft)	10	10	10	10	10	10
	g)	Height of stair handrail (mm)	840	780	840	780	870	870
	h)	Area & location & profile of Fire Refuge Area	1900 mm X 7592 mm					
	i)	Width and type of door leading to Fire refugee area	Ordinary Door → 1070 mm					
	j)	Pressurization of staircase	No					
	k)	Segregation of staircase	Yes					

34.	Number of Lifts installed→4nos	Main Building			
	Lift-Numbers	#1	#2	#3	#4
	a) Type of door	Metallic	Metallic	Metallic	Metallic
	b) Fire resistance rating	2 Hrs	2 Hrs	2 Hrs	2 Hrs
	c) Area of lift car	1100 mm X 1240 mm	1100 mm X 1240 mm	1400 mm X 1100 mm	1400 mm X 1100 mm
	d) Capacity (no of persons)	8	8	9	9
	e) Capacity(in kg)	544	544	612	612
	f) Company	OTIS	OTIS	Schnider	Schnider
	g) Is communication system, installed in the lift car?	NO	NO	YES	YES
	h) Is a fireman's switch being installed in the car?	YES	YES	YES	YES
	i) Pressurization of lift	No	NO	NO	NO
	j) Whether validity of "Form-C" from appropriate authority obtained?	YES	YES	Applied	Applied
35.	Presence of proper signage in all the exit route	In the main building Signage direction is given only in the stair but not in the office. In the College building no signage is available			
36.	Is it posted with illuminated signage ?	No			
37.	Whether it is landing to fire assembly point?	YES			
38.	Any form of Public address system available ?	No except the ground which is covered with PAS cum Music system			
39.	Width form of internal road within the Premises ?	2868 mm			
40.	Width of the Entry / exit of Gate	2858 mm			
41.	Height of the Entry / exit of Gate	Open to sky			

PART IV

Provision of Fire Safety Arrangement

42.	Is any water reservoir for firefighting available? (at ground level / over head)	Yes	U/G 400,000 ltr open tank O/H80000 ltr
	a) If yes, specify the distance from the building	10 mtr	Meter from the Main building
	b) If yes, specify the capacity (in litres) as approved by WBF & ES.	None Found	
	c) Specify the condition of the reservoir	Satisfactory	
43.	Is any public or other water storage facility available nearby ?	Yes	■specify the distance from the building ----1000 Mtr
	a) Is it readily accessible ?	Yes	■condition and type of the reservoir—Water body
44.	Are internal hydrants being provided ?	Yes	■single outlets in the main building only. In the College Building it is being installed
	If so, please indicate no of hydrants in each floor	Two in Two riser	
45.	Are first aid hose reels being provided ? If so please indicate	Yes	■No of hose reels on each floor-----Two in each floor
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes To the riser	■Bore and length of hose reel tubing on each reel--- -- 25mm 33Mtr
	b) Size (bore) and type of nozzle fitted to each hose reel	5 mm, Jet type	
46.	Are fire hoses being provided near each hydrant? If so, please indicate	Yes	■Type of hose--Canvas ■Size of hose—mm ■Length of hose—15 mtr
	a) Total no of hoses provided near each hydrant	One in hydrant point	
47.	Have wet risers/dry risers been provided?	Yes ☐ wet riser	
	If yes, please indicate the number of risers and internal diameter of each	TWO, 150 mm at the main building	
48.	Has any down comer been provided? If so, please give details	No	
49.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Yes	
	a) Number of pumps	TWO, one main (60 HP), one jockey-15 HP	
	b) Size of suction and delivery connection to each pump/Output/Head	■Suction:150mm ■Delivery 150mm ■Output of each pump: 2600 ltr / min ■Max head against which the pump can operate at the output mentioned in 70M	
	e) Is the pump automatic in action?	Yes	
	f) Is the water pressure sufficient at max distance from the pump?	Yes. Found 4.8 Kg/ Cm ² at the top	

50.	Sprinkler system		YES		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes		
	a)	Type of detectors used	Smoke detector		
51.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes		
	a)	Alarm receiving system	Yes		
52.	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		■Yes ■Yes Dec 2013	Number of FE Type/ Capacity DCP(5kg) ABC(5Kg) CO2(4.5 Kg) Water (9 Ltr)	130 nos 31 68 10 21
	Location		Stair case & in the offices		
53.	Is Emergency Fire Alarm being provided in each floor?		■Yes	■No. of Fire Alarm –Four in each floor ■Location of Fire Alarm—near stair case	
54.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		■yes_/ Security, House keeping staff, maintenance staff are trained .		
55.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?		Yes.		
56.	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES		Not available		
57.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES		Not available. It is with project group		
58.	Status of NOC from WBF&ES		NOC valid upto23.10.12. Applied for renewal on 31.10.12		

Part-V

Electrical, Cables and Ventilation

59.	If the building is Centrally air –conditioned, please indicate,	YES from 2nd floor to 7th floor		
	a) Material used for construction of ducts and its fittings	Could not be checked		
	b) Type of tinning used for ducts	Could not be checked		
	c) Type of lagging used, if any for insulating any portion of the duct	Could not be checked		
	d) How the lagging is secured?	Could not be checked		
	e) If false ceiling is there?	YES		
	f) Material used for false ceiling	Gypsum board		
	g) Is a separate AHU being provided in each floor	Two AHU in each floor		

	H)	Whether automatic shutdown of AHU is coupled with detection system?	Yes. Checked in 6 th floor & found the system is working	
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Yes	
	j)	Will fire dampers be provided in AC duct?	Yes	
60.	Is there any standby source of electric supply being provided?		YES, 1500 KVA + 500 KVA + 500KVA	
	Is the back supply automatic? Emergency light at stair case available.		No Manual	Specify the functions that can be maintained simultaneously by such back ups ■ Fire Pump_/ ■ Emergency Light_/ ■ Lift_/ ■ Partly to the office
61.	Location of switch- gears and transformers		In side the BLD.	
	a)	Transformer capacity	1600 KVA dry type	
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	YES	
	c)	If outside, how far is it from the building?	Not applicable	
62.	What precautions is taken to prevent a possible fire in the transformers from spreading?		Fire Extinguishers	
63.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Electrical shafts are foundsealed.	
64.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		Yes.	
65.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable	
66.	Whether natural ventilation is relied upon? If so, give details.		Yes	
67.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		NO	
68.	Whether mechanical ventilation is being coupled with automatic detection system?		Not applicable	
69.	Whether the refuge area is being provided?		■yes_/ Two Nos at 7 th floor in the main building	
70.	Storage of combustibles materials near electrical equipment/fuse units.		No	
71.	RCCBs available??		None found	
72.	Master switch in warehouses		Not applicable	
73.	Proper cable joint procedures as per manufacturer		Yes	
74.	Earthing Pit Tested??		Yes. Last done on 10 th Dec12	
75.	Use of MCB??		Yes	

76.	Bypassing of protection devices	None found
77.	Deteriorated insulation	None found
78.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
79.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	YES
80.	Tracking possibility	Yes
81.	Unused opening in the panels, etc.	None found
82.	Possibility of ground fault/short circuit	None found
83.	Mechanical protection to cables	Yes
84.	Loose terminations due to improper supports, crimping	None found
85.	Improper gland installation, wrong lug size	None found
86.	Over-rated uses, wrongly set protection relays, etc.	None found
87.	Earthing layout & it's effectiveness	Yes
88.	Switch yard and sub station	Yes
89.	DG operation and maintenance	Yes
90.	Reliability of the fire hydrant system	yes
91.	Emergency preparedness and response	None Found
92.	Availability of Evacuation plan	None Found
93.	Mock drill conducted??	YES
94.	Awareness of the people??	Average
95.	Sample basis validation of smoke detection system??	Yes
96.	Storage if hazardous material, chemicals??	NO
97.	Use of signage??	Insufficient signage
98.	Hydrants clear, access to public thorough fare open	Yes
99.	Flame & work permits (as applicable)	Not applicable
100.	Effective internal communication and public address system	No except in the ground floor of the main building
101.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
102.	Management structure, role of safety officer, fire department etc.	None Found
103.	Procedure for incident investigation and control	None Found

PART- VI

Other Information

118.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	■Yes	■Deviation from WBF&ES NOC
119	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO	
	Is Trade License available??	No	
120	Name of the Insurance Company	No	
121	Remarks (if any) 18.Proper illuminated signage at all exit route was not found in both building 19.No FCD found in the main building 20. No auto Fire Extinguishers found in the Electrical Installation		

NDITA

Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	Illuminated signage at exit route not found in both buildings	Proper illuminated signage to be used in both buildings
2	No FCD found in the main building	
3	No auto Fire Extinguishers found in the Electrical Installation	

Auditor

Reviewer

Signature & date Inspecting and Reporting Authority With seal

INSIGMIA TOWER



EXECUTIVE SUMMARY

Part I & II

General Information

INSIGMIA TOWER is situated at EN-1, Sector V, Salt Lake, Kolkata 700091; the structure is G + 7 & built up area is approx. 40000 Sq.ft., in total 15 Katha of land.

In the Ground floor .There is Garage space, two rented shops, pump room etc. There is one tenant at 3rd floor M/s Abhijit Group, and rest 1st, 2nd, 4th, 5th, 6th, 7th floors are vacant. Work is on to start a restaurant at ground floor & Mezzanine floor. Renovation work is on the vacant floors. Each floor has got a Verandah on the road side, which will additionally work as a refuse area.

There is no central AC system in the building.

There are TWO lifts of 8 Passenger capacities in the building. One is operational & other is kept Closed. C- Certificate was available & valid up to 31.5.2013.

OC (Occupational Certificate) obtained directly from Bidhan Nagar Municipality & ad hoc lump sum payment of the current Tax bill has been paid to the concerned authority for the year 2011-2012

Renewal Application made for NOC at WBF & E Son 8.8.12

Occupancy Load as on audit date was found as

Existing -- 39

Floating -- 12

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two nos Staircases available. There are two nos Lifts available.

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is wet riser, sprinkler, smoke detectors & portable fire extinguishers.

Wet riser

There is an Under- ground fire tank of 6 lakhltr capacity. There is a main pump of 50HP a stand by main pump of 50 HP& a jockey pump of 15 HP capacities for building the pressure in the pipe line. As on audit date this was found not working for some renovation/Installation work.FHC cabinet needs some attention for replacement of glass & placement of Nozzle.

Sprinkler system is being installed throughout the building

Alternate source of water is the Water body approx. 800 mtr away

Buildings are equipped with Fire detection system like smoke detectors up to 4th floor. Plan is there to install in the rest of the floor..

Total 50Nos Portable fire extinguishers are found deployed throughout the building.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is DG of 500 KVA at the roof top as an alternate source of supply

PART VI

OTHER INFORMATION

NIL

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

Part-I

General Information

1.	PLOT No/Premises No:	EN-1	
2.	Premises Name (if any):	INSIGMIA TOWER	
3.	Name of the owner /occupier/lessee	M/s United scientific equipment Pvt Ltd	
4.	Permanent Address	EN-1, Sector-V, Salt Lake Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	Mr.GulAhuja	
7.	Phone No of Contact Person	9830051110	
8.	E-mail	Gulahuja55@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	15katas	
11.	Build up area(as informed to the Auditor)	40000sqft	
12.	No of Floors	G+7	
13.	Date of Sanction of Building Plan	Not Available	
14.	Whether P.O.C/OC received from local body?	Not available	
15.	Incidence of assessment done	Not Available	
SECURITY SETUP DETAILS			
16.	Name of the SECURITY AGENCY engaged	Group 4	
17.	No of Security Personnel engaged	7 nos	
18.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
19.	Whether records of Visitors entering into the building are kept	Yes	
20.	Whether Metal detectors are used at the entry point	No	
21.	Whether Monitoring System through Close circuit TV available	No	
VEHICLES VOLUME			
22.	No of Vehicles Engaged by the Organization	One	
23.	No of Own Vehicles engaged by Employees	None	
24.	No of Vehicles for which parking space is available in the premises	24 nos	

25.	Whether parking space available for visitors within the premises	Yes at present
26.	Place where excess vehicles (if any) are parked	Outside parking Zone
GENERAL MAINTENANCE		
27.	Garbage Clearing	Through NDITA clearing system
28.	Drainage System	Connected directly to NDITA drainage system
29.	Maintenance of Road	Internal Roads are maintained by the owner
TELEPHONE TOWER		
30.	No of Towers	No of towers : NIL
31.	Statutory Clearance from AAI	Not Applicable
32.	Any Other Clearance	Not applicable

PART - II

33.	Occupancy load	Based on Estimates								
	Existing	Gr	1st	2nd	3rd	4th	5th	6th	7th	Total
	a)Regular	4	V	V	35	V	V	V	V	39
	b)Floating									12
34.	Electrical Load	Not Available								
35.	Basement	NO BASEMENT								

V=vacant

Part- III

Provisions of means of escape

36.	Number of staircases -2 Nos			
	Stair-I & II		Stair #1	Stair #2
a)	Width of flight		1500 mm	1500 mm
b)	Tread width		270 mm	270 mm
c)	Riser Height		150 mm	150 mm
d)	Finish		Kota Stone	Kota Stone
e)	Width of stair door (FCD)		NIL, Glass doors only	
f)	Height of stair head room		3658 mm	3658 mm
g)	Height of stair handrail		900 mm	940 mm
h)	Area & location & profile of Fire Refuge Area		NIL	
i)	Width and type of door leading to Fire refugee area		1500 mm glass door	
j)	Pressurization of staircase		In each floor there is verandah which can be used as refuse area. Approx. area 1500 mm X 3500 mm	
k)	Segregation of staircase		No	

37.	Number of Lifts installed-	One + One is kept closed		
		Lift Details:		
	a)	Type of door	Metallic	
	b)	Fire resistance rating	2Hrs	
	c)	Area of lift car	1110 mm1410mm	
	d)	Capacity (no of persons)	8	
	e)	Capacity(in kg)	630 kg	
	f)	Company	OTIS	
	g)	Is communication system, installed in the lift car?	Yes	
	h)	Is a fireman's switch being installed in the car?	No	
	i)	Pressurization of lift	No	
	j)	Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Yes ☐ Valid up to 31.5.2013	
38.	Presence of proper signage in all the exit route		No	
39.	Is it posted with illuminated signage?		No	
40.	Whether it is landing to fire assembly point?		No	
41.	Any form of Public address system available?		No	
42.	Width form of internal road within the Premises?		3750 mm	
43.	Width of the Entry / exit of Gate		#1-3034mm	#2-3000mm #3-5750mm
44.	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

45.	Is any water reservoir for firefighting available? (at ground level / overhead)	Yes ☐ U/G 1, 50, 000 Ltr
	a) If yes, specify the distance from the building	Adjacent to building
	b) If yes, specify the capacity (in liters) as approved by WBF& ES.	None
	c) Specify the condition of the reservoir	Satisfactory
46.	Is any public or other water storage facility available nearby?	Yes
	a) Is it readily accessible?	Yes
	b) If yes, specify the distance from the building	800 Mtr approx.
	c) Specify the condition and type of the reservoir	Water Body
47.	Are internal hydrants being provided?	Yes
	a) If so, please indicate no of hydrants in each floor & also mention whether these hydrants are having single or twin outlets.	Single out let In Each floor & surrounding the building at ground floor

48.	Are first aid hose reels being provided? If so please indicate	Yes
a)	No of hose reels on each floor	One
b)	Bore and length of hose reel tubing on each reel	25mm, 30 mtr
c)	Size (bore) and type of nozzle fitted to each hose reel	5 mm, Standard type
d)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes ☐ Directly to the riser
49.	Are fire hoses being provided near each hydrant? If so, please indicate	Yes
a)	Type of hose	Canvas
b)	Size of hose	63 mm
c)	Length of hose	15 mtr
d)	Total no of hoses provided near each hydrant	One
50.	Have wet risers/dry risers been provided?	Yes
51.	If yes, please indicate the number of risers and internal diameter of each	Two in each floor
52.	Has any down comer been provided? If so, please give details	No
53.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Yes ☐ But it is not run continuously
a)	Number of pumps	One main & one jockey. One main as stand by
b)	Size of suction and delivery connection to each pump	Suction 200 mm, discharge 150mm
c)	Output of each pump	150/- average in every flat
d)	Max head against which the pump can operate at the output mentioned in	150/- average in every flat
e)	Is the pump automatic in action?	No
f)	Is the water pressure sufficient at max distance from the pump?	No ☐ Could not be checked as pump was not running
54.	Sprinkler system	YES
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	Yes
a)	Type of detectors used	Smoke detectors
55.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	Yes
a)	Alarm receiving system	Yes
56.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate	Yes
a)	Number of FE	50nos
b)	Type of FE	Type /Quantity/Capacity Foam (9 ltr)- 2 Nos DCP(5 kgs)-10 nos Co2(2 Kgs)-2 Nos Mech Foam(25 Ltr)- 1No
c)	Location	Near stair case, Garrage, & at different areas

d)	Expire date of FE	08.07.12
57.	Indicate whether the Fire extinguishers bear the ISI certification mark?	No ☐ at certain Fire Extinguishers
58.	Is Emergency Fire Alarm being provided in each floor?	Yes ☐ Being installed in all the floors
a)	No. of Fire Alarm	One in each floor
b)	Location of Fire Alarm	Near stair case
59.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No
60.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min. twice a year)?	No
61.	Verification of Architectural drawing of building in line with the requirements of WB F & ES	No Architectural drawing is available for verification
62.	Verification of 'As installed' circuit diagram of fire detection & Alarm system of the building in line with requirements of WBF & ES	No circuit diagram for detection of alarm system was available
63.	Status of NOC from Fire department	Applied on 8.8.12

Part-V

Electrical, Cables and Ventilation

64.	If the building is Centrally air –conditioned, please indicate,	No Central Air condition system
a)	Material used for construction of ducts and its fittings	Not Applicable
b)	Type of tinning used for ducts	Not Applicable
c)	Type of lagging used, if any for insulating any portion of the duct	Not Applicable
d)	How the lagging is secured?	Not Applicable
e)	If false ceiling is there?	Not Applicable
f)	Material used for false ceiling	Not Applicable
g)	Is a separate AHU BEING PROVIDED FOR EACH FLOOR?	Not Applicable
H)	Whether automatic shutdown of AHU is coupled with detection system?	Not Applicable
i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not Applicable
j)	Will fire dampers be provided in AC duct?	Not Applicable
65.	Is there any standby source of electric supply being provided?	Yes
a)	If yes, how	Through generator
b)	Specify the capacity	500 KVA
c)	Specify the functions that can be maintained simultaneously by such back ups	Operating lift Fire pumps

66.	Is the backup supply	Manual ☐ at present
67.	Location of switch- gears and transformers	Outside the building
	a) Transformer capacity	No Transformer
	b) If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not Applicable
	c) If outside, how far is it from the building?	Not Applicable
68.	What precautions will be taken to prevent a possible fire in the transformers from spreading?	Placed at outside building in open area
69.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	No ☐ There is no sealing found in the electrical shaft
70.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	No
71.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	No
72.	Whether natural ventilation is relied upon? If so, give details.	Yes
73.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No
74.	Whether mechanical ventilation is being coupled with automatic detection system?	No
75.	Whether the refuge area is being provided?	YES
	a) On which floor	At each floor Verandah is provided in such a way that it can be used as refuse area
76.	Storage of combustibles materials near electrical equipment/fuse units.	No
77.	RCCBs	No
78.	Master switch in warehouses	No
79.	Proper cable joint procedures as per manufacturer	Yes
80.	Earthling defects	No
81.	Use of non-standard fuse wires	No
82.	Bypassing of protection devices	No
83.	Deteriorated insulation	No
84.	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes
85.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No
86.	Tracking possibility	Yes
87.	Unused opening in lie panels, etc.	No
88.	Possibility of ground fault/short circuit	No

89.	Mechanical protection to cables	Yes
90.	Loose terminations due to improper supports, crimping	No
91.	Improper gland installation, wrong lug size	No
92.	Over-rated uses, wrongly set protection relays, etc.	No
93.	Review of equipment safety	No
94.	Cable layout	Yes
95.	Earthling layout & it's effectiveness	Yes
96.	Switch yard and sub station	Yes
97.	MCC and distribution boards	Yes
98.	DG operation and maintenance	No
99.	Reliability of the fire hydrant system	No
100.	Emergency preparedness and response	No
101.	Evacuation plan	No
102.	Mock drill	No
103.	Awareness of the people	No
104.	Sample basis validation of smoke detection system	Yes
105.	Storage of hazardous material, chemicals	No
106.	Use of signage	No
107.	Hydrants clear, access to public thorough fare open	Yes
108.	Flame & work permits (as applicable)	No
109.	Effective internal communication and public address system	No
110.	Color coding system of hazardous chemical gas lines etc.	No
111.	Management structure, role of safety officer, fire department etc.	No
112.	Procedure for incident investigation and control	No

PART- VI

Other Information

113.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No
114.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
115.	Name of the Insurance Company	None

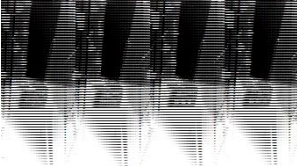
116.	Remarks (if any) 1. Access to Fire extinguishers are blocked with trash material at pump room 2. No rubber mats found behind main LT distribution panel 3. Pressure of Wet riser is Zero. Wet risers pumps are not working 4. No Fire Mock Drill has been conducted so far 5. No Evacuation Drill has been conducted so far 6. No valid NOC was available from WNFES

Auditor I

Auditor II

Signature & date Inspection and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1.	Access to Fire extinguishers are blocked with trash material at pump room	Access to Fire Extinguishers are to be kept clear
2.	No rubber mats found behind main LT distribution panel 	Rubber mats should be include behind main LT distribution panel
3.	Pressure of Wet riser is Zero	Fire pumps are to be run continuously
4.	No Fire Mock Drill has been conducted so far	Fire Mock drill to be conducted periodically. Record to be maintained
5.	No Evacuation Drill has been conducted so far	Evacuation drill to be conducted periodically with all occupants. Record to be maintained
6.	Fire pump of Wet riser runs as & when required only	Fire pump should run in auto mode for 24 hrs, so that pressure is maintained at 7 to 7.5 kg at the discharge points
7.	No Emergency response plan is available	Emergency response plan is to be prepared

Auditor I

Auditor II

Signature & date Inspection and Reporting Authority With seal

KUMAYUN DRUGS PVT. LTD.



EXECUTIVE SUMMARY

Part I & II

General Information

Kumayun Drugs Pvt. Ltd. is situated at EN-3, Sector V, Salt Lake, Kolkata 700091, The structure is G + 3 & built up area is Approx. 14000 Sqft, in total 15 Kata of land.

Ground floor is the store, 1st floor & 3rd floor is being used for manufacturing drugs. 2nd floor is lying vacant.

There is no central AC system in the building.

There is one lift in the building, **but valid C- certificate was not available.**

OC obtained directly from Bidhan Nagar Municipality & current Tax bill is being paid to the concerned authority

Renewal Application made for NOC at WBF & ES on 08.08.2012

Occupancy Load was found as

Existing -- 28

Floating -- 10

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There is only one Staircase is available. There is one Lift available. There is no refuse area because of height of the building is G+3 only.

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is wet riser, portable fire extinguishers.

Wet riser

There is an Underground fire tank of 40000 ltr capacity, with a 50 HP pump & a jockey pump of 15 HP for building the pressure in the pipe line. **But there is no pressure gauge at the end for checking the pressure. There is no stand by pump available. Fire pumps operates when is needed.**

There is no Sprinkler system

Alternate source of water is the Water body approx. 800 mtr away

Buildings are equipped with Fire detection system like smoke detectors.

6 Nos Portable fire extinguishers are found deployed near the staircase.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is No DG supply available

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN-3	
2.	Premises Name (if any):	Kumayun Drugs Pvt Ltd	
3.	Name of the owner /occupier/lessee	MrsJamunaSen	
4.	Permanent Address	EN-3, Sector-V, Salt Lake Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	MrAmitBaranghosh	
7.	Phone No of Contact Person	6455 2025	
8.	E-mail	kumayun@hotmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial ☐
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	10cottas	
11.	Build up area(as informed to the Auditor)	14000 sqft	
12.	No of Floors	G+3	
13.	Date of Sanction of Building Plan	Date:01.12.2005	
14.	Whether P.O.C/OC received from local body?	Not available	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Warriors Security	
16.	No of Security Personnel engaged	4 nos	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	Yes	
19.	Whether Metal detectors are used at the entry point	No	
20.	Whether Monitoring System through Close circuit TV available	No	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organization	None	
22.	No of Vehicles for which parking space is available in the premises	10 nos	
23.	Whether parking space available for visitors within the premises	Yes	
24.	Place where excess vehicles (if any) are parked	Outside parking Zone	

GENERAL MAINTENANCE		
25	Garbage Clearing	1.Through NDITA clearing system 2. Rejected Al foils are sold off for recycling. 3.Rejected Pet bottles are given back to supplier
26	Drainage System	Connected directly to NDITA drainage system
27	Maintenance of Road	Internal Roads are maintained by Kamayun Drugs pvt.Ltd. Condition is satisfactory
TELEPHONE TOWER		
28	No of Towers	NIL
29	Statutory Clearance from AAI	Not Applicable
30	Any Other Clearance	Not Applicable

PART - II

31	Occupancy load		(Attach floor wise details separately if required)				
	Existing		Grdfir	1stflr	2ndflr	3rd floor	Total
	a)Regular		2	12	12	2	28
	b)Floating						10
32	Basement		NO BASEMENT				
	a)	If basement extends beyond building profile	Not applicable				
	b)	Use of the basement	Not applicable				
	c)	Is it being sprinkle red?	Not applicable				
	d)	Whether any cubicles present in the basement?	Not applicable				
		If yes, their use to be specified	Not applicable				
	f)	Whether fire zones are defined?	Not applicable				
		If yes, please provide details	Not applicable				

Part- III

Provisions of means of escape

33	Number of staircases -->		
	Stairs Number		
		#1	#2
	a)	Width of flight	1800 mm
	b)	Tread width	260 mm
	c)	Riser Height	180 mm
	d)	Finish	Kota Stone
	e)	Width of stair door (FCD)	NIL
	f)	Height of stair head room	5180 mm
	g)	Height of stair handrail	1000 mm
			1030 mm
	h)	Area & location & profile of Fire Refuge Area	NIL
	i)	Width and type of door leading to Fire refugee area	NIL
34	j)	Pressurization of staircase	No
	k)	Segregation of staircase	Not applicable
	Number of Lifts installed->		
	Lift-Numbers		
		#1	
	a)	Type of door	Collapsible
	b)	Fire resistance rating	Not available
	c)	Area of lift car	1220 mmX 940 mm
	d)	Capacity (no of persons)	6
	e)	Capacity(in kg)	408 kgs
	f)	Company	sweaty Elevator
	g)	Is communication system, installed in the lift car?	No
	h)	Is a fireman's switch being installed in the car?	No
	i)	Pressurization of lift	No
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	No ☐ Application made on 18.10.12
35	Presence of proper signage in all the exit route		No
36	Is it posted with illuminated signage?		No
37	Whether it is landing to fire assembly point?		No
38	Any form of Public address system available?		No
39	Width form of internal road within the Premises?		3750 mm
40	Width of the Entry / exit of Gate		3750 mm
41	Height of the Entry / exit of Gate		Open to sky

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available? (at ground level / overhead)	Yes	U/G40000 LTR
	a) If yes, specify the distance from the building	Adjacent to building	
	b) If yes, specify the capacity (in liters) as approved by WBF& ES.	No recommendation is available	
	c) Specify the condition of the reservoir	Satisfactory	
43	Is any public or other water storage facility available nearby?	Yes	
	a) Is it readily accessible?	Yes	
44	Are internal hydrants being provided?	Yes	
	If so, please indicate no of hydrants in each floor	Single out let In Each floor& surrounding the building at ground floor	
45	Are first aid hose reels being provided? If so please indicate	Yes	
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes ☐ directly to riser	Bore and length of hose reel tubing on each reel: 25 mm, 30 mtr
	b) Size (bore) and type of nozzle fitted to each hose reel	5 mm, Standard type	
46	Are fire hoses being provided near each hydrant? If so, please indicate	No ☐ at ground floor surrounding the building	Type of hose: Canvas Size of hose: 63 mm Length of hose: 15 Mtr
	a) Total no of hoses provided near each hydrant	One	
47	Have wet risers/dry risers been provided?	Yes ☐ Wet Riser	
	If yes, please indicate the number of risers and internal diameter of each	One	
48	Has any down comer been provided? If so, please give details	No ☐	
49	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Yes ☐ But it is not run continuously. Runs only when it is needed	
	a) Number of pumps	One main (50 HP0 & one jockey(7.5 HP). No spare main pump is available.	
	b) Size of suction and delivery connection to each pump/Output/Head	Suction 200 mm, discharge 150 mm at the output Main pump: 38 Ltr /Sec Jockey pump : 4.2 Ltr /Sec	
	e) Is the pump automatic in action?	No ☐ Manually operated when needed	
	f) Is the water pressure sufficient at max distance from the pump?	No ☐ Could not be checked as no pressure gauge available at the top floor	

50	Sprinkler system		Yes		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes		
	a)	Type of detectors used	Smoke detectors are installed		
51	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes		
52	Alarm receiving system		Yes		
53	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations?		Yes	Number of FE Type/ Capacity- Foam (9 Ltr) DCP (5 KG) CO2 (2 Kg)	14
	If yes, indicate				2
	Indicate whether the Fire extinguishers bear the ISI certification mark?		Yes		10
	Date of Validity		17/02/2013		2
54	Location and population of the FEs adequate		Near stair case,& Pump room		
55	Is Emergency Fire Alarm being provided in each floor?		Yes	No. of Fire Alarm: 4 Location of Fire Alarm: In The corridor	
56	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		No		
57	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?		No		
58	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES		No Verification could be done as drawings are not available		
59	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES		No Verification could be done as drawings are not available		
60	Status of NOC from WBFES		Valid up to 22/05/2009 Renewal of application made on 08/08/2012		

Part-V

Electrical, Cables and Ventilation

61	If the building is Centrally air –conditioned, please indicate,	No Central Air condition system
	a) Material used for construction of ducts and its fittings	Not Applicable
	b) Type of tinning used for ducts	Not Applicable
	c) Type of lagging used, if any for insulating any portion of the duct	Not Applicable
	d) How the lagging is secured?	Not Applicable
	e) If false ceiling is there?	Not Applicable

	f)	Material used for false ceiling	Not Applicable
	g)	Is a separate AHU being provided in each floor	Not Applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not Applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not Applicable
	j)	Will fire dampers be provided in AC duct?	Not Applicable
62		Is there any standby source of electric supply being provided?	No ☐ DG Available
		Is the back supply automatic?	Not Applicable
63		Location of switch- gears and transformers	Inside the building
64	a)	Transformer capacity	100 KVA
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Could not be checked as the room is found locked by WBSEDCL
	c)	If outside, how far is it from the building?	Inside the building
65		What precautions will be taken to prevent a possible fire in the transformers from spreading?	Transformer room is locked by WBSEDCL
66		Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Yes
67		Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	No
68		Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	No applicable
69		Whether natural ventilation is relied upon? If so, give details.	Yes ☐
70		Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No
71		Whether mechanical ventilation is being coupled with automatic detection system?	No
72		Whether the refuge area is being provided?	No
73		Storage of combustibles materials near electrical equipment/fuse units.	No
74		RCCBs available??	No
75		Master switch in warehouses	No
76		Proper cable joint procedures as per manufacturer	Yes
77		Earthling Pit Tested??	No
78		Use of MCB??	Yes
79		Bypassing of protection devices	No
80		Deteriorated insulation	No
81		Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes ☐ But Foam type Fire Extinguishers are deployed in the pump room
82		Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Yes
83		Tracking possibility	Yes

84	Unused opening in the panels, etc.	No
85	Possibility of ground fault/short circuit	No
86	Mechanical protection to cables	Yes
87	Loose terminations due to improper supports, crimping	No
88	Improper gland installation, wrong lug size	No
89	Over-rated uses, wrongly set protection relays, etc.	No
90	Switch yard and sub station	Yes
91	DG operation and maintenance	No
92	Reliability of the fire hydrant system	No
93	Emergency preparedness and response	No
94	Availability of Evacuation plan	No
95	Mock drill conducted??	No
96	Awareness of the people??	No
97	Sample basis validation of smoke detection system??	Yes
98	Condition of Lightning Arrestor	No
99	Periodic test of UPS system (as applicable)	Not applicable
100	Handling of electrical work by competent electrician	NO
101	Approval of receiving station, substation and DG	Not available
102	Storage of hazardous material, chemicals?	No
103	Use of signage?	No
104	Hydrants clear, access to public thorough fare open	Yes
105	Flame & work permits (as applicable)	Yes
106	Effective internal communication and public address system	No
107	Color coding system of hazardous chemical gas lines etc.	No
108	Management structure, role of safety officer, fire department etc.	No
109	Procedure for incident investigation and control	No

PART- VI

Other Information

110	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes ☐ from NOC from WBFES
111	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
	Is Trade License available??	Trade License available with head office. Not available at site
112	Name of the Insurance Company	None
113	Remarks (if any) 1.No Fire Mock Drill has been conducted so far 2.No Evacuation Drill has been conducted so far 3. Only 4 persons were trained for Fire fighting 4. Foam type Fire extinguishers are deployed at pump room 5. No alternate power supply system is available 6.No stand by fire pump Is available in the wet riser 7.Fire pump of Wet riser runs as & when required only 8. No fire Extinguisher is available at RM store. 9. No Emergency response plan is available 10. No Valid NOC from WBFES was found 11. No valid C-form for the lift is available 12. No DG is available as alternate source of Power	

Auditor -I

Auditor-II

Signature& date of Inspecting and Reporting Authority With seal

NDITA

Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1.	At Canteen heater plug socket is found burnt out 	Socket is to be replaced
2.	No rubber mats found behind main LT distribution panel 	Rubber mat is to be placed
3.	Finished goods godown Cartons are kept near the Tube lights- Fire hazards 	Tube lights are to be relocated
4.	Pressure of Wet riser is Zero 	Fire pumps are to be run continuously for 24 Hrs
5.	No Fire hose is available near the hydrant point at the ground floor 	Hose reel to be provided in fire hose cabinet near each hydrant point

6	No plug top in the fan connection at Lab at 4 th floor 	Plug top is to be provided
7	Access to Fire extinguishers are blocked with trash material at pump room 	Access to Fire Extinguishers are to be kept clear
8	No Fire Mock Drill has been conducted so far	Fire Mock drill to be conducted periodically. Record to be maintained
9	No Evacuation Drill has been conducted so far	Evacuation drill to be conducted periodically with all occupants. Record to be maintained
10	Foam type Fire extinguishers are deployed at pump room	Foam type is used for oil fire. Suitable Fire extinguishers are to be provided
11	No stand by fire pump Is available in the wet riser	Stand by pump is to be provided
12	Fire pump of Wet riser runs as & when required only	Fire pump should run in auto mode, so that pressure is maintained at 7 to 7.5 kgs. at the discharge points
13	No fire Extinguisher is available at RM store.	Fire Extinguisher is to be provided
14	No Emergency response plan is available	Emergency response plan is to be prepared
15	No valid NOC was found	Valid NOC from WBF&ES is to be obtained
16	No valid C-form for the lift is available	Valid C form is to be obtained
17	No DG is available as alternate source of Power	Alternate source of power is to be provided for running the fire pump

Auditor -I

Auditor-II

Signature of Inspecting and Reporting Authority With seal

BISWANATH BUILDERS



EXECUTIVE SUMMARY

Part I & II

General Information

Biswanath Builders is situated at EN-7, Sector V, Salt Lake, Kolkata 700091, The structure is G + 3 & built up area is Approx. 16344 Sq.ft., in total 10 Katah of land.

In the Ground floor there is a mobile shop, a cake shop & an Office of G4 , 1st floor is vacant . 2nd floor is rented to G4 & 3rd floor is rented to Sodexo. In the Mezzanine floor there is a Bank.

There is one lift available. **No C certificate is available.**

There is no central AC system in the building

OC obtained directly from Bidhan Nagar Municipality & current Tax bill is being paid to the concerned authority.

NOC of WBF & ES has expired on 20.5.11. Reminder for renewal is given on 10.12.12

Occupancy Load was found as

Existing -- 63
Floating -- 20

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two nos Staircase are available. There is one Lift available. **There is no refuse area because of height of the building is G+3 only.**

Evacuation Drill has been conducted .by G4 & Sodexo. Employees of Biswanath builders join them

Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is Down Comer, portable fire extinguishers.

Down comer

There is an Overhead fire tank of 12000 ltr capacity, with a 5 HP pump & a spare pump for building the pressure in the pipe line. Pressure found 2 kg at the ground floor.

There is no Sprinkler system

Alternate source of water is the Water body approx 800 mtr away

Buildings are equipped with Fire detection system like smoke detectors.

10 Nos Portable fire extinguishers are found deployed near the staircase.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is a DG supply available of 50 KVA

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN-7	
2.	Premises Name (if any):	Biswanath Builders	
3.	Name of the owner /occupier/lessee	MrAmalBhattacharjee	
4.	Permanent Address	EN-7, Sector-V, Salt Lake Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold- 999 yrs from Urban Development	
6.	Name of the Contact Person	MrAmalBhattacharjee	
7.	Phone No of Contact Person	98310 13557	
8.	E-mail	Ab426815@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational
			Institutional
			Assembly
			☐ Business
			☐ Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	10katas (6669 SqMtrs)	
11.	Build up area(as informed to the Auditor)	16344 sqft (i518.4 SqMtr)	
12.	No of Floors	G+3	
14.	Date of Sanction of Building Plan	Date:03.02.2003	
15.	Whether P.O.C/OC received from local body?	Yes	OC Issuing Authority Bidhan Nagar Municipality Dated:26/09/2003
SECURITY SETUP DETAILS			
16.	Name of the SECURITY AGENCY engaged	G4	
17.	No of Security Personnel engaged	1 (one)	
18.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
19.	Whether records of Visitors entering into the building are kept	Maintained by G-4 and Sodexo	
20.	Whether Metal detectors are used at the entry point	Yes	
21.	Whether Monitoring System through Close circuit TV available	Yes	
VEHICLES VOLUME			
22.	No of Vehicles Engaged by the Organization	1+ G-4 (2 Nos)+Sodexo (1 Nos)	
23.	No of Vehicles for which parking space is available in the premises	4nos	
24.	Whether parking space available for visitors within the premises	No	
25.	Place where excess vehicles (if any) are parked	Outside the parking Zone	

GENERAL MAINTENANCE		
26	Garbage Clearing	Through NDITA garbage clearing System
27	Drainage System	Connected directly to NDITA drainage system
28	Maintenance of Road	Internal Roads are maintained by Biswanathbuilders. Condition is Satisfactory.
TELEPHONE TOWER		
29	No of Towers	NIL
30	Statutory Clearance from AAI	Not Applicable
31	Any Other Clearance	Not Applicable

PART – II

32	Occupancy load		(Based on estimates)				
	Existing		Grdflyr	1stflyr	2ndflyr	3rd floor	Total
	a)Regular		23	Vacant	22	18	63
	b)Floating						20
33	Basement		NIL				
	a)	If basement extends beyond building profile	Not Applicable				
	b)	Use of the basement	Not Applicable				
	c)	Is it being sprinkle red?	Not Applicable				
	d)	Whether any cubicles present in the basement?	Not Applicable				
		If yes, their use to be specified	Not Applicable				
	f)	Whether fire zones are defined?	Not Applicable				
		If yes, please provide details					

Part- III

Provisions of means of escape

34	Number of staircases --→			
	Stairs Number		#1	#2
	a)	Width of flight	1540mm	1700 mm
	b)	Tread width	270 mm	240 mm
	c)	Riser Height	150 mm	150 mm
	d)	Finish	Kota Stone	Marble
	e)	Width of stair door (FCD)	NIL	
	f)	Height of stair head room	3050 mm	3050 mm
	g)	Height of stair handrail	960 mm	830 mm
	h)	Area & location & profile of Fire Refuge Area	NIL	
	i)	Width and type of door leading to Fire refugee area	NIL	
	J)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	
35	Number of Lifts installed→			
	Lift-Numbers		#1	
	a)	Type of door	Collapsible	
	b)	Fire resistance rating	2Hrs	
	c)	Area of lift car	1030 mmX880 mm	
	d)	Capacity (no of persons)	5	
	e)	Capacity(in kg)	340kgs	
	f)	Company	SKY MARK	
	g)	Is communication system, installed in the lift car?	No	
	h)	Is a fireman's switch being installed in the car?	No	
	i)	Pressurization of lift	No	
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	No ☐ Renewal Application made on 18.10.12	
36	Presence of proper signage in all the exit route		Yes	
37	Is it posted with illuminated signage?		Yes	
38	Whether it is landing to fire assembly point?		No	
39	Any form of Public address system available?		No	
40	Width form of internal road within the Premises?		3500mm	
41	Width of the Entry / exit of Gate		3500 mm	
42	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

43	Is any water reservoir for firefighting available? (at ground level / overhead)	Yes	U/G No Fire water tank O/H: 12000 Ltr
	a) If yes, specify the distance from the building	At the roof top	
	b) If yes, specify the capacity (in liters) as approved by WBF& ES.	None	
	c) Specify the condition of the reservoir	Satisfactory-4 Nos PVC tanks	
44	Is any public or other water storage facility available nearby?	Yes	
	a) Is it readily accessible?	Yes	
45	Are internal hydrants being provided?	Yes	
	If so, please indicate no of hydrants in each floor	Single out let In Each floor & surrounding the building at ground floor	
46	Are first aid hose reels being provided? If so please indicate	Yes	No of hose reels on each floor : one
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel: 25 mm, 30 Mtr
	b) Size (bore) and type of nozzle fitted to each hose reel	18 mm, Standard bottle type nozzle	
47	Are fire hoses being provided near each hydrant? If so, please indicate	Yes	Type of hose: Canvas Size of hose: 63 mm Length of hose: 15 Hrs
	a) Total no of hoses provided near each hydrant	One	
48	Have wet risers/dry risers been provided?	No	
	If yes, please indicate the number of risers and internal diameter of each	One	
49	Has any down comer been provided? If so, please give details	Yes ☐ One main & One standby of 15 HP each with Suction 100 mm, discharge 100 mm, output 10.8 M ³ /hr	
50	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	No	
	a) Number of pumps	Nil	
	b) Size of suction and delivery connection to each pump/Output/Head	Not Applicable	
	e) Is the pump automatic in action?	Yes the pump for down comer	
	f) Is the water pressure sufficient at max distance from the pump?	Yes ☐ 2 Kg found at the ground floor of down comer	
51.	Sprinkler system	Yes	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	Yes	
	a) Type of detectors used	Smoke Detector	

52	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	Yes		
53	Alarm receiving system	Yes		
54	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes	Number of FE Type/ Capacity: Co ₂ (4.5 Kg) DCP (5 Kg) ABC (5 Kg) Sodexo and G-4 are having their own fire extinguisher 17.02.2013	10 4 5 1
55	Location and population of the FEs adequate	In the stair case		
56	Is Emergency Fire Alarm being provided in each floor?	Yes	No. of Fire Alarm: 1 (one) Location of Fire Alarm: in each floor	
57	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	Yes☐Sodexo& G4 are having their own skilled fire fighter		
58	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	Yes. Sodexo& G4 conducts regularly. Biswanath people joins them		
59	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
60	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
61	Status of NOC from WBF&ES	Not available		

Part-V

Electrical, Cables and Ventilation

62	If the building is Centrally air -conditioned, please indicate,	No Central Air condition system
	a) Material used for construction of ducts and its fittings	Not Applicable
	b) Type of tinning used for ducts	Not Applicable
	c) Type of lagging used, if any for insulating any portion of the duct	Not Applicable
	d) How the lagging is secured?	Not Applicable
	e) If false ceiling is there?	Not Applicable
	f) Material used for false ceiling	Not Applicable
	g) Is a separate AHU being provided in each floor	Not Applicable
	h) Whether automatic shutdown of AHU is coupled with detection system?	Not Applicable
	i) Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not Applicable
	j) Will fire dampers be provided in AC duct?	Not Applicable

63	Is there any standby source of electric supply being provided?	Yes	DG Capacity: 50 KW- Under maintenance
	Is the back supply automatic?	NO	Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump□
64	Location of switch- gears and transformers	Outside the building	
65	a) Transformer capacity	315 KVA	
	b) If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Outside the building	
	c) If outside, how far is it from the building?	30 mtr	
66	What precautions will be taken to prevent a possible fire in the transformers from spreading?	It is in the open space near the main road	
67	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Yes	
68	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	No	
69	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	No	
70	Whether natural ventilation is relied upon? If so, give details.	Yes	
71	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No	
72	Whether mechanical ventilation is being coupled with automatic detection system?	No	
73	Whether the refuge area is being provided?	No	
74	Storage of combustibles materials near electrical equipment/fuse units.	No	
75	RCCBs available??	No	
76	Master switch in warehouses	No	
77	Proper cable joint procedures as per manufacturer	Yes	
78	Earthling Pit Tested??	No	
79	Use of MCB??	Yes	
80	Bypassing of protection devices	No	
81	Deteriorated insulation	No	
82	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes	
83	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Yes	
84	Tracking possibility	Yes	
85	Unused opening in the panels, etc.	No	

86	Possibility of ground fault/short circuit	No
87	Mechanical protection to cables	Yes
88	Loose terminations due to improper supports, crimping	No
89	Improper gland installation, wrong lug size	No
90	Over-rated uses, wrongly set protection relays, etc.	No
91	Switch yard and sub station	Yes
92	DG operation and maintenance	Yes ☐ As on audit date this is Out of order
93	Reliability of the fire hydrant system	Yes
94	Emergency preparedness and response	Yes
95	Availability of Evacuation plan	Yes
96	Mock drill conducted??	Yes
97	Awareness of the people??	Yes
98	Sample basis validation of smoke detection system??	Yes
99	Condition of Lightening Arrestor	Ok
100	Periodic test of UPS system (as applicable)	Not Applicable
101	Handling of electrical work by competent electrician	Yes
102	Approval of receiving station, substation and DG	No
103	Storage if hazardous material, chemicals?	No
104	Use of signage?	Yes
105	Hydrants clear, access to public thorough fare open	Yes
106	Flame & work permits (as applicable)	No
107	Effective internal communication and public address system	No
108	Colour coding system of hazardous chemical gas lines etc.	No
109	Management structure, role of safety officer, fire department etc.	No
110	Procedure for incident investigation and control	No
111	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	No

PART- VI

Other Information

111.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No
112	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
	Is Trade License available??	None
113	Name of the Insurance Company	Sodexo And G-4 are having trade license but could not be seen
114	Remarks (if any) 1. NOC from WBFES not yet available 2. C certificate of lift is not available 3. Amount of annual property tax Rs 150000/- per Qtr. 4. DG to be put back at the earliest. 5. Electrical load is taken 38 KW per floor.	

NDITA

Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	Valid NOC from WBFES is not available	To be obtained
2.	C- Certificate for the Lift is not available	To be obtained
3	DG found out of order	DG to be put back at the earliest

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

ROY'S IT PARK



EXECUTIVE SUMMARY

Part I & II

General Information

ROY'S IT PARK is situated at EN 9, Sector V Salt Lake City, Pin: 700091. The ground floor has the Car parking space, Pump Room, Facility management room, Transformer room., DG. The Building is G +9 floor being rented for IT & ITES purpose. 7th, 8th, & 9th floor are lying vacant.

The plot area & build up area is not available

NOC from WBFE&S is not available

The date of OC (Occupation Certificate) is 12.9.08.

Estimated Occupancy Load was found as

	Existing -- 67
Floating -- 15	

Part III

PROVISION OF MEANS OF ESCAPE

In the Building there are four stairs & Two Nos Lifts are available.

Evacuation Drill has not been conducted

There is Signage not available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers Wet Riser, Sprinklers, MCPs, Smoke detectors along with CCTV surveillance.

There is a Fire tank of approx. 500000 Ltr capacities available.

Alternate source of water is the Water body approx. 800 mtr away from the building.

36 nos Portable fire extinguishers are found deployed at the Buildings at common areas & electrical installations.

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises ,near the Electrical installation.

The building has a DG-set of 125 KVA as an alternate source of power.

There are two nos transformers, of oil cooled 31.5 KVA capacity each

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SEFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 9	
2.	Premises Name (if any):	Ray's IT Park	
3.	Name of the owner /occupier/lessee	MrSusanta Roy	
4.	Permanent Address	EN 9,Sector-V salt lake city, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Lease hold	
6.	Name of the Contact Person	Mr Sanjay Roy MrRabindraNath	
7.	Phone No of Contact Person	98300 08221 78905 83267	
8.	E-mail	NIL	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	Not Available	
11.	Build up area(as informed to the Auditor)	Not Available	
12.	No of Floors	G+9	
13.	Date of Sanction of Building Plan	Not Availabe	
14.	Whether P.O.C/OC received from local body?	Not Available	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	New Security & services	
16.	No of Security Personnel engaged	2	
17.	Whether Records of Vehicles (No & type entering into the building are kept	YES	
18.	Whether records of Visitors entering into the building are kept	YES	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	YES	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	One	

22.	No of Vehicles for which parking space is available in the premises	12Nos
23.	Whether parking space available for visitors within the premises	NO
24.	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
25.	Garbage Clearing	NDITA Garbage clearing system
26.	Drainage System	Connected to NDITA Drainage system
27.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	Not applicable
30.	Any Other Clearance	Not applicable

PART - II

V= Vacant

31.	Occupancy load	(Based on Estimates)										
	Existing	G	1	2	3	4	5	6	7	8	9	Total
	a)Regular	2	12	25	5	10	5	8	V	V	V	67
	b)Floating											15
32.	Basement	NO										

Part- III

Provisions of means of escape

33.	Number of staircases --→TWO NOS			
34.	Stairs Number		1#	2#
	a)	Width of flight	1250	1250
	b)	Tread width	260	260
	c)	Riser Height	150	150
	d)	Finish	Marble	Marble
	e)	Width of stair door (FCD)-	No FCD	No Fcd
	f)	Height of stair head room	8"	8"
	g)	Height of stair handrail	100 ⁰	90 ⁰
	h)	Area & location & profile of Fire Refuge Area	6 th / 7 th floor	
	i)	Width and type of door leading to Fire refugee area	3m x 1 mtr 5mtrXx 1 mtr	
	J)	Pressurization of staircase	NO	
k)	Segregation of staircase	YES		

35.	Number of Lifts installed→Two		
	Lift-Numbers	#1	#2
	a) Type of door	Metallic	Metallic
	b) Fire resistance rating	2 hrs	2 hrs
	c) Area of lift car	1000 mm X 1200 mm	1700 mm X 1400 mm
	d) Capacity (no of persons)	8	8
	e) Capacity(in kg)	544	544
	f) Company	OTIS	OTIS
	g) Is communication system, installed in the lift car?	YES	YES
	h) Is a fireman's switch being installed in the car?	YES	YES
	i) Pressurization of lift	NO	
	j) Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Not Available	
36.	Presence of proper signage in all the exit route	NO	
37.	Is it posted with illuminated signage ?	NO	
38.	Whether it is landing to fire assembly point?	None	
39.	Any form of Public address system available ?	YES	
40.			
41.	Width form of internal road within the Premises ?		
42.	Width of the Entry / exit of Gate		
43.	Height of the Entry / exit of Gate	Open to sky	

PART IV

Provision of Fire Safety Arrangement

44.	Is any water reservoir for firefighting available ? (at ground level / overhead)	Yes	U/G500000ltr O/H Not available
	a) If yes, specify the distance from the building	Adjacent	
	b) If yes, specify the capacity (in litres)as approved by WBF & ES.	None	
	c) Specify the condition of the reservoir	Satisfactory	
45.	Is any public or other water storage facility available nearby ?	Yes	■specify the distance from the building ----800Mtr
	a) Is it readily accessible?	Yes	■condition and type of the reservoir—Water body

46.	Are internal hydrants being provided ?	Yes
	If so, please indicate no of hydrants in each floor	One in each floor
47.	Are first aid hose reels being provided ? If so please indicate	Yes.
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	YES, directly to the riser
	b) Size (bore) and type of nozzle fitted to each hose reel	20 mm,30 mtr
48.	Are fire hoses being provided near each hydrant? If so, please indicate	yes
	a) Total no of hoses provided near each hydrant	one
49.	Have wet risers/dry risers been provided?	Wet riser provided
50.	If yes, please indicate the number of risers and internal diameter of each	One riser
51.	Has any down comer been provided? If so, please give details	No
52.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Main pump -60 HP Stand by pump -60 HP Jockey pump-15 HP
	a) Number of pumps	3nos
	b) Size of suction and delivery connection to each pump/Output/Head	Suction 150 mm & Delivery is 150 mm Discharge 125 M ³ /Hr Head Height- 70Mtr
	e) Is the pump automatic in action?	YES
	f) Is the water pressure sufficient at max distance from the pump?	Could not be checked as there is no pressure gauge at the top
53.	Sprinkler system	YES
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	YES, Smoke detectors
	a) Type of detectors used	Addressable smoke detectors
54.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	YES in each floor
	a) Alarm receiving system	Yes

55.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Yes 14. 3.1 3	Number of FE Type/ Capacity BC(5 Kg)----- CO2(4.5Kg)----- Water (9 Ltr) -----	36 nos 15nos. 6No. 15Nos
	Location	At common areas& Electrical Installations		
56.	Are Emergency Fire Alarm being provided in each floor ?	YES		
57.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	None		
58.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (mintwice a year)?	No record is available		
59.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
60.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
61.	Status of NOC from WBF&ES	Not available		

Part-V

Electrical, Cables and Ventilation

62.	If the building is Centrally air - conditioned, please indicate,	No Central AC
a)	Material used for construction of ducts and its fittings	Not applicable
b)	Type of tinning used for ducts	Not applicable
c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
d)	How the lagging is secured?	Not applicable
e)	If false ceiling is there?	Not applicable
f)	Material used for false ceiling	Not applicable
g)	Is a separate AHU being provided in each floor	Not applicable
H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
j)	Will fire dampers be provided in AC duct?	Not applicable

63.	Is there any standby source of electric supply being provided?	YES. DG of 125 KVA
	Is the back supply automatic?	NO. Operates manually
64.	Location of switch- gears and transformers	Out side
65.	a) Transformer capacity	31.5 KVA X 2 nos
	b) If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable
	c) If outside, how far is it from the building?	2 mtrs
66.	What precautions are taken to prevent a possible fire in the transformers from spreading?	NIL
67.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Shafts are not sealed
68.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	NO
69.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
70.	Whether natural ventilation is relied upon? If so, give details.	Yes
71.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO
72.	Whether mechanical ventilation is being coupled with automatic detection system?	Not applicable
73.	Whether the refuge area is being provided?	Yes . In between 6 th & 7 th floor
74.	Storage of combustibles materials near electrical equipment/fuse units.	NO
75.	RCCBs available??	None found
76.	Master switch in warehouses	NO
77.	Proper cable joint procedures as per manufacturer	YES
78.	Earthing Pit Tested??	Records are not available
79.	Use of MCB??	NO

80.	Bypassing of protection devices	None found
81.	Deteriorated insulation	None found
82.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
83.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	NO
84.	Tracking possibility	Yes
85.	Unused opening in the panels, etc.	None found
86.	Possibility of ground fault/short circuit	None found
87.	Mechanical protection to cables	Yes.
88.	Loose terminations due to improper supports, crimping	None found
89.	Improper gland installation, wrong lug size	None found.
90.	Over-rated uses, wrongly set protection relays, etc.	NO Protection relay
91.	Earthing layout & it's effectiveness	Not available
92.	Switch yard and sub station	No
93.	DG operation and maintenance	YES
94.	Reliability of the fire hydrant system	YES
95.	Emergency preparedness and response	None found
96.	Availability of Evacuation plan	None found
97.	Mock drill conducted??	No record is available
98.	Awareness of the people??	Average
99.	Sample basis validation of smoke detection system??	No record found
100.	Storage if hazardous material, chemicals??	NO
101.	Use of signage??	NO
102.	Hydrants clear, access to public thorough fare open	YES
103.	Flame & work permits (as applicable)	None found
104.	Effective internal communication and public address system	YES
105.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
106.	Management structure, role of safety officer, fire department etc.	NO
107.	Procedure for incident investigation and control	NO

PART- VI

Other Information

108.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	None found as no NOC is available
109.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
110.	Is Trade License available??	Not available
111.	Name of the Insurance Company	Information not available
112.	Remarks (if any) 21.No assembly point is identified 22. There is no pressure gauge at the top floor of the hydrant 23.No record of fire Mock drill& Evacuation is available 24. There is no signage is available for the Emergency Exit 25.No record of validation of smoke detector is available 26.No NOC from WBFES is found available 27.No C form for the lifts are available 28.Wet riser fire pumps are found not in operation 29. No hammer is available in the \MCPs	

Auditor

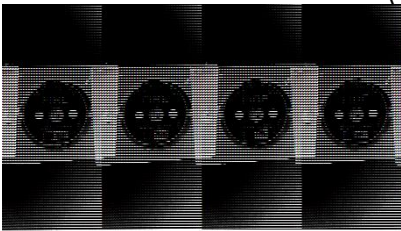
Reviewer

Signature& date of Inspecting and Reporting Authority With seal

NDITA

Observation tracking report (summary Sheet)

<i>Sl.No</i>	<i>OBSERVATIONS</i>	<i>RECOMMENDATIONS</i>
1.	No assembly point is identified	Assembly point is to be identified
2.	There is no pressure gauge at the top floor of the hydrant	pressure gauge is to be installed at the top floor of the hydrant
3.	No record of fire Mock drill & Evacuation is available	Records are to be maintained
4.	There is no signage is available for the Emergency Exit	Proper Illuminated signage to be provided for the emergency route
5.	No record of validation of smoke detector is available	Smoke detectors are to be validated periodically. Records are to be kept
6	No NOC from WBFES is found available	NOC from WBFES is to be obtained
7	No C form for the lifts are available	C certificate from WB govt is to be obtained

8	Wet riser fire pumps are found not in operation 	Wet riser pumps are to run 24 X 7 in auto mode
9	No hammer is available in the \MCPs 	Hammers are to be provided in MCPs

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

ICE KING



EXECUTIVE SUMMARY

Part I & II

General Information

The name of the building is ICE KING and is having G+ 9 structures. The building is jointly owned by Mr Vinod Chowdhury & other 2 crowners. The total plot area is approx. 501.761sq.mtrs and built up area is approx.2916.34sq.mtrs

The owners have rented out all the 10 floors to 10 companies.

As per record the building plan has been sanctioned on 05.07.2006

The Occupation Certificate certificates (OC) have been obtained from NDITA on 07.06.2012

The building is of B+G+10.In the basement there are car parking space, LT panel room as well as pump room in a very constricted area. **The unsafe act & condition was found that Pump room LT panel is set side by side; water is leaking & flowing under the LT room. As per IE rule this situation is not accepted.**

At some floors Emergency doors have rolling shutter doors. Emergency doors are found opening inside.

NOC from WBFES has Expired on 01.11.2012 (Ref WBFES/DG/FP/446/11/Bidhan-CB/219/05(242/03) dated 01.11.2011

The name of the main security agency engaged is GopalPalit. However, other agencies are also engaged at various floors.

Occupancy Load(including all floors) was found as

Existing -- 94

Floating -- 6

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows:

There are two Staircases available for use one of which is called emergency stair. There are also two KONE made lifts available, with auto sliding type door. The Lift can carry 8 persons (max) both the lifts are provided with communication system from inside and fire man's switches are also available

C form for the lifts from appropriate authorities have not been received yet

The 8th floor has been provided with fire refuge area

Fire emergency drill has not been conducted.

There is instructive Signage available at various locations like EXIT Route etc.

Assembly point has not been marked clearly near the gate.

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is underground water reservoir (1, 50,000liters capacity), fire water pumps, wet riser and portable fire extinguishers located at staircase landings

There are two fire water pumps (the main pump is of 60 HP rating) and the jockey pump (15HP rating) to charge the wet riser. There is one stand by water pump of 60 HP. The pump capacity is 2850 liters per minute and the head is 70 mtr, Also there is no pressure gauge at the wet riser top end to know the pressure at the top

Fire hydrant (single nozzle) and hose reel connection at each landing points are available.

Water Sprinkler system, smoke detection system and fire alarm system are in place at each floor. There is MCP (manual call point) at each floor. The fire alarm panel is at the ground floor.

PART V

ELECTRICAL FIRE HAZARDS

The power supply is thru installed transformer having 11KVA capacity and DG set of capacity 250 KVA can be started if required. The DG set is to be started up manually when required. Normal Electrical load is 130 KVA.

There is no ELCB or RCCB in the circuit.

There is no Lightning arrestor AT THE ROOF TOP.

Electrical attendant do not have Electrical license.

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 10	
2.	Premises Name (if any):	TOUCHSTONE TECHNOLOGIES Pvt Ltd	
3.	Name of the owner /occupier/lessee	Mr. Dinesh Neotia	
4.	Permanent Address	EN 10, Salt Lake,Sector V , Kolkata 700 091.	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Lease hold.	
6.	Name of the Contact Person	SaikatMajumdar	
7.	Phone No of Contact Person	9748733847	
8.	E-mail	Saratexp2007@rediffmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
			IT/ITES ☐ Ok
10.	Plot Area(as informed to the Auditor)	501.761 sq.mtr	
11.	Build up area(as informed to the Auditor)	2916.34 sq.mtr	
12.	No of Floors	B+G+10	
14.	Date of Sanction of Building Plan	Date: 5.7.06	
15.	Whether P.O.C/OC received from local body?	Yes	OC Issuing Authority Bidhan Nagar Municipality/ NDITA Dated:07/06/2012
SECURITY SETUP DETAILS			
16	Name of the SECURITY AGENCY engaged	GopalPalit	
17	No of Security Personnel engaged	2	
18	Whether Records of Vehicles (No & type entering into the building are kept	No	
19	Whether records of Visitors entering into the building are kept	YES	
20	Whether Metal detectors are used at the entry point	No	
21	Whether Monitoring System through Close circuit TV available	No	

VEHICLES VOLUME		
22	No of Vehicles Engaged by the Organization	1
23	No of Vehicles for which parking space is available in the premises	6
24	Whether parking space available for visitors within the premises	No
25	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
26	Garbage Clearing	NDITA garbage clearing system
27	Drainage System	Connected to NDITA Drainage system
28	Maintenance of Road	Internal Roads are maintained by owner
TELEPHONE TOWER		
29	No of Towers	NIL
30	Statutory Clearance from AAI	Not Applicable
31	Any Other Clearance	Not Applicable

PART - II

V=vacant

32	Occupancy load		(Attach floor wise details separately if required)													
	Existing		B	G	1	2	3	4	5	6	7	8	9	10		T
	a)Regular			24	v	25	25	v	v	20	v	v	v	v		94
	b)Floating															6
33	Basement		yes													
	a)	If basement extends beyond building profile	No													
	b)	Use of the basement	Parking		Storage (Combustible/noncombustible):No						Fire Pump					
	c)	Is it being sprinkle red?	Yes													
	d)	Whether any cubicles present in the basement?	No													
		If yes, their use to be specified														
	f)	Whether fire zones are defined?	No													
		If yes, please provide details														

Part- III

Provisions of means of escape

34	Number of staircases --→ TWO			
	Stairs Number		#1	#2
	a)	Width of flight	1440 mm	1390 mm
	b)	Tread width	280 mm	270mm
	c)	Riser Height	160mm	170mm
	d)	Finish	Marble	Kota Stone
	e)	Width of stair door (FCD)	1800 MM Glass	980 mm wooden door
	f)	Height of stair head room	8 ft	8 ft
	g)	Height of stair handrail	990 mm	980mm
	h)	Area & location & profile of Fire Refuge Area	On 8th floor -9780 mm X 1400 mm	
	i)	Width and type of door leading to Fire refugee area	1050mm Glass door	
	j)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	
35	Number of Lifts installed→ TWO			
	Lift-Numbers		#1	#2
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2 hrs	2 hrs
	c)	Area of lift car	1420mmX1420 mm	1100mmX860 mm
	d)	Capacity (no of persons)	8 persons	8 persons
	e)	Capacity(in kg)	544 kgs	544 kgs
	f)	Company	KONE	KONE
	g)	Is communication system, installed in the lift car?	Yes	Yes
	h)	Is a fireman's switch being installed in the car?	Yes	Yes
	i)	Pressurization of lift	Yes	No
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	No	Not Available under process
36	Presence of proper signage in all the exit route		No	
37	Is it posted with illuminated signage?		Yes/No	
38	Whether it is landing to fire assembly point?		Yes/No	
39	Any form of Public address system available?		Yes/No	
40	Width form of internal road within the Premises?		4200 mm	
41	Width of the Entry / exit of Gate		4150 mm	
42	Height of the Entry / exit of Gate		Open to Sky	

PART IV

Provision of Fire Safety Arrangement

43	Is any water reservoir for fire fighting available ? (at ground level / over head)		Yes	U/G-150000 Ltr O/H: 8000 Ltr
	a)	If yes, specify the distance from the building	Adjacent to the building	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	None	
	c)	Specify the condition of the reservoir	Satisfactory	
44	Is any public or other water storage facility available nearby ?		Yes	Specify the distance from the building- 800 mtr
	a)	Is it readily accessible ?	Yes	Condition and type of the reservoir: water body
45	Are internal hydrants being provided ?		Yes	Single
	If so, please indicate no of hydrants in each floor		Single	
46	Are first aid hose reels being provided ? If so please indicate		Yes	No of hose reels on each floor :2 (Two)
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel: 25 mm, 30mm
	b)	Size (bore) and type of nozzle fitted to each hose reel	5 mm, jet type	
47	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	Type of hose: Convey Size of hose:63mm Length of hose:15mtr
	a)	Total no of hoses provided near each hydrant	One	
48	Have wet risers/dry risers been provided?		Wet riser provided.	
	If yes, please indicate the number of risers and internal diameter of each		One riser of 6inch size.	
49	Has any down comer been provided? If so, please give details		No down comer provided.	
50	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes	
	a)	Number of pumps	3 nos.	
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction: 200 mm, Delivery: 150 mm Output of each pump:2850lpm Max head against which the pump can: 70mtroperate at the output mentioned in:	
	e)	Is the pump automatic in action?	Yes	
	f)	Is the water pressure sufficient at max distance from the pump?	No ☐ Could not be checked as there is no pressure gauge	

51.	Sprinkler system: Yes				
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes		
	a)	Type of detectors used	Smoke detectors		
52	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes		
53	Alarm receiving system		Yes		
54	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		Yes	Number of FE	35
			Yes With in validity	Type/ Capacity	15
				DCP	15
				FOAM	5
		CO ₂		35	
55	Location and population of the FEs adequate		Back Stair cases-2 in each floor		
56	Is Emergency Fire Alarm being provided in each floor?		Yes	No. of Fire Alarm: 9nos. Location of Fire Alarm: Stair case	
57	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		No		
58	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?		No		
59	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES		Not Available		
60	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES		Not Available		
61	Status of NOC from WBF&ES		NOC (Ref no WBFES/ 977/10/Bidhan-113/320/05(66/10) dated 24.2.10 valid up to 23.2.11. Renewal application made On 12.5.12		

Part-V

Electrical, Cables and Ventilation

62	If the building is Centrally air -conditioned, please indicate,		NO Central AC	
	a)	Material used for construction of ducts and its fittings	Not applicable	
	b)	Type of tinning used for ducts	Not applicable	
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable	
	d)	How the lagging is secured?	Not applicable	
	e)	If false ceiling is there?	Not applicable	
	f)	Material used for false ceiling	Not applicable	
	g)	Is a separate AHU being provided in each floor	Not applicable	
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable	
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable	
	j)	Will fire dampers be provided in AC duct?	Not applicable	
63	Is there any standby source of electric supply being provided?		Yes	DG Capacity: 250 KVA
	Is the back supply automatic?		No	Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump ☐ ■Emergency Light ☐ ■Lift ☐
64	Location of switch- gears and transformers		Back side the building open to sky	
65	a)	Transformer capacity	11KVA	
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Outside the building	
	c)	If outside, how far is it from the building?	3 mtr	
66	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Totally covered	
67	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Gap in electrical Shot.	
68	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		No	
	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable	
69	Whether natural ventilation is relied upon? If so, give details.		Yes	

70	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No	
71	Whether mechanical ventilation is being coupled with automatic detection system?	No	
72	Whether the refuge area is being provided?	Yes	On which floor: 8 th floor Area of Fire Refuge Area: 9780 mmX 1400mm Width of Fire Refuge Area: 1400mm
73	Storage of combustibles materials near electrical equipment/fuse units.	No	
74	RCCBs available??	No	
75	Master switch in warehouses	Not applicable	
76	Proper cable joint procedures as per manufacturer	Yes	
77	Earthling Pit Tested??	No	
78	Use of MCB??	Yes	
79	Bypassing of protection devices	No	
80	Deteriorated insulation	No	
81	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes	
82	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Yes	
83	Tracking possibility	Yes	
84	Unused opening in the panels, etc.	No	
85	Possibility of ground fault/short circuit	No	
86	Mechanical protection to cables	Yes	
87	Loose terminations due to improper supports, crimping	No	
88	Improper gland installation, wrong lug size	No	
89	Over-rated uses, wrongly set protection relays, etc.	No	
90	Switch yard and sub station	No	
91	DG operation and maintenance	Yes	
92	Reliability of the fire hydrant system	No	
93	Emergency preparedness and response	No	
94	Availability of Evacuation plan	No	
95	Mock drill conducted??	Yes	
96	Awareness of the people??	Nil	
97	Sample basis validation of smoke detection system??	No	
98	Condition of Lightning Arrestor	No	
99	Periodic test of UPS system (as applicable)	Not applicable	
100	Handling of electrical work by competent electrician	Yes	
101	Approval of receiving station, substation and DG	Yes	
102	Storage if hazardous material, chemicals?	No	

103	Use of signage?	No
104	Hydrants clear, access to public thorough fare open	Yes
105	Flame & work permits (as applicable)	No
106	Effective internal communication and public address system	No
107	Color coding system of hazardous chemical gas lines etc.	Not Applicable
108	Management structure, role of safety officer, fire department etc.	No
109	Procedure for incident investigation and control	No

PART- VI

Other Information

110	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes	From recommendation of NOC from WBF&ES
111	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No	
	Is Trade License available??	No	
112	Name of the Insurance Company	None	
113	Remarks (if any) 1. No Evacuation drill has been conducted 2. No mock Fire drill has been conducted 3. No pressure gauge at the top to find out the pressure at the top. 4. Valid NOC from WBF&ES is not available 5. NO ELCB or RCCB found installed in the power consuming units like split ACs 6. No Emergency procedure is available neither with the Tenants or the owner 7. No pressure gauge at the top to find out the pressure at the top. 8. In the basement Electrical installation panel room & Water pump room is situated side by side. Leaked water was found flowing on the ground under the electrical installation 9. In some floors Emergency doors are found shut with rolling shutters 10. In some floors Emergency doors are found opening inside 11. No proper signage is available 12. No Lightning arrestor was found 13. No earth pit test has been conducted 14. Electrical shafts are found not sealed 15. Amount of annual property Tax RS 5, 60,884/- per annum.		

Auditor I

Auditor II

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1.	No Evacuation drill has been conducted	Periodically Evacuation drill is to be conducted for all the occupants Record to be maintained
2.	No mock Fire drill has been conducted	Fire Mock drill is to be conducted
3.	No pressure gauge at the top to find out the pressure at the top.	Pressure gauge is to be provided
4.	No Emergency procedure is available neither with the Tenants or the owner	Emergency Procedure is to be developed
5.	Valid NOC from WBF&ES is not available	Valid NOC to be obtained
6.	NO ELCB or RCCB found installed in the power consuming units like split ACs	ELCB/RCCB to be put in the circuit
7.	In the basement Electrical installation panel room & Water pump room is situated side by side. Leaked water was found flowing on the ground under the electrical installation 	These have to be separated with clear boundary wall
8	In some floors Emergency doors are found shut with rolling shutters 	Emergency door should open quickly in case of emergency
9	In some floors Emergency doors are found opening inside	Emergency door should open outside
10	No proper signage is available	Proper illuminated signage to be put in the emergency exit
11	No Lightning arrestor was found	Lightening arrestor has to be installed with proper earthing
12	No earth pit test has been conducted	Earth pit test to be conducted periodically
13	Electrical shafts are found not sealed 	Shaft to kept sealed to avoid percolation of smoke

Auditors I

Auditors II

Signature& Date of Inspecting and Reporting Authority With seal

ANDERSON PRINTING HOUSE



EXECUTIVE SUMMARY

Part I & II

General Information

ANDERSON PRINTING HOUSE is situated at EN-11, Sector V, Salt Lake, Kolkata 700091, The structure is G + 8 & built up area is approx. 2146.474 sqmtr , in total approx. 501.761 sqmtr of land.

This property is taken in rent from Late AsitBaranBasu in 2007. The Printing company named Anderson Printing House & Anderson Technology is situated in this building. Paper for printing is stacked in the ground floor which was designated as a parking place in the sanctioned plan.

On 6th floor M/S LETSE Software & Services has taken rent from the owner MrAtmaramMatra. Their Trade license N0 002136dt 12.11.12 is valid up to 31.3.2013

In the Ground floor there is storage of paper rolls & printing machines, in the 1st floor & Floor there is printing machines, 3rd & 8th floor are the offices of Anderson Printing House. 4th & 6th floor are rented, 5th & 7th floors are vacant.

There is no central AC system in the building

OC (Occupation Certificate) obtained directly from Bidhan Nagar Municipality & current Tax bill has been paid of Rs 56108/- by the Anderson group for their share of floors. **Others Tax payment is not available**

Last NOC from WBF & ES (Ref No WBFES/3093/07/Bidhan/RB/139/04(155/04) dated 17.05.07 is valid up to 16, 5, 08. There after No Valid NOC is available

Occupancy Load was found as

Existing -- 89
Floating -- 15

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two Staircases available. There are two nos Lifts available. There is no refuse area though the building height is more than 25 mtr

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers & wet risers, Sprinklers & smoke detectors. MCP are not working, Smoke detectors were found not working. Control panel was found shut off.

Wet Riser

There is an underground tank of 70000 ltr capacity For Fire only. There are two nos pumps housed under the stair case. One pump capacity is 60 HP & that of Jockey pump is of 15 HP. There is no spare pump available. The pumps are found fully covered with cob webs & jerry cans. It is obvious that pump do not run. There is sprinkler system available, but sprinkler do not have any water.

Alternate source of water is the Water body approx. 800 mtr away

PAS is available,.

Close circuit TV monitoring is available

24 Nos Portable fire extinguishers are found deployed near the staircase & in the working area.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is one 160 KVA DG supply is as alternate source of power. This is operated manually

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART - I

1.	Plot No/Premises No:	EN-11	
2.	Premises Name (if any):	Anderson Printing House	
3.	Name of the owner /occupier/lessee	Late AsitBaranBasu	
4.	Permanent Address	EN-11,Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Rented	
6.	Name of the Contact Person	K.S.Ojha	
7.	Phone No of Contact Person	98312 51716	
8.	E-mail	accounts@andersonindia.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial ☐
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	501.761 sqmtr(7.50129 cottah)	
11.	Build up area(as informed to the Auditor)	2146 sqmtr	
12.	No of Floors	G+8	
13.	Date of Sanction of Building Plan	Date: Date 4.5.06	
14.	Whether P.O.C/OC received from local body?	Not Available	
SECURITY SETUP DETAILS			
15	Name of the SECURITY AGENCY engaged	Anderson	- FALCON
16	No of Security Personnel engaged	4	2
17	Whether Records of Vehicles (No & type entering into the building are kept	No	
18	Whether records of Visitors entering into the building are kept	Yes	
19	Whether Metal detectors are used at the entry point	No	
20	Whether Monitoring System through Close circuit TV available	Yes	
VEHICLES VOLUME			
21	No of Vehicles Engaged by the Organization	Anderson- 2	LETSE- 1
22	No of Vehicles for which parking space is available in the premises	3	
23	Whether parking space available for visitors within the premises	No	
24	Place where excess vehicles (if any) are parked	Outside Road	
GENERAL MAINTENANCE			
25	Garbage Clearing	NDITA Garbage clearing system	

26	Drainage System	Connected to NDITA Drainage system
27	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
28	No of Towers	NIL
29	Statutory Clearance from AAI	Not applicable
30	Any Other Clearance	Not applicable

PART - II

V=vacant

31	Occupancy load		(Attach floor wise details separately if required)									
	Existing		G	1	2	3	4	5	6	7	8	T
	a)Regular		7	6	6	30	7	V	25	V	8	89
	b)Floating											15
32	Basement		NIL									
	a)	If basement extends beyond building profile	Not Applicable									
	b)	Use of the basement	Not Applicable									
	c)	Is it being sprinkle red?	Not Applicable									
	d)	Whether any cubicles present in the basement?	Not Applicable									
		If yes, their use to be specified	Not Applicable									
	f)	Whether fire zones are defined?	Not Applicable									
		If yes, please provide details	Not Applicable									

Part- III

Provisions of means of escape

33	Number of staircases --> TWO Nos			
	Stairs Number		#1	#2
	a)	Width of flight	1700 mm	1100 mm
	b)	Tread width	265 mm	260 mm
	c)	Riser Height	160 mm	170 mm
	d)	Finish	Marble	Marble
	e)	Width of stair door (FCD)	NIL	NIL
	f)	Height of stair head room	3048 mm	3048 mm
	g)	Height of stair handrail	1010 mm	910 mm
	h)	Area & location & profile of Fire Refuge Area	NO Refuse Area	
	i)	Width and type of door leading to Fire refugee area	Not applicable	
	j)	Pressurization of staircase	Yes	No
	k)	Segregation of staircase	Yes	No
34	Number of Lifts installed->			
	Lift-Numbers		#1	#2
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2 Hrs	2 Hrs
	c)	Area of lift car	1100m X980mm	1480mmX1120 mm
	d)	Capacity (no of persons)	6	10
	e)	Capacity(in kg)	408 kg	680 kg

	f)	Company	Anderson	Anderson
	g)	Is communication system, installed in the lift car?	Yes	
	h)	Is a fireman's switch being installed in the car?	No	
	i)	Pressurization of lift	No	
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Not available	
35	Presence of proper signage in all the exit route		No	
36	Is it posted with illuminated signage?		No	
37	Whether it is landing to fire assembly point?		No	
38	Any form of Public address system available ?		Yes	
39	Width form of internal road within the Premises ?		3020 mm	
40	Width of the Entry / exit of Gate		3000 mm	
41	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G:70,000 ltr O/H:5000 ltr
	a)	If yes, specify the distance from the building	Adjacent to building	
	b)	If yes, specify the capacity (in liters) as approved by WBF& ES.	None	
	c)	Specify the condition of the reservoir	Satisfactory	
42	Is any public or other water storage facility available nearby?		Yes	Specify the distance from the building----800 Mtr
	a)	Is it readily accessible?	Yes/No	Condition and type of the reservoir—Water body
43	Are internal hydrants being provided?		Yes	Single or twin outlets.
	If so, please indicate no of hydrants in each floor		Single	
44	Are first aid hose reels being provided? If so please indicate		Yes	No of hose reels on each floor----- One in each floor :
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel---- - 25 mm,30 Mtr
	b)	Size (bore) and type of nozzle fitted to each hose reel	5 mm, spray type	
45	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	Type of hose: Convey Size of hose:63mm Length of hose:15mtr
	a)	Total no of hoses provided near each hydrant	One	

46	Have wet risers/dry risers been provided?		Yes		
	If yes, please indicate the number of risers and internal diameter of each		One, 150 mm		
47	Has any down comer been provided? If so, please give details		No		
48	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes		
	a)	Number of pumps	TWO, one main (60 HP), one jockey-15 HP		
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction: Not available Delivery: Not available Output of each pump: Not available Max head against which the pump can operate at the output mentioned in: Not available		
	e)	Is the pump automatic in action?	Could not be assessed as pump was found running		
	f)	Is the water pressure sufficient at max distance from the pump?	Could not be assessed as pump was found running		
49.	Sprinkler system				
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		YES		
	a)	Type of detectors used	Smoke detector, but found not working		
50	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes/No		
51	Alarm receiving system		Yes		
52	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations?		Yes	Number of FE Type/ Capacity DCP(5 Kg) Co2 (4.5 Kg)	24 16 8
	If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark?		Yes		
	Date of Validity		8.3.13		
53	Location and population of the FEs adequate		Yes		
54	Are Emergency Fire Alarm being provided in each floor ?		Yes	No. of Fire Alarm: one in each floor:1 (One) Location of Fire Alarm: near stair case: Stair case	
55	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		No		
56	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months		No		

	(min.twice a year)?	
57	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available
58	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available
59	Status of NOC from WBF&ES	Not available

Part-V

Electrical, Cables and Ventilation

60	If the building is Centrally air –conditioned, please indicate,		No Central AC
	a)	Material used for construction of ducts and its fittings	Not applicable
	b)	Type of tinning used for ducts	Not applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d)	How the lagging is secured?	Not applicable
	e)	If false ceiling is there?	Not applicable
	f)	Material used for false ceiling	Not applicable
	g)	Is a separate AHU being provided in each floor	Not applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j)	Will fire dampers be provided in AC duct?	Not applicable
61	Is there any standby source of electric supply being provided?		Yes
	Is the back supply automatic?		Yes/No
			DG Capacity: 160 KVA Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump ☐ ■Emergency Light ☐ ■Lift ☐ ■Partly to Office ■ Others
62	Location of switch- gears and transformers		Back side
63	a)	Transformer capacity	450 KVA dry type
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	OUT side
	c)	If outside, how far is it from the building?	3mtr
64	What precautions will be taken to prevent a possible fire in the transformers from spreading?		No such precaution is taken

65	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Electrical shafts are not sealed up to 6 th floor	
66	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	NO	
67	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable	
68	Whether natural ventilation is relied upon? If so, give details.	Yes	
69	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	YES	
70	Whether mechanical ventilation is being coupled with automatic detection system?	NO	
71	Whether the refuge area is being provided?	No	No refuse area found ,building height is above 25 mtr
72	Storage of combustibles materials near electrical equipment/fuse units.	Yes	
73	RCCBs available??	No	
74	Master switch in warehouses	No	
75	Proper cable joint procedures as per manufacturer	Yes	
76	Earthling Pit Tested??	Records are not available	
77	Use of MCB??	Yes	
78	Bypassing of protection devices	No	
79	Deteriorated insulation	No	
80	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes	
81	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	NO- not done in Cable shaft	
82	Tracking possibility	Yes	
83	Unused opening in the panels, etc.	No	
84	Possibility of ground fault/short circuit	No	
85	Mechanical protection to cables	Yes	
86	Loose terminations due to improper supports, crimping	No	
87	Improper gland installation, wrong lug size	No	
88	Over-rated uses, wrongly set protection relays, etc.	No	
89	Switch yard and sub station	Yes	
90	DG operation and maintenance	Yes	
91	Reliability of the fire hydrant system	NO	
92	Emergency preparedness and response	NO	
93	Availability of Evacuation plan	NO	
94	Mock drill conducted??	NO	

95	Awareness of the people??	NO
96	Sample basis validation of smoke detection system??	NIL
97	Condition of Lightening Arrestor	No
98	Periodic test of UPS system (as applicable)	Not applicable
99	Handling of electrical work by competent electrician	Yes.
100	Approval of receiving station, substation and DG	Not available
101	Storage of hazardous material, chemicals?	YES
102	Use of signage?	NO
103	Hydrants clear, access to public thorough fare open	NO
104	Flame & work permits (as applicable)	NO
105	Effective internal communication and public address system	YES
106	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
107	Management structure, role of safety officer, fire department etc.	NO
108	Procedure for incident investigation and control	NO

PART- VI

Other Information

109	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes	■Deviation :WBF&ES NOC
110	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO	
	Is Trade License available??	YES. Enlistment for 2012-2013 no 001861 dt 23.5.12	
111	Name of the Insurance Company	NO	
112	Remarks (if any) 30. No Fire mock drill has been conducted 31. No Evacuation drill has been conducted 32. There is no spare fire main pump 33. Fire pumps do not run 34. Fire pump area fully blocked by Jerry cans 35. MCP are not working 36. MCP installation is missing 37. Control panel is found switched off 38. Smoke detectors are not working 39. Ground floor which is supposed to be a garage as per sanctioned plan has been converted to a paper godown 40. Barely 6 “ below the ordinary tube light papers are stacked in the ground floor godown 41. There is no rubber mat in front of LT panel room		

	42. LT panel room is adjacent to paper store 43. In the 1st floor Paint godown(approx 250 ltr& above are dumped in the store room. No aisle way found 44. Ordinary tube light is fixed in the paint store 45. No fire lift of minimum 8 persons capacity is identified 46. No fireman's switch is available in the lifts 47. Collapsible gate found in one of the lifts of 10 person capacity 48. Escape route Passage is blocked by UPS battery in 3rd floor 49. No refuse area found though the building is above 25 Mtr height 50. House keeping is extremely poor all around the building 51. Fire escape route stairs are completely blocked by material from 1st floor to ground floor 23 Electrical switches are blocked by paper material 52. No nozzle in the fire hose cabinet 53. No hose found in the fire hose cabinet 54. No Fire extinguisher is available in 6th& 8th floor offices 55. Amount of property Tax Rs 140217 (oct-dec). 56. Valid NOC not available.

Auditor I

Auditor II

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.N o	OBSERVATIONS	RECOMMENDATIONS
1	No Fire mock drill has been conducted	Fire Mock drill is to be conducted periodically. Record is to be maintained
2	No Evacuation drill has been conducted	Evacuation drill is to be conducted periodically with all occupants. Record is to be maintained
3	There is no spare fire main pump	Spare Fire pump is to be installed
4	Fire pumps do not run	Fire pump should run for 24 hrs in auto mode
5	Fire pump area fully blocked by Jerry cans 	Area to be cleaned & accessible.
6	MCP are not working	MCP to be set in order
7	MCP installation is Missing 	MCP switch is to be reinstalled

8	Control panel is found switched off 	Control panel is to be switched on.
9	Smoke detectors are not working	Smoke detectors are to be set on
10	Ground floor which is supposed to be a garage as per sanctioned plan has been converted to a paper godown	Godown is to be relocated
11	Barely 6 " below the ordinary tube light papers are stacked in the ground floor godown	Lights are to be made flame proof light
12	There is no rubber mat in front of LT panel room 	A Rubber mat is to be provided
13	LT panel room is adjacent to paper store	To be isolated
14	In the 1st floor Paint godown(approx 250 ltr& above are dumped in the store room. No aisle way found 	Paints are to be stacked properly. Light switch should be made outside.
15	Ordinary tube light is fixed in the paint store 	Light is to be made flame proof light
16	No fire lift of minimum 8 persons capacity is identified	Lift should be identified
17	No fireman's switch is available in the lifts	Fireman's switch is to be provided
18	Collapsible gate found in one of the lifts of 10 person capacity	Collapsible gate to be replaced by Metallic gate
19	Escape route Passage is blocked by UPS battery in 3 rd floor 	Ups battery to be relocated to make the passage free of any obstacle

20	No refuse area found though the building is above 25 Mtr height	The building plan is to be reviewed
21	House keeping is extremely poor all around the building 	There is no aisle way in the paper godown. House keeping is to be done to make aisleway for easy escape
22	Fire escape route stairs are completely blocked by material from 1 st floor to ground floor   	Escape route should be always be kept free from any obstacle
23	Electrical switches are blocked by paper material 	Electrical switch should be always accessible.
24	No nozzle in the fire hose cabinet at stair case 	Fire Nozzle to be kept in each FHC

25	No hose found in the fire hose cabinet at stair case 	Hose & nozzle are to be provided in the FHC
26	No Fire extinguisher is available in 6 th & 8 th floor offices	Fire extinguisher in suitable numbers are to be provided in the office
27	Valid NOC not available.	Valid NOC to be obtained from WBF & ES.

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

GLOBSYN CRYSTAL



EXECUTIVE SUMMARY

Part I & II

General Information

GLOBSYN CRYSTAL is situated at EP 11 & 12, Sector V, Salt Lake, Kolkata 700091;The building is divided by two wings. One is B+G+P+11 & other is B+G+ P +5. Both the buildings are interconnected in the 1st floor with two number corridors. The basement, ground floor & podium is common to both the buildings .The built up area is 54274.70 sqmtr , in total approx.8676.63 sq.mtr. of land. In the podium there are 4 nos of restaurants, Globsyn & Globsyn business school. Rests of the floors of the buildings are rented out to different IT & ITES companies.

There is one central AC system in the building.

OC(Occupational Certificate) is available

NOC from WBF & ES is available.

Based on estimates **Occupancy Load** was found as

Existing -- 2500

Floating -- 100

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are total 4nos Staircases are available at both the buildings. Altogether Tenno of passenger Lifts and two no service lifts are available. These lifts have fire control switch with ARD & communication system. These Lifts do have valid C-Certificates from Govt. of West Bengal. There is one ESCALATOR from ground floor to the PODIUM

Evacuation Drill has been conducted.

There is Signage available in the EXIT Route except in the restaurants

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is the Wet Riser, sprinklers, portable fire extinguishers. Smoke detector, MCPs& Fire alarm.

Wet Riser

There are 5 nos pumps .Apart from these pumps there is a diesel stand by pump..

There is Sprinkler system at the basement, ground floor & lift lobby.

Alternate source of water is the Water body approx500 mtr away

Buildings are equipped with Fire detection system like smoke detectors.

148Nos Portable fire extinguishers are found deployed near the common areas& at the electrical installation. Refilling date is valid till July 2013. Apart from the above fire extinguishers Tenants have their own fleet of Fire extinguishers & smoke detectors

Auto CO2 Fire extinguishers are being installed at major electrical installations

MCPs are available in the common areas.

PART V

ELECTRICAL FIRE HAZARDS

There is no RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

DG supply is available as an alternate source of power. But Aircell is having their own sets of DGs(4 nos) as alternate source of power at basement.

PART VI

OTHER INFORMATION

There is a fire insurance coverage with BhartiAxa General Insurance company.

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	EP 11 &12	
2.	Premises Name (if any):	Globsyn Crystal	
3.	Name of the owner /occupier/lessee	Intelligent Infrastructure Ltd &Globsyn	
4.	Permanent Address	EP 11 &12,Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	MrArupBagchi	
7.	Phone No of Contact Person	96741 73132	
8.	E-mail	bagchiarup@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	8676.63 sqmtr	
11.	Build up area(as informed to the Auditor)	54274.70 SqMtr	
12.	No of Floors	Basement +Ground+Podium+11 Basement +Ground+Podium+5 Interconnected at 1 st floor	
13.	Date of Sanction of Building Plan	19.01.2007 , 126/BM(P)	
14.	Whether P.O.C/OC received from local body?	No. Applied for CC letter ref 16.3.11	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	G4s	
16.	No of Security Personnel engaged	30	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	Yes	
19.	Whether Metal detectors are used at the entry point	Yes	
20.	Whether Monitoring System through Close circuit TV available	Yes	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	NIL	
22.	No of Vehicles for which parking space is available in the premises	369	

23	Whether parking space available for visitors within the premises	NO
24	Place where excess vehicles (if any) are parked	Outside the building
GENERAL MAINTENANCE		
25	Garbage Clearing	Through NDITA Garbage clearing system
26	Drainage System	Connected to the drainage system
27	Maintenance of Road	Internal Road is maintained by the owner. Condition is satisfactory
TELEPHONE TOWER		
28	No of Towers	One no→Aircell
29	Statutory Clearance from AAI	Yes. AAI/20012/680/2005/AI(NOC)
30	Any Other Clearance	NO

PART – II V=vacant

31	Occupancy load		(Based on Estimates).														
	Existing		B	G	P	1	2	3	4	5	6	7	8	9	10	11	TTL
	a)Regular																
	Building 1		4	4	200	650	8	69	175	175	400	315	V	V	V	V	2000
	Building 2					V	500	V	V	V	X	X					500
	b)Floating																
	Building 1																75
	Building 2																25
32	Basement		YES														
	a)	If basement extends beyond building profile			NO												
	b)	Use of the basement							Pump House , DG sets, Car park, LT room								
	c)	Is it being sprinklered?							YES								
	d)	Whether any cubicles present in the basement?							NO								
		If yes, their use to be specified							Not Applicable								
	f)	Whether fire zones are defined?							NO								
		If yes, please provide details							Not Applicable								

Part- III

Provisions of means of escape

33	Number of staircases --→4 Nos		Building #1		Building #2	
	Stairs Number		#1	#2	#3	#4
	a)	Width of flight (mm)	1360	1300	1360	1300
	b)	Tread width(mm)	310	300	310	300
	c)	Riser Height(mm)	130	160	130	160
	d)	Finish	Kota stone	Kota stone	Kota stone	Kota stone
	e)	Width of stair door (FCD)	1090	1090	1090	1090
	f)	Height of stair handrail(mm)	930	960	930	960
	g)	Height of stair head room(ft)	12	15	12	15
	h)	Area & location & profile of Fire Refuge Area	3rd floor,7 th floor 10500 mm X 1500 mm each		Between 3 rd &4 th floor 8058 x 180 mm	
	i)	Width and type of door leading to Fire refugee area	1090 mm		1090 mm	
	j)	Pressurization of staircase	No			
k)	Segregation of staircase	Yes				
34	Number of Lifts installed→ 12 Nos		Building 1 & 2 →Passanger		Building 1 & 2 →Sevice	
	Lift-Numbers		Lift 1 to 10		Lift 11 to 12	
	a)	Type of door	Metallic		Metallic	
	b)	Fire resistance rating	2 Hrs		2 Hrs	
	c)	Area of lift car (mm ²)	1550 mm X 2010 mm		1300 mm X 2000 mm	
	d)	Capacity (no of persons)	20		16	
	e)	Capacity(in kg)	1360		1088	
	f)	Company	OTIS		OTIS	
	g)	Is communication system, installed in the lift car?	YES			
	h)	Is a fireman's switch being installed in the car?	YES			
	i)	Pressurization of lift	NO			
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Yes , valid till 21.06.2013			
35	Presence of proper signage in all the exit route		Yes except in restaurants			
36	Is it posted with illuminated signage ?		No			
37	Whether it is landing to fire assembly point?		Yes			
38	Any form of Public address system available ?		Yes			
39	Width form of internal road within the Premises ?		North -7000 mm, south 2750 mm, east 2000 mm, west 4000 mm			
40	Width of the Entry / exit of Gate		5920 mm (Entry) & 4000 mm(Exit)			
41	Height of the Entry / exit of Gate		Open to sky			

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available? (at ground level / over head)		Yes	U/G→3,12,000 ltr
	a)	If yes, specify the distance from the building	Adjacent to the building	
	b)	If yes, specify the capacity (in litres) as approved by WBF & ES.	No such recommendation is found	
	c)	Specify the condition of the reservoir	Satisfactory	
42	Is any public or other water storage facility available nearby?		Yes	Specify the distance from the building→500 Mtr
	a)	Is it readily accessible?	Yes	Condition and type of the reservoir→ Water Body
43	Are internal hydrants being provided?		Yes	Single outlets.
	If so, please indicate no of hydrants in each floor		Single	
44	Are first aid hose reels being provided? If so please indicate		Yes	No of hose reels on each floor : one
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel:→ 20 mm, 30 mtr
	b)	Size (bore) and type of nozzle fitted to each hose reel	5mm, Jet Type	
45	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	Type of hose: canvas Size of hose: 63 mm Length of hose: 15 Mtr
	a)	Total no of hoses provided near each hydrant	One	
46	Have wet risers/dry risers been provided?		Yes wet riser	
	If yes, please indicate the number of risers and internal diameter of each		4 nos	
47	Has any down comer been provided? If so, please give details		NO	
48	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		NO	
	a)	Number of pumps	5 nos main pump→75 KW Jockey Main→75 KW Stand by pump→ 75 KW Jockey to hydrant→ 11 KW Jockey to sprinkler→ 11 KW Diesel Stand by Pump→ 98 KW	
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction 200 mm Delivery 150 mm Main pump out put→ 171 M3/Hr Jockey pump output → 10.8 M3/Hr Head : 85 mtr	
	e)	Is the pump automatic in action?	YES	
	f)	Is the water pressure sufficient at max distance from the pump?	Could not be checked as there is no pressure gauge at the top of the building	

49.	Sprinkler system	Yes		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	Yes, Some Detector		
	a) Type of detectors used	Addressable, HFP11, HFPT 11,HMSB – D,HTRI-R,HTRI-S		
50	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	YES		
51	Alarm receiving system	YES		
52	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Yes 18.7.2013	Number of FE Type/ Capacity DCP(5 Kg) CO2(2 Kg) A type(9 Ltr) Foam(9 Ltr) These covers both the buildings .Apart from the above the Tenants are having their own fleet of Fire extinguishers which are not accounted here.	148 Nos 69 10 59 10
53	Location and population of the FEs adequate	Yes, in all the common areas & own office& electrical installations.		
54	Are Emergency Fire Alarm being provided in each floor ?	YES		
55	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	Yes		
56	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	YES		
57	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
58	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
59	Status of NOC from WBF&ES	Yes valid till 27.5.2013. Ref WBFES/DG/FP/1542/12/Bidhan- IT/116/05(125/05) dated 28.5.12		

Part-V

Electrical, Cables and Ventilation

60	If the building is Centrally air -conditioned, please indicate,		CENTRAL AC IS AVAILABLE #%) TR X 2 nos, One 450 Tr as stand by
	a)	Material used for construction of ducts and its fittings	Al sheet & glass wool
	b)	Type of tinning used for ducts	Al sheet
	c)	Type of lagging used, if any for insulating any portion of the duct	Glass wool
	d)	How the lagging is secured?	Wire mesh
	e)	If false ceiling is there?	Yes
	f)	Material used for false ceiling	Gypsum board
	g)	Is a separate AHU being provided in each floor	Yes
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Yes
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Yes
	j)	Will fire dampers be provided in AC duct?	Yes
61	Is there any standby source of electric supply being provided?		Yes DG 2035nKVA + 1730 KVA+1055 KVA Another one 2000 KVA is being installed
62	Is the back supply automatic?		Yes
63	Location of switch- gears and transformers		Inside the main building
64	a)	Transformer capacity	2000 KVA
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Yes
	c)	If outside, how far is it from the building?	Not applicable
65	What precautions is taken to prevent a possible fire in the transformers from spreading?		Auto Fire Extinguishers
66	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Electrical shaft found sealed. Hydrant shaft found not sealed
67.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		Not installed
68.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable
69.	Whether natural ventilation is relied upon? If so, give details.		Yes
70.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No such plan
71.	Whether mechanical ventilation is being coupled with automatic detection system?		YES

72.	Whether the refuge area is being provided?	YES at 4 th & 7 th floor in building# 1, in 4 th floor in building#2
73.	Storage of combustibles materials near electrical equipment/fuse units.	NO
74.	RCCBs available??	installed in each DB
75.	Master switch in warehouses	Not applicable
76.	Proper cable joint procedures as per manufacturer	Yes
77.	Earthing Pit Tested??	No such record is found
78.	Use of MCB??	YES
79.	Bypassing of protection devices	No such incidence found
80.	Deteriorated insulation	No such incidence found
81.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
82.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Electrical shaft found sealed Hydrant shaft found not sealed
83.	Tracking possibility	YES
84.	Unused opening in the panels, etc.	No unusual opening is found
85.	Possibility of ground fault/short circuit	No such possibility found at this moment
86.	Mechanical protection to cables	Yes
87.	Loose terminations due to improper supports, crimping	No such loose termination found after testing with infra red gun
88.	Improper gland installation, wrong lug size	No such loose improper gland installation found after testing with infra red gun
89.	Over-rated uses, wrongly set protection relays, etc.	Not found
90.	Switch yard and sub station	Ok
91.	DG operation and maintenance	DG is being maintained & under AMC
92.	Reliability of the fire hydrant system	YES
93.	Emergency preparedness and response	available
94.	Availability of Evacuation plan	Available
95.	Mock drill conducted??	Being done at an interval. Record is being maintained in the Fire register
96.	Awareness of the people??	Poor in the restaurants
97.	Sample basis validation of smoke detection system??	Yes done periodically
98.	Condition of Lightning Arrestor	There are 1 no Lightning arrestors found but continuity has not been tested
99.	Periodic test of UPS system (as applicable)	YES .Individual Tenants have their own system
100.	Handling of electrical work by competent electrician	Yes. Has valid License
101.	Approval of receiving station, substation and DG	Yes available
102.	Storage ifhazardous material, chemicals?	None
103.	Use of signage?	Yes,except in the restaurants

104.	Hydrants clear, access to public thorough fare open	YES
105.	Flame & work permits (as applicable)	Yes, system is there
106.	Effective internal communication and public address system	Yes. Walky talky, Portable mega phone, PAS
107.	Colour coding system of hazardous chemical gas lines etc.	YES
108.	Management structure, role of safety officer, fire department etc.	YES
109.	Procedure for incident investigation and control	Being formulated

PART- VI

Other Information

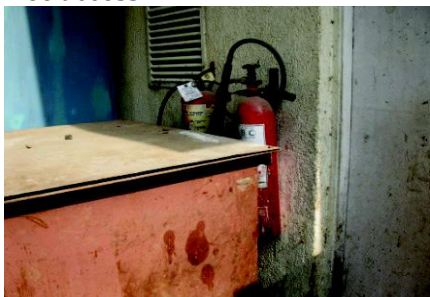
110.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No NOCfound from WBF &ES
111	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
	Is Trade License available??	NO. Trade license for the restaurant are available
112	Name of the Insurance Company	BharatiAxa
113	Remarks (if any) 1 The LPG gas bank of the Bhajahari Manna has no opening at the bottom 2. Fire extinguishers near the gas bank has no free access. 3. In the Azad Hind restaurant no free access to Fire extinguisher. 4. In the Azad Hind restaurant, The gas pipe is being abusedby all the junk materials 5. In the PPARAZZI restaurant electrical line is passing along with the gas pipe line 6. None of the Restaurants is having EXIT signage 7. LPG Gas detector is not available in any Kitchen except in KFC 8. Earth pit test record not found.	

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

NDITA
OBSERVATIONS tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1	The LPG gas bank of the Bhajahari Manna has no opening at the bottom 	Opening to be provided at the bottom
	Fire extinguishers near the gas bank has no free access 	Free access to be provided in all the extinguishers
	In the Azad Hind restaurant no free access to Fire extinguisher 	Free access to be provided in all the extinguishers
	In the Azad Hind restaurant, The gas pipe is being abused by all the junk materials 	Gas pipe to be kept free from any material

		
	In the PPARAZZI restaurant electrical line is passing along with the gas pipe line 	Electric line should be out of LPG line
	In the PPARAZZI restaurant, there is no access is to Fire Extinguishers 	Free access to be provided in all the extinguishers
	None of the Restaurants is having EXIT signage	EMERGENCY EXIT SIGNS ARE TO BE PROVIDED
	LPG Gas detector is not available in any Kitchen except in KFC	LPG detector is to be provided in the kitchens
	Earth pit test record not found.	Earth pits are to be tested & record to be maintained

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

EN-12



EXECUTIVE SUMMARY

Part I & II

General Information

The building is situated at EN-12, Sector V, Salt Lake, Kolkata 700091, The structure is B+G+9 & built up area is approx. 28000 sqft, in total approx. 7.5 cottah of land.

There is no central AC system in the building

Application for OC (Occupation Certificate) is made 1.10.12

Last NOC from WBF &ES is valid up to 24.11.11. There after No Valid NOC could be produced

Occupancy Load was found as

Existing -- 71

Floating -- 15

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two Staircases available. There are two nos. Lifts available.

There is a refuse area on 8th floor

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers & wet risers, Sprinklers & smoke detectors. MCP, Smoke detectors were found not working. Control panel was found shut off.

Wet Riser

There is an underground tank of 150000 ltr capacity For Fire only. There are two nos pumps housed under the stair case. One pump capacity is 60 HP & that of Jockey pump is of 15 HP. Alternate source of water is the Water body approx. 800 mtr away

PAS is not available

Close circuit TV monitoring is not available

32Nos Portable fire extinguishers are found deployed near the staircase & in the working area.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is one 200 KVA DG supply is as alternate source of power. This is operated manually

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART - I

1.	Plot No/Premises No:	EN12	
2.	Premises Name (if any):	NONE	
3.	Name of the owner /occupier/lessee	Lexotic Export Pvt. Ltd.	
4.	Permanent Address	EN-12, Sector-V, Saltlake, Kolkata-700091	
5.	Ownership details : Freehold/Rental/√Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	SomadritaMukherjee	
7.	Phone No of Contact Person	9830354600	
8.	E-mail	somadrita@mallcomindia.com	
9.	Purpose of the Land Use	√Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business √
			Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	7.5 Kattah	
11.	Build up area(as informed to the Auditor)	28000sq. ft	
12.	No of Floors	B+G+9	
13.	Date of Sanction of Building Plan	Date: 4/6/2001	
14.	Whether P.O.C/OC received from local body?	No	Applied for cc on 1/10/12 (application verified to NDITA)
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	THIRD EYE	
16.	No of Security Personnel engaged	2	
17.	Whether Records of Vehicles (No & type entering into the building are kept	YES	
18.	Whether records of Visitors entering into the building are kept	YES	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	YES	
VEHICLES VOLUME			

21	No of Vehicles Engaged by the Organisation	5
22	No of Vehicles for which parking space is available in the premises	19
23	Whether parking space available for visitors within the premises	NO
24	Place where excess vehicles (if any) are parked	OUTSIDE
GENERAL MAINTENANCE		
25	Garbage Clearing	Through NDITA Garbage clearing system
26	Drainage System	Connected to NDITA drainage system
27	Maintenance of Road	Internal Road is being maintained by occupier
TELEPHONE TOWER		
28	No of Towers	NO
29	Statutory Clearance from AAI	Not applicable
30	Any Other Clearance	Not applicable

PART – II

V-Vacant

31	Occupancy load		(Based on estimates)									
	Existing		B G 1 2 3 4 5 6 7 8 9									
	a)Regular		-6 3 10 V VV 15 15 22 = 71									
	b)Floating		15									
32	Basement		YES									
	a)	If basement extends beyond building profile	No									
	b)	Use of the basement	√Parking	Pump room and LT Panel room								
	c)	Is it being sprinkled?	Yes									
	d)	Whether any cubicles present in the basement?	No									
		If yes, their use to be specified	Not applicable									
	f)	Whether fire zones are defined?	No									
		If yes, please provide details	Not applicable									

Part- III

Provisions of means of escape

33	Number of staircases --→ Two			
	Stairs Number		#1 mm	#2 Mm (Fire exit)
	a)	Width of flight in mm	1680	1680
	b)	Tread width in mm	260	260
	c)	Riser Height in mm	150	170
	d)	Finish	marble	marble
	e)	Width of stair door (FCD) in mm	1100	1100
	f)	Height of stair head room in ft	14feet	10feet
	g)	Height of stair handrail	980mm	1000m
	h)	Area & location & profile of Fire Refuge Area	8 th floor 12040mm×950mm	
	i)	Width and type of door leading to Fire refuge area	FCD 980mm	GLASS 980mm
	j)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	
34	Number of Lifts installed→Two			
	Lift-Numbers		#1	#2
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2hr	2hr
	c)	Area of lift car	1300×1100m m ²	1300×1100m m ²
	d)	Capacity (no of persons)	8	8
	e)	Capacity(in kg)	544	544
	f)	Company	None	None
	g)	Is communication system, installed in the lift car?	Yes	Yes
	h)	Is a fireman's switch being installed in the car?	Yes	Yes
	i)	Pressurization of lift	No	No
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	No →applied	
35	Presence of proper signage in all the exit route		Yes	
36	Is it posted with illuminated signage ?		Yes	
37	Whether it is landing to fire assembly point?		No	
38	Any form of Public address system available?		Yes	
39	Width form of internal road within the Premises?		3700mm-south 2700mm-north	
40	Width of the Entry / exit of Gate		5100mm	
41	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available ? (at ground level / overhead)	Yes	U/G 150000ltrs O/H4000lts
	a) If yes, specify the distance from the building	Adjacent	
	b) If yes, specify the capacity (in litres) as approved by WBF & ES.	Could not be verified as provisional NOC could not be produced	
	c) Specify the condition of the reservoir	Satisfied	
43	Is any public or other water storage facility available nearby?	Yes	Specify the distance from the building 800mtr
	a) Is it readily accessible?	Yes	Condition and type of the reservoir water body
44	Are internal hydrants being provided ?	Yes	Single
	If so, please indicate no of hydrants in each floor	Single	
45	Are first aid hose reels being provided ? If so please indicate	Yes	No of hose reels on each floor → one
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel: 25mm, 30mm
	b) Size (bore) and type of nozzle fitted to each hose reel	5mm, Jet	
45	Are fire hoses being provided near each hydrant? If so, please indicate	Ye	Type of hose: canvas Size of hose: 65mm Length of hose: 15 mtr.
	a) Total no of hoses provided near each hydrant	One	
46	Have wet risers/dry risers been provided?	Yes wetriser	
	If yes, please indicate the number of risers and internal diameter of each	Two riser one for hydrant one for sprinkler	
47	Has any down comer been provided? If so, please give details	No	
	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Yes not connected in auto mode: pressure found	
	a) Number of pumps	1 Main, 1 Standby & Jockey	
	b) Size of suction and delivery connection to each pump/Output/Head	Suction: 200mm Delivery: 150 mm Output of each pump: 171m ³ /hr (main & standby) 70m ³ /hr jockey Max head against which the pump can operate at the output mentioned in: 70 m (all these pumps)	

	e)	Is the pump automatic in action?	No		
	f)	Is the water pressure sufficient at max distance from the pump?	No pressure pipe was found dry		
48.	Sprinkler system		yes		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes		
	a)	Type of detectors used	Smoke detector (not in working condition)		
49	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes		
50	Alarm receiving system		Yes		
51	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		Yes 26/11/13	Number of FE Type/ Capacity BC (5 Kg) Co2 (9 Ltr) AB (9 Ltr)	32nos statement attached 17 12 3
52	Location and population of the FEs adequate		Yes		
53	Are Emergency Fire Alarm being provided in each floor ?		Yes	No. of Fire Alarm: Two Location of Fire Alarm: on each stair case	
54	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		No		
55	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?		Yes last done 14/12/12		
56	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES		Could not be checked as the Drawing was not available		
57	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES		Do Could not be checked as the Drawing was not available		
58	Status of NOC from WBF&ES		Not valid. expires on 24/11/11 party claims that NOC had been received sep 12but could not be produced		

Part-V

Electrical, Cables and Ventilation

59	If the building is Centrally air - conditioned, please indicate,		Yes for each floor individuals AHU with exclusive one compressor	
	a)	Material used for construction of ducts and its fittings	Could not be checked sincerely sealed	
	b)	Type of tinning used for ducts	Not available	
	c)	Type of lagging used, if any for insulating any portion of the duct	Rubber Tape	
	d)	How the lagging is secured?	NA	
	e)	If false ceiling is there?	NA	
	f)	Material used for false ceiling	NA	
	g)	Is a separate AHU being provided in each floor	Yes with dedicated single compressor for each floor	
	H)	Whether automatic shutdown of AHU is coupled with detection system?	No	
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Isolated	
	j)	Will fire dampers be provided in AC duct?	No	
60	Is there any standby source of electric supply being provided?		Yes	DG200 KVACapacity
	Is the back supply automatic?		No Manual	Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump ☐ ■Emergency Light ☐ ■Lift ☐ ■ Offices ☐
61	Location of switch- gears and transformers		Outsides(Transformer) HT Gear room-inside	
62	a)	Transformer capacity	315 KVA -11KV-433Vair cooled	
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	HT Gear room is sealed but separated by brick wall	
	c)	If outside, how far is it from the building?	More than 4 meters	
63	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Fire extinguisher	

64	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	No	
65	Is Earth Leakage Circuit Breaker (ELCB) in every distribution board?	No	
66	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable	
67	Whether natural ventilation is relied upon? If so, give details.	Yes	
68	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No	
69	Whether mechanical ventilation is being coupled with automatic detection system?	No	
70	Whether the refuge area is being provided?	Yes	On which floor: 8 th floor Area of Fire Refuge Area:12040mm×950 mm Width of Fire Refuge Area:950mm
71	Storage of combustibles materials near electrical equipment/fuse units.	No	
72	RCCBs available??	No	
73	Master switch in warehouses	Not applicable	
74	Proper cable joint procedures as per manufacturer	Yes	
75	Earthing Pit Tested??	No	
76	Use of MCB??	Yes	
77	Bypassing of protection devices	No	
78	Deteriorated insulation	No	
79	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes	
80	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No	
81	Tracking possibility	Yes	
82	Unused opening in the panels, etc.	No	
83	Possibility of ground fault/short circuit	No	
84	Mechanical protection to cables	Yes	

85	Loose terminations due to improper supports, crimping	No
86	Improper gland installation, wrong lug size	No
87	Over-rated uses, wrongly set protection relays, etc.	No
88	Switch yard and sub station	Yes
89	DG operation and maintenance	Yes
90	Reliability of the fire hydrant system	Yes
91	Emergency preparedness and response	Yes
92	Availability of Evacuation plan	Yes
93	Mock drill conducted??	Yes
94	Awareness of the people??	Yes
95	Sample basis validation of smoke detection system??	No
96	Condition of Lightning Arrestor	No
97	Periodic test of UPS system (as applicable)	Yes
98	Handling of electrical work by competent electrician	Yes
99	Approval of receiving station, substation and DG	Yes
100	Storage of hazardous material, chemicals?	No
101	Use of signage?	Yes
102	Hydrants clear, access to public thoroughfare open	Yes
103	Flame & work permits (as applicable)	No
104	Effective internal communication and public address system	Yes
105	Colour coding system of hazardous chemical gas lines etc.	Na
106	Management structure, role of safety officer, fire department etc.	
107	Procedure for incident investigation and control	No

PART- VI

Other Information

108.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes	√■DeviationFrom NOC
109.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No	
	Is Trade License available??	Yes for their offices at 12/1 Nellisenguptasarani, kol-89-- Ceno-001341036534 dt. 25/7/12valid up to 31/3/13.	
110	Name of the Insurance Company	TATA AIG	
111	Remarks (if any) 1. The basement is used for Car Parking, pump room and L T panels LT panel is not very safe as it is beside the pumps and any leakage from pump may flood with waste 2. The second floor is rented to M/S Elecome Technologies 3. 3rd, 4th, 5th floor are vacant now to be maintained. 4. 6th, 7th& 9th are the offices of the occupier in the name Malcom. 5. The architectural drawing of floor layout drawing of risers , sprinklers <i>Smoke Detectors</i>, fire extinguisherscould not be verified as the same could not be provided. 6. Consent of director of electricity for generator and transformer could not be verified as same was not available 7. No accident/ incident report maintained.		

Reviewer

Auditor

Signature & date Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	A plastic bag filled with water found in the electrical part on 1 st floor next to cafeteria indicating leakage of some type	To be repaired and plastic to be removed.
2.	Hose real pipes fitted were found bent ,obstructing the flow of water 1 st & 2 nd floor of the risers	To be fitted properly. Obstruction is to be avoided
3.	No earth connection is found in the heater in cafeteria &the wire also have several leakages	The wire should not be changed and proper earthing connected.
4.	No rubber matt is found in LT panel the same should be separated with pump room.	Same to be provide and separated
5.	Pump is not in auto mode.	Pump to be in auto mode for 24 X 7
6.	Smoke detectors were found not working.	Should be tested and kept inworking condition.
7.	Automatic CO2 or DCP not fitted in transformer or switchgears not available	Automatic CO2 or DCP to be provided in the electrical installation

Reviewer

Auditor

Signature & date Inspecting and Reporting Authority With seal

ANTRIKSH



EXECUTIVE SUMMARY

Part I & II

General Information

The plot no is 13 and is owned by Mr. Purchand Saha (Owner of OK Bakery, Maniktala Road, Kolkata) and his family. At present the building is leased to Mr. J.K. Shaw who is using it for educational purpose. The name of the premises is proposed to be Antriksh.

The plot area is 7.5 Cottah, and built up area is approx. 25,956 sq.ft. The structure is of G+9 floor construction. The building plan has been sanctioned on 1/11/2006 and the sanction ref. no is V/BM/376. The issuance of OC (Occupational Certificate) and the assessment etc. are pending.

The Ground floor is used for car parking but at present part of it is under use as office space with wooden partition.

Presently the 1st, 2nd, 3rd, 5th & 8th floors along with Ground floor of the building are being used. The name of the security service provider is General Facility Service and 2 persons of the agency are engaged for the work.

Record of the visitors coming to the premises is kept in the register.

The total Occupancy load is 130 nos. regular (1st floor 10, 2nd, 3rd, 5th and 8th 30 nos. each), 25 nos. floating.

There is no central **AC system** in the building. There is no other type of A/C also in the building.

For garbage clearing and drainage etc. NDITA facility is employed.

The present NOC from WBFES is a provisional one only(WBFES/60/11/Bidhan-CB/26/06(28/06) dtd 5/4/2011 and application has been lodged for the regular NOC on 27/12/2012.

There is no tower on the building top. The height of the building is 31mtrs.

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two staircases on either sides of the building and two metallic lifts made by Schindler. Both the lifts are having ADR facility. Telephone communication can be made from lift carriages outside in case of emergency. Both can carry 10 passengers at a time. The applications for Form C certificates for the lifts are pending to be made. The refuge area is situated on the 8th floor.

The entry doors on the 1st as well as 2nd floor are wooden ones and all other entry doors, i.e from 3rd floor onwards are FCDs.

There is a kitchen on the 3rd floor equipped with 3 large ovens (having 9 burners)and LPG gas connection from cylinder kept on the ground floor. There is mechanical ventilation and exhaust system in this area. This is used for hotel management classes.

VISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement in the premises include an underground water tank of 1,50,000litres capacity, Fire pumps (3 no.pumps--- 1main,1 standby, and 1 jockey). The first two are of 55 KW rating and the Jockey pump is of 11KW rating. The entire system is located at a very dark corner ,and hence no other information could be collected on this. The system was not in operation at the time of audit.

The water delivery line is branched into two.While one is exclusively for water sprinkler system, the other for fire hydrants. Both the risers are running parallelly along the outside wall of the building and hydrants or sprinkler lines have been branched into inside thru the wall at every half landing of the staircase. Hose boxes are available near each fire hydrant point and hose reels are also arranged. There is no fire hydrant system facility with the main staircase(other side of the building) landing points.

Fire alarm and smoke detector system has been installed but not commissioned yet.

Fire extinguishers, 1 CO2 type and 1 DCP type have been placed near each firehydrant point (half landing points at each floor stair case) as well as top lift room, LT panel room,and car parking area. Total fire extinguishers deployed are CO2 type 12nos. and DCP type 12 nos. The validity date of the extinguishers are not available.

PART V

ELECTRICAL FIRE HAZARDS

The installed transformer and DG set capacities are 500KVA and 125KVA respectively. Both of these are located outside the building within boundary wall. The running load is 150KVA.

PART VI

OTHER INFORMATION

Construction and finishing work for the purpose of using the building in totality are still going on. Hence these materials are lying (ply wood boards etc) at many places along the stair case landing and floors as could be seen while climbing up the staircase. These are potential fire hazards.

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 13	
2.	Premises Name (if any):	ANTRIKSH AS PROPOSED.	
3.	Name of the owner /occupier/lessee	OK BAKERY (MR. PurnachandraSaha& family)	
4.	Permanent Address	EN13 Salt Lake,Sector V, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leesse	
6.	Name of the Contact Person	MrJ.K.Shaw	
7.	Phone No of Contact Person	9831120974	
8.	E-mail	shawgopa@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational ok
			Institutional
			Assembly
			Business
			Mercantile ☐ Restaurant
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	7.5 Kattha	
11.	Build up area(as informed to the Auditor)	25,956Sq Ft	
12.	No of Floors	G+9	
13.	Whether approved by local body?	☒ Yes ☐ ☒ No V/BM/376dtd. 1/11/2006	
14.	Date of Sanction of Building Plan	1/11/2006	
15.	Whether P.O.C/OC received from local body?	☒ Yes ☒ No ok	Pending
16.	Incidence of assessment done	☒ Yes ☒ No ok	Pending
SECURITY SETUP DETAILS			
17.	Name of the SECURITY AGENCY engaged	General facility services	
18.	No of Security Personnel engaged	2 nos.	
19.	Whether Records of Vehicles (No & type entering into the building are kept	No	
20.	Whether records of Visitors entering into the building are kept	Yes.	
21.	Whether Metal detectors are used at the entry point	No	
22.	Whether Monitoring System through Close circuit TV available	No	
VEHICLES VOLUME			
23.	No of Vehicles Engaged by the Organisation	No.	
24.	No of Own Vehicles engaged by Employees	4Nos.	

25	No of Vehicles for which parking space is available in the premises	17Nos
26	Whether parking space available for visitors within the premises	No
27	Place where excess vehicles (if any) are parked	Out side Road
GENERAL MAINTENANCE		
28	Garbage Clearing	NDITA garbage clearing system
29	Drainage System	Connected to NDITA Drainage system
30	Maintenance of Road	Internal Roads are maintained by owner
TELEPHONE TOWER		
31	No of Towers	No of towers: NIL
32	Statutory Clearance from AAI	Not applicable
33	Any Other Clearance	Not Applicable

PART - II

34	Occupancy load				
	Existing				Total
	a)Regular			130	
	b)Floating			25	155
35	Electrical Load	150 KVA			
36	Basement	NIL			

Part- III

Provisions of means of escape

37	Number of staircases -->		2nos.	
	Stairs Number		#1	#2
	a)	Width of flight	1400 mm	1720mm
	b)	Tread width	270 mm	280mm
	c)	Riser Height	150 mm	160mm
	d)	Finish	Marble	Marble
	e)	Width of stair door (FCD)	1400	1400mm
	f)	Height of stair head room	6.5 ft	10ft
	g)	Height of stair handrail	950 mm	900mm
	h)	Area & location & profile of Fire Refuge Area	8 th Floor 8500*950mm ²	
	i)	Width and type of door leading to Fire refugee area	780mm	
	j)	Pressurization of staircase	No	No
38	Number of Lifts installed		2 Nos.	
	Lift-Numbers-		#1	#2
	a)	Type of door	Metallic	Metallic

	b)	Fire resistance rating	2hrs.	2hrs.
	c)	Area of lift car	1450*1230mm ²	1450*1230mm²
	d)	Capacity (no of persons)	10 nos.	10nos.
	e)	Capacity(in kg)	680kgs	680kgs
	f)	Company	Schindler	Schindler
	g)	Is communication system, installed in the lift car?	Yes	Yes
	h)	Is a fireman's switch being installed in the car?	Yes	Yes
	i)	Pressurization of lift	No	No
	j)	Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Pending	Pending
39		Presence of proper signage in all the exit route	Yes	
40		Is it posted with illuminated signage?	Yes	
41		Whether it is landing to fire assembly point?	No	
42		Any form of Public address system available?	No	
43		Width form of internal road within the Premises ?	2780 mm	
44		Width of the Entry / exit of Gate	2550 mm	
45		Height of the Entry / exit of Gate	Open to Sky	

PART IV

Provision of Fire Safety Arrangement

46		Is any water reservoir for firefighting available? (at ground level / overhead)	Yes ☐ U/G 1,50,000 ltr	
	a)	If yes, specify the distance from the building	Adjacent to the building. Under the drive way.	
	b)	If yes, specify the capacity (in litres) as approved by WBF & ES.	1,50,000 ltr in U/G Tank	
	c)	Specify the condition of the reservoir	Satisfactory	
47		Is any public or other water storage facility available nearby?	Yes ok.	
	a)	Is it readily accessible?	Yes	
	b)	If yes, specify the distance from the building	Deep tubewell or from next building.	
	c)	Specify the condition and type of the reservoir	Good	
48		Are internal hydrants being provided ?	Yes	
	a)	If so, please indicate no of hydrants in each floor & also mention whether these hydrants are having single or twin outlets.	One hydrant point on each floor with single outlet.	

49	Are first aid hose reels being provided? If so please indicate	Yes	
	a) No of hose reels on each floor	One in each floor	
	b) Bore and length of hose reel tubing on each reel	25 mm, 30mtr	
	c) Size (bore) and type of nozzle fitted to each hose reel	20 mm, Running type	
	d) Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes To the RISER	
50	Are fire hoses being provided near each hydrant	Yes	
51	Have wet risers/dry risers been provided?	Yes WET Riser	
52	If yes, please indicate the number of risers and internal diameter of each	I no.riser of 6" dia.	
53	Has any down comer been provided? If so, please give details	No	
54	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Yes	
	a) Number of pumps	3nos.	
	b) Size of suction and delivery connection to each pump	Suction- 150mm Discharge 150mm	
	c) Output of each pump	Not available.Main motor and Standby pump motor each of HP 55KW and Jockey pump motor HP is 11KW.	
	d) Max head against which the pump can operate at the output mentioned in	Not available	
	e) Is the pump automatic in action?	Yes	
	f) Is the water pressure sufficient at max distance from the pump?	No ☐ Could not be checked as there is no pressure gauge	
55.	Sprinkler system	YES	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	Yes	
	a) Type of detectors used	Smoke detector.	
56	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	Yes but these are not functioning at the time of Audit	
	a) Alarm receiving system	Yes	
57	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate	Yes	
	a) Number of FE	12Nos	
	b) Type of FE	Type/ Capacity Water CO2 Type ((Ltr Capacity) DCP Type(5 Kg Capacity)	Quantity 12 12

	c)	Location	At the Stair case half landings and parking area as well as LT and lift room.
	d)	Expire date of FE	Not available.
58		Indicate whether the Fire extinguishers bear the ISI certification mark?	Yes
59		Are Emergency Fire Alarm being provided in each floor ?	Yes
	a)	No. of Fire Alarm	9
	b)	Location of Fire Alarm	Stair case Half landing points.
60		Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No
61		Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No
62		Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not Available
63		Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Drawing not available for verification.
64		Status of NOC from WBF&ES	Application has been made for NOC from WBF&ES on 27.12.12. Expected shortly.

Part-V

Electrical, Cables and Ventilation

67		If the building is Centrally air -conditioned, please indicate,	There is no Central AC
	a)	Material used for construction of ducts and its fittings	Not Applicable
	b)	Type of tinning used for ducts	Not Applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not Applicable
	d)	How the lagging is secured?	Not Applicable
	e)	If false ceiling is there?	Not Applicable
	f)	Material used for false ceiling	Not Applicable
	g)	Is a separate AHU BEING PROVIDED FOR EACHS FLOOR?Not	Not Applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not Applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not Applicable
	j)	Will fire dampers be provided in AC duct?	Not Applicable

68	Is there any standby source of electric supply being provided?	Yes
	a) If yes, how	DG set.
	b) Specify the capacity	125 KVA
	c) Specify the functions that can be maintained simultaneously by such back ups	Lift operation Lighting Fire pump operation
69	Is the back up supply	Manual
70	Location of switch- gears and transformers	Outside the building
71	a) Transformer capacity	500 KVA
	b) If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not Applicable
	c) If outside, how far is it from the building?	Adjacent within boundary wall
72	What precautions will be taken to prevent a possible fire in the transformers from spreading?	Fire extinguisher to be used.
73	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Yes ☐
74	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	No ☐
75	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable.
76	Whether natural ventilation is relied upon? If so, give details.	Yes ☐
77	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No ☐
78	Whether mechanical ventilation is being coupled with automatic detection system?	No ☐
79	Whether the refuge area is being provided?	Yes
81	Storage of combustibles materials near electrical equipment/fuse units.	No ☐
82	RCCBs	No ☐
83	Master switch in warehouses	Not applicable
84	Proper cable joint procedures as per manufacturer	Yes
85	Earthling defects	Pits provided.
86	Use of nonstandard fuse wires	No
87	Bypassing of protection devices	No
88	Deteriorated insulation	No
89	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes
90	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Yes
91	Tracking possibility	Yes
92	Unused opening in lie panels, etc.	No
93	Possibility of ground fault/short circuit	No

94	Mechanical protection to cables	Yes
95	Loose terminations due to improper supports, crimping	No
96	Improper gland installation, wrong lug size	No
97	Over-rated uses, wrongly set protection relays, etc.	No
98	Review of equipment safety	No
99	Cable layout	Yes
100	Earthing layout & it's effectiveness	No test report available.
101	Switch yard and sub station	Ok
102	MCC and distribution boards	Ok
103	DG operation and maintenance	Yes by security personnel
104	Reliability of the fire hydrant system	Yes
105	Emergency preparedness and response	No
106	Evacuation plan	No
107	Mock drill	No
108	Awareness of the people	Good
109	Sample basis validation of smoke detection system	No document available
110	Storage if hazardous material, chemicals	Construction material at staircase found
111	Use of signage	Yes
112	Hydrants clear, access to public thorough fare open	Yes
113	Flame & work permits (as applicable)	Not applicable
114	Effective internal communication and public address system	Not available
115	Colour coding system of hazardous chemical gas lines etc.	Not applicable
116	Management structure, role of safety officer, fire department etc.	Good
117	Procedure for incident investigation and control	Not applicable

PART- VI

Other Information

118.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	NOC from WBFES has been applied on 27.12.12.
119	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	LPG cylinder being used at Ground floor and gas being taken to 3 rd floor kitchen
120	Name of the Insurance Company	None
121	Remarks (if any) 1. Application has been made on 27.12.12 for NOC from WBFES. 2. No Fire Mock Drill has been conducted 3. Emergency Response plan is not available 4. OC/CC will be applied after receiving the NOC. 5. Consent to operate the DG set from Directorate of Electricity ,Govt. of West Bengal, not obtained so far. 6. Housekeepingneeds improvement. Lots of materials are lying on staircase. 7. Electrical inspector visited for connection as stated a year back. Documents are with Kashipur office. 8. Smoke detector /sprinkler testing certificate is pending. 9. Earth pit testing report is not available. 10. LT panel not earthed. 11. Ground floor common area power supply taken from board without proper plug. 12. Power distribution board at 8th floor remaining open. 13. Lift power supply main distribution board not earthed externally. 14. LT power distribution room house keeping needs improvement and the panel is not earthed externally. 15. Fire hydrant facility at the otherside staircase is not provided. 16. Smoke detection and sprinkler system is not in operation	

Auditor I

Auditor II

Signature & Date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1.	No Fire Mock Drill has been conducted	Periodically Evacuation drill is to be conducted for all the occupants Record to be maintained
2.	NOC not obtained	NOC from WBFES to be expedited.
3.	Emergency Response plan is not available	Emergency procedure to be made
4.	Consent for DG set operation not obtained.	Consent to be obtained from Directorate of Electricity Govt ,WB.
5.	Earth pit testing, ,smoke detector and sprinkler testing certificates pending.	Earth pit ,Smoke detector and sprinkler testing certificates are to be obtained.
6.	LT panel,lift power main distribution board, not earthed.	LT panel, Lift power main distribution board are to be properly earthed.
7.	House keeping of the staircase is not proper.	Housekeeping of the staircase is to be improved by removing material stacked on the same.

Auditor I

Auditor II

Signature& Date of Inspecting and Reporting Authority With seal

S.R. MICRO PRINTERS



EXECUTIVE SUMMARY

Part I & II

General Information

S.R. Micro printers is situated at EN-15, Sector V, Salt Lake, Kolkata 700091 ,The structure is G + 2 & built up area is approx. 6000 Sq ft , in total approx. 5.479 Cottah of land.

Ground floor is rented to a Restaurant named Kabir's. In the 1st floor M/s S.R. Micro printers is having their own office, 2nd floor is lying vacant.

There is no central AC system in the building

OC (Occupation Certificate) obtained directly from Bidhan Nagar Municipality & current Tax bill is being paid to the concerned authority

NOC from WBF & ES is valid up to 29.01.05. There after no action has been taken so far

Occupancy Load was found as

Existing -- 20
Floating -- 5

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There is only one Staircase is available. There is no Lift available. There is no refuse area because of height of the building is G+2 only.

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is down comer, portable fire extinguishers.

Down comer:

There is an overhead PVC tank of 1500 ltr capacity, (against the recommendation of WBF&ES letter for 10,000 ltr capacity) exclusively for fire, with a 2 HP pump for boosting up the pressure in the pipe line. But there is no pressure gauge at the end for checking the pressure.

Sprinkler system is being installed at Ground floor at Kabir's Restaurant as per recommendation of WBF&ES

Alternate source of water is the Water body approx. 800 mtr away

Buildings are not equipped with Fire detection system like smoke detectors.

6 Nos Portable fire extinguishers are found deployed near the staircase.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is one DG supply available to the Kabir's Restaurant. There is no alternate source of Power supply at 1st& 2nd floor

PART VI

OTHER INFORMATION

There is a LPG Gas bank at the back side of the building supplying LPG to the Restaurant. One DCP Fire extinguisher found placed 3 Mtrs away.

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 15	
2.	Premises Name (if any):	S.R.Microprinters	
3.	Name of the owner /occupier/lessee	M/s S.R.Microprinters	
4.	Permanent Address	EN-15, .Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Lease holder	
6.	Name of the Contact Person	M. Salil Kumar Mitra	
7.	Phone No of Contact Person	98310 31532	
8.	E-mail	indvent@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational
			Institutional
			Assembly
			Business
			Mercantile ☐
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	5.479 Cottas	
11.	Build up area(as informed to the Auditor)	6000 Sq Ft	
12.	No of Floors	G+2	
14.	Date of Sanction of Building Plan	Date: 2005 Renewal	
15.	Whether P.O.C/OC received from local body?	Yes	OC Issuing Authority Bidhan Nagar Municipality/ NDITA Dated:28.11.2007
SECURITY SETUP DETAILS		S.R.Microprinters	Kabir,s Restaurant
16	Name of the SECURITY AGENCY engaged	No Security Engaged	Super Securities
18	No of Security Personnel engaged	None	2
17	Whether Records of Vehicles (No & type entering into the building are kept	No	No
18	Whether records of Visitors entering into the building are kept	No	No
19	Whether Metal detectors are used at the entry point	No	No
20	Whether Monitoring System through Close circuit TV available	No	No
VEHICLES VOLUME			
21	No of Vehicles Engaged by the Organization	One	
22	No of Vehicles for which parking space is available in the premises	4Nos	

23	Whether parking space available for visitors within the premises	Yes
24	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
25	Garbage Clearing	NDITA garbage clearing system
26	Drainage System	Connected to NDITA Drainage system
27	Maintenance of Road	Internal Roads are maintained by owner
TELEPHONE TOWER		
28	No of Towers	NIL
29	Statutory Clearance from AAI	Not applicable
30	Any Other Clearance	Not applicable

PART – II

31	Occupancy load		Based on estimates			
	Existing		Ground Flr	1 st Flr	2 nd Flr	Total
	a)Regular		10	10	Vacant	20
	b)Floating					5
32	Basement		NIL			
	a)	If basement extends beyond building profile	Not Applicable			
	b)	Use of the basement	Not Applicable			
	c)	Is it being sprinkle red?	Not Applicable			
	d)	Whether any cubicles present in the basement?	Not Applicable			
		If yes, their use to be specified	Not Applicable			
	f)	Whether fire zones are defined?	Not Applicable			
		If yes, please provide details	Not Applicable			

Part- III

Provisions of means of escape

33	Number of staircases --→		1 (one)
	Stairs Number		#1
	a)	Width of flight	1100 mm
	b)	Tread width	275 mm
	c)	Riser Height	170 mm
	d)	Finish	Marble
	e)	Width of stair door (FCD)	NIL
	f)	Height of stair head room	3048 mm
	g)	Height of stair handrail	710 mm
	h)	Area & location & profile of Fire Refuge Area	NIL
	i)	Width and type of door leading to Fire refugee area	NIL
	J)	Pressurization of staircase	No
	k)	Segregation of staircase	Not applicable
34	Number of Lifts installed→		
	Lift-Numbers		#1
	a)	Type of door	Not Applicable
	b)	Fire resistance rating	Not Applicable
	c)	Area of lift car	Not Applicable
	d)	Capacity (no of persons)	Not Applicable
	e)	Capacity(in kg)	Not Applicable
	f)	Company	Not Applicable
	g)	Is communication system, installed in the lift car?	Not Applicable
	h)	Is a fireman's switch being installed in the car?	Not Applicable
	i)	Pressurization of lift	Not Applicable
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Not Applicable
35	Presence of proper signage in all the exit route		No
36	Is it posted with illuminated signage?		No
37	Whether it is landing to fire assembly point?		No
38	Any form of Public address system available?		No
39	Width form of internal road within the Premises?		2780 mm
40	Width of the Entry / exit of Gate		2550 mm
41	Height of the Entry / exit of Gate		Open to Sky

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G: 50000 Ltr O/H: 2500Ltr
	a)	If yes, specify the distance from the building	Adjacent to the building	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	10000 ltr in O/H tank	
	c)	Specify the condition of the reservoir	Satisfactory	

43	Is any public or other water storage facility available nearby?		Yes	Specify the distance from the building- 800 Mtr	
	a)	Is it readily accessible?	Yes	Condition and type of the reservoir- Water Body	
44	Are internal hydrants being provided?		No		
	If so, please indicate no of hydrants in each floor		Not applicable		
45	Are first aid hose reels being provided? If so please indicate		Yes	No of hose reels on each floor : 1 (One)	
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel: 25 mm, 30 mtr	
	b)	Size (bore) and type of nozzle fitted to each hose reel	5 mm, Jet Type		
56	Are fire hoses being provided near each hydrant? If so, please indicate		No		
	a)	Total no of hoses provided near each hydrant	No		
57	Have wet risers/dry risers been provided?		No		
	If yes, please indicate the number of risers and internal diameter of each		None		
48	Has any down comer been provided? If so, please give details		Yes ☐ Hose reels are provided one in each floor. Pressure is build up thru a 2 Hp pump		
49	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		3 HP mtr		
	a)	Number of pumps	Nil		
	b)	Size of suction and delivery connection to each pump/Output/Head	Not Applicable		
	e)	Is the pump automatic in action?	Not applicable		
	f)	Is the water pressure sufficient at max distance from the pump?	No ☐ Could not be checked as there is no pressure gauge		
50.	Sprinkler system				
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		No		
	a)	Type of detectors used	None		
51	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes ☐ but these are not functioning		
52	Alarm receiving system		Yes		
53	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations?		No ☐	Number of FE Type/ Capacity: Mechanical Foam 9 ltr	06 01
	If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark?			DCP 5 Kg	03
	Date of Validity		Expired	Water Co ₂ 9 Ltr	02

54	Location and population of the FEs adequate	Stair case	
55	Is Emergency Fire Alarm being provided in each floor?	Yes	No. of Fire Alarm: 3 (one) Location of Fire Alarm: In each floor, Ground it is not working.
56	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	Yes	
57	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No	
58	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not Available	
59	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	There is no such Drawing is available There is one dedicated Poly tank of 1500Ltr capacity at the roof top where from water is supplied through a 2 HP pump to the Hose reel pipe line passing through each floor at the stair case. In each floor hose reel is provided. Ar Kabir's Restaurant, sprinkler system is being installed as per Fire dept's direction	
60	Status of NOC from WBF&ES	<u>S.R.Microprinters</u> NOC obtained last on 30.5.04 & was valid till 29.5.05 (Ref WBFS /703/Cal-B/126/97(120/03) dt 30.1.04. There after no action has been taken <u>Premier Continental Inn Ltd(Kabir's)</u> NOC obtained on 15.6.12 & is valid till 14.6.13(Ref WBFES/Kol Assemble/B-674/12(674/12) dt 15.6.12 As directed sprinkler system is being installed. Generator installed. Stipulation given O/H tank capacity of 2500 ltr with pump capacity of 1000ltr/min NOC (WBFS/703/cal B/126/97(120/03) is valid up to 14.6.13	

Part-V

Electrical, Cables and Ventilation

60	If the building is Centrally air –conditioned, please indicate,		There is no Central AC	
	a)	Material used for construction of ducts and its fittings	Not Applicable	
	b)	Type of tinning used for ducts	Not Applicable	
	c)	Type of lagging used, if any for insulating any portion of the duct	Not Applicable	
	d)	How the lagging is secured?	Not Applicable	
	e)	If false ceiling is there?	Not Applicable	
	f)	Material used for false ceiling	Not Applicable	
	g)	Is a separate AHU being provided in each floor	Not Applicable	
	h)	Whether automatic shutdown of AHU is coupled with detection system?	Not Applicable	
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not Applicable	
	j)	Will fire dampers be provided in AC duct?	Not Applicable	
61	Is there any standby source of electric supply being provided?		Yes ☐ at Kabirs	
	Is the back supply automatic?		Yes	Specify the functions that can be maintained simultaneously by such back ups ☒ Fire Pump ☒ Emergency Light ☐ ☒ Lift ☒ Partly to Office ☒ Others
62	Location of switch- gears and transformers		Outside the building	
63	a)	Transformer capacity	No Transformer	
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not Applicable	
	c)	If outside, how far is it from the building?	Not Applicable	
64	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Not Applicable	
65	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Yes	
66	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		No	
67	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		No	
68	Whether natural ventilation is relied upon? If so, give details.		Yes	

69	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No
70	Whether mechanical ventilation is being coupled with automatic detection system?	No
71	Whether the refuge area is being provided?	No
72	Storage of combustibles materials near electrical equipment/fuse units.	No
73	RCCBs available??	No
74	Master switch in warehouses	No
75	Proper cable joint procedures as per manufacturer	Yes
76	Earthling Pit Tested??	No
77	Use of MCB??	Yes
78	Bypassing of protection devices	No
79	Deteriorated insulation	No
80	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes
81	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Yes
82	Tracking possibility	Yes
83	Unused opening in the panels, etc.	No
84	Possibility of ground fault/short circuit	No
85	Mechanical protection to cables	Yes
86	Loose terminations due to improper supports, crimping	No
87	Improper gland installation, wrong lug size	No
88	Over-rated uses, wrongly set protection relays, etc.	No
89	Switch yard and sub station	No
90	DG operation and maintenance	Yes ☐ For Kabir's only
91	Reliability of the fire hydrant system	No
92	Emergency preparedness and response	No
93	Availability of Evacuation plan	No
94	Mock drill conducted??	No
95	Awareness of the people??	No
96	Sample basis validation of smoke detection system??	No
97	Condition of Lightening Arrestor	No lightning arrestor
98	Periodic test of UPS system (as applicable)	Not Applicable
99	Handling of electrical work by competent electrician	Yes
100	Approval of receiving station, substation and DG	Not Available
101	Storage if hazardous material, chemicals?	No
102	Use of signage?	No
103	Hydrants clear, access to public thorough fare open	No

104	Flame & work permits (as applicable)	No
105	Effective internal communication and public address system	No
106	Colour coding system of hazardous chemical gas lines etc.	No
107	Management structure, role of safety officer, fire department etc.	No
108	Procedure for incident investigation and control	No

PART- VI

Other Information

118.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes	■ Deviation From recommendation of NOC from WBF&ES
119	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	LPG gas bank is at the back side of the building. This is used for the Restaurant at Ground floor	
	Is Trade License available??	Not available for the restaurant	
120	Name of the Insurance Company	None	
121	Remarks (if any) 17. No Fire Drill has been conducted 18. No Fire Mock Drill has been conducted 19. Emergency Response plan is not available 20. Fire NOC is not available for S.R. Microprinters. Last NOC was valid up to 29.1.2005 21. Down comer Water tank capacity is found less than the capacity recommended by WBF&ES 22. There is no Signage 23. Housekeeping is very poor. Lots of junk/Unwanted materials are lying in 1 st floor 3 nos room, under the staircase near Meter room at Ground floor, & at the roof top. The unwanted material is unnecessary increasing the Fire Load. 24. MCP are out of Order 25. Sand buckets are having trash 26. Sand buckets are lying on floor 27. Fan connection made with loose bare wire. 28. Hose reel valves are found jammed. Needs servicing 29. Fire Alarm is out of order at 1 st floor 30. Amount of annual Property Tax Rs. 157400/- per qtr		

Auditor I

Auditor II

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	No Fire Drill has been conducted	Periodically Evacuation drill is to be conducted for all the occupants Record to be maintained
2.	No Fire Mock Drill has been conducted	Periodically Fire drill is to be conducted for the Employees. Record to be maintained
3.	Emergency Response plan is not available	Emergency procedure to be made
4.	Fire NOC is not available for S.R. Micro printers. Last NOC was valid up to 29.1.2005	Fire NOC is to be obtained
5.	Down comer Water tank capacity is found less than the capacity recommended by WBF&ES	Tank capacity to be enhanced as per recommendation
6.	There is no Signage	Illuminated signage to be displayed
7.	Housekeeping is very poor. Lots of junk/ Unwanted materials are lying in 1 st floor 3 nos room, Under the staircase near Meter room at Ground floor, & at the roof top. The unwanted material is unnecessary increasing the Fire Load.	Immediate housekeeping is to be done. All unwanted materials are to be removed
8.	Sand buckets are having trash 	Sand buckets should have clean sands
9.	Sand buckets are lying on floor 	Sand buckets should have clean sands & to be rest in a stand
10	Fan connection made with loose bare wire. 	A plug is to be provided
11	Hose reel valves are found jammed. Needs servicing	Hose reel valves needs servicing
12	Fire Alarm is out of order at 1 st floor 	Fire alarm is to be set in order

Auditor I

Auditor II

Signature & Date of Inspecting and Reporting Authority With seal

S.R. MICRO PRINTERS



EXECUTIVE SUMMARY

Part I & II

General Information

The unnamed building is situated at EN-22, Sector V, Salt Lake, Kolkata 700091, The structure is G + 9 in total 10.0013 cottah of land & built up area is around approx. 3211.765 sqmtr

There is no central AC system in the building

OC (Occupational Certificate) dated 22.6.2007 is available

Valid NOC from WBF & ES is not available.

Occupancy Load was found as

Existing -- 150
Floating -- 3

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There is Two Staircase available. There are two nos Lifts available. There are refuse areas 6th & 8th floor only.

The whole building is empty & being renovated thoroughly, as such, lift & other Firefighting systems are not working.

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is fire extinguishers, MCPs, Smoke detectors, Hydrant system. These are under maintenance

There are 3 nos Fire pumps, but these are under maintenance

Alternate source of water is the Water body approx. 800 mtr away

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is one portable DG supply of 5 KW available

PART VI

OTHER INFORMATION

NIL

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 22	
2.	Premises Name (if any):	None	
3.	Name of the owner /occupier/lessee	MrTarunNahata	
4.	Permanent Address	EN22,Sector-V salt lake city, Kolkata 700091	
5.	Ownership details :33 Freehold/Rental/Leasehold/Sublease/Any other	Lease hold	
6.	Name of the Contact Person	MrSajeevMorrey	
7.	Phone No of Contact Person	93313 33673	
8.	E-mail	sanjeevmorrey@hotmail.com	
9.	Purpose of the Land Use	Principal Use ☐	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	10.0013Cottah,	
11.	Build up area(as informed to the Auditor)	3211.765 SqMtr	
12.	No of Floors	G+10	
13.	Date of Sanction of Building Plan	22.6.07 Ref V/BM/173/R2	
14.	Whether P.O.C/OC received from local body?	Yes from Bidhan Nagar Municipality vide Memo no 1614(3) M8(8) dt 4.8.07	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	ATM Services	
16.	No of Security Personnel engaged	4	
17.	Whether Records of Vehicles (No & type entering into the building are kept	NO	
18.	Whether records of Visitors entering into the building are kept	YES	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	NO	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	NIL	
22.	No of Vehicles for which parking space is available in the premises	8 Nos	
23.	Whether parking space available for visitors within the premises	Yes	
24.	Place where excess vehicles (if any) are parked	Outside Road	

GENERAL MAINTENANCE		
25.	Garbage Clearing	NDITA Garbage clearing system
26.	Drainage System	Connected to NDITA Drainage system
27.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	Not applicable
30.	Any Other Clearance	Not applicable

PART - II

V= Vacant

31.	Occupancy load	(Based on Estimates)		
	Existing	G	1 to 9 th floor	Total
	a)Regular	4	Vacant	4
	b)Floating			0
32.	Basement	NIL		

Part- III

Provisions of means of escape

33.	Number of staircases --→ TWO NOS			
	Stairs Number		#1	#2
	a)	Width of flight	1400 mm	1400 mm
	b)	Tread width	260 mm	260 mm
	c)	Riser Height	160 mm	160 mm
	d)	Finish	Marble	Marble
	e)	Width of stair door (FCD)-GlassDoor	940 mm	940 mm
	f)	Height of stair head room	10'	10'
	g)	Height of stair handrail	960 mm	960 mm
	h)	Area & location & profile of Fire Refuge Area	6 th & 8 th Floor	
	i)	Width and type of door leading to Fire refugee area	Ordinary door 960 mm	
	j)	Pressurization of staircase	NO	
	k)	Segregation of staircase	YES	

34.	Number of Lifts installed→TWO= Both lifts are found out of order		
	Lift-Numbers	#1	#2
	a) Type of door	Metallic	Metallic
	b) Fire resistance rating	2 Hrs	2 Hrs
	c) Area of lift car	1340mm X 1300 mm	1340mm X 1300 mm
	d) Capacity (no of persons)	16	16
	e) Capacity(in kg)	1088	1088
	f) Company	KONE	KONE
	g) Is communication system, installed in the lift car?	YES	YES
	h) Is a fireman's switch being installed in the car?	YES	YES
	i) Pressurization of lift	NO	NO
	j) Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Not available	Not available
35.	Presence of proper signage in all the exit route	NO	
36.	Is it posted with illuminated signage ?	NO	
37.	Whether it is landing to fire assembly point?	None	
38.	Any form of Public address system available ?	NO	
39.			
40.	Width form of internal road within the Premises ?	3200 mm	
41.	Width of the Entry / exit of Gate	3800 mm	
42.	Height of the Entry / exit of Gate	Open to sky	

PART IV

Provision of Fire Safety Arrangement

43.	Is any water reservoir for firefighting available ? (at ground level / overhead)	Yes	U/G 70000 ltr O/H 30000 ltr
	a) If yes, specify the distance from the building	Adjacent to building	
	b) If yes, specify the capacity (in litres)as approved by WBF & ES.	70000 ltr	
	c) Specify the condition of the reservoir	Satisfactory	
44.	Is any public or other water storage facility available nearby ?	Yes	■specify the distance from the building ----800 Mtr
	a) Is it readily accessible ?	Yes	■condition and type of the reservoir—Water body
45.	Are internal hydrants being provided ?	YES	
	If so, please indicate no of hydrants in each floor	one	
46.	Are first aid hose reels being provided ? If so please indicate	YES	
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	Directly connected to Riser	
	b) Size (bore) and type of nozzle fitted to each hose reel	20 mm, 30 mtr	
47.	Are fire hoses being provided near each hydrant? If so, please indicate	YES	
	a) Total no of hoses provided near each hydrant	one	

48.	Have wet risers/dry risers been provided?		Wet Riser
49.	If yes, please indicate the number of risers and internal diameter of each		One
50.	Has any down comer been provided? If so, please give details		No
51.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes Main -60 HP Jockey -15 HP Stand By -60 HP
	a)	Number of pumps	3 nos
	b)	Size of suction and delivery connection to each pump/Out put/Head	Suction -200 mm , Delivery 150 mm 3000ltr/min 80 mtr
	c)	Is the pump automatic in action?	Not applicable as this is not in operation now
	d)	Is the water pressure sufficient at max distance from the pump?	Not applicable as this is not in operation now
52.	Sprinkler system		YES
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		YES, Smoke detectors
	a)	Type of detectors used	Addressable smoke detectors
53.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		YES in each floor
	a)	Alarm receiving system	Yes
54.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		☒ Yes ☐ ☒ Yes ☐ Not applicable Order Placed for 77 Nos ABC (% Kg)- 72 Nos CO2 (4.5 Kg)- 3 Nos Foam (9 ltr) - 2 Nos
	Location		Not yet placed
55.	Are Emergency Fire Alarm being provided in each floor ?		Yes
56.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		None
57.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min twice a year)?		No record is available
58.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES		Not available
59.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES		Not available
60.	Status of NOC from WBF&ES		Not Valid. Last NOC No WBFES/5346/07 Bidhan-CB/77/05(85/05) dated 13.8.07 was valid for a year

Part-V

Electrical, Cables and Ventilation

61.	If the building is Centrally air –conditioned, please indicate,		No Central AC
	a)	Material used for construction of ducts and its fittings	Not applicable
	b)	Type of tinning used for ducts	Not applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d)	How the lagging is secured?	Not applicable
	e)	If false ceiling is there?	Not applicable
	f)	Material used for false ceiling	Not applicable
	g)	Is a separate AHU being provided in each floor	Not applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j)	Will fire dampers be provided in AC duct?	Not applicable
62.	Is there any standby source of electric supply being provided?		NO
	Is the back supply automatic?		Not applicable
63.	Location of switch- gears and transformers		Outside the Building
64.	a)	Transformer capacity	500 KVA Closed type air cooled
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable
	c)	If outside, how far is it from the building?	Outside the building
65.	What precautions is taken to prevent a possible fire in the transformers from spreading?		Fire Extinguishers
66.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Gaps are found not sealed
67.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		NO
68.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable
69.	Whether natural ventilation is relied upon? If so, give details.		Yes
70.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		NO
71.	Whether mechanical ventilation is being coupled with automatic detection system?		Not applicable
72.	Whether the refuge area is being provided?		YES on 6 th & 8 th floor Area 6 th floor – 7 Mtr X 1.3 Mtr 8 th floor- 5.7 Mtr X 1.3 Mtr

73.	Storage of combustibles materials near electrical equipment/fuse units.	NO
74.	RCCBs available??	None found
75.	Master switch in warehouses	NO
76.	Proper cable joint procedures as per manufacturer	YES
77.	Earthing Pit Tested??	Records are not available
78.	Use of MCB??	NO
79.	Bypassing of protection devices	None found
80.	Deteriorated insulation	None found
81.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES. Order placed
82.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Not applicable
83.	Tracking possibility	Yes
84.	Unused opening in the panels, etc.	None found
85.	Possibility of ground fault/short circuit	None found
86.	Mechanical protection to cables	Yes.
87.	Loose terminations due to improper supports, crimping	None found
88.	Improper gland installation, wrong lug size	None found.
89.	Over-rated uses, wrongly set protection relays, etc.	NO Protection relay
90.	Earthing layout & it's effectiveness	Not available
91.	Switch yard and sub station	HT room is locked. LT panel is to be installed
92.	DG operation and maintenance	YES
93.	Reliability of the fire hydrant system	YES
94.	Emergency preparedness and response	None found
95.	Availability of Evacuation plan	None found
96.	Mock drill conducted??	No record is available
97.	Awareness of the people??	Poor
98.	Sample basis validation of smoke detection system??	No record found
99.	Storage if hazardous material, chemicals??	NO
100.	Use of signage??	NO
101.	Hydrants clear, access to public thorough fare open	YES
102.	Flame & work permits (as applicable)	None found
103.	Effective internal communication and public address system	YES
104.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
105.	Management structure, role of safety officer, fire department etc.	NO
106.	Procedure for incident investigation and control	NO

PART- VI

Other Information

107.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes -- NOC has expired in 2007
108.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
109.	Is Trade License available??	Not available
110.	Name of the Insurance Company	Information not available
111.	Remarks (if any) 1. Lifts are out of order 2. Smoke detectors are out of Order 3. MCPs are out of order 4. Intelligent panel is not working 5. There is no LT panel 6. Housekeeping at the bottom of 500 KVA is bad. Combustible materials are kept 7. Incoming HT cable laid through cable trench is without any mechanical protection –like brick & sand filling. More over exposed to floor level at some areas. 8. LT cable of transformer laid on the floor partly & partly on wall 1” above ground level. The cable also blocks southern passage of the building 9. None of Earth pits are visible & identified 10. The cable shaft gaps are not sealed	

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	Lifts are out of order	To be made operational
2.	Smoke detectors are out of Order	To be made operational
3.	MCPs are out of order	To be made operational
4.	Intelligent panel is not working	To be made operational
5.	There is no LT panel	LT panel is to be installed
6	Housekeeping at the bottom of 500 KVA is bad. Combustible materials are kept	Housekeeping to be done
7	Incoming HT cable laid through cable trench is without any mechanical protection -like brick & sand filling. More over exposed to floor level at some areas.	Cable trench should be properly laid & dressed
8	LT cable of transformer laid on the floor partly & partly on wall 1" above ground level. The cable also blocks southern passage of the building	Cable should be laid properly to avoid any obstruction
9	None of Earth pits are visible & identified	Earth pit should be visible & identified to facilitate servicing
10	The cable shaft gaps are not sealed	Gaps are to be sealed at least in alternate floor
11	Smoke detectors are out of Order	To be made operational
12	MCPs are out of order	To be made operational

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

**WEST BENGAL BIOTECH
DEVELOPMENT CORPORATION
LTD**



EXECUTIVE SUMMARY

Part I & II

General Information

West Bengal Biotech Development Corporation Ltd has shifted its office from Camac street in 2011 & is situated at EN-24, Sector V, Salt Lake, Kolkata 700091, The structure is G + 9 & built up area is approx. 3211.765 SqMtr, in total 668.975 SqMtr of land.

In the Ground floor .There is Garage space,& Fire water pump room . In the 1st floor there is a Biotech Laboratory. At 3rd floor there is Biotech office. Rest all the floors are vacant.

There is a refuse area at 8th floor.

There are two stair cases & Two Lifts of 10 Person carrying capacity. **Form C is not available.**

There is no central AC system in the building.

OC obtained directly from Bidhan Nagar Municipality & assessment has not been done yet

NOC from WBF& ES has expired on 12.7.12

Occupancy Load as on audit date was found as

Existing -- 29
Floating -- 10

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two nos Staircases available. There are two nos Lifts available.

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is wet riser, sprinkler, smoke detectors& portable fire extinguishers

Wet riser

There is an Under- ground fire tank of 6 lakh ltr capacity. There is a main pump of 50HP, a stand by main pump of 50 HP& a jockey pump of 15 HPcapacities for building the pressure in the pipe line. **As on audit date this was found not working.**

Sprinkler system is already installed in Ground floor, 1st floor, 3rd floor and Garage space. In the rest of the floors this is being installed

Alternate source of water is the Water body approx. 800 mtr away

Buildings is equipped with Fire detection system like smoke detectors in 1st& 3rd floorIn the rest of the floors this is being installed

Total 17 Nos Portable fire extinguishers are found deployed throughout the building.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

There is no sealing found in the electrical shaft with non-combustible material.

Generally no combustible material is stored in the premises, near the Electrical installation

There is DG of 650 KVA at the ground floor as an alternate source of supply

PART VI

OTHER INFORMATION

NIL

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 24	
2.	Premises Name (if any):	BIOTECH PARK	
3.	Name of the owner /occupier/lessee	WB Biotech Development CorporationLtd	
4.	Permanent Address	EN-24,Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/ Any other	Lessee	
6.	Name of the Contact Person	MrAmitSanyal	
7.	Phone No of Contact Person	2357 0082	
8.	E-mail	wbbiotech@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational ☐
			Institutional ☐
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	668.975 Sq. Mtr.	
11.	Build up area(as informed to the Auditor)	3211.765 SqMtr	
12.	No of Floors	G+9	
14.	Date of Sanction of Building Plan	Date:29/12/2007	
15.	Whether P.O.C/OC received from local body?	Not Available	
SECURITY SETUP DETAILS			
17	Name of the SECURITY AGENCY engaged	Anapol Protection Services	
18	No of Security Personnel engaged	8 Nos	
19	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
20	Whether records of Visitors entering into the building are kept	Yes	
21	Whether Metal detectors are used at the entry point	No	
22	Whether Monitoring System through Close circuit TV available	NO	

VEHICLES VOLUME		
23	No of Vehicles Engaged by the Organization	One
24	No of Vehicles for which parking space is available in the premises	Three
25	Whether parking space available for visitors within the premises	20 Nos
27	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
28	Garbage Clearing	NDITA garbage clearing system
29	Drainage System	Connected NDITA drainage system
30	Maintenance of Road	Internal road is maintained by owner
TELEPHONE TOWER		
31	No of Towers	Nil
32	Statutory Clearance from AAI	Not APPLICABLE
33	Any Other Clearance	Not APPLICABLE

PART - II

34	Occupancy load	(Attach floor wise details separately if required)										
	Existing	G	1	2	3	4	5	6	7	8	9	T
	a)Regular	4	9	V	16	V	V	V	V	V	V	29
	b)Floating											10
35.	Basement	NIL										

V=vacant

Part- III

Provisions of means of escape

36	Number of staircases --→ 2 (TWO)Nos			
	Stairs Number		#1	#2
	a)	Width of flight	1380 mm	1480 mm
	b)	Tread width	270 mm	260 mm
	c)	Riser Height	140 mm	140 mm
	d)	Finish	Granite	Kota Stone
	e)	Width of stair door (FCD)	1500 mm	1500 mm
	f)	Height of stair head room	2438 mm	3048 mm
	g)	Height of stair handrail	870 mm	880 mm
	h)	Area & location & profile of Fire Refuge Area	8th floor, 3962 mm X 1219 mm, Open Balcony without any railing	
	i)	Width and type of door leading to Fire refugee area		
	j)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	

37	Number of Lifts installed→		2 (Two) Nos	
	Lift-Numbers		#1	#2
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2 hrs	2 hrs
	c)	Area of lift car	1410 mmX1170 mm	1410 mmX1170 mm
	d)	Capacity (no of persons)	10	10
	e)	Capacity(in kg)	680 kgs	680 kg
	f)	Company	Schindler	Schindler
	g)	Is communication system, installed in the lift car?	No	
	h)	Is a fireman's switch being installed in the car?	No	
	i)	Pressurization of lift	No	
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Not Available	
38	Presence of proper signage in all the exit route		No	
39	Is it posted with illuminated signage?		No	
40	Whether it is landing to fire assembly point?		No	
41	Any form of Public address system available?		No	
42	Width form of internal road within the Premises?		3962 mm	
43	Width of the Entry / exit of Gate		#1—5791 mm	#2-3962 mm
44	Height of the Entry / exit of Gate		Open to Sky	

PART IV

Provision of Fire Safety Arrangement

45	Is any water reservoir for firefighting available? (at ground level / over head)		Yes/No	U/G : 140000 Ltr O/H: Not available
	a)	If yes, specify the distance from the building	Adjacent to building	
	b)	If yes, specify the capacity (in liters)as approved by WBF & ES.	Yes U/G 1,40,000 ltr	
	c)	Specify the condition of the reservoir	Satisfactory	
46	Is any public or other water storage facility available nearby ?		Yes	
	a)	Is it readily accessible?	Yes	
	b)	If yes, specify the distance from the building	Approx 800 Mtr	
	c)	Specify the condition and type of the reservoir	Water body	

47	Are internal hydrants being provided?		Yes	
	If so, please indicate no of hydrants in each floor		One in each floor, Single out let	
48	Are first aid hose reels being provided?		Yes	
	If so please indicate			
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes directly to riser	
	b)	Size (bore) and type of nozzle fitted to each hose reel	25 mm, 30 m	
49	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	
	a)	Total no of hoses provided near each hydrant	1 (one)	
50	Have wet risers/dry risers been provided?		Yes wet riser	
	If yes, please indicate the number of risers and internal diameter of each		One	
51	Has any down comer been provided? If so, please give details		No	
52	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes	
	a)	Number of pumps	3 Nos.	
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction:150 mm Delivery: 150 mm Discharge rate not available Max head against which the pump can operate at the output mentioned in: Maximum rate not available	
	e)	Is the pump automatic in action?	No	
	f)	Is the water pressure sufficient at max distance from the pump?	No , Could not be checked as there is pressure gauge at the top	
53.	Sprinkler system		Yes	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes	
	a)	Type of detectors used	Smoke detector	
54	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes, But found not working	
55	Alarm receiving system		Yes, Control panel is being shifted	
56	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations?		Yes	Total Number 17 Water 9 3

	If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Valid till 8 th March 2013	Ltr: 3 DCP: 3 ABC: 5 Kg	3 11
57	Location and population of the FEs adequate	Lobby, Staircase		
58	Are Emergency Fire Alarm being provided in each floor?	Yes		
59	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No		
60	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No		
61	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Yes. Ref Drg No V/BM/380(2/2) dt 29.12.2007		
62	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Yes. Ref Drg No V/BM/380(2/2) dt 29.12.2007		
63	Status of NOC from WBF&ES	Last NOC (Ref WBFES 1275/11) dated 13.7.11 has expired on 12.7.12		

Part-V

Electrical, Cables and Ventilation

64	If the building is Centrally air –conditioned, please indicate,		THERE IS CENTRAL AC
	a)	Material used for construction of ducts and its fittings	Not applicable
	b)	Type of tinning used for ducts	Not applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d)	How the lagging is secured?	Not applicable
	e)	If false ceiling is there?	Not applicable
	f)	Material used for false ceiling	Not applicable
	g)	Is a separate AHU being provided in each floor	Not applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j)	Will fire dampers be provided in AC duct?	Not applicable

65	Is there any standby source of electric supply being provided?	Yes, DG capacity is not applicable
	Is the back supply automatic?	No Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump □ ■Emergency Light □ ■Lift □ ■Partly to Office □ ■ Others
66	Location of switch- gears and transformers	Outside the building
67	a) Transformer capacity	550 KVA
	b) If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Outside the building
	c) If outside, how far is it from the building?	4 mtr
68	What precautions will be taken to prevent a possible fire in the transformers from spreading?	This is under cover
69	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	No ☐ Electrical shaft & Wet riser shaft found not sealed at floor level
70	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	No
71	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	No
72	Whether natural ventilation is relied upon? If so, give details.	Yes
73	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No
74	Whether mechanical ventilation is being coupled with automatic detection system?	No
75	Whether the refuge area is being provided?	Yes 8 th floor
76	Storage of combustibles materials near electrical equipment/fuse units.	No
77	RCCBs available??	No
78	Master switch in warehouses	Not applicable
79	Proper cable joint procedures as per manufacturer	No

80	Earthling Pit Tested??	No
81	Use of MCB??	No
82	Bypassing of protection devices	No
83	Deteriorated insulation	No
84	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes
85	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No
86	Tracking possibility	Yes
87	Unused opening in the panels, etc.	No
88	Possibility of ground fault/short circuit	No
89	Mechanical protection to cables	Yes
90	Loose terminations due to improper supports, crimping	No
91	Improper gland installation, wrong lug size	No
92	Over-rated uses, wrongly set protection relays, etc.	No
93	Switch yard and sub station	No
94	DG operation and maintenance	Yes
95	Reliability of the fire hydrant system	Yes
96	Emergency preparedness and response	Yes
97	Availability of Evacuation plan	Yes
98	Mock drill conducted??	Yes
99	Awareness of the people??	No
100	Sample basis validation of smoke detection system??	No
101	Condition of Lightning Arrestor	No
102	Periodic test of UPS system (as applicable)	No
103	Handling of electrical work by competent electrician	No
104	Approval of receiving station, substation and DG	No
105	Storage if hazardous material, chemicals?	No
106	Use of signage?	No
107	Hydrants clear, access to public thorough fare open	Yes
108	Flame & work permits (as applicable)	No
109	Effective internal communication and public address system	No
110	Colour coding system of hazardous chemical gas lines etc.	No
111	Management structure, role of safety officer, fire department etc.	No
112	Procedure for incident investigation and control	No

PART- VI

Other Information

113.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes, NOC of Fire Department	No
114	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No	
	Is Trade License available??	Not Applicable	
115	Name of the Insurance Company	None	
116	Remarks (if any) 1) In LT panel room wet riser pipes, pressure gauge & sprinkler gong is existing, against Electricity rule 2) No mock Fire drill has been conducted 3) No Evacuation drill has been conducted 4) No training has been provided to Staff & Security people on the use of of Fire Hose or Fire Extinguishers 5) NOC from Fire Department has expired 6) C- Form for the Lifts are not available 7) Electrical & Wet risers shafts are not sealed at floor level 8) MCP are not functioning 9) Smoke detectors at 1 st floor found not working 10) Wet riser pump is found not being operated. 11) No water is available in the sprinklers. 12) No fire Lift has been identified 13) There is no signage is evidenced in the building Two BC Fire extinguishers near Electrical Installation at ground floor found expired in last		

Auditor I

Auditor II

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Nonconformity tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1	Wet riser pump is found not being operated. Lots of Cob web around 	The Pump area should be thoroughly cleaned. The pump should run for 24 Hrs in auto mode
2	In LT panel room wet riser pipes, pressure gauge & sprinkler gong is existing, against Electricity rule 	Immediately both the system should be separated by a wall or relocated
3	Two BC Fire extinguishers near Electrical Installation at ground floor found expired in last Aug 12 	To be checked & refilled
4	No mock Fire drill has been conducted so far	Mock drill to be conducted periodically
5	No Evacuation drill has been conducted with occupants	Evacuation drill with the all occupants to be conducted periodically
7	NOC from Fire Department has expired	NOC to be obtained
8	Electrical & Wet risers shafts are not sealed at floor level	Shafts to be sealed to arrest any smoke percolation
9	MCP are not functioning	MCP to be set in order
10	Smoke detectors at 1 st floor found not working	Smoke detectors at 1 st floor to be set in order
11	No water is available in the sprinklers.	Fire pump should run 24 hrs to maintain a pressure in the pipe line
12	No fire Lift has been identified	Fire Lift should be identified. Fire switch to be ensured
13	There is no signage is evidenced in the building	Signage to be provided at all suitable places
14	C- Form for the Lifts are not available	C- form for the Lifts are to be obtained

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

AMRIT TOWER



EXECUTIVE SUMMARY

Part I & II

General Information

Fire safety audit was carried out at the premises /plot no EN 26 named AMRIT TOWER on 22nd December 2012. The premises is owned by M/s. TEAMCO Pvt Ltd. The audit findings are summarized as below:

The AMRIT TOWER is a building having 13 no. of floors along with Basement and Ground floor (B+G+13). The total area of the Plot and Built up are 10 Katha and Approx. 30,000 sq.ft (2200*13+1500 Ground floor) respectively. The Building plan was sanctioned on 12th Sept. 2005, the owner has applied for issuance of O.C which they are yet to receive. Hence assessment of the property is pending.

The Basement is having a capacity for parking of 13 nos. of cars. The Ground floor is being used as a showroom for garments. The organization has no vehicle of their own and visitors are required to park their car outside on the road. The 1st, 2nd, 7th and 10th floors are at present lying vacant. The rest of the floors are occupied as follows:

3rd floor by M/s. Liz InfoTech, 4th floor by M/s. Johnson controls, 5th floor by M/s. Virtusa, 6th floor M/s. Schenck India Ltd., 8th and 9th floor by M/s. Amrit exports, and 11th, 12th, and 13th floor by M/s. Global Education Trust have been occupied. Also the floor wise load details are as follows:

3rd floor 50 persons +5 floating, 4th floor 35 persons +10 floating, 5th floor 15 persons +3 floating, 6th floor 40 persons + 10 floating. The 8th and 9th floors have a combined load of 80 persons + 15 floating and similarly, the 11th, 12th and 13th floors are having a combined load of 70 persons +10 floating.

Different security agencies are engaged on different floors and the details are as follows:

The Basement and Ground floor are managed by 4 persons of G4 security, and similarly 4th and 6th floors are also managed by 1 person each floor of the same agency. The 5th floor is managed by Group four security agencies.

There is no telephone tower installed on the building and garbage as well as drainage system is service by the common arrangement in the area i.e. NDITA garbage handling system and NDITA.

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two staircases on the two sides of the building for climbing the floors on foot. One is to be used essentially for emergency situation (Fire exit). However there is no

sign of any such kind of instruction anywhere in the building. They were advised to install such instructive signs like fire EXIT, NO-SMOKING, etc. at various appropriate locations.

The Building is having two main entry gates each having a width of 3.9mtrs. The entry passage on ground floor is 4.55mtrs wide.

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

The building has its fire refuge are on the 7th floor.

It has been provided with two M/s. KONE made metallic lifts to carry people from floor to floor. Each lift can carry maximum 10persons (i.e. 680Kgs.) at a time. Both the lifts have ADR facility and have the fire man's switch. Outside communication facility from the lifts have been provided for handling emergency situations. The Form -C (fitness certificate) for the lifts are yet to be obtained by the user.

The premise has its own firefighting arrangement consisting of the following equipment:

One Ground level water reservoir of capacity 1, 00,000liters.

Three Nos. of Fire water pumps (75 HP rating each -- One for main header+ One for sprinkler header+ One as common standby-by). Each of the pump has a capacity of 2900 liters per min.

One Jockey pump of 15HP rating.

Wet riser running up near the staircase upto the topmost floor with Fire-hydrant at each floor. Canvas hoses has been provided at each location near the hydrant in a box.

One first aid firewater hose reel has been provided at each floor.

Smoke detectors are installed at the false ceilings of different floors for alarms activation. The fire location indicating panel is situated at the ground floor. Water sprinklers are located at various locations below the false ceiling at each floor. The wet riser top is not having any pressure gauge for knowing the pressure. The attention of the authority has been drawn to this.

Manual fire alarm has been installed at each floor near staircase.

The NOC from Fire services has expired on 12th Sept 2012. Application for renewal of the same has been made and is pending with the Fire dept.

There are total 54 nos. of Fire extinguishers (ISI marked --Water CO2 type -23nos., DC type—23nos., and CO2 type -8 nos.) located at Basement, Near Staircase, Lift room, and near Electrical panel. There is no validity mark on these extinguishers. Attention has been drawn to this aspect.

No evidence of any mock drill or firefighting could be gathered. General awareness of emergency handling arising out of fire needs to be periodically given to people. Training

on Handling of fire extinguishers is to be imparted to all and sundry. Fire wet risers are to be kept on line by running the

PART V

ELECTRICAL FIRE HAZARDS

The present Electrical load is 250KVA and Transformer of 630KVA rating is installed at a corner outside the main building within the boundary wall. The DG set is also installed and is of 500KVA rating. The HT as well as LT rooms were inspected and found to have certain construction items temporarily stored. Instruction was passed to remove these and clear these areas.

The building is not centrally air conditioned. Different arrangement for each floor has been provided as follows:

Floor Type Capacity and nos.

1st and 7th Split and Duct 6.25TR * 2 nos.

2nd,3rd,5th and 6th Split AC 2TR *8nos.

4th Do 8.5TR

8th Split 8.3TR *2 nos.

9th split 8.1 TR and 3.2 TR one each.

10th split 5.5TR One and 2TR Three nos.

11th, 12th,and 13th split 2TR * 8 nos.

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is one 160 KVA DG supply is as alternate source of power. This is operated manually

PART VI

OTHER INFORMATION

NIL

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 26	
2.	Premises Name (if any):	AMRIT TOWER	
3.	Name of the owner /occupier/lessee	TEAMCO PVT LTD	
4.	Permanent Address	EN 26 Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leesse	
6.	Name of the Contact Person	Mr.G.C.Tewari	
7.	Phone No of Contact Person	9874816109	
8.	E-mail	TIWARI@amritExpert.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	10 Kattah	
11.	Build up area(as informed to the Auditor)	30,100 Sq.ft	
12.	No of Floors	B+G+13	
14.	Date of Sanction of Building Plan	Date: 12.09.2005	
15.	Whether P.O.C/OC received from local body?	Yes/No	OC Issuing Authority Bidhan Nagar Municipality/ NDITA Dated:
16.	Incidence of assessment done	Amount of Annual Property tax Rs Pending.	
SECURITY SETUP DETAILS			
17.	Name of the SECURITY AGENCY engaged	Group Facility	
18.	No of Security Personnel engaged	6 nos.	
19.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
20.	Whether records of Visitors entering into the building are kept	Yes	
21.	Whether Metal detectors are used at the entry point	No	
22.	Whether Monitoring System through Close circuit TV available	CC TV surveillance at 3 rd , 4 th , 7 th , 8 th , 9 th . Planning for G and lift lobby	

VEHICLES VOLUME		
23	No of Vehicles Engaged by the Organization	Nil
24	No of Vehicles for which parking space is available in the premises	13 at Basement
25	Whether parking space available for visitors within the premises	Not allowed.
26	Place where excess vehicles (if any) are parked	On the road.
GENERAL MAINTENANCE		
27	Garbage Clearing	NDITA garbage clearing system
28	Drainage System	Connected to JUSCO NDITA
29	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
30	No of Towers	No
31	Statutory Clearance from AAI	Not Applicable
32	Any Other Clearance	Not Applicable

PART - II

33	Occupancy load		(Attach floor wise details separately if required)	
	Existing			
	a)Regular		290	
	b)Floating		53	
	c) Electrical Load		250KVA	
34	Basement		Nil	
	a)	If basement extends beyond building profile	No	
	b)	Use of the basement	Parking	Storage (Combustible/noncombustible)
	c)	Is it being sprinkle red?	Yes	
	d)	Whether any cubicles present in the basement?	No	
	e)	If yes, their use to be specified	Not applicable	
	f)	Whether fire zones are defined?	No	
	h)	If yes, please provide details	Not applicable	

Part- III

Provisions of means of escape

35	Number of staircases --→2nos			
	Stairs Number		#1	#2
	a)	Width of flight	1660 mm	1550mm
	b)	Tread width	260mm	260mm
	c)	Riser Height	160mm	160mm
	d)	Finish	Green Marble	Green Marble
	e)	Width of stair door (FCD)	1981 mm X1676 mm Glass	2134 mm X 1067 mm
	f)	Height of stair head room	9ft	9ft
	g)	Height of stair handrail	860mm	Being fixed
	h)	Area & location & profile of Fire Refuge Area	One at 7 th floor	
	i)	Width and type of door leading to Fire refugee area		
	J)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	
36	Number of Lifts installed→2Nos.			
	Lift-Numbers		#1	#2
	a)	Type of door	Metallic door	Metallic door
	b)	Fire resistance rating	2hrs.	2hr.
	c)	Area of lift car	1410X 1210mm	1410X 1210mm
	d)	Capacity (no of persons)	10 person	10 persons
	e)	Capacity(in kg)	680 kgs	680 KGS
	f)	Company	KONE	KONE
	g)	Is communication system, installed in the lift car?	Yes	Yes
	h)	Is a fireman's switch being installed in the car?	Yes	Yes
	i)	Pressurization of lift	No	No
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Yes	Reference No: Valid up to:
37	Presence of proper signage in all the exit route		No	
38	Is it posted with illuminated signage?		No	
39	Whether it is landing to fire assembly point?		No	
40	Any form of Public address system available?		Yes	
41	Width form of internal road within the Premises?		3900mm	
44	Width of the Entry / exit of Gate		4550mm	
42	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

43	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G 1,00,000 litres
	a)	If yes, specify the distance from the building	Adjacent to building	
	b)	If yes, specify the capacity (in liters) as approved by WBF& ES.	None	
	c)	Specify the condition of the reservoir	Satisfactory	
44	Is any public or other water storage facility available nearby?		Yes	Specify the distance from the building --- 800mtrs
	a)	Is it readily accessible?	Yes	Condition and type of the reservoir... Water body
48	Are internal hydrants being provided?		Yes	Single outlets.
	If so, please indicate no of hydrants in each floor		Single	
49	Are first aid hose reels being provided? If so please indicate		Yes	No of hose reels on each floor : One hose reels on each floor
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel: Directly to the riser.
	b)	Size (bore) and type of nozzle fitted to each hose reel	5mm std size	
50	Are fire hoses being provided near each hydrant? If so, please indicate		Yes / No	■ Type of hose Canvas ■ Size of hose 63mm ■ Length of hose 15mtrs
	a)	Total no of hoses provided near each hydrant	One hose at each hydrant point	
51	Have wet risers/dry risers been provided?		Yes	
	If yes, please indicate the number of risers and internal diameter of each		One riser	
52	Has any down comer been provided? If so, please give details		Yes	
53	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes	
	a)	Number of pumps	Total 4nos. (3nos 75HP, 1Main, 1Standby, 1sprinkler) 1No. Jockey 15HP	
	b)	Size of suction and delivery connection to each pump/Output/Head	■ Suction: 200 mm ■ Delivery: 150mm ■ Output of each pump -- 2900 litres/min. ■ Max head against which the pump can operate at the output mentioned in-- 80mtrs.	
	e)	Is the pump automatic in action?	Yes	
	f)	Is the water pressure sufficient at max distance from the pump?	Yes	

54.	Sprinkler system			
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes	
	a)	Type of detectors used	Smoke detectors	
55	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes but not working.	
56	Alarm receiving system		Yes	
57	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		Yes Yes/No	Number of FE Type/ Capacity 54 no 23 nos. 23 nos 8nos
58	Location and population of the FEs adequate		Basement, Staircase, lift room, electrical panel room.	
59	Is Emergency Fire Alarm being provided in each floor?		Yes	■No. of Fire Alarm-- One on each floor. ■Location of Fire Alarm ---Near staircase.
60	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		No	
61	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?		Yes	
62	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES		Verified	
63	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES		Not available	
64	Status of NOC from WBF&ES		Valid up to 12/9/'12. Applied for renewal.	

Part-V

Electrical, Cables and Ventilation

67	If the building is Centrally air -conditioned, please indicate,	No	
	a) Material used for construction of ducts and its fittings	Not applicable	
	b) Type of tinning used for ducts	Not applicable	

	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d)	How the lagging is secured?	Not applicable
	e)	If false ceiling is there?	YES
	f)	Material used for false ceiling	Gypsum
	g)	Is a separate AHU being provided in each floor	1 st and 7 th floor duct able. Rest split a/cs.
	H)	Whether automatic shutdown of AHU is coupled with detection system?	No
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Independent A/Cs each floor.
	j)	Will fire dampers be provided in AC duct?	Not provided.
68		Is there any standby source of electric supply being provided?	Y e s DG Capacity: 500KVA
		Is the back supply automatic?	Y e s Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump ☐ ■Emergency Light ☐ ■Lift ☐ ■Partly to Office ■ Others
70		Location of switch- gears and transformers	Ground floor.
71	a)	Transformer capacity	630KVA
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Yes.
	c)	If outside, how far is it from the building?	No.
72		What precautions will be taken to prevent a possible fire in the transformers from spreading?	Fire Extinguisher, but auto extinguishers are fixed
73		Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Yes
74		Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	NO
75		Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not Applicable
76		Whether natural ventilation is relied upon? If so, give details.	Yes
77		Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No

78	Whether mechanical ventilation is being coupled with automatic detection system?	No
79	Whether the refuge area is being provided?	Yes On which floor: floor 7th floor Area of Fire Refuge Area:91440X1524mm ² Width of Fire Refuge Area:1524mm
81	Storage of combustibles materials near electrical equipment/fuse units.	No
82	RCCBs available??	No
83	Master switch in warehouses	No
84	Proper cable joint procedures as per manufacturer	Yes
85	Earthling Pit Tested??	No record available.
86	Use of MCB??	Yes
87	Bypassing of protection devices	No
88	Deteriorated insulation	No
89	Selection, deployment of PFFs (Portable Fire Extinguishers)	OK
90	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No
91	Tracking possibility	YES
92	Unused opening in the panels, etc.	No
93	Possibility of ground fault/short circuit	No
94	Mechanical protection to cables	Ok
95	Loose terminations due to improper supports, crimping	No
96	Improper gland installation, wrong lug size	NO
97	Over-rated uses, wrongly set protection relays, etc.	NO
101	Switch yard and sub station	YES
103	DG operation and maintenance	Own maintenance.
104	Reliability of the fire hydrant system	Not running during audit.
105	Emergency preparedness and response	Not prepared
106	Availability of Evacuation plan	Not available
107	Mock drill conducted??	No.
108	Awareness of the people??	Needs improvement.
109	Sample basis validation of smoke detection system??	Not done.
110	Condition of Lightning Arrestor	No
111	Periodic test of UPS system (as applicable)	Not applicable
112	Handling of electrical work by competent electrician	Yes
113	Approval of receiving station, substation and DG	No
114	Storage if hazardous material, chemicals?	NO
115	Use of signage?	NO

116	Hydrants clear, access to public thorough fare open	YES
117	Flame & work permits (as applicable)	No
118	Effective internal communication and public address system	No
119	Colour coding system of hazardous chemical gas lines etc.	Not applicable
120	Management structure, role of safety officer, fire department etc.	NIL
121	Procedure for incident investigation and control	NO

PART- VI

Other Information

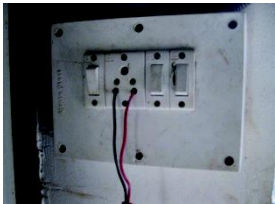
118.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes	■DeviationFrom last NOC of WBFES
119	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO	
	Is Trade License available??	NO	
120	Name of the Insurance Company	NO	
121	Remarks (if any) 1. C Form, certifying fitness of both the lifts for use are not yet obtained. To be expedited. 2. Various instructive signage, like No smoking, Fire exit etc. are not displayed. To be placed at appropriate locations. 3. Construction material and debris were observed in both HT and LT panel room. These rooms are to be kept free of material. 4. Fire NOC has expired on 12/9/2012. Application made for renewal. To be expedited. 5. Many fire extinguishers have passed their validity. To be refilled and validity marked by the appropriate authority. 6. Wet riser is not pressurized. It should be kept pressurized and pumps should be kept on auto made for startup whenever required. 7. Fire/emergency mock drill should be rehearsed periodically and record to be retained. 8. People should be trained to use fire extinguisher periodically. 9. Smoke detectors and fire alarm should be tested at regular interval and record to be kept. 10. Assembly point should be marked properly.		

Auditor I

Auditor II

Signature & date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	C Form for both the lifts were not taken.	The C Forms should be immediately arranged from appropriate authority.
2.	Renewal of Fire NOC from WBFES not received till date.	Should be expedited and obtained without delay.
3.	Fire extinguishers are to be revalidated for use when required.	To be checked by the agency for use and expiry date marked.
4.	Mock fire/emergency drill not done.	Mock fire /emergency drill should be carried out regularly and record generated.
5	Alarm testing not done	Smoke detection/fire alarm should be periodically tested and record kept.
6	Wet riser not kept pressurized 	The wet riser should always be kept pressurized and pumps to be kept on auto.
	LT Room smoke detector is out of order 	Smoke detector to be set right
	In the LT room Fire extinguisher is placed under trash 	Trash to be cleaned. Fire extinguisher to be properly fixed
	Work is on with bare connection 	Plug top to be provided

	No Rubber Mat in the LT room, Trashes are kept in front of LT panel 	Trash to be cleaned & Mat to be placed on floor
	No Rubber mat in front of LT room 	Mat to be placed on floor
	Fire Extinguisher refill date has expired 	To be refilled immediately

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

ADVANTAGE TOWER



EXECUTIVE SUMMARY

Part I & II

General Information

The name of the building is Advantage Tower and is having G+ 8 structures. The building is jointly owned by its 8 owners each of who occupies one floor. The name of the owners is separately attached. The G floor is meant for parking of 16 cars. The total plot area is approx. 668.98 sq.mtrs and built up area is approx. 2863.946sq.mtrs (inclusive of car parking and roof top).One peculiarity of identifying the floors in the building is that the 1st floor here is marked as Ground floor.

The owners have formed an association called Advantage Tower's Association which is a registered body (Registration certificate attached). The association's primary responsibilities include maintenance activities of the building and similar other jobs.

As per record the building plan has been sanctioned on 27thNov'98, revised on 16thDec'03 and revalidated on 26th Nov'2008.

The clearance certificates (CC) have been obtained from Bidhannagar Municipality (4nos. of CCs attached) as follows:

Car parking, Ground, 1st and 2nd floor on 28/07/2005

3rd, 4th, 5th and 6th floor on 30/01/2006.

For the 7th floor, application has been lodged on 30/11/2009.

OC (Occupancy certificate) could not be found.

NOC from WBFES has been obtained vide Memo No.WBFES/3272/12/Cal-B/19/98(Part)(1448/12) dtd.21/09/2012 (copy attached).

The name of the main security agency engaged is Security System Service. However, other agencies are also engaged at various floors. The total manpower deployed for this purpose is estimated to be 18 nos.

The 1st, 2nd, 3rd, 5th, 7th and 8th floors of the tower are equipped with closed circuit TV monitoring.

Occupancy Load(including all floors) was found as

Existing -- 250

Floating -- 50.

Part of the Ground floor (i.e.1st floor) , and the 6th floor is having Centralized A/C. The AHU is above the false ceiling and not easily accessible. The rest of the floors are serviced by split as well as window A/C.

There is a small communication tower installed at the roof top by M/s. AIRTEL.

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows:

There are two Staircases available for use one of which is called emergency stair. There are also two KONE made lifts available, one with auto sliding type door and the other with collapsible door with FCD. The first can carry 8 persons (max) and the second 6 persons (max). Both the lifts are provided with communication system from inside and the second one is having ADR for use by fireman.

C form for the lifts from appropriate authorities has not been taken.

The 2nd floor (i.e. 3rd floor) has been provided with fire refuge area and each floor has a balcony which can be used as fire refuge area if needed.

Fire emergency drill has been conducted but there is no record of the same.

There is instructive Signage available at various locations like EXIT Route etc.

Assembly point has been marked clearly near the gate.

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is underground water reservoir (1,50,000 liters capacity) ,fire water pumps, wet riser and portable fire extinguishers located at staircase landings as well as floors(floor and types of extinguishers etc. are provided as attachment).

There are two fire water pumps (the main one of 60 HP rating) and the jockey pump (15HP rating) to charge the wet riser. The pump capacity is 40 and 4 liters per second respectively and the head is 75mtrs (for both). There is no standby fire water pump installed. Also there is no pr.gauge at the wet riser top end to know the pressure at the top

Fire hydrant (single nozzle) and hose reel connection at each landing points are available.

Water Sprinkler system, smoke detection system and fire alarm system are in place at each floor. There are MCP (manual call point) at each floor. The fire alarm panel is at the ground floor.

PART V

ELECTRICAL FIRE HAZARDS

The power supply is thru installed transformer having 315KVA capacity and DG set of capacity 125 KVA can be started if required. The DG set is to be started up manually when required. Normal Electrical load is 161 KVA. The sanction load is 300KVA. Each floor has provision for UPS back up.

Electrical inspection and clearance certificate for power connection from West Bengal Electricity Board is available vide letter no. SE/BNDC/T-5/874 dtd 5/6/1998 (attached)

There is no ELCB or RCCB in the circuit.

PART VI

OTHER INFORMATION

Nil

NDITA-FIRE SURVEY AND SAFETY AUDIT CHECKLIST

General Information

PART – I

1.	Plot No/Premises No:	EN 27	
2.	Premises Name (if any):	Advantage tower.	
3.	Name of the owner /occupier/lessee	8 nos. of owners. List attached.	
4.	Permanent Address	EN 27, Salt Lake,Sector V , Kolkata 700 091.	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	List attached.	
6.	Name of the Contact Person	MrBapi Roy	
7.	Phone No of Contact Person	9748072365 / 033 40073927	
8.	E-mail	No e-mail address	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional ☐
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	668.98 sq.mtr	
11.	Build up area(as informed to the Auditor)	2863.946 sq.mtr (includes car parking and rooftop)	
12.	No of Floors	G+8	
13.	Whether approved by local body?	Yes	
14.	Date of Sanction of Building Plan	Latest revalidated on 26/11/2008	
15.	Whether P.O.C/OC received from local body?	Yes	CC obtained for all floors except 7 th floor, for which application has been made. Issuing Authority Bidhan Nagar Municipality
SECURITY SETUP DETAILS			
17.	Name of the SECURITY AGENCY engaged	Security system services and others.	
18.	No of Security Personnel engaged	18	
19.	Whether Records of Vehicles (No & type entering into the building are kept	No	
20.	Whether records of Visitors entering into the building are kept	No	
21.	Whether Metal detectors are used at the entry point	No	
22.	Whether Monitoring System through Close circuit TV available	Yes. On 1 st to 8 th floor except 4 th floor.	

VEHICLES VOLUME		
23	No of Vehicles Engaged by the Organization	Nil
24	No of Own Vehicles engaged by Employees	Nil
25	No of Vehicles for which parking space is available in the premises	16
26	Whether parking space available for visitors within the premises	No
27	Place where excess vehicles (if any) are parked	On the Road
GENERAL MAINTENANCE		
28	Garbage Clearing	NDITA garbage clearing system
29	Drainage System	Connected to NDITA Drainage system
30	Maintenance of Road	Internal Roads are maintained by owner
TELEPHONE TOWER		
31	No of Towers	Yes (Airtel Maintained)
32	Statutory Clearance from AAI	Not available
33	Any Other Clearance	Not available

PART - II

34	Occupancy load		Based on estimates
	Existing		Total
	a)Regular		250
	b)Floating		50
36	Basement		Nil
	a)	If basement extends beyond building profile	Not Applicable
	b)	Use of the basement	Not Applicable
	c)	Is it being sprinkle red?	Not Applicable
	d)	Whether any cubicles present in the basement?	Not Applicable
		If yes, their use to be specified	Not Applicable
	f)	Whether fire zones are defined?	Not Applicable
		If yes, please provide details	Not Applicable

Part- III

Provisions of means of escape

37	Number of staircases --→2Nos		
	Stairs Number	#1	#2
	a) Width of flight	1430 mm	1120mm
	b) Tread width	270 mm	265mm
	c) Riser Height	160 mm	165mm
	d) Finish	Marble	Marble
	e) Width of stair door (FCD)	900mm	900mm
	f) Height of stair head room	12 ft	12ft
	g) Height of stair handrail	940 mm	900mm
	h) Area & location & profile of Fire Refuge Area	2 nd floor 10,000X1550 sq.mm	2nd floor 10,000*1550 Sq.mm
	i) Width and type of door leading to Fire refugee area		
	j) Pressurization of staircase	No	
	k) Segregation of staircase	No	
38	Number of Lifts installed→		2Nos
	Lift-Numbers	#1	#2
	a) Type of door	Auto sliding	Collapsible with FCD
	b) Fire resistance rating	2 hrs.	2 hrs.
	c) Area of lift car	1040mmX1330sq.mm	880mmX1320sq. mm
	d) Capacity (no of persons)	8persons	6persons
	e) Capacity(in kg)	544kgs	408kgs
	f) Company	KONE	KONE
	g) Is communication system, installed in the lift car?	Yes	No
	h) Is a fireman's switch being installed in the car?	Yes	No
	i) Pressurization of lift	No	
	j) Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Not obtained	Not obtained.
39	Presence of proper signage in all the exit route	No	
40	Is it posted with illuminated signage?	No	
41	Whether it is landing to fire assembly point?	No	
42	Any form of Public address system available?	No	
43	Width form of internal road within the Premises?	4.12 mtrs.	
44	Width of the Entry / exit of Gate	3mtrs and 4.15 mtrs.	
45	Height of the Entry / exit of Gate	Open to Sky	

PART IV

Provision of Fire Safety Arrangement

46	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G UnderGround level tank of 50000 Ltr O/H: Not available
	a)	If yes, specify the distance from the building	Adjacent to the building	
	b)	If yes, specify the capacity (in liters) as approved by WBF & ES.	1,50,000ltrs.	
	c)	Specify the condition of the reservoir	Satisfactory	
47	Is any public or other water storage facility available nearby?		Yes	Specify the distance from the building:- 800 Mtr
	a)	Is it readily accessible?	Yes	Condition and type of the reservoir: Water Body
48	Are internal hydrants being provided ?		Yes	Single Outlets.
	If so, please indicate no of hydrants in each floor		One on each floor Single	
49	Are first aid hose reels being provided? If so please indicate		Yes	No of hose reels on each floor : One reel each floor
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel: 25mm, 30mtr Connected to riser.
	b)	Size (bore) and type of nozzle fitted to each hose reel	5 mm, jet type	
50	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	Type of hose: canvas made Size of hose: 63mm Length of hose: 30mtrs
	a)	Total no of hoses provided near each hydrant	One	
51	Have wet risers/dry risers been provided?		Wet riser provided	
	If yes, please indicate the number of risers and internal diameter of each		One riser of 6inch size. Slowly reducing in size as it rises up	
52	Has any down comer been provided? If so, please give details		No (No down comer provided)	
53	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes	
	a)	Number of pumps	2nos(60HP main pump and 15 HP Jockey Pump)	
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction: 6" Delivery: 6") Output of each pump: 40 Ltr per sec Max head against which the pump can operate at the output mentioned in: 75 mtr	
	e)	Is the pump automatic in action?	Yes	
	f)	Is the water pressure sufficient at max distance from the pump?	No Could not be checked as there is no pressure gauge	

54.	Sprinkler system		Yes		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes		
	a)	Type of detectors used	Smoke detectors		
55	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes		
56	Alarm receiving system		Yes		
57	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		Yes	Type/ Capacity	total28
			Yes	DCP 5kg (valid up to July, 2014) ABC 2 kg(Expired) Water / CO ₂ (valid up to Oct, 2013)	11 06 11
			With in validity		
a)	Number of FE		30 Nos		
b)	Type of FE		Different types of extinguishers were found at various locations. Many have expired validity. A detailed list attached.		
c)	Location		At the Stair cases and inside offices.		
d)	Expire date of FE		Many have expired.		
	Indicate whether the Fire extinguishers bear the ISI certification mark?		Yes		
58	Location and population of the FEs adequate		Yes		
59	Are Emergency Fire Alarm being provided in each floor?		Yes	No. of Fire Alarm: 8Nos Location of Fire Alarm: Stair case landing.	
60	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		No		
61	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?		YesBut no record available.		
62	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES		Not Available		
63	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES		Not available.		
64	Status of NOC from WBF&ES		Copy of the NOC attached.		

Part-V

Electrical, Cables and Ventilation

67	If the building is Centrally air – conditioned, please indicate,		Part of G floor and 6 th floor have central A/C.	
	a)	Material used for construction of ducts and its fittings	Since this is between the roof and false ceiling, accessibility is not easy.	
	b)	Type of tinning used for ducts	Not Visible	
	c)	Type of lagging used, if any for insulating any portion of the duct	Not Visible	
	d)	How the lagging is secured?	Not Visible	
	e)	If false ceiling is there?	Yes.	
	f)	Material used for false ceiling	Gypsum board.	
	g)	Is a separate AHU being provided in each floor	G floor and 6 th floor.	
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable	
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable	
	j)	Will fire dampers be provided in AC duct?	No	
68	Is there any standby source of electric supply being provided?		Yes	
	a)	If yes, how	Through generator✓	
	b)	Specify the capacity	125 KVA	
	c)	Specify the functions that can be maintained simultaneously by such back ups	Operating lift ☐ Fire water pumps	Emergency lighting ☐
69	Is the back supply automatic?		No	Specify the functions that can be maintained simultaneously by such back ups ■ Fire Pump ☐ ■ Emergency Light ☐ ■ Lift ■ Partly to Office ■ Others
70	Location of switch- gears and transformers		Inside the building	
71	a)	Transformer capacity	315KVA	
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Inside the building installed separately	
	c)	If outside, how far is it from the building?	Not Applicable	
72	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Use fire extinguisher	

73	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Yes	
74	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	No	
75	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable	
76	Whether natural ventilation is relied upon? If so, give details.	Yes	
77	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No	
78	Whether mechanical ventilation is being coupled with automatic detection system?	No	
79	Whether the refuge area is being provided?	Yes	On which floor:2 nd floor Area of Fire Refuge Area:10000x1550mm ² Width of Fire Refuge Area:1550mm
81	Storage of combustibles materials near electrical equipment/fuse units.	No	
82	RCCBs available??	No	
83	Master switch in warehouses	Not applicable	
84	Proper cable joint procedures as per manufacturer	Yes	
85	EarthlingPit Tested??	yes	
86	Use of MCB??	Yes	
87	Bypassing of protection devices	No	
88	Deteriorated insulation	No	
89	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes	
90	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Yes	
91	Tracking possibility	Yes	
92	Unused opening in the panels, etc.	No	
93	Possibility of ground fault/short circuit	No	
94	Mechanical protection to cables	Yes	
95	Loose terminations due to improper supports, crimping	No	
96	Improper gland installation, wrong lug size	No	
97	Over-rated uses, wrongly set protection relays, etc.	No	
98	Review of equipment safety	Not applicable	
99	Cable layout	Yes	

100	Earthling layout & it's effectiveness	Ok
101	Switch yard and sub station	No
103	DG operation and maintenance	Yes
104	Reliability of the fire hydrant system	No
105	Emergency preparedness and response	No
106	Availability of Evacuation plan	No
107	Mock drill conducted??	Yes
108	Awareness of the people??	Low
109	Sample basis validation of smoke detection system??	No
110	Condition of Lightening Arrestor	Ok
111	Periodic test of UPS system (as applicable)	OK
112	Handling of electrical work by competent electrician	Ok
113	Approval of receiving station, substation and DG	Approval taken for receiving station, approval to be taken for DG operation
114	Storage if hazardous material, chemicals?	No
115	Use of signage?	Yes
116	Hydrants clear, access to public thorough fare open	Yes
117	Flame & work permits (as applicable)	No
118	Effective internal communication and public address system	No
119	Colour coding system of hazardous chemical gas lines etc.	No
120	Management structure, role of safety officer, fire department etc.	No
121	Procedure for incident investigation and control	No

PART- VI

Other Information

118.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes	■ Deviation Yes ☐ From recommendation of NOC from WBF&ES
119	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No	
	Is Trade License available??	Not available	
120	Name of the Insurance Company	None	
121	Remarks (if any) 31. Copy of proof of each individual owner's Deed as well as Trade License should be available with the association. 32. List of security agencies employed at different floors should be available with association. 33. Copy of OC should be available with association. 34. Entry and exit of outsiders other than employees should be regulated thru register maintained at the association office and periodically reviewed for security. 35. Form C for the lifts is not available. These lacunae should be corrected immediately. 36. No fire water pump was running at the time of audit. Wet riser was empty. 37. There is no stand by fire water pump installed. 38. Fire alarm system was not operative at the time of audit. 39. AHUs (G and 6 th floor) are not easily accessible as these are within roof and false ceiling. This is not a safe arrangement. 40. Many fire extinguishers validity date have expired. Some do not have the validity labels pasted. Such discrepancies should be resolved. 41. At some MCP installations the hammer for glass breaking are missing. 42. Awareness level on fire and safety aspects in certain personnel needs improvement.		

Auditor I

Auditor II

Signature & date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1.	Mock fire drill conducted but no record could be found.	Periodically Evacuation drill is to be conducted for all the occupants Record to be maintained
2.	Standby fire water pump not installed.	Standby fire water pump should be installed. Fire water header should be kept charged . Hydrant and related valves are to be greased periodically so that they can be opened during emergency.
3.	Fire alarm system was on off position.	Alarm system should be kept on live always. Call points should be tested functioning periodically and record should be maintained.
4.	Fire extinguishers not validated.	Fire extinguishers should be checked for validity. A list to be maintained for its type , location & each individual should be trained to handle the same.
5.	Trade licenses, Deeds, OCs etc. could not be located.	Updated copies of these documents should be made available.
6.	Different security agencies at different floors	Names of the agencies engaged should be made available for better coordination.
7.	C forms for the lifts.	Both the lifts should be immediately certified for safe operation and C forms obtained and displayed.
8	AHUs operating	Both the AHUs should be stopped in case of fire emergency. It can be thru automatic tripping circuit or manual training of personal.

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

M/S A.B. ENTERPRISE



EXECUTIVE SUMMARY

Part I & II

General Information

M/s A.B. Enterprise owner of the building had Garment manufacturing facilities in this building. But they have stopped the manufacturing the garments from this building & started shifting the Manufacturing equipment's. At present 1st floor to 4th floor is kept as godown of cloths. 5th floor is the guest house. 6th floor is the office. Though the manufacturing process has been suspended but for the storage of cloth in great quantity is a fire hazard. The building is situated in 668.975 sqmtr of Land & built up area for G+ 6 storied is approx 2077.306 sqmtr

There is no central AC system in the building

Valid NOC from WBF&ES is not available. Last NOC is valid up to 2003.

Occupancy Load was found as

Existing -- 16
Floating -- 5

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are two stair cases available. **There is 1 no lifts available.** Refuse area was found in 6th floor. In the building there is no FCD available.

Evacuation Drill has not been conducted

There is Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is the Wet riser & MCP, No sprinkler or smoke detector is available. Wet riser& MCPs are found not in operation. There is not a single Fire extinguisher in the building

There is an overhead Cemented tank of 10,000 ltr capacity & an underground tank of 1,00,000ltr capacity

Alternate source of water is the Water body approx. 800 mtr away

PART V

ELECTRICAL FIRE HAZARDS

There is no RCCB in the distribution board found. ELCB & MCB are deployed in each floor in the DB

Generally no combustible material is stored in the premises, near the Electrical installation

There is no DG supply is available as alternate source of power.

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	EN 28	
2.	Premises Name (if any):	None	
3.	Name of the owner /occupier/lessee	A.B. Enterprise	
4.	Permanent Address	EN 28, Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	MrSidharthAgarwal Mr. R.N.Chakraborty	
7.	Phone No of Contact Person	98318 10027 99033 49805	
8.	E-mail	Agarwal_sidharth@yahoo.co.uk	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial ☐
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	668.975 sqmtr	
11.	Build up area(as informed to the Auditor)	2077.306 sqmtr	
12.	No of Floors	G+6	
13.	Date of Sanction of Building Plan	Date: 2002	
14.	Whether P.O.C/OC received from local body?	Not available	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Own	
16.	No of Security Personnel engaged	2	
17.	Whether Records of Vehicles (No & type entering into the building are kept	No	
18.	Whether records of Visitors entering into the building are kept	No	
19.	Whether Metal detectors are used at the entry point	No	
20.	Whether Monitoring System through Close circuit TV available	No	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	One	
22.	No of Vehicles for which parking space is available in the premises	12	

23	Whether parking space available for visitors within the premises	No
24	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
25	Garbage Clearing	NDITA garbage clearing system
26	Drainage System	Connected to NDITA drainage system
27	Maintenance of Road	Internal Road by owner
TELEPHONE TOWER		
28	No of Towers	NIL
29	Statutory Clearance from AAI	Not applicable
30	Any Other Clearance	Not applicable

PART - II

31	Occupancy load		(Attach floor wise details separately if required)							
	Existing		G	1	2	3	4	5	6	Total
	a)Regular		4	2	2	2	2	2	2	16
	b)Floating									5
32	Basement		NIL							
	a)	If basement extends beyond building profile	Not applicable							
	b)	Use of the basement	Not applicable							
	c)	Is it being sprinklered?	Not applicable							
	d)	Whether any cubicles present in the basement?	Not applicable							
		If yes, their use to be specified	Not applicable							
	f)	Whether fire zones are defined?	Not applicable							
		If yes, please provide details	Not applicable							

Part- III

Provisions of means of escape

33	Number of staircases --→ Two			
	Stairs Number		#1	#2
	a)	Width of flight	1400 mm	900 mm
	b)	Tread width	250 mm	240 mm
	c)	Riser Height	160 mm	150 mm
	d)	Finish	Kota stone	Kota stone
	e)	Width of stair door (FCD)	NIL	NIL
	f)	Height of stair head room	3050 mm	3650 mm
	g)	Height of stair handrail	900 mm	940 mm
	h)	Area & location & profile of Fire Refuge Area	At 6 th floor 30 ft X 4 ft, curve at the centre	
	i)	Width and type of door leading to Fire refugee area	30 ft	
	j)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	
34	Number of Lifts installed→One			
	Lift-Numbers		1	
	a)	Type of door	Collapsible	
	b)	Fire resistance rating	2 hrs	
	c)	Area of lift car	1100 mm X 1290 mm	
	d)	Capacity (no of persons)	8	
	e)	Capacity(in kg)	544	
	f)	Company	OTIS	
	g)	Is communication system, installed in the lift car?	Not working	
	h)	Is a fireman's switch being installed in the car?	No	
	i)	Pressurization of lift	No	
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	No	
35	Presence of proper signage in all the exit route		No	
36	Is it posted with illuminated signage ?		No	
37	Whether it is landing to fire assembly point?		No	
38	Any form of Public address system available ?		No	
39	Width form of internal road within the Premises?		3000 mm	
40	Width of the Entry / exit of Gate		3400 mm	
45	Height of the Entry / exit of Gate		Open to Sky	

PART IV

Provision of Fire Safety Arrangement

41	Is any water reservoir for firefighting available ? (at ground level / overhead)		Yes/No	U/G 1,00,000 Ltr O/H 10,000 Ltr
	a)	If yes, specify the distance from the building	Adjacent to the building	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	1,00,000 Ltr	
	c)	Specify the condition of the reservoir	Satisfactory	
42	Is any public or other water storage facility available nearby ?		Yes	Specify the distance from the building→ 800 Mtr
	a)	Is it readily accessible ?	Yes	Condition and type of the reservoir→ Water body
43	Are internal hydrants being provided ?		Yes	Single outlet.
	If so, please indicate no of hydrants in each floor		Single	
44	Are first aid hose reels being provided? If so please indicate		Yes	No of hose reels on each floor :one in each floor
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel: 25 mm, 30 mtr
	b)	Size (bore) and type of nozzle fitted to each hose reel	5 mm, Jet Type	
45	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	Type of hose: Canvas Size of hose:63 mm Length of hose:15 mtr
	a)	Total no of hoses provided near each hydrant		
46	Have wet risers/dry risers been provided?		Yes- Wet Riser	
	If yes, please indicate the number of risers and internal diameter of each		one	
47	Has any down comer been provided? If so, please give details		No	
48	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes but pumps are not working	
	a)	Number of pumps	Two, Main 60 HP, Jockey 15 HP	
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction: 150 mm Delivery: 150 mm Output of each pump: Not available Max head against which the pump can operate at the output mentioned in: Not available	
	e)	Is the pump automatic in action?	No	
	f)	Is the water pressure sufficient at max distance from the pump?	No- No pressure gauge at the top	

49.	Sprinkler system	NO	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	No	
	a) Type of detectors used	Not applicable	
50	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	YES	
51	Alarm receiving system	YES	
52	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	NIL Not Applicable Not applicable	
53	Location and population of the FEs adequate	Not applicable	
54	Are Emergency Fire Alarm being provided in each floor?	Yes	No. of Fire Alarm: one in each floor Location of Fire Alarm: Near stair case
55	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No	
56	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No	
57	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available	
58	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available	
59	Status of NOC from WBF&ES	Not available. Last NOC has expired 12.09.03	

Part-V

Electrical, Cables and Ventilation

60	If the building is Centrally air –conditioned, please indicate,	No CENTRAL AC	
	a) Material used for construction of ducts and its fittings	Not applicable	
	b) Type of tinning used for ducts	Not applicable	
	c) Type of lagging used, if any for insulating any portion of the duct	Not applicable	
	d) How the lagging is secured?	Not applicable	
	e) If false ceiling is there?	Not applicable	

	f)	Material used for false ceiling	Not applicable	
	g)	Is a separate AHU being provided in each floor	Not applicable	
	H J	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable	
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable	
	j)	Will fire dampers be provided in AC duct?	Not applicable	
61		Is there any standby source of electric supply being provided?	No	
		Is the back supply automatic?	Not applicable	
62		Location of switch- gears and transformers	Inside the building	
63	a)	Transformer capacity	50 KVA	
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Yes -4 hrs	
	c)	If outside, how far is it from the building?	Not applicable	
64		What precautions is taken to prevent a possible fire in the transformers from spreading?	Fire extinguishers	
65		Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	No shaft	
66		Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	NO	
67		Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable	
68		Whether natural ventilation is relied upon? If so, give details.	Yes	
69		Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO	
70		Whether mechanical ventilation is being coupled with automatic detection system?	NO	
71		Whether the refuge area is being provided?	Yes	On which floor: 6 th floor Area of Fire Refuge Area: 30 ft X 4 ft Width of Fire Refuge Area: 30 ft
72		Storage of combustibles materials near electrical equipment/fuse units.	NO	
73		RCCBs available??	NO	
74		Master switch in warehouses	YES	
75		Proper cable joint procedures as per manufacturer	NO	
76		Earthing Pit Tested??	NO	

77	Use of MCB??	Yes
78	Bypassing of protection devices	NO
79	Deteriorated insulation	NO
80	Selection, deployment of PFFs (Portable Fire Extinguishers)	NO
81	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	NO
82	Tracking possibility	YES
83	Unused opening in the panels, etc.	NO
84	Possibility of ground fault/short circuit	NO
85	Mechanical protection to cables	Yes
86	Loose terminations due to improper supports, crimping	NO
87	Improper gland installation, wrong lug size	NO
88	Over-rated uses, wrongly set protection relays, etc.	NO
89	Switch yard and sub station	YES
90	DG operation and maintenance	NO
91	Reliability of the fire hydrant system	NO
92	Emergency preparedness and response	NO
93	Availability of Evacuation plan	NO
94	Mock drill conducted??	NO
95	Awareness of the people??	NO
96	Sample basis validation of smoke detection system??	NO
97	Condition of Lightning Arrestor	Not there
98	Periodic test of UPS system (as applicable)	Not applicable
99	Handling of electrical work by competent electrician	Yes
100	Approval of receiving station, substation and DG	Not applicable
101	Storage of hazardous material, chemicals?	No
102	Use of signage?	No
103	Hydrants clear, access to public thorough fare open	Yes
104	Flame & work permits (as applicable)	No
105	Effective internal communication and public address system	No
106	Colour coding system of hazardous chemical gas lines etc.	NO
107	Management structure, role of safety officer, fire department etc.	No
108	Procedure for incident investigation and control	No

PART- VI

Other Information

109	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes	■ Deviation No From NOC of WBF&ES
110	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO	
111	Is Trade License available??	No	
112	Name of the Insurance Company	No	
113	Remarks (if any) At present Wet riser is not working, MCP are not working & no Fire extinguishers are available. There is no smoke detector available.		

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1	Wet riser found not working 	Wet Riser system is to be set right
2	There is no smoke detector System	Smoke detector to be installed
3	There is no sprinkler system	Sprinkler system is to be installed
4	MCPs are not working 	MCP are to be made functioning
5	There is no fire extinguishers	Fire Extinguishers in right quantity to be deployed
6	There is no lightning arrestor at the roof top	Lightning arrestor to be installed with dedicated earthing
7	There is no pressure gauge at the top floor on the Fire hydrant pipe	Pressure gauge is to be installed
8	Access to Refuse area is blocked at 6 th floor	Should have a free access
9	No ELCB/RCCB is found installed	ELCB to be installed in the DB
10	No Evacuation drill has been conducted	Evacuation drill to be conducted with all occupants periodically & record are to be maintained
11	No Signage is available	Proper illuminated signage is to be displayed on each floor
12	No Emergency Response Procedure is available	Emergency response plan is to be prepared

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

**B.P. PODDAR INSTITUTE
OF
MANAGEMENT & TECHNOLOGY**



EXECUTIVE SUMMARY

Part I & II

General Information

B.P. Poddar Institute Of Management & Technology is situated at EN-31, Sector V, Salt Lake, Kolkata 700091, The structure is G + 4 & built up area is 1828.85 sqmtr, in total 668.975 sqmtr of land.

This property is taken in rent from Shri Ashutosh Paul, residing at CF 144, Sector I, Salt Lake City, Kolkata 700064. The educational institute named B.P. Poddar Institute of Management & Technology is situated in the ground, second, third and fourth floors of this building. Fire pumps and wet risers are being installed. Sprinklers and smoke detectors are also being installed.

The first floor is vacant, and the other floors are occupied by Messrs .B.P. Poddar Institute of Management & Technology. Primarily BCA and BBA courses are taught here.

There is no central **AC system** in the building

A provisional NOC certificate was issued by WBF & ES vide letter no. WBFS/2460 dated 3.5.99. The present occupier has applied afresh on 21.2.12, NOC for which is yet not received.

Occupancy Load was found as

Existing -- 240
Floating -- 5

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two Staircases available. There are no Lifts available.

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers. Sprinklers & smoke detectors, and wet risers are being installed but not ready for use.

Wet Riser

There is an underground tank of 100000 ltr capacity for Fire only but water is not stored as water supply is not available at present. Application for water to NDITA has been applied for .

Alternate source of water is the Water body approx. 800 mtr away

Fire Extinguishers

Cease fire ABC type 2 kgs – 6nos, two on each floor on the 2nd, 3rd and 4th floors

ABC – 5 kgs – 9, nos , one each on ground, 2nd, 3rd and 4th floor, in each stair, and one in meter room

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises ,near the Electrical installation

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN- 31	
2.	Premises Name (if any):	NONE	
3.	Name of the owner /occupier/lessee	B.P.Poddar Institute of Management & Technology	
4.	Permanent Address	EN-31,Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Rented	
6.	Name of the Contact Person	SumanChakroborty	
7.	Phone No of Contact Person	9903716876	
8.	E-mail	sumanc@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational ☐
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	668.975 sq.mtrs	
11.	Build up area(as informed to the Auditor)	1828.85 sqmtr	
12.	No of Floors	G+4	
13.	Date of Sanction of Building Plan	Date: Not available	
14.	Whether P.O.C/OC received from local body?		Not available
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	A.K.Security Services	
16.	No of Security Personnel engaged	4	
17.	Whether Records of Vehicles (No & type entering into the building are kept	NO	
18.	Whether records of Visitors entering into the building are kept	YES	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	NO	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	Nil	
22.	No of Vehicles for which parking space is available in the premises	2	

23	Whether parking space available for visitors within the premises	4
24	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
25	Garbage Clearing	NDITA Garbage clearing system
26	Drainage System	Connected to NDITA Drainage system
27	Maintenance of Road	Internal road maintained by occupier
TELEPHONE TOWER		
28	No of Towers	No of towers: NIL
29	Statutory Clearance from AAI	Not applicable
30	Any Other Clearance	Not applicable

PART – II

V: Vacant

31	Occupancy load		(Attach floor wise details separately if required)									
	Existing		G	1	2	3	4					T
	a)Regular		40	V	60	100	40					240
	b)Floating											5
32	Basement		NIL									
	a)	If basement extends beyond building profile	Not applicable									
	b)	Use of the basement	Not applicable									
	c)	Is it being sprinklered?	Not applicable									
	d)	Whether any cubicles present in the basement?	Not applicable									
		If yes, their use to be specified	Not applicable									
	f)	Whether fire zones are defined?	Not applicable									
		If yes, please provide details	Not applicable									

Part- III

Provisions of means of escape

33	Number of staircases -->			
	Stairs Number		#1	#2
	a)	Width of flight	1760 mm	1300 mm
	b)	Tread width	250 mm	250 mm
	c)	Riser Height	150 mm	150 mm
	d)	Finish	Kota stone	Cemented
	e)	Width of stair door (FCD)	1070 mm (wooden door)	845 mm (wooden door)
	f)	Height of stair head room	3048mm	3352 mm
	g)	Height of stair handrail	750 mm	850mm
	h)	Area & location & profile of Fire Refuge Area	NO Refuse Area	
	i)	Width and type of door leading to Fire refugee area	NO Refuse Area	
	j)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	
34	Number of Lifts installed->			
	Lift-Numbers			
	a)	Type of door	Not applicable	
	b)	Fire resistance rating	Not applicable	
	c)	Area of lift car	Not applicable	
	d)	Capacity (no of persons)	Not applicable	
	e)	Capacity(in kg)	Not applicable	
	f)	Company	Not applicable	
	g)	Is communication system, installed in the lift car?	Not applicable	
	h)	Is a fireman's switch being installed in the car?	Not applicable	
	i)	Pressurization of lift	Not applicable	
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Not applicable	
35	Presence of proper signage in all the exit route		No	
36	Is it posted with illuminated signage?		No	
37	Whether it is landing to fire assembly point?		No	
38	Any form of Public address system available ?		No	
39	Width form of internal road within the Premises ?		3700 mm	
40	Width of the Entry / exit of Gate		3690 mm	
41	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available ? (at ground level / overhead)	Yes	U/G100000ltr(not in use as water is not available) O/H5000 ltr
	a) If yes, specify the distance from the building		Adjacent to building
	b) If yes, specify the capacity (in litres)as approved by WBF & ES.		None
	c) Specify the condition of the reservoir		Satisfactory
43	Is any public or other water storage facility available nearby ?	Yes	Specify the distance from the building----800 Mtr
	a) Is it readily accessible ?	Yes	Condition and type of the reservoir—Water body
44	Are internal hydrants being provided?	No	Not applicable
	If so, please indicate no of hydrants in each floor		
45	Are first aid hose reels being provided? If so please indicate		No
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?		Not applicable
	b) Size (bore) and type of nozzle fitted to each hose reel		Not applicable
45	Are fire hoses being provided near each hydrant? If so, please indicate		Not applicable
	a) Total no of hoses provided near each hydrant		Not applicable
46	Have wet risers/dry risers been provided?		Wet Riser is being constructed , not yet ready
	If yes, please indicate the number of risers and internal diameter of each		One, 150 mm
47	Has any down comer been provided? If so, please give details		NO
	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		
	a) Number of pumps		No pumps installed
	b) Size of suction and delivery connection to each pump/Output/Head		Not applicable
	e) Is the pump automatic in action?		Not applicable
	f) Is the water pressure sufficient at max distance from the pump?		Not applicable
48.	Sprinkler system		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes, being installed but not yet ready
	a) Type of detectors used		Smoke detector, sprinklers
49	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes
50	Alarm receiving system	Yes	

51	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark?	Yes	Number of FE Type/ Capacity ABC 2kgs ABC 5 kgs	15 6 9
	Date of Validity	Yes		
52	Location and population of the FEs adequate	Each floors, landings of each staircases, meter room		
53	Are Emergency Fire Alarm being provided in each floor ?	Yes	System is being commissioned	
54	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No		
55	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No		
56	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
57	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
58	Status of NOC from WBF&ES	NOC from WBF&ES has been applied on 21.2.12 but not yet received		

Part-V

Electrical, Cables and Ventilation

59	If the building is Centrally air –conditioned, please indicate,		No Central AC
	a)	Material used for construction of ducts and its fittings	Not applicable
	b)	Type of tinning used for ducts	Not applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d)	How the lagging is secured?	Not applicable
	e)	If false ceiling is there?	Not applicable
	f)	Material used for false ceiling	Not applicable
	g)	Is a separate AHU being provided in each floor	Not applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j)	Will fire dampers be provided in AC duct?	Not applicable

60	Is there any standby source of electric supply being provided?		Not available
	Is the back supply automatic?		Not applicable
61	Location of switch- gears and transformers		No transformer installed
62	a)	Transformer capacity	Not applicable
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable
	c)	If outside, how far is it from the building?	Not applicable
63	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Not applicable
64	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Concealed wiring, no shaft found
65	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		NO
66	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable
67	Whether natural ventilation is relied upon? If so, give details.		Yes
68	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No
69	Whether mechanical ventilation is being coupled with automatic detection system?		NO
70	Whether the refuge area is being provided?		NO
71	Storage of combustibles materials near electrical equipment/fuse units.		No
72	RCCBs available??		No
73	Master switch in warehouses		No
74	Proper cable joint procedures as per manufacturer		Yes
75	Earthling Pit Tested??		Records are not available
76	Use of MCB??		Yes
77	Bypassing of protection devices		Yes, one connection found to bypass the mains and connected direct
78	Deteriorated insulation		NO
79	Selection, deployment of PFFs (Portable Fire Extinguishers)		YES

80	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No shafts found
81	Tracking possibility	No
82	Unused opening in the panels, etc.	Yes , some switches were found open
83	Possibility of ground fault/short circuit	No
84	Mechanical protection to cables	Yes, concealed and new cables
85	Loose terminations due to improper supports, crimping	NO
86	Improper gland installation, wrong lug size	NO
87	Over-rated uses, wrongly set protection relays, etc.	NO
88	Switch yard and sub station	Not applicable
89	DG operation and maintenance	Not applicable
90	Reliability of the fire hydrant system	Not applicable
91	Emergency preparedness and response	Not applicable
92	Availability of Evacuation plan	Not applicable
93	Mock drill conducted??	Not applicable
94	Awareness of the people??	NIL
95	Sample basis validation of smoke detection system??	NO
96	Condition of Lightning Arrestor	NO
97	Periodic test of UPS system (as applicable)	Yes
98	Handling of electrical work by competent electrician	Yes
99	Approval of receiving station, substation and DG	Not available
100	Storage if hazardous material, chemicals?	No
101	Use of signage?	No
102	Hydrants clear, access to public thorough fare open	Not applicable
103	Flame & work permits (as applicable)	NO
104	Effective internal communication and public address system	NO
105	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
106	Management structure, role of safety officer, fire department etc.	NO
107	Procedure for incident investigation and control	NO

PART- VI

Other Information

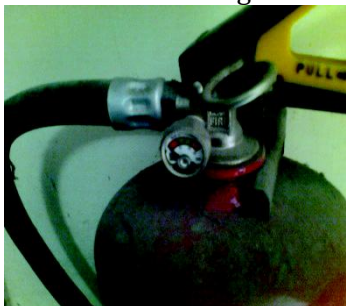
108.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No	■ Deviation
109.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO	
	Is Trade License available??	No	
110	Name of the Insurance Company	NO	
111	Remarks (if any) 57. No Fire mock drill has been conducted 58. No Evacuation drill has been conducted 59. There is no fire pump. 60. Smoke detectors are not working as installation is not complete. 61. Escape route should be free from any obstructions – they were found blocked in the fire escape route of Stair 2 62. Doors leading to the stairs should open from inside to inside leading to the stairs, they were found to open from outside to inside 63. Safe trips should be connected to the water coolers which were not found 64. Sprinklers were found fitted in the computer room which is not advisable 65. Though all the fire extinguishers having validity date 2016, were found okay one was found unsatisfactory. One electrical wire was found by passing the mains switch.		

Auditor I

Auditor II

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1	No Fire mock drill has been conducted	Fire Mock drill is to be conducted periodically. Record is to be maintained
2	No Evacuation drill has been conducted	Evacuation drill is to be conducted periodically with all occupants. Record is to be maintained
3	There is no fire pump	Should be installed & commissioned as soon as possible
4	Smoke detectors not installed	Installation process has been started found
5	Escape routed found blocked 	Area to be cleaned so that it can be easily accessible
6	Doors opening from inside to outside	Should be reversed
7	Safe trips are not connected in water coolers	Safe trips should be connected
8	Sprinklers are fitted in the computer room 	Sprinklers should be removed and suitable fire extinguishers should be placed
9	Defective fire extinguisher found 	The extinguisher must be repaired immediately

10	Bypassing of electrical cable from the main  switch	The bypassing should be immediately removed and connected through proper mains switch

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

SHYAM STEEL



EXECUTIVE SUMMARY

Part I & II

General Information

SHYAM STEEL is situated at EN-32, Sector V, Salt Lake, Kolkata 700091, The structure is G + 9 & built up area is Approx. 34823 Sqft , in total 10.00113 Kathas of land.

In the Ground floor .There is Garage space,& Fire water pump room . In the 1st floor It is rented to M/s Bengal Shriram. 6th& 7th Floor is occupied by Shyam Steel. 8th& 9th Floor is occupied by Din Chemicals. Rest 2nd, 3rd, 4th, 5th floors are vacant.

Building Plan was sanctioned in 2007.

There is a refuse area at 3rd,6th& 8th floor.

There are two stair cases & Two Lifts of 10 Person carrying capacity. Form C is not available.

There is no central **AC system** in the building.

OC obtained directly from Bidhan Nagar Municipality& assessment has been done but appeal made with an adhoc payment

NOC from WBF& ES has expired on 12.7.12

Occupancy Load as on audit date was found as

Existing -- 150
Floating -- 35

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are two nos Staircases available . There are two nos Lifts available.

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is wet riser, sprinkler, smoke detectors& portable fire extinguishers.

Wet riser

There is an Under- ground fire tank of 100000ltr capacity. There is a main pump of 60HP a stand by main pump of 60 HP& a jockey pump of 15 HP capacity for building the pressure in the pipe line.

Sprinkler system is already installed in all the floors

Alternate source of water is the Water body approx 800 mtr away

Buildings is equipped with Fire detection system like smoke detectors

Total 28 Nos Portable fire extinguishers are found deployed throughout the building.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is DG of **** KVA at the ground floor as an alternate source of supply

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN-32	
2.	Premises Name (if any):	SHYAM S STEEL	
3.	Name of the owner /occupier/lessee		
4.	Permanent Address	EN-32, Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Lessee	
6.	Name of the Contact Person	Mr Vishal Pachisia	
7.	Phone No of Contact Person	84200 09057	
8.	E-mail	Vishal.pachisia@ shyamsteel.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	10.00113 Cottahs	
11.	Build up area(as informed to the Auditor)	34823 Sqft	
12.	No of Floors	G+9	
13.	Date of Sanction of Building Plan	Date:24.06.2003	
14.	Whether P.O.C/OC received from local body?	Not available	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	OWN Security	
16.	No of Security Personnel engaged	7	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	Yes	
19.	Whether Metal detectors are used at the entry point	Yes	
20.	Whether Monitoring System through Close circuit TV available	Yes, Only in Din Chemicals office	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	11	
22.	No of Vehicles for which parking space is available in the premises	12 cars	

23	Whether parking space available for visitors within the premises	Yes, 12 Cars
24	Place where excess vehicles (if any) are parked	At vacant plot in the adjacent building
GENERAL MAINTENANCE		
25	Garbage Clearing	NDITA garbage clearing system
26	Drainage System	Connected to NDITA drainage system
27	Maintenance of Road	Internal road is maintained by the owner
TELEPHONE TOWER		
28	No of Towers	No of towers: NIL
29	Statutory Clearance from AAI	Not Applicable
30	Any Other Clearance	Not Applicable

PART – II

V-Vacant

31	Occupancy load	(Attach floor wise details separately if required)										
	Existing	G	1	2	3	4	5	6	7	8	9	T
	a)Regular	2	28	V	V	V	V	30	30	30	30	150
	b)Floating											35
32	Basement	NIL										
	a) If basement extends beyond building profile	Not Applicable										
	b) Use of the basement	Not Applicable										
	c) Is it being sprinklered?	Not Applicable										
	d) Whether any cubicles present in the basement?	Not Applicable										
	If yes, their use to be specified	Not Applicable										
	f) Whether fire zones are defined?	Not Applicable										
	If yes, please provide details	Not Applicable										

Part- III

Provisions of means of escape

33	Number of staircases -->			
	Stairs Number		#1	#2
	a)	Width of flight	1650 mm	1450 mm
	b)	Tread width	260 mm	265 mm
	c)	Riser Height	160 mm	180 mm
	d)	Finish	Kota Stone	Kota Stone
	e)	Width of stair door (FCD)	910 mm	900 mm
	f)	Height of stair head room	2320 mm	2320 mm
	g)	Height of stair handrail	960 mm	960 mm
	h)	Area & location & profile of Fire Refuge Area	8 th floor, 6 th floor, 3 rd floor Area- 7700 mm X 150 mm	
	i)	Width and type of door leading to Fire	1680 mm, Glass Door	

		refugee area		
	J)	Pressurization of staircase		No
	k)	Segregation of staircase		Yes
34	Number of Lifts installed→			
	Lift-Numbers		#1	#2
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2 Hrs	2 Hrs
	c)	Area of lift car	1330mmX1370 mm	1330mmX1370 mm
	d)	Capacity (no of persons)	10	10
	e)	Capacity(in kg)	680 kgs	680 kgs
	f)	Company	KONE	KONE
	g)	Is communication system, installed in the lift car?	Yes	
	h)	Is a fireman's switch being installed in the car?	Yes	
	i)	Pressurization of lift	No	
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	No	Reference No: Valid upto: 3.11.12 Applied for renewal
35	Presence of proper signage in all the exit route		No	
36	Is it posted with illuminated signage?		No	
37	Whether it is landing to fire assembly point?		No	
38	Any form of Public address system available?		No	
39	Width form of internal road within the Premises?		4100mm	
40	Width of the Entry / exit of Gate		3500 mm	
41	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available? (at ground level / over head)		Yes/No	U/G: 100000 Ltr O/H: Not available
	a)	If yes, specify the distance from the building	Adjacent to building	
	b)	If yes, specify the capacity (in litres) as approved by WBF & ES.	No recommendation found	
	c)	Specify the condition of the reservoir	Satisfactory	
43	Is any public or other water storage facility available nearby ?		Yes	Specify the distance from the building---800 mtr
	a)	Is it readily accessible ?	Yes	Condition and type of the reservoir--- Water body
44	Are internal hydrants being provided ?		Yes	Single or twin outlets-- Single outlet
	If so, please indicate no of hydrants in each floor		Single	

45	Are first aid hose reels being provided ? If so please indicate		Yes	Type of hose-- Canvas ■Size of hose --- 63 mm ■Length of hose—15 mtr	
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes/No	Bore and length of hose reel tubing on each reel: 25mm, 30 mtr	
	b)	Size (bore) and type of nozzle fitted to each hose reel	One		
46	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	No of hose reels on each floor --one	
	a)	Total no of hoses provided near each hydrant	one		
47	Have wet risers/dry risers been provided?		Yes√ Wet Riser		
	If yes, please indicate the number of risers and internal diameter of each		One, 100 mm		
48	Has any down comer been provided? If so, please give details		No		
	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes		
	a)	Number of pumps	One main pump of 60 HP, one stand by, One jockey pump -15 HP		
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction: 150 mm Delivery: 150 mm Output of each pump: Not available Max head against which the pump can operate at the output mentioned in: -- 80 Mtr		
	e)	Is the pump automatic in action?	Yes		
	f)	Is the water pressure sufficient at max distance from the pump?	Could not be checked for want of pressure gauge.		
49.	Sprinkler system		Yes		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes		
	a)	Type of detectors used	Smoke Detectors		
50	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes		
51	Alarm receiving system		Yes		
52	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		Yes	Number of FE Type/ Capacity ABC(5 Kg) ABC(2 Kg) Foam(9Ltr) CA(5Kg) April, 2014	28 19 4 1 (DG) 4
53	Location and population of the FEs adequate		One in each floor near stair case,3 nos in each offices, one in DG		

54	Are Emergency Fire Alarm being provided in each floor ?	Yes	No. of Fire Alarm: 3 Nos in each floor Location of Fire Alarm: — Front of the lift, Inside office, Gate
55	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No	
56	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No	
57	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available	
58	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available	
59	Status of NOC from WBF&ES	Not available	

Part-V

Electrical, Cables and Ventilation

60	If the building is Centrally air –conditioned, please indicate,		No
	a)	Material used for construction of ducts and its fittings	Not Applicable
	b)	Type of tinning used for ducts	Not Applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not Applicable
	d)	How the lagging is secured?	Not Applicable
	e)	If false ceiling is there?	Not Applicable
	f)	Material used for false ceiling	Not Applicable
	g)	Is a separate AHU being provided in each floor	Not Applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not Applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not Applicable
	j)	Will fire dampers be provided in AC duct?	Not Applicable
61	Is there any standby source of electric supply being provided?		No
	Is the back supply automatic?		Yes
			Specify the functions that can be maintained simultaneously by such back ups ■ Fire Pump ☐ ■ Emergency Light ☐ ■ Lift ☐ ■ Partly to Office ■ Others
62	Location of switch- gears and transformers		– Out side the building
63	a)	Transformer capacity	1000 KVA
	b)	If inside, whether housed in separate	Out Side the Building

		compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	
	c)	If outside, how far is it from the building?	5 mtr
64	What precautions will be taken to prevent a possible fire in the transformers from spreading?		No fire extinguishers found near by
65	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		No
66	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		No
67	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		No
68	Whether natural ventilation is relied upon? If so, give details.		Yes
69	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No
70	Whether mechanical ventilation is being coupled with automatic detection system?		Not Applicable
71	Whether the refuge area is being provided?	Yes	On which floor: 3rd, 6th, 8th Area of Fire Refuge Area: 7700 mm X 1500 mm Width of Fire Refuge Area: 1500 mm
72	Storage of combustibles materials near electrical equipment/fuse units.		No
73	RCCBs available??		No
74	Master switch in warehouses		No
75	Proper cable joint procedures as per manufacturer		No
76	Earthling Pit Tested??		No
77	Use of MCB??		Yes
78	Bypassing of protection devices		No
79	Deteriorated insulation		No
81	Selection, deployment of PFFs (Portable Fire Extinguishers)		Yes
82	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)		No
83	Tracking possibility		Yes
84	Unused opening in the panels, etc.		No
85	Possibility of ground fault/short circuit		No
86	Mechanical protection to cables		Yes

87	Loose terminations due to improper supports, crimping	No
88	Improper gland installation, wrong lug size	No
89	Over-rated uses, wrongly set protection relays, etc.	No
90	Switch yard and sub station	Yes
91.	DG operation and maintenance	Yes
92.	Reliability of the fire hydrant system	Yes
93.	Emergency preparedness and response	No
94.	Availability of Evacuation plan	No
95.	Mock drill conducted??	No
96.	Awareness of the people??	No
97.	Sample basis validation of smoke detection system??	Yes
98.	Condition of Lightning Arrestor	No
99.	Periodic test of UPS system (as applicable)	Not applicable
100.	Handling of electrical work by competent electrician	Yes
101.	Approval of receiving station, substation and DG	Not available
102.	Storage if hazardous material, chemicals?	No
103.	Use of signage?	No
104.	Hydrants clear, access to public thorough fare open	Yes
105.	Flame & work permits (as applicable)	No
106.	Effective internal communication and public address system	Yes
107.	Colour coding system of hazardous chemical gas lines etc.	No
108	Management structure, role of safety officer, fire department etc.	No
109	Procedure for incident investigation and control	No

PART- VI

Other Information

110.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes	■ Deviation
111.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No	
	Is Trade License available??	Last valid license no 0739 has expired on 19.8.09. Renewal application made	

112	Name of the Insurance Company	Oriental Insurance
113	Remarks (if any) 1. No smoke Detector is found in the Battery room 2. In 8th floor fire hydrant blocked by housekeeping material 3. No signage found on exit route. 4. No FCD found. 5. Valid NOC not available. 6. Fire man switch not available in the lift.	

Signature& date of Inspecting and Reporting Authority With seal

NDITA

Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
01	No smoke Detector is found in the Battery room	Should be provided
02	In 8 th floor fire hydrant blocked by housekeeping material	Access to be kept clear
03.	No FCD found.	FCD should be provided
04	Fire man switch not available in the lift.	Valid NOC to be obtained

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

**SUBHAS BOSE INSTITUTE
OF
HOTEL MANAGEMENT**



EXECUTIVE SUMMARY

Part I & II

General Information

Subhas Bose Institute of Hotel Management is situated at EN-33, Sector V, Salt Lake, Kolkata 700091 ,The structure is G + 1 in total 9 Cottah 6 Chatak of land.The Buildup area is approx. 7000 Sq Ft

There is no central AC system in the building

OC(Occupational Certificate)is not available

NOC from WBF & ES is not available.

Occupancy Load was found as

Existing -- 150

Floating -- 3

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are Two Staircase available . There is no Lift available. There is no refuse area because of height of the building is G+1 only.

There is a narrow stair leading from 1st floor to ground floor at the back side. This stair has no railing & leads to 3 nos classes at ground floor which are practically surrounded by walls only

The height of the exit doors of Labs & main stair are very low . Head may struck at any movement.

All the doors of the classes are opening from inside

The drive alley on the right side of the building is found covered with Tinned roof & benches & tables are kept all along

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is only one portable fire extinguishers. That too has expired .Requisite amount of Fire Extinguishers are to be deployed

There is no Fire pump as there are no Fire Hydrant system

There is no Sprinkler system

Alternate source of water is the Water body approx 800 mtr away

Buildings is not equipped with Fire detection system like smoke detectors or MCPS

1 No Portable fire extinguishers are found deployed but the dates have expired

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is one portable DG supply of 5 KW available

PART VI

OTHER INFORMATION

NIL

NDITA- FIRE SURVAY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 33	
2.	Premises Name (if any):	Subhas Bose Institute of Hotel Management	
3.	Name of the owner /occupier/lessee	IndraniNatharu	
4.	Permanent Address	EN 33,Sector-V salt lake city, Kolkata 700091	
5.	Ownership details :33 Freehold/Rental/Leasehold/Sublease/Any other	Lease hold	
6.	Name of the Contact Person	MrsBidishaSarkar MrK.P.Basu	
7.	Phone No of Contact Person	99032 27185 98303 17518	
8.	E-mail	bidisha@sbihm.com	
9.	Purpose of the Land Use	Principal Use ☐	Residential
		Mixed Use	Educational ☐
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	9 Cottah, 6 chatak	
11.	Build up area(as informed to the Auditor)	7000 Sqft	
12.	No of Floors	G+1	
13.	Date of Sanction of Building Plan	Not Availabe	
14.	Whether P.O.C/OC received from local body?	Not Available	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Own	
16.	No of Security Personnel engaged	12	
17.	Whether Records of Vehicles (No & type entering into the building are kept	NO	
18.	Whether records of Visitors entering into the building are kept	NO	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	NO	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	One + 3 Buses	
22.	No of Vehicles for which parking space is available in the premises	3Nos	
23.	Whether parking space available for visitors within the premises	No	
24.	Place where excess vehicles (if any) are parked	Outside Road	
GENERAL MAINTENANCE			

25.	Garbage Clearing	NDITA Garbage clearing system
26.	Drainage System	Connected to NDITA Drainage system
27.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	Not applicable
30.	Any Other Clearance	Not applicable

PART - II

V= Vacant

31.	Occupancy load	(Based on Estimates)		
	Existing	G	1	Total
	a)Regular	100	50	150
	b)Floating			3
32.	Basement	NIL		

Part- III

Provisions of means of escape

33.	Number of staircases --→TWO NOS			
	Stairs Number		#1	#2
	a)	Width of flight	1050 mm	880 mm
	b)	Tread width	220 mm	220 mm
	c)	Riser Height	150 mm	210 mm
	d)	Finish	Marble	Marble
	e)	Width of stair door (FCD)- Ordinary Door	870 mm	870 mm
	f)	Height of stair head room	12’	12’
	g)	Height of stair handrail	960 mm	960 mm
	h)	Area & location & profile of Fire Refuge Area	NIL	
	i)	Width and type of door leading to Fire refugee area	NIL	
	J)	Pressurization of staircase	NO	
	k)	Segregation of staircase	YES	
34.	Number of Lifts installed→NIL			
	Lift-Numbers			
	a)	Type of door	Not applicable	
	b)	Fire resistance rating	Not applicable	
	c)	Area of lift car	Not applicable	
	d)	Capacity (no of persons)	Not applicable	
	e)	Capacity(in kg)	Not applicable	
	f)	Company	Not applicable	
	g)	Is communication system, installed in the lift car?	Not applicable	
	h)	Is a fireman’s switch being installed in the car?	Not applicable	
	i)	Pressurization of lift	Not applicable	
	j)	Whether validity of “Form-C” from appropriate authority obtained? (If yes, attach a photocopy of the same)	Not applicable	

35.	Presence of proper signage in all the exit route	NO
36.	Is it posted with illuminated signage ?	NO
37.	Whether it is landing to fire assembly point?	None
38.	Any form of Public address system available ?	NO
39.	Width form of internal road within the Premises ?	3280 mm 1230 mm
40.	Width of the Entry / exit of Gate	3280 mm
41.	Height of the Entry / exit of Gate	Open to sky

PART IV

Provision of Fire Safety Arrangement

42.	Is any water reservoir for firefighting available ? (at ground level / overhead)	Yes	U/G No Fire Tank O/H Not available
	a) If yes, specify the distance from the building		Not applicable
	b) If yes, specify the capacity (in litres) as approved by WBF & ES.		Not applicable
	c) Specify the condition of the reservoir		Not applicable
43.	Is any public or other water storage facility available nearby ?	Yes	■specify the distance from the building ---- 800 Mtr
	a) Is it readily accessible ?	Yes	■condition and type of the reservoir—Water body
44.	Are internal hydrants being provided ?		No
	If so, please indicate no of hydrants in each floor		Not applicable
45.	Are first aid hose reels being provided ? If so please indicate		No
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?		Not applicable
	b) Size (bore) and type of nozzle fitted to each hose reel		Not applicable
46.	Are fire hoses being provided near each hydrant? If so, please indicate		NO
	a) Total no of hoses provided near each hydrant		Not applicable
47.	Have wet risers/dry risers been provided?		NO
48.	If yes, please indicate the number of risers and internal diameter of each		Not applicable
49.	Has any down comer been provided? If so, please give details		No
50.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Not applicable
	a) Number of pumps		Not applicable
	b) Size of suction and delivery connection to each pump/Out put/Head		Not applicable
	c) Is the pump automatic in action?		Not applicable
	d) Is the water pressure sufficient at max distance from the pump?		Not applicable
51.	Sprinkler system		NO
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		YES, Smoke detectors at ground floor only
	a) Type of detectors used		Addressable smoke detectors

52.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	YES at Ground & 2 nd floor only		
	a) Alarm receiving system	Yes		
53.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Yes Expired 3 yrs back	Number of FE BC (5 Kg)	1 no
	Location	Office room		
54.	Are Emergency Fire Alarm being provided in each floor ?	NO		
55.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	None		
56.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min twice a year)?	No record is available		
57.	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
58.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
59.	Status of NOC from WBF&ES	Not available		

Part-V

Electrical, Cables and Ventilation

60.	If the building is Centrally air -conditioned, please indicate,	No Central AC
	a) Material used for construction of ducts and its fittings	Not applicable
	b) Type of tinning used for ducts	Not applicable
	c) Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d) How the lagging is secured?	Not applicable
	e) If false ceiling is there?	Not applicable
	f) Material used for false ceiling	Not applicable
	g) Is a separate AHU being provided in each floor	Not applicable
	H) Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i) Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j) Will fire dampers be provided in AC duct?	Not applicable

61.	Is there any standby source of electric supply being provided?		YES. DG of KW potable
	Is the back supply automatic?		NO. Operates manually
62.	Location of switch- gears and transformers		NIL
63.	a)	Transformer capacity	Not applicable
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable
	c)	If outside, how far is it from the building?	Not applicable
64.	What precautions is taken to prevent a possible fire in the transformers from spreading?		Fire Extinguishers but dates are expired
65.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		No Shafts
66.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		NO
67.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable
68.	Whether natural ventilation is relied upon? If so, give details.		Yes
69.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		NO
70.	Whether mechanical ventilation is being coupled with automatic detection system?		Not applicable
71.	Whether the refuge area is being provided?		NO
72.	Storage of combustibles materials near electrical equipment/fuse units.		NO
73.	RCCBs available??		None found
74.	Master switch in warehouses		NO
75.	Proper cable joint procedures as per manufacturer		YES
76.	Earthing Pit Tested??		Records are not available
77.	Use of MCB??		NO
78.	Bypassing of protection devices		None found
79.	Deteriorated insulation		None found
80.	Selection, deployment of PFFs (Portable Fire Extinguishers)		YES
81.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)		Not applicable
82.	Tracking possibility		Yes
83.	Unused opening in the panels, etc.		None found
84.	Possibility of ground fault/short circuit		None found
85.	Mechanical protection to cables		Yes.
86.	Loose terminations due to improper supports, crimping		None found
87.	Improper gland installation, wrong lug size		None found.
88.	Over-rated uses, wrongly set protection relays, etc.		NO Protection relay

89.	Earthing layout & it's effectiveness	Not available
90.	Switch yard and sub station	No
91.	DG operation and maintenance	YES
92.	Reliability of the fire hydrant system	YES
93.	Emergency preparedness and response	None found
94.	Availability of Evacuation plan	None found
95.	Mock drill conducted??	No record is available
96.	Awareness of the people??	Poor
97.	Sample basis validation of smoke detection system??	No record found
98.	Storage if hazardous material, chemicals??	NO
99.	Use of signage??	NO
100.	Hydrants clear, access to public thorough fare open	YES
101.	Flame & work permits (as applicable)	None found
102.	Effective internal communication and public address system	YES
103.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
104.	Management structure, role of safety officer, fire department etc.	NO
105.	Procedure for incident investigation and control	NO

PART- VI

Other Information

106.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes -- NOC has expired in 2007
107.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
108.	Is Trade License available??	Not available
109.	Name of the Insurance Company	Information not available
110.	Remarks (if any) 1. No assembly point is identified 2. No record of fire Mock drill & Evacuation is available 3. There is no signage is available for the Emergency Exit 4. No smoke detector is available 5. No Valid NOC from WBFES is found available 6. No Earth pit was marked & earth pit test record not found 7. No Fire extinguishers are available expect one of BC type which has expired long back 8. There is a narrow stair leading from 1st floor to ground floor at the back side. This stair has no railing & leads to 3 nos classes at ground floor which are practically surrounded by walls only 9. The height of the exit doors of Labs & main stair are very low. Head may strike at any movement. 10. All the doors of the classes are opening from inside 11. The drive alley on the right side of the building is found covered with Tinned roof & benches & tables are kept all along 12. No trained Fire fighter is available 13. NO PAS is available 14. NO MCP is available	

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	No assembly point is identified	Assembly point is to be identified
2.	No Earth pit was marked & earth pit test record not found	Earth pit are to be tested & record maintained
3.	No record of fire Mock drill & Evacuation is available	Records are to be maintained
4.	There is no signage is available for the Emergency Exit	Proper Illuminated signage to be provided for the emergency route
5.	No smoke detector is available	Smoke detectors are to be installed
6	No valid NOC from WBFES is found available	Valid NOC from WBFES is to be obtained
7	No Fire extinguishers are available expect one of BC type which has expired long back	Requisite numbers of Fire Extinguishers are to be provided
8	There is a narrow stair leading from 1st floor to ground floor at the back side. This stair has no railing & leads to 3 nos classes at ground floor which are practically surrounded by walls only	Total accommodation for a large number of students to be reviewed & free Exit is to be planned
9	The height of the exit doors of Labs & main stair are very low. Head may struck at any movement.	EXIT Door height is to be modified
10	All the doors of the classes are opening from inside	All the doors should open from outside to avoid stampede
11	The drive alley on the right side of the building is found covered with Tinned roof & benches & tables are kept all along	The passage to be kept free
12	No trained Fire fighter is available	Trained Fire fighters are to be provided
13	NO PAS is available	PAS to be installed or Emergency Bell is to be installed
14	NO MCP is available	MCP s are to be installed

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

M/S. SEVEN HILLS BYTES (P) LTD.



EXECUTIVE SUMMARY

Part I & II

General Information

The premises No EN 34 is owned by M/s. SEVEN HILLS BYTES (P) LTD. and given on lease to the Govt. of West Bengal who is running the ALIAH University at the said location. The buildings are having G+ 9 structures and at present only 4th and 8th floors are being used for running classes. Rests of the floors are being made ready for use.

The building is situated on a plot area of 10kattah and built up area is about 40,000 sq. The OC has been obtained on 24/8/2007 from the Bidhan Nagar Municipality.

There is no Basement at the premises.

Two security agencies are engaged at present for the security of the property. There is no tower at the top of the building but M/s. Vodafone has a small antenna at the roof top.

The total occupancy load is about 92 regular (80 are students on 4th and 8th floor which are in use, and 12 at G floor). Floating load is estimated to be at 5nos.

The sanctioned electrical load is 500KVA and running load is 50KVA.

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two staircases and two lifts in the building. Refuge areas have been provided on 4th, 6th, 7th and 8th floors. Both the lifts are provided with ADR facility.

Proper signage of Exit, Do Not Use Lift during Fire, Assembly Point etc. have been displayed at appropriate locations for guidance.

Mock drill is carried out at regular frequency and record is available.

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

The Fire Safety arrangement is good. The underground fire water storage tank of capacity 2, 00,000liters is within the premises, and three pumps (one main pump of 150M3/hr capacity, one standby pump of 150M3/hr capacity) are the main features of the system. The jockey pumps of 15HP and 80Mtrs.Head. The wet rise is charged at 7kgs./cm² pr. And the system is on auto mode.

The wet riser runs up to the topmost floor and fire water reels as well as fire hydrant point has been provided at each floor staircase landing.

Smoke detection points and sprinklers arrangement are all well set at strategic locations on each floor. Smoke detection as well as a fire alarm hooter is located at entry door on each floor and panel at the ground floor can find out the location of fire from indication on this.

Fire extinguishers are well distributed on staircase landing points at each floor, Transformer location, LT panel room and roof top. M/s. OBS graphics personnel are employed for round the clock as firefighting personnel.

NOC issued by WBFES having reference no. WBFES/DG/FP/2096/12/KOL-013/344/04(396/04) dated 2/7/2012.

Part V

ELECTRICAL FIRE HAZARDS

The transformer receiving power from WBSEB is of 500KVA rating and located within the premises separately at a distance from the building within the boundary wall. There is no compartment for the transformer, and the Switch Gears are within the building.

There is no ELCB or RCCB in the distribution board found.

No combustible material is stored in the premise near the Electrical installation

There is one 250 KVA DG set installed near the Transformer as an alternate source of power. This is operated manually when needed.

PART VI

OTHER INFORMATION

The installation is insured with M/s. New India Assurance company against all possible damages.

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART - I

1.	Plot No/Premises No:	EN-34	
2.	Premises Name (if any):	ALIAH UNIVERSITY	
3.	Name of the owner /occupier/lessee	SEVEN HILLS BYTES (P) LTD.	
4.	Permanent Address	EN-34,Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leese	
6.	Name of the Contact Person	Mr.AmitAnand	
7.	Phone No of Contact Person	9831020613	
8.	E-mail	Sevenhillsbytes2011@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational ☐
			Institutional
			Assembly
			Business
			Mercantile
			Industrial(Printing House)
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	10 Kattah	
11.	Build up area(as informed to the Auditor)	40,000 sq.ft	
12.	No of Floors	G+9	
14.	Date of Sanction of Building Plan	☒ Yes ☒ Date Not available. Bidhan Nagar Municipality	
15.	Whether P.O.C/OC received from local body?	Yes/No	OC Issuing Authority Bidhan Nagar Municipality/ NDITA Dated: 24/8/2007
16.	Incidence of assessment done	☒ Yes	Amount of Annual Property tax Rs 13,68,495/- X 4Qtr per annum
SECURITY SETUP DETAILS			
17.	Name of the SECURITY AGENCY engaged	NIS	Ex Para military sec.services.
18.	No of Security Personnel engaged	4	3
19.	Whether Records of Vehicles (No & type entering into the building are kept	YES	
20.	Whether records of Visitors entering into the building are kept	YES	
21.	Whether Metal detectors are used at the entry point	NO	
22.	Whether Monitoring System through Close circuit TV available	YES	

VEHICLES VOLUME		
23	No of Vehicles Engaged by the Organization	2 Nos.
24	No of Own Vehicles engaged by Employees	NIL
25	No of Vehicles for which parking space is available in the premises	19
26	Whether parking space available for visitors within the premises	YES
27	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
28	Garbage Clearing	NDITA Garbage clearing system
29	Drainage System	Connected to NDITA Drainage system
30	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
31	No of Towers	No
32	Statutory Clearance from AAI	Not applicable
33	Any Other Clearance	Not applicable

PART – II

V=vacant

34	Occupancy load		(Attach floor wise details separately if required)									
	Existing		G	1	2	3	4	5	6	7	8	9
	a)Regular		12				40				40	
	b)Floating		Nil				5				5	
35	Electrical Load		500 KVA									
36	Basement		NIL									
	a)	If basement extends beyond building profile	No									
	b)	Use of the basement	Not applicable									
	c)	Is it being sprinkle red?	Not applicable									
	d)	Whether any cubicles present in the basement?	Not applicable									
		If yes, their use to be specified	Not applicable									
	f)	Whether fire zones are defined?	Not applicable									
		If yes, please provide details	Not applicable									

Part- III

Provisions of means of escape

37	Number of staircases --→2 (Two Nos)		
	Stairs Number	#1	#2
	a) Width of flight	1520 mm	1480 mm
	b) Tread width	300 mm	265 mm
	c) Riser Height	140 mm	150 mm
	d) Finish	Stone	Marble
	e) Width of stair door (FCD)	1700mm Glass(1 st /9 th floor)	1770 Wooden
	f) Height of stair head room	12ft	12ft
	g) Height of stair handrail	910 mm	980 mm
	h) Area & location & profile of Fire Refuge Area	4 th ,6 th ,7 th & 8 th floor. 12*2, 8*2, 8*2 & 8*2 Sq.mtrs respectively.	
	i) Width and type of door leading to Fire refugee area	Glass door, 1.75 mtrs.	Glass door, 1.75 mtrs.
	j) Pressurization of staircase	Yes	
	k) Segregation of staircase	Yes	
38	Number of Lifts installed→	2 (Two nos.)	
	Lift-Numbers	#1	#2
	a) Type of door	Metallic	Metallic
	b) Fire resistance rating	2 Hrs	2 Hrs
	c) Area of lift car	1310*1360m m2	1310mm*1360 mm2
	d) Capacity (no of persons)	10	10
	e) Capacity(in kg)	680 kg	680 kg
	f) Company	KONE	KONE
	g) Is communication system, installed in the lift car?	Yes/ ~~No~~	Yes/ ~~No~~
	h) Is a fireman's switch being installed in the car?	Yes/ ~~No~~	Yes/ ~~No~~
	i) Pressurization of lift	Yes/No	Yes/No
	j) Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	No Applied on 28/6/2012.Recpt no.0806370 and 0806371	
39	Presence of proper signage in all the exit route	Yes	
40	Is it posted with illuminated signage?	Yes	
41	Whether it is landing to fire assembly point?	Yes	
42	Any form of Public address system available?	Yes	
43	Width form of internal road within the Premises ?	3400 mm	
44	Width of the Entry / exit of Gate	3400 mm	
45	Height of the Entry / exit of Gate	Open to sky	

PART IV

Provision of Fire Safety Arrangement

46	Is any water reservoir for firefighting available? (at ground level / overhead)	Yes	U/G2,00,000 ltr
	a) If yes, specify the distance from the building	Adjacent to building (inside boundary wall)	
	b) If yes, specify the capacity (in liters) as approved by WBF& ES.	Yes	
	c) Specify the condition of the reservoir	Good	
47	Is any public or other water storage facility available nearby ?	Yes	Specify the distance from the building 800 Mtr
	a) Is it readily accessible?	Yes	Condition and type of the reservoir: Water body
48	Are internal hydrants being provided?	Yes	Single outlets.
	If so, please indicate no of hydrants in each floor	Single	
49	Are first aid hose reels being provided? If so please indicate	Yes	No of hose reels on each floor : 1 (One)
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes Directly to the riser	■ Bore and length of hose reel tubing on each reel- 20 mm, 30 Mtr
	b) Size (bore) and type of nozzle fitted to each hose reel	5 mm, Thru type	
50	Are fire hoses being provided near each hydrant? If so, please indicate	Yes	■ Type of hose--Canvas ■ Size of hose—63 mm ■ Length of hose—15 mtr
	a) Total no of hoses provided near each hydrant	One in hydrant point	
51	Have wet risers/dry risers been provided?	Yes	
	If yes, please indicate the number of risers and internal diameter of each	One riser. 150mm	
52	Has any down comer been provided? If so, please give details	No	
53	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Yes	
	a) Number of pumps	Three pumps. Two main (60 HP, 80 Mtrs, 150 M ³ /Hr) & One Jockey-15 HP, 80 Mtrs.	
	b) Size of suction and delivery connection to each pump/Output/Head	■ Suction: 150mm ■ Delivery: 150mm ■ Max head against which the pump can operate at the output mentioned 7 kgs/cm ² .	
	c) Is the pump automatic in action?	Yes	
	d) Is the water pressure sufficient at max distance from the pump?	Yes	

54.	Sprinkler system		Yes	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Each floor equipped with sprinklers with automatic sprinkling arrangement in case of a fire.	
	a)	Type of detectors used	Smoke detector	
55	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		YesGlass to be broken in case of a fire which will activate the hooter. These are located near landing points at all floors	
56	Alarm receiving system		Yes/NoAt panel located at the ground floor.	
57	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations?		Yes/No	Number of FE Type/ Capacity ABC DCP(5 Kg) 18 Co2 (4.5 Kg) 4 Water (9 liters) 21 Foam (9 liters) 2 BC (DCP) 5kg 3
	If yes, indicate		Yes/No	
	Indicate whether the Fire extinguishers bear the ISI certification mark?		08.03. 2013	
	Date of Validity			
	Location and population of the FEs adequate		Stair case landing and Transformer panel Pump room and Pannel	
58	Is Emergency Fire Alarm being provided in each floor?		Yes/No	■No. Of Fire Alarm –One in each floor, Total 20 alarms. ■Location of Fire Alarm—Near stair case and G floor
59	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		YesOBS Graphics	
60	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?		■ Monthly carried out .Record available. Recently done on 16/10/ and 10/11/2012.	
61	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES		Drawing not available	
62	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES		Drawing not available	
63	Status of NOC from WBF&ES		NOC No. WBFES/DG/FP/2096/12/Kol-013/344/04(396/04) dtd 2/7/2012.	

Part-V

Electrical, Cables and Ventilation

64	If the building is Centrally air -conditioned, please indicate,		No		
	a)	Material used for construction of ducts and its fittings	Not applicable		
	b)	Type of tinning used for ducts	Not applicable		
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable		
	d)	How the lagging is secured?	Not applicable		
	e)	If false ceiling is there?	Not applicable		
	f)	Material used for false ceiling	Not applicable		
	g)	Is a separate AHU being provided in each floor	Not applicable		
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable		
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable		
	j)	Will fire dampers be provided in AC duct?	Not applicable		
65	Is there any standby source of electric supply being provided?		Yes	DG 250 KVA Capacity	No
	Is the back supply automatic?		No	Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump ☐ ■Emergency Light ☐ ■Lift ☐ ■Partly to Office ☐ ■ Others	
66	Location of switch- gears and transformers		S.G Inside building&Tr Outside		
67	a)	Transformer capacity	500 KVA dry type		
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	No compartment.		
	c)	If outside, how far is it from the building?	4.5mtr		
68	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Fire extinguisher from nearby is to be used.		
69	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Electrical cables are sealed.		
70	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		NO		
71	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable		
72	Whether natural ventilation is relied upon? If so, give details.		YES		

73	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO	
74	Whether mechanical ventilation is being coupled with automatic detection system?	NO	
75	Whether the refuge area is being provided?	Yes/ No	On which floor: 4th, 6th, 7th & 8th floors 12*2, 8*2, 8*2 & 8*2 Sq. mtrs respectively.
76	Storage of combustibles materials near electrical equipment/fuse units.	NO	
77	RCCBs available??	NO	
78	Master switch in warehouses	NO	
79	Proper cable joint procedures as per manufacturer	YES	
80	Earthling Pit Tested??	Yes. 8 nos. of pits. Records are not available	
81	Use of MCB??	YES	
82	Bypassing of protection devices	NO	
83	Deteriorated insulation	NO	
84	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES	
85	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	NO	
86	Tracking possibility	NO	
87	Unused opening in the panels, etc.	NO	
88	Possibility of ground fault/short circuit	NO	
89	Mechanical protection to cables	YES	
90	Loose terminations due to improper supports, crimping	NO	
91	Improper gland installation, wrong lug size	NO	
92	Over-rated uses, wrongly set protection relays, etc.	NO	
93	Earthling layout & it's effectiveness	Yes but Earth pit test report not found	
94	Switch yard and sub station	Yes	
95	DG operation and maintenance	Yes. By security and/AMC with Ashoke Leyland	
96	Reliability of the fire hydrant system	Good	
97	Emergency preparedness and response	Good	
98	Availability of Evacuation plan	YES	
99	Mock drill conducted?	YES	
100	Awareness of the people??	Good	
101	Sample basis validation of smoke detection system??	Tested. No record	
102	Condition of Lightning Arrestor	No	
103	Periodic test of UPS system (as applicable)	Not applicable	
104	Handling of electrical work by competent electrician	Yes	

105	Approval of receiving station, substation and DG	No
106	Storage of hazardous material, chemicals?	NO
107	Use of signage?	Very good.
108	Hydrants clear, access to public thoroughfare open	YES
109	Flame & work permits (as applicable)	NO
110	Effective internal communication and public address system	YES
111	Color coding system of hazardous chemical gas lines etc.	NOT applicable
112	Management structure, role of safety officer, fire department etc.	Good
113	Procedure for incident investigation and control	Not applicable

PART- VI

Other Information

114.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No	■ Deviation
115	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO	
	Is Trade License available??	Not applicable.	
116	Name of the Insurance Company	New India Insurance co.	
117	Remarks (if any) 15. The portable Fire extinguishers do not have validity date marked on them by suppliers. 16. The Manual Call Points (Fire call points) do not have small hammers with chain for breaking the glass in emergency. 17. In front of the LT panel switch gear installation there is no rubber mat for protection of the personnel. 18. Adjacent to rising wet header (fire water header), every floor has small opening which might have been planned for running cables or dry header. These are to be tightly sealed/ closed to prevent smoke from spreading from floor to floor.		

Auditor I

Auditor II

Signature & date of Inspecting and Reporting Authority With seal

NDITA
Nonconformity tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	Rubber mat in LT panel room is missing	Rubber mat should be placed to work on standing
2.	Fire extinguishers without validity date marked.	Refilling agency should be contacted for validity date confirmation and pasting on these bottles.
3.	Manual call points of the fire alarm system are without hammer.	Hammer for glass breaking in case of emergency should be fixed with a chain.
4.	Gaps on floors adjacent to running wet riser shaft are open	These gaps are to be closed /sealed to prevent spread of smoke from floor to floor.

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

WALZEN



EXECUTIVE SUMMARY

Part I & II

General Information

WALZEN is situated at EN 35, Sector V, Salt Lake, Kolkata 700091 in the plot area of 2501 SqMtr & build up area is around 2406.26 SqMtr

Date of Sanction of Building plan is 8.6.2004

For OC (Occupational Certificate) application has been made

NOC from WBFES was valid till 2.9.2013(Ref WBFS/2695/12/ Bidhan –CB /8/03(591). Dated:- 03.09.2012. Thereafter no action has been initiated

Estimated Occupancy Load	Regular 60
	Floating 5

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuge area are available as follows:

There are two stair cases which are segregated & two lifts are available

Illuminated Signage are not there in the Emergency Exit Route. No assembly point has been unmarked

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

There is no Separate Fire tank of 100000 ltr available in the ground floor.

There is no wet riser available

The alternate source of water body is approximately 500mtr away,

There are total 24nos Fire Extinguishers available throughout the building

MCPs are available in the building

PART V

ELECTRICAL

There is no RCCB in the distribution board

Earth pits were not found marked and tested.

Generally no combustible material is stored in the premises, near the Electrical installation

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 35	
2.	Premises Name (if any):	WALZEN	
3.	Name of the owner /occupier/lessee	MR. T. Roychoudhury, LykaEngg. Work	
4.	Permanent Address	Sector V, Salt Lake, Kolkata-700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Lease	
6.	Name of the Contact Person	Vijay Kr Gaur	
7.	Phone No of Contact Person	8100727639	
8.	E-mail	prpuria@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	668.975m ²	
11.	Build up area(as informed to the Auditor)	3086.602 m ²	
12.	No of Floors	G+7	
13.	Date of Sanction of Building Plan	Date:08/06/2004	
14.	Whether P.O.C/OC received from local body?	No	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Adams management Services	
16.	No of Security Personnel engaged	2Nos	
17.	Whether Records of Vehicles (No & type entering into the building are kept	No	
18.	Whether records of Visitors entering into the building are kept	Yes	
19.	Whether Metal detectors are used at the entry point	No	
20.	Whether Monitoring System through Close circuit TV available	No	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	1 Nos.	

22	No of Vehicles for which parking space is available in the premises	7Nos.
23	Whether parking space available for visitors within the premises	No
24	Place where excess vehicles (if any) are parked	Outside
GENERAL MAINTENANCE		
25	Garbage Clearing	Through NDITA Garbage clearing system
26	Drainage System	Connected to NDITA drainage system
27	Maintenance of Road	Internal Road is being maintained by occupier
TELEPHONE TOWER		
28	No of Towers	No Tower
29	Statutory Clearance from AAI	Not Applicable
30	Any Other Clearance	Not Applicable

PART – II

31	Occupancy load		Based on Estimates
	Existing		4th and 5th floors are occupied only
	a)Regular		30+30=60 persons.
	b)Floating		5 persons
32	Basement		No Basement
	a)	If basement extends beyond building profile	Not applicable
	b)	Use of the basement	Not applicable
	c)	Is it being sprinkle red?	Not applicable
	d)	Whether any cubicles present in the basement?	Not applicable
		If yes, their use to be specified	Not applicable
	f)	Whether fire zones are defined?	Not applicable
		If yes, please provide details	Not applicable

Part- III

Provisions of means of escape

33	Number of staircases --→ Two			
	Stairs Number		#1	#2
	a)	Width of flight	1470	1500
	b)	Tread width	260	260
	c)	Riser Height	175	155
	d)	Finish	Granite	Marble
	e)	Width of stair door (FCD)	1340(G)	1120(Glass door)
	f)	Height of stair head room	8ft	8ft
	g)	Height of stair handrail	870	Yet to be fixed
	h)	Area & location & profile of Fire Refuge Area	Location 7 th floor Area 12000X 1500mm ²	
	i)	Width and type of door leading to Fire refugee area	1200 mm Glass door	
	j)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	
34	Number of Lifts installed→ Two			
	Lift-Numbers		#1	#2
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2hr resistance	2hr resistance
	c)	Area of lift car	1410X 1210	1410X1210 mm ²
	d)	Capacity (no of persons)	10 person	10 person
	e)	Capacity(in kg)	680Kgs	680Kgs
	f)	Company	Schindler	Schindler
	g)	Is communication system, installed in the lift car?	Yes	Yes
	h)	Is a fireman's switch being installed in the car?	Yes	Yes
	i)	Pressurization of lift	No	No
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Not available	
35	Presence of proper signage in all the exit route		Yes	
36	Is it posted with illuminated signage ?		Yes, all signage will be placed after painting works	
37	Whether it is landing to fire assembly point?		No	
38	Any form of Public address system available ?		No	
39	Width form of internal road within the Premises?		3600mm	
40	Width of the Entry / exit of Gate		3600mm	
41	Height of the Entry / exit of Gate		Open to Sky	

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G ☐ 1,00,000 ltr
	a)	If yes, specify the distance from the building	Adjacent to the building below the pathway	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	100000 liters	
	c)	Specify the condition of the reservoir	Good	
43	Is any public or other water storage facility available nearby?		Yes	Specify the distance from the building: Bore well
	a)	Is it readily accessible?	Yes	Condition and type of the reservoir: Bore well
44	Are internal hydrants being provided ?		Yes	Single
	If so, please indicate no of hydrants in each floor		One at each half landing	
45	Are first aid hose reels being provided ? If so please indicate		Yes	No of hose reels on each floor :: One at each half landing
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel: 25mm/30mtr/Jet type
	b)	Size (bore) and type of nozzle fitted to each hose reel	5mm Jet type	
45	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	Type of hose: Canvas Size of hose:65mm Length of hose:15mtr
	a)	Total no of hoses provided near each hydrant	One at each hydrant	
46	Have wet risers/dry risers been provided?		Yes	
	If yes, please indicate the number of risers and internal diameter of each		One Wet rises 150mm	
47	Has any down comer been provided? If so, please give details		No	
	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes	
	a)	Number of pumps	3 (three) pumps	

	b)	Size of suction and delivery connection to each pump/Output/Head	Suction:200 Delivery: 150 Output of each pump: <table border="1"> <tr> <th>Capacity</th> <th>Head</th> <th>Power</th> <th></th> </tr> <tr> <td>2250Mtr</td> <td>70mt</td> <td>60HP</td> <td>Main</td> </tr> <tr> <td>2250</td> <td>70</td> <td>60</td> <td>S.By</td> </tr> <tr> <td>180</td> <td>70</td> <td>15</td> <td>Jockey</td> </tr> </table> Max head against which the pump can operate at the output mentioned in:80 Mtr			Capacity	Head	Power		2250Mtr	70mt	60HP	Main	2250	70	60	S.By	180	70	15	Jockey
Capacity	Head	Power																			
2250Mtr	70mt	60HP	Main																		
2250	70	60	S.By																		
180	70	15	Jockey																		
	e)	Is the pump automatic in action?	Yes																		
	f)	Is the water pressure sufficient at max distance from the pump?	Yes																		
48.	Sprinkler system																				
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes																		
	a)	Type of detectors used	Smoke Detector																		
49	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes																		
50	Alarm receiving system		Yes																		
51	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		Yes Yes/No	Number of FE Type/ Capacity 5Kg ABC- 10pc(stair landing 8 +pumps room 2) 9lit CO ₂ water- 10pcs (Stair landing 8+ pumps 2) 9 Lit Foam- 2pcs (pump room 1 DGSD/1) 2kg CO ₂ - 1 pic (1ltr) 5kg DCP-1 pic (1ltr)	24 nos																
52	Location and population of the FEs adequate		Yes																		
53	Are Emergency Fire Alarm being provided in each floor ?		Yes	No. of Fire Alarm:8no Location of Fire Alarm: in each Staircase half landing																	
54	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		No																		

55	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No Mock drill conducted
56	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not applicable
57	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not applicable
58	Status of NOC from WBF&ES	WBFES/2695/12/Bidhan-CB/8/03 (591)Dtd03/09/2012

Part-V

Electrical, Cables and Ventilation

59	If the building is Centrally air – conditioned, please indicate,		No central A/C		
	a)	Material used for construction of ducts and its fittings	Not applicable		
	b)	Type of tinning used for ducts	Not applicable		
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable		
	d)	How the lagging is secured?	Not applicable		
	e)	If false ceiling is there?	Not applicable		
	f)	Material used for false ceiling	Not applicable		
	g)	Is a separate AHU being provided in each floor	Not applicable		
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable		
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable		
	j)	Will fire dampers be provided in AC duct?	Not applicable		
60	Is there any standby source of electric supply being provided?		Yes	DG Capacity: 380 KVA	UPS Capacity: 5Kva
	Is the back supply automatic?		Yes	Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump ☐ ■Emergency Light ☐ ■Lift ☐ ■Partly to Office ☐ ■ Others	

61	Location of switch-gears and transformers		Ground Floor , out side
62	a)	Transformer capacity	500 Kva
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable
	c)	If outside, how far is it from the building?	2.5 mtr.
63	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Extinguisher to be used
64	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Yes
65	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		Yes in LT panel
66	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable
67	Whether natural ventilation is relied upon? If so, give details.		Natural Ventilation
68	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No
69	Whether mechanical ventilation is being coupled with automatic detection system?		-No
70	Whether the refuge area is being provided?	Yes	On which floor:7 th floor Area of Fire Refuge Area:12000x 1500mm ² Width of Fire Refuge Area:1500mm
71	Storage of combustibles materials near electrical equipment/fuse units.		No
72	RCCBs available??		Each Floor
73	Master switch in warehouses		-
74	Proper cable joint procedures as per manufacturer		Yes
75	Earthing Pit Tested??		No document available
76	Use of MCB??		Yes
77	Bypassing of protection devices		-
78	Deteriorated insulation		No

79	Selection, deployment of PFFs (Portable Fire Extinguishers)	No
80	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Yes
81	Tracking possibility	Yes -
82	Unused opening in the panels, etc.	No
83	Possibility of ground fault/short circuit	No
84	Mechanical protection to cables	Yes
85	Loose terminations due to improper supports, crimping	No
86	Improper gland installation, wrong lug size	No
87	Over-rated uses, wrongly set protection relays, etc.	No
88	Switch yard and sub station	Ok
89	DG operation and maintenance	Auto start. New machine
90	Reliability of the fire hydrant system	Very reliable
91	Emergency preparedness and response	No
92	Availability of Evacuation plan	No
93	Mock drill conducted??	No
94	Awareness of the people??	Low
95	Sample basis validation of smoke detection system??	No
96	Condition of Lightning Arrestor	No
97	Periodic test of UPS system (as applicable)	Not done
98	Handling of electrical work by competent electrician	Yes
99	Approval of receiving station, substation and DG	To be obtained
100	Storage of hazardous material, chemicals?	No
101	Use of signage?	Good
102	Hydrants clear, access to public thoroughfare open	Yes
103	Flame & work permits (as applicable)	Not applicable
104	Effective internal communication and public address system	NO
105	Colour coding system of hazardous chemical gas lines etc.	Not applicable
106	Management structure, role of safety officer, fire department etc.	No
107	Procedure for incident investigation and control	No.

PART- VI

Other Information

108.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No
109.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
	Is Trade License available??	No
110	Name of the Insurance Company	None
111	Remarks (if any) Only 4th and 5th floor are occupied at present. Lot of finishing work like painting wooden work, flooring etc. going on material is also lying scattered here and there. Ground floor looks untidy. Housekeeping will be done as soon as the finishing work is completed.	

NDITA

Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	OC not obtained from WBF&S	OC applied for but reference not available
2.	C form for both lifts not available	C form to be obtained from WB Govt
3.	Close circuit TV not installed	Closed circuit TV to be installed as per recommendation
4.	Emergency evacuation plan not prepared	NOC from WBF& ES evacuation plan is to be prepared
5.	Mock drill was not conducted	Mock drill to be conducted once every six months.

Reviewer

Auditor

Signature & date of Inspecting and Reporting Authority With seal

AZEX ENGINEERING PVT. LTD.



EXECUTIVE SUMMARY

Part I & II

General Information

Azex Engineering Pvt. Ltd. is situated at EN-40, Sector V, Salt Lake, Kolkata 700091, The structure is G + 2 & built up area is approx. 93.25 sqmt, in total of land.

This property is taken in rent from Ms Nilima Roy Chowdhury. The Azex Engineering Pvt Ltd is situated in this building. All the parts for Anesthetic Machines are assembled here.

This company is OEM of WIPRO GE Health Care

In the 1st floor there is storage of all parts of the machines, in the Ground floor & 1st Floor assembling the parts is being done, 2nd floor is lying vacant

There is no central AC system in the building

OC (Occupation Certificate) obtained directly from Bidhan Nagar Municipality.

NOC from WBF & ES is available & valid upto 12.9.2013

Occupancy Load was found as

Existing -- 8
Floating -- 2

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There is only one Staircase is available. There is no Lift available. **There is no refuse area because of height of the building is G+2 only.**

Evacuation Drill is being conducted in a proper manner in every Qtr.

There is Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers & only one Hose reel in the ground floor which is directly connected to a 5 HP pump.

Water Storage

There is an overhead Cemented tank of 2000 ltr capacity & an underground tank of 3500 ltr capacity

Alternate source of water is the Water body approx 800 mtr away

Buildings is not equipped with Fire detection system like smoke detectors

No PAS is available, No sprinkler is available.

8 Portable fire extinguishers are found deployed in the ground floor & in the working area in Ground & 1st floor.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found. This is required for operation of grinding M/c & drilling M/C

Generally no combustible material is stored in the premises ,near the Electrical installation

There is no DG supply is as alternate source of power.

PART VI

OTHER INFORMATION

NIL

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN-40	
2.	Premises Name (if any):	None	
3.	Name of the owner /occupier/lessee	MsNilimaChowdhury	
4.	Permanent Address	EN-40,Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Rented	
6.	Name of the Contact Person	N.A.Munshi	
7.	Phone No of Contact Person	98300 60112	
8.	E-mail	namunshi@azex-engineering.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly ☐
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	174.33 SqMtr	
11.	Build up area(as informed to the Auditor)	93.25 SqMtr	
12.	No of Floors	G+2	
14.	Date of Sanction of Building Plan	Not available	
15.	Whether P.O.C/OC received from local body?	Not Available	
SECURITY SETUP DETAILS			
17	Name of the SECURITY AGENCY engaged	OWN	
18	No of Security Personnel engaged	2	
19	Whether Records of Vehicles (No & type entering into the building are kept	No	
20	Whether records of Visitors entering into the building are kept	No	
21	Whether Metal detectors are used at the entry point	No	
22	Whether Monitoring System through Close circuit TV available	YES	
VEHICLES VOLUME			
23	No of Vehicles Engaged by the Organization	2	
	No of Own Vehicles engaged by Employees	None	
25	No of Vehicles for which parking space is available in the premises	3	
26	Whether parking space available for visitors within the premises	No	
27	Place where excess vehicles (if any) are parked	Outside Road	

GENERAL MAINTENANCE		
28	Garbage Clearing	NDITA Garbage clearing system
29	Drainage System	Connected to NDITA Drainage system
30	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
31	No of Towers	NIL
32	Statutory Clearance from AAI	Not applicable
33	Any Other Clearance	Not applicable

PART - II

34	Occupancy load		(Attach floor wise details separately if required)			
	Existing		Gr	1st floor	2nd floor	Total
	a)Regular		4	4	Vacant	8
	b)Floating					2
36	Basement		NIL			
	a)	If basement extends beyond building profile	Not applicable			
	b)	Use of the basement	Not applicable			
	c)	Is it being sprinkle red?	Not applicable			
	d)	Whether any cubicles present in the basement?	Not applicable			
		If yes, their use to be specified	Not applicable			
	f)	Whether fire zones are defined?	Not applicable			
		If yes, please provide details	Not applicable			

Part- III

Provisions of means of escape

37	Number of staircases --> 1 (One nos)				
	Stairs Number			#1	
	a)	Width of flight			1010mm
	b)	Tread width			270 mm
	c)	Riser Height			165 mm
	d)	Finish			Laminated sheet
	e)	Width of stair door (FCD)			NIL
	f)	Height of stair head room			3048 mm
	g)	Height of stair handrail			880 mm
	h)	Area & location & profile of Fire Refuge Area			NO Refuse Area
	i)	Width and type of door leading to Fire refuge area			Not applicable
	j)	Pressurization of staircase			Yes/No
	k)	Segregation of staircase			Yes/No

38	Number of Lifts installed→	NIL
	Lift-Numbers	Not applicable
	a) Type of door	Not applicable
	b) Fire resistance rating	Not applicable
	c) Area of lift car	Not applicable
	d) Capacity (no of persons)	Not applicable
	e) Capacity(in kg)	Not applicable
	f) Company	Not applicable
	g) Is communication system, installed in the lift car?	Not applicable
	h) Is a fireman's switch being installed in the car?	Not applicable
	i) Pressurization of lift	Not applicable
	j) Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Not applicable
39	Presence of proper signage in all the exit route	Yes/ ~~No~~
40	Is it posted with illuminated signage ?	~~Yes~~ /No
41	Whether it is landing to fire assembly point?	~~Yes~~ /No
42	Any form of Public address system available?	Yes/ ~~No~~
43	Width form of internal road within the Premises?	3354 mm
44	Width of the Entry / exit of Gate	3354mm
45	Height of the Entry / exit of Gate	1701.8

PART IV

Provision of Fire Safety Arrangement

46	Is any water reservoir for firefighting available? (at ground level / overhead)	Yes/ ~~No~~	U/G 3500 ltr O/H 2000 ltr
	a) If yes, specify the distance from the building	Adjacent to building	
	b) If yes, specify the capacity (in liters) as approved by WBF& ES.	None	
	c) Specify the condition of the reservoir	Satisfactory	
47	Is any public or other water storage facility available nearby?	Yes	■specify the distance from the building ----800 Mtr
	a) Is it readily accessible?	Yes	condition and type of the reservoir— Water body
48	Are internal hydrants being provided?	No	
		Not applicable	
	If so, please indicate no of hydrants in each floor	Not applicable	
49	Are first aid hose reels being provided? If so please indicate	Not applicable	
		Only one Hose reel is available at ground floor connected to 5 HP pump motor	
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel:25mm, 30mtr The pipe found broken
		Not Applicable	
	b) Size (bore) and type of nozzle fitted to each hose reel	Not Applicable	

50	Are fire hoses being provided near each hydrant? If so, please indicate	No		
	a) Total no of hoses provided near each hydrant	No		
51	Have wet risers/dry risers been provided?	No		
	If yes, please indicate the number of risers and internal diameter of each	Not Applicable		
52	Has any down comer been provided? If so, please give details	No		
53	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	No		
	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	No		
	a) Number of pumps	Not Applicable		
	b) Size of suction and delivery connection to each pump/Output/Head	Not Applicable		
	e) Is the pump automatic in action?	No		
	f) Is the water pressure sufficient at max distance from the pump?	No		
54.	Sprinkler system	No		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	Not Applicable		
	a) Type of detectors used	No smoke detector found		
55	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	NO MCP available		
56	Alarm receiving system	Not Applicable		
57	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Yes/ ~~No~~ 13.09.13	Number of FE Type/ Capacity ABC 5kg ABC 2 kg	8 3 5
58	Location and population of the FEs adequate	in the working area in Ground, 1 st floor		
59	Is Emergency Fire Alarm being provided in each floor?	No		
60	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No		
61	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No		

62	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available
63	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available
64	Status of NOC from WBF&ES	NOC valid upto 16.5.08. Ref WBFES/3093/07/Bidhan/RB/139/04 (155/04) dated 17.5.07. There after no action has been taken

Part-V

Electrical, Cables and Ventilation

67	If the building is Centrally air –conditioned, please indicate,		No Central AC
	a)	Material used for construction of ducts and its fittings	Not applicable
	b)	Type of tinning used for ducts	Not applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d)	How the lagging is secured?	Not applicable
	e)	If false ceiling is there?	Not applicable
	f)	Material used for false ceiling	Not applicable
	g)	Is a separate AHU being provided in each floor	Not applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j)	Will fire dampers be provided in AC duct?	Not applicable
68	Is there any standby source of electric supply being provided?		No DG Capacity: Not available
	Is the back supply automatic?		Not applicable
70	Location of switch- gears and transformers		No Transformer
71	a)	Transformer capacity	Not available
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable
	c)	If outside, how far is it from the building?	Not applicable
72	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Not applicable
73	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Not applicable

74	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	No
75	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
76	Whether natural ventilation is relied upon? If so, give details.	YES
77	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	YES
78	Whether mechanical ventilation is being coupled with automatic detection system?	No
79	Whether the refuge area is being provided?	Not applicable
80	Storage of combustibles materials near electrical equipment/fuse units.	No
81	RCCBs available??	No
82	Master switch in warehouses	No
83	Proper cable joint procedures as per manufacturer	Yes
84	Earthling Pit Tested??	Records are not available
85	Use of MCB??	Yes
86	Bypassing of protection devices	No
87	Deteriorated insulation	No
88	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes
89	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Not applicable
90	Tracking possibility	Yes
91	Unused opening in the panels, etc.	No
92	Possibility of ground fault/short circuit	No
93	Mechanical protection to cables	Yes
94	Loose terminations due to improper supports, crimping	No
95	Improper gland installation, wrong lug size	No
96	Over-rated uses, wrongly set protection relays, etc.	No
97	Switch yard and sub station	Yes
98	DG operation and maintenance	Yes
99	Reliability of the fire hydrant system	No
100	Emergency preparedness and response	No
101	Availability of Evacuation plan	No
102	Mock drill conducted??	No
103	Awareness of the people??	NIL
104	Sample basis validation of smoke detection system??	No
105	Condition of Lightning Arrestor	No
106	Periodic test of UPS system (as applicable)	Not applicable
107	Handling of electrical work by competent electrician	Yes

108	Approval of receiving station, substation and DG	No
109	Storage of hazardous material, chemicals?	Yes
110	Use of signage?	Yes
111	Hydrants clear, access to public thoroughfare open	Not applicable
112	Flame & work permits (as applicable)	No
113	Effective internal communication and public address system	No
114	Colour coding system of hazardous chemical gas lines etc.	Not applicable
115	Management structure, role of safety officer, fire department etc.	No
116	Procedure for incident investigation and control	No

PART- VI

Other Information

117	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes/No	■ Deviation
118	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No	
119	Is Trade License available??	YES. 002106 dt 6.10.12 for the year 2011-2013	
120	Name of the Insurance Company	No	
121	Remarks (if any) 19. No Fire mock drill has been conducted 20. Access to Fire Extinguisher is not Clear 21. Fire hose should be replaced for damage 22. Test certificate to be obtained on repaired gas pipe 23. Height of the main entrance is low 24. Amount of Annual Property tax Rs 67480/- per annum		

Auditor I

Auditor II

Signature & date of Inspecting and Reporting Authority With seal

NDITA
Nonconformity tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1	No Fire mock drill has been conducted	No Fire mock drill to be conducted periodically. Records to be maintained
2	Access to Fire Extinguisher is not Clear 	Access to be kept cleared always
3	Fire hose should be replaced for damage 	Broke hose reel to be replaced
4	Test certificate to be obtained on repaired gas pipe 	Test certificate to be obtained for proper repair
5	Height of the main entrance is low 	Height is low for Fire tender entry

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

EN-42



EXECUTIVE SUMMARY

Part I & II

General Information

A flute Cover factory is situated at EN-42, Sector V, Salt Lake, Kolkata 700091, The structure is G + 2 & built up area is approx. 742 Sqmtr , in total approx. 345.8 Sqmtr of land.

An extra floor has been created with the wooden structure in between Ground floor & 1st floor. Ground floor basically is being used as store. Extended Floor & the 1st floor is being used for Manufacturing activities. 2nd floor is being used as office.

There is no central AC system in the building

OC(Occupational Certificate) obtained directly from Bidhan Nagar Municipality& current Tax bill is being paid to the concerned authority

Application made for **NOC** at WBF & ES on 01.10.2012

Occupancy Load was found as

Existing -- 45
Floating -- 12

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There is only one Staircase is available. There is no Lift available. There is no refuse area because of height of the building is G+2 only.

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is only the portable fire extinguishers only.

There is no Sprinkler system

Alternate source of water is the Water body approx. 800 mtr away

The Building is not equipped with Fire detection system like smoke detectors.

16 Nos Portable fire extinguishers (ABC Type) are found deployed near the staircase & outside the court yard.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is no alternate source of Power supply

PART VI

OTHER INFORMATION

Nil

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 42	
2.	Premises Name (if any):	None	
3.	Name of the owner /occupier/lessee	Mr Vijay Talwar	
4.	Permanent Address	EN 42, Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leessee	
6.	Name of the Contact Person	Mr S.P.Lal	
7.	Phone No of Contact Person	2357 7808	
8.	E-mail	Tbpl2@yahoo.co.in	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial ☐
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	348.8 sqmtr	
11.	Build up area(as informed to the Auditor)	742.1 sqmtr	
12.	No of Floors	G+2	
13.	Whether approved by local body?	Yes B. N Municipality	
14.	Date of Sanction of Building Plan	Date: 24.05.04 Bidhannagar Municipality	
15.	Whether P.O.C/OC received from local body?	Yes/No	OC Issuing Authority Bidhan Nagar Municipality/ NDITA Dated: Not available
SECURITY SETUP DETAILS			
17.	Name of the SECURITY AGENCY engaged	OWN	
18.	No of Security Personnel engaged	6	
19.	Whether Records of Vehicles (No & type entering into the building are kept	No	
20.	Whether records of Visitors entering into the building are kept	No	
21.	Whether Metal detectors are used at the entry point	No	
22.	Whether Monitoring System through Close circuit TV available	YES	
VEHICLES VOLUME			
23.	No of Vehicles Engaged by the Organization	None	
24.	No of Own Vehicles engaged by Employees	One	

25	No of Vehicles for which parking space is available in the premises	Three
26	Whether parking space available for visitors within the premises	None
27	Place where excess vehicles (if any) are parked	Outside parking area
GENERAL MAINTENANCE		
28	Garbage Clearing	Cut pcs are sold off
29	Drainage System	Connected to NDTA drainage system
30	Maintenance of Road	Internal roads are maintained by OWN
TELEPHONE TOWER		
31	No of Towers	NIL
32	Statutory Clearance from AAI	Not applicable
33	Any Other Clearance	Not applicable

PART - II

34	Occupancy load		Based on estimates				
	Existing		Gr flr	Ext	1 st flr	2 nd flr	Total
	a)Regular		6	8	17	14	45
	b)Floating						12
35	Basement		NO Basement				
	a)	If basement extends beyond building profile	Not applicable				
	b)	Use of the basement	Not applicable				
	c)	Is it being sprinkle red?	Not applicable				
	d)	Whether any cubicles present in the basement?	Not applicable				
		If yes, their use to be specified	Not applicable				
	f)	Whether fire zones are defined?	Not applicable				
		If yes, please provide details	Not applicable				

Part- III

Provisions of means of escape

36	Number of staircases -->		1 (one)
	Stairs Number		1#
	a)	Width of flight	1450 mm
	b)	Tread width	260 mm
	c)	Riser Height	160 mm
	d)	Finish	Cemented with metallic strip at the edge
	e)	Width of stair door (FCD)	NIL
	f)	Height of stair head room	12'
	g)	Height of stair handrail	1050 mm
	h)	Area & location & profile of Fire Refuge Area	NIL
	i)	Width and type of door leading to Fire refugee area	NIL
	J)	Pressurization of staircase	Yes/No
	k)	Segregation of staircase	Yes/No

37	Number of Lifts installed→	NIL
	Lift-Numbers	Nil
	a) Type of door	Not applicable
	b) Fire resistance rating	Not applicable
	c) Area of lift car	Not applicable
	d) Capacity (no of persons)	Not applicable
	e) Capacity(in kg)	Not applicable
	f) Company	Not applicable
	g) Is communication system, installed in the lift car?	Not applicable
	h) Is a fireman's switch being installed in the car?	Not applicable
	i) Pressurization of lift	Not applicable
	j) Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Not applicable
38	Presence of proper signage in all the exit route	Yes/No
39	Is it posted with illuminated signage?	Yes/No
40	Whether it is landing to fire assembly point?	Yes/No
41	Any form of Public address system available?	Yes/No
42	Width form of internal road within the Premises?	3320 mm
43	Width of the Entry / exit of Gate	3320 mm
44	Height of the Entry / exit of Gate	Open to sky

PART IV

Provision of Fire Safety Arrangement

45	Is any water reservoir for firefighting available? (at ground level / overhead)	No	U/G 90000 Ltr O/H: Not available
	a) If yes, specify the distance from the building	Not applicable	
	b) If yes, specify the capacity (in liters) as approved by WBF& ES.	None	
	c) Specify the condition of the reservoir	Not applicable	
46	Is any public or other water storage facility available nearby?	Yes	Specify the distance from the building- 800 Mtr
	a) Is it readily accessible?	Yes	Condition and type of the reservoir- Water body
47	Are internal hydrants being provided?	No	
	If so, please indicate no of hydrants in each floor	Not applicable	
48	Are first aid hose reels being provided ? If so please indicate	No	
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	No	
	b) Size (bore) and type of nozzle fitted to each hose reel	Not Applicable	
49	Are fire hoses being provided near each hydrant? If so, please indicate	No	
	a) Total no of hoses provided near each hydrant	Not Applicable	
50	Have wet risers/dry risers been provided?	No	
	If yes, please indicate the number of risers and internal diameter of each	Not applicable	
51	Has any down comer been provided? If so, please give details	No	

52	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		No		
	a)	Number of pumps	Not Applicable		
	b)	Size of suction and delivery connection to each pump/Output/Head	Not Applicable		
	e)	Is the pump automatic in action?	Not Applicable		
	f)	Is the water pressure sufficient at max distance from the pump?	Not Applicable		
53.	Sprinkler system		No		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		No		
	a)	Type of detectors used	No		
54	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		No		
55	Alarm receiving system		No		
56	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		Yes 2015	Number of FE Type/ Capacity 5 kgs ABC type	16Nos 16
57	Location and population of the FEs adequate		At Stair cases on each floor & outside court yard		
	Expire date of FE		ABC type. Validity depends on Pressure. Date of checking not mentioned. All pressure meter showing green		
	Indicate whether the Fire extinguishers bear the ISI certification mark?		Yes		
58	Are Emergency Fire Alarm being provided in each floor?		No		
59	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		No		
60	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?		No		
61	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES		Yes ☐ Drawing Submitted application to WBF&ES for NOC- Drawing could not be soon		
62	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES		No such job has been done . As such no drawing is available		
63	Status of NOC from WBF&ES		No NOC is available.Application made on 1.10.12		

Part-V

Electrical, Cables and Ventilation

64	If the building is Centrally air –conditioned, please indicate,		NO CENTREAL AC
	a)	Material used for construction of ducts and its fittings	Not Applicable
	b)	Type of tinning used for ducts	Not Applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not Applicable
	d)	How the lagging is secured?	Not Applicable
	e)	If false ceiling is there?	Not Applicable
	f)	Material used for false ceiling	Not Applicable
	g)	Is a separate AHU being provided in each floor	Not Applicable
	h)	Whether automatic shutdown of AHU is coupled with detection system?	Not Applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not Applicable
	j)	Will fire dampers be provided in AC duct?	Not Applicable
65	Is there any standby source of electric supply being provided?		No
	Is the back supply automatic?		Not Applicable
	Location of switch- gears and transformers		Outside the building
66	a)	Transformer capacity	No Transformer
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not Applicable
	c)	If outside, how far is it from the building?	Not Applicable
67	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Not Applicable
68	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		There is no shaft
69	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		No
70	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		No
71	Whether natural ventilation is relied upon? If so, give details.		YES
72	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No
73	Whether mechanical ventilation is being coupled with automatic detection system?		No
74	Whether the refuge area is being provided?		No
	Whether certificate from Directorate of Electricity undertaking regarding provision to its satisfaction, of transformer, sub-station and ancillary power supply?		No

75	Storage of combustibles materials near electrical equipment/fuse units.	No
76	RCCBs available??	No ☐ only MCB
77	Master switch in warehouses	No
78	Proper cable joint procedures as per manufacturer	No
79	Earth Pit Tested??	No
80	Use of MCB??	No
81	Earthing defects	No
82	Use of non-standard fuse wires	No
83	Bypassing of protection devices	No
84	Deteriorated insulation	No
85	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
86	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	YES
87	Tracking possibility	YES
88	Unused opening in the panels, etc.	No
89	Possibility of ground fault/short circuit	No
90	Mechanical protection to cables	Yes
91	Loose terminations due to improper supports, crimping	No
92	Improper gland installation, wrong lug size	No
93	Over-rated uses, wrongly set protection relays, etc.	No
94	Review of equipment safety	Yes
95	Cable layout	Yes
96	Earthing layout & it's effectiveness	Yes
97	Switch yard and sub station	No
98	DG operation and maintenance	No
99	Reliability of the fire hydrant system	No
100	Emergency preparedness and response	No
101	Availability of Evacuation plan	No
102	Mock drill conducted??	No
103	Awareness of the people??	No
104	Sample basis validation of smoke detection system??	No
105	Condition of Lightning Arrestor	No
106	Periodic test of UPS system (as applicable)	Not Applicable
107	Handling of electrical work by competent electrician	Yes
108	Approval of receiving station, substation and DG	No
109	Storage of hazardous material, chemicals?	No
110	Use of signage?	No
111	Hydrants clear, access to public thorough fare open	No
112	Flame & work permits (as applicable)	No
113	Effective internal communication and public	No

	address system	
114	Colour coding system of hazardous chemical gas lines etc.	No
115	Management structure, role of safety officer, fire department etc.	No
116	Procedure for incident investigation and control	No

PART- VI

Other Information

117.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No
118	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
	Is Trade License available??	No
119	Name of the Insurance Company	None
120	Remarks (if any) 1.No Evacuation drill conducted so far 2. No Fire Drill conducted so far 3.No identified Fire Squad for fire fighting 4.No Emergency Procedure is available 5.No MCP is available 6. No fire alarm is available 7. No NOC is available from WBF&ES 8.No smoke detector is available 9. Annual property TAX paid Rs 75122 per year. 10. Electrical Load is 34.97 KW.	

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1	No Evacuation drill conducted so far	Evacuation drill to be conducted periodically with all Occupants. Records to be maintained
2	No Fire Drill conducted so far	Mock Fire drill to be conducted periodically with identified fire squad. Records to be maintained
3	No identified Fire Squad for fire fighting	Fire Squad to be identified & trained periodically
4	No Emergency Procedure is available	Emergency procedure is to be prepared
5	No MCP is available	MCP is to be installed with control panel
6	No fire alarm is available	Fire alarm is to be installed
7	No NOC is available from WBF&ES	NOC is to be obtained
8	No smoke detector is available	Smoke detector is to be installed

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

FRIENDS COLOR



EXECUTIVE SUMMARY

Part I & II

General Information

Friends Color is situated at EN-50, Sector V, Salt Lake, Kolkata 700091, The structure is G + 2 & built up area is Approx. 6000 Sqft , in total Approx. 5.1696 Katah of land.

This property is purchased in 11th May 2012. The Printing company named Friends Color is situated in this building. Printed papers are brought from Delhi & printing is being done on digital printing machines. They are printing complete documents like CESC Bill, Vodafone Bill, Idea Bill, e paper etc

In the Ground floor there is a storage of paper rolls & Printing machines , in the 1st floor there is printing machines & one side is dispatch department, in the 2nd floor office with computers.

There is no central AC system in the building

OC(Occupation Certificate) obtained directly from Bidhan Nagar Municipality& current Tax bill has been paid an adhoc amount of Rs 35.5 lakh & appeal has been made

NOC from WBF & ES is not available through application has been made

Occupancy Load was found as

Existing -- 41
Floating -- 10

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There is only one Staircase is available. There is no Lift available. There is no refuse area because of height of the building is G+2 only.

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers.

Water Storage

There is an overhead Cemented tank of 5000 ltr capacity & an underground tank of 3000 ltr capacity

Alternate source of water is the Water body approx. 800 mtr away

Buildings is equipped with Fire detection system like smoke detectors with self-battery support 8 Nos out of which 3 nos were found out of order. There is no control panel in this system. System found not reliable.

No PAS is available, No sprinkler is available.

14 Nos Portable fire extinguishers are found deployed near the staircase & in the working area.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is one 200 KVA DG supply is as alternate source of power. This is operated manually

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 50	
2.	Premises Name (if any):	NONE	
3.	Name of the owner /occupier/lessee	Chandra ProkashSalim	
4.	Permanent Address	EN-50, Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leesse	
6.	Name of the Contact Person	MrBiswajit Roy	
7.	Phone No of Contact Person	98317 73983	
8.	E-mail	biswajit@friendscolor.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
		IT/ITES	
10.	Plot Area(as informed to the Auditor)	5.1696 Cottah	
11.	Build up area(as informed to the Auditor)	6000 Sqft	
12.	No of Floors	G+2	
14.	Date of Sanction of Building Plan	Not available	
15.	Whether P.O.C/OC received from local body?	Not available	
SECURITY SETUP DETAILS			
16	Name of the SECURITY AGENCY engaged	BLISS WORLD	
17	No of Security Personnel engaged	3	
18	Whether Records of Vehicles (No & type entering into the building are kept	No	
19	Whether records of Visitors entering into the building are kept	No	
20	Whether Metal detectors are used at the entry point	No	
21	Whether Monitoring System through Close circuit TV available	No	
VEHICLES VOLUME			
22	No of Vehicles Engaged by the Organisation	None	
23	No of Vehicles for which parking space is available in the premises	3 Nos	

24	Whether parking space available for visitors within the premises	No
25	Place where excess vehicles (if any) are parked	Outside road
GENERAL MAINTENANCE		
26	Garbage Clearing	Through NDITA garbage clearing system
27	Drainage System	Connected to NDITA drainage system
28	Maintenance of Road	Internal road is maintained by owner
TELEPHONE TOWER		
29	No of Towers	No of towers: NIL
30	Statutory Clearance from AAI	Not Applicable
31	Any Other Clearance	Not Applicable

PART - II

32	Occupancy load		(Attach floor wise details separately if required)			
	Existing		Gr floor	1st floor	2nd floor	Total
	a)Regular		11	15	15	41
	b)Floating					10
33	Basement		NIL			
	a)	If basement extends beyond building profile	Not Applicable			
	b)	Use of the basement	Not Applicable			
	c)	Is it being sprinkle red?	Not Applicable			
	d)	Whether any cubicles present in the basement?	Not Applicable			
		If yes, their use to be specified	Not Applicable			
	f)	Whether fire zones are defined?	Not Applicable			
		If yes, please provide details	Not Applicable			

Part- III

Provisions of means of escape

34	Number of staircases --→ ONE		
	Stairs Number		
	a)	Width of flight	1320 mm
	b)	Tread width	165 mm
	c)	Riser Height	150 mm
	d)	Finish	Marble
	e)	Width of stair door (FCD)	NIL
	f)	Height of stair head room	2438 mm
	g)	Height of stair handrail	950 mm
	h)	Area & location & profile of Fire Refuge Area	Not applicable
	i)	Width and type of door leading to Fire refugee area	Not applicable
	J)	Pressurization of staircase	No
	k)	Segregation of staircase	No
35	Number of Lifts installed→		Nil
	Lift-Numbers		
	a)	Type of door	Not Applicable
	b)	Fire resistance rating	Not Applicable
	c)	Area of lift car	Not Applicable
	d)	Capacity (no of persons)	Not Applicable
	e)	Capacity(in kg)	Not Applicable
	f)	Company	Not Applicable
	g)	Is communication system, installed in the lift car?	Not Applicable
	h)	Is a fireman’s switch being installed in the car?	Not Applicable
	i)	Pressurization of lift	Not Applicable
	j)	Whether validity of “Form-C” from appropriate authority obtained?(If yes, attach a photocopy)	Not Applicable
36	Presence of proper signage in all the exit route		No☐only Evacuation root displayed
37	Is it posted with illuminated signage?		No
38	Whether it is landing to fire assembly point?		No
39	Any form of Public address system available?		No
40	Width form of internal road within the Premises?		3500 mm
41	Width of the Entry / exit of Gate		3400 mm
42	Height of the Entry / exit of Gate		Open to Sky

PART IV

Provision of Fire Safety Arrangement

43	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G5000 ltr O/H3000 Ltr
	a)	If yes, specify the distance from the building	Adjacent to the building & at roof top	
	b)	If yes, specify the capacity (in liters) as approved by WBF& ES.	None	
	c)	Specify the condition of the reservoir	Satisfactory	
44	Is any public or other water storage facility available nearby?		Yes	Specify the distance from the building: 800 Mtr
	a)	Is it readily accessible?	Yes	Condition and type of the reservoir: Water body
45	Are internal hydrants being provided?		NO	
	If so, please indicate no of hydrants in each floor		Not Applicable	
46	Are first aid hose reels being provided? If so please indicate		Not applicable	
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Not applicable	
	b)	Size (bore) and type of nozzle fitted to each hose reel	Not applicable	
47	Are fire hoses being provided near each hydrant? If so, please indicate		Not applicable	
	a)	Total no of hoses provided near each hydrant	Not Applicable	
48	Have wet risers/dry risers been provided?		No	
	If yes, please indicate the number of risers and internal diameter of each		No	
49	Has any down comer been provided? If so, please give details		No	
50	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		No	
	a)	Number of pumps	NIL	
	b)	Size of suction and delivery connection to each pump/Output/Head	Not Applicable	
	e)	Is the pump automatic in action?	Not Applicable	
	f)	Is the water pressure sufficient at max distance from the pump?	Not Applicable	
51.	Sprinkler system			
	Is the building being equipped with automatic fire detection and alarm		8 Nos Smoke detector with individual battery support has been	

	system? If so, please indicate with details.	installed in godown& printing area
	a) Type of detectors used	Smoke detector. Out 8 nos 3 nos are found out of order

52	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	No		
53	Alarm receiving system	Yes		
54	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes	Number of FE Type/ Capacity ABC (5 Kg) BC(5 Kg) 22.12.12	14 7 7
55	Location and population of the FEs adequate	Near stair case & in working areas		
56	Is Emergency Fire Alarm being provided in each floor?	Yes	No. of Fire Alarm: 3 nos Location of Fire Alarm: ---in each floor	
57	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	Yes☐5 persons are trained		
58	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No		
59	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	No such diagram is available		
60	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	No such diagram is available		
61	Status of NOC from WBF&ES	Application made on 11.11.11 but NOC not received yet.		

Part-V**Electrical, Cables and Ventilation**

62	If the building is Centrally air –conditioned, please indicate,		No
	a)	Material used for construction of ducts and its fittings	Not Applicable
	b)	Type of tinning used for ducts	Not Applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not Applicable
	d)	How the lagging is secured?	Not Applicable
	e)	If false ceiling is there?	Not Applicable
	f)	Material used for false ceiling	Not Applicable
	g)	Is a separate AHU being provided in each floor	Not Applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not Applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not Applicable
	j)	Will fire dampers be provided in AC duct?	Not Applicable
63	Is there any standby source of electric supply being provided?		No
	Is the back supply automatic?		Not applicable
64	Location of switch- gears and transformers		Transformer out side
65	a)	Transformer capacity	10KVA
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not Applicable
	c)	If outside, how far is it from the building?	Not Applicable
66	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Not Applicable

67	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Not Applicable
68	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	NO
69	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	NO
70	Whether natural ventilation is relied upon? If so, give details.	Yes
71	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO
72	Whether mechanical ventilation is being coupled with automatic detection system?	NO
73	Whether the refuge area is being provided?	Not Applicable
74	Storage of combustibles materials near electrical equipment/fuse units.	No
75	RCCBs available??	No
76	Master switch in warehouses	No
77	Proper cable joint procedures as per manufacturer	Yes
78	Earthlings Pit Tested??	No
79	Use of MCB??	Yes
80	Bypassing of protection devices	No
81	Deteriorated insulation	No
82	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes
83	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	NO
84	Tracking possibility	Yes
85	Unused opening in the panels, etc.	NO
86	Possibility of ground fault/short circuit	NO
87	Mechanical protection to cables	YES
88	Loose terminations due to improper supports, crimping	NO
89	Improper gland installation, wrong lug size	NO
90	Over-rated uses, wrongly set protection relays, etc.	NO
91	Switch yard and sub station	YES
92	DG operation and maintenance	NO
93	Reliability of the fire hydrant system	Not applicable
94	Emergency preparedness and response	NO
95	Availability of Evacuation plan	NO

96	Mock drill conducted??	NO
97	Awareness of the people??	NO
98	Sample basis validation of smoke detection system??	NO
99	Condition of Lightening Arrestor	No
100	Periodic test of UPS system (as applicable)	Not applicable
101	Handling of electrical work by competent electrician	Yes
102	Approval of receiving station, substation and DG	No
103	Storage if hazardous material, chemicals?	NO
104	Use of signage?	NO, Only Evacuation route displayed near stair case
105	Hydrants clear, access to public thorough fare open	Not applicable
106	Flame & work permits (as applicable)	NO
107	Effective internal communication and public address system	NO
108	Color coding system of hazardous chemical gas lines etc.	NO
109	Management structure, role of safety officer, fire department etc.	NO
110	Procedure for incident investigation and control	NO

PART- VI

Other Information

111.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No
112	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	None
	Is Trade License available??	Not available.
113	Name of the Insurance Company	National Insurance Company
114	Remarks (if any) 1. No Evacuation drill is conducted 2. No fire Mock drill is conducted 3. Access to Fire extinguishers is found blocked at several places 4. Fire Extinguishers refilling/Checking date is just over 5. Proper smoke detector with control panel are to be provided discarding this unreliable individual battery support type smoke detector 6. Sprinkler should be introduced if possible . 7. MCP to be installed at each floor 8. No signage like No smoking, Exit route are displayed 9. 9.No Emergency procedure is available	

Auditor I

Auditor II

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	No Evacuation drill is conducted	Evacuation drill to be conducted periodically with all occupants. Record to be maintained
2	No fire Mock drill is conducted	Mock fire drill is to be conducted periodically. Record to be maintained
3	Access to Fire extinguishers is found blocked at several places    	Accesses to all the fire extinguishers are to be kept free always.
4	Fire Extinguishers refilling/Checking date is just over	Fire Extinguishers to refilled & checked immediately
5	Proper smoke detector with control panel are to be provided discarding this unreliable individual battery support type smoke detector	Proper smoke detector is to be installed

6	Sprinkler should be introduced if possible .	Sprinklers are to be installed as for Fire hazard is high due to stock of Papers.
7	MCP to be installed at each floor	MCP to be installed
8	No signage like No smoking, Exit route are displayed	Proper illuminated signage to be provided
9	No Emergency Response procedure is available	Emergency Response procedure is to be made
10	Emergency Exit is blocked by Material at ground floor. 	Emergency Exit to be kept free from any blockade.

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

SAMCO PHARMA PVT. LTD.



EXECUTIVE SUMMARY

Part I & II

General Information

Samco Pharma Pvt. Ltd. is situated at EN-59, Sector V, Salt Lake, Kolkata 700091 ,The structure is G + 2 & built up area is approx. 6600 Sqft , in total 5.26 Katah of land. Though it is G+2 building its roof has been covered with false ceiling for conducting classes.

The Ground floor has been rented out to a bag manufacturing company. 1st floor, 2nd floor & converted 3rd floor is rented to an Engineering college.

The entry alley at ground floor has been converted to a Godown.

There is no central AC system in the building

OC(Occupational Certificate)obtained directly from Bidhan Nagar Municipality& current Tax bill is being paid to the concerned authority

NOC from WBF & ES is valid up to 18.02.05. There after no action has been taken so far

Occupancy Load was found as

Existing -- 223
Floating -- 15

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There is only one Staircase is available. There is no Lift available. There is no refuse area because of height of the building is G+2 only.

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is Down comer, portable fire extinguishers.

Down comer:

There is an overhead tank with a 5 HP pump for boosting up the pressure in the pipe line of the down comer. But there is no pressure gauge at the end for checking the pressure. Capacity of the roof top tank could not be checked as there is no access .

There is no Sprinkler system

Alternate source of water is the Water body approx. 800 mtr away

A building is not equipped with Fire detection system like smoke detectors.

6 Nos Portable fire extinguishers are found deployed near the staircase. Refilling date has expired

MCPs are not working. No control panel could be evidenced

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is one DG supply available

PART VI

OTHER INFORMATION

NIL

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 59	
2.	Premises Name (if any):	SamcoPharmaPvt Ltd	
3.	Name of the owner /occupier/lessee	Mr Ramesh Daga	
4.	Permanent Address	EN 59.Sector V,Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leesee	
6.	Name of the Contact Person	MrUdayGhosh	
7.	Phone No of Contact Person	90077 24421	
8.	E-mail	Daga_ramesh@ yahoo.co.in	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	5.26 Cottah	
11.	Build up area(as informed to the Auditor)	6600 sqft	
12.	No of Floors	G+ 2+(Top floor is being used for holding classes covering the top with false ceiling)	
13.	Whether approved by local body?	■Yes✓	
14.	Date of Sanction of Building Plan	Date:2002	
15.	Whether P.O.C/OC received from local body?	Yes	OC Issuing Authority Bidhan Nagar Municipality Dated:2003
16.	Incidence of assessment done (as told to Auditors)	■Yes	Amount of Annual Property tax Rs 4,90,000/- per year
SECURITY SETUP DETAILS			
17.	Name of the SECURITY AGENCY engaged	Neelachal Security	
18.	No of Security Personnel engaged	Two	
19.	Whether Records of Vehicles (No & type entering into the building are kept	No	
20.	Whether records of Visitors entering into the building are kept	No	
21.	Whether Metal detectors are used at the entry point	No	
22.	Whether Monitoring System through Close circuit TV available	Close circuit TV monitoring system is available at 1 st ,2 nd ,3 rd floor	

VEHICLES VOLUME		
23	No of Vehicles Engaged by the Organization	One
24	No of Own Vehicles engaged by Employees	None
25	No of Vehicles for which parking space is available in the premises	None Entry Alley converted to a Godown
26	Whether parking space available for visitors within the premises	No
27	Place where excess vehicles (if any) are parked	In the front road
GENERAL MAINTENANCE		
28	Garbage Clearing	Private arrangement is made for clearing the garbage
29	Drainage System	Connected to NDITA drainage system
30	Maintenance of Road	There is no internal road as such
TELEPHONE TOWER		
31	No of Towers	NIL
32	Statutory Clearance from AAI	Not Applicable
33	Any Other Clearance	Not Applicable

PART - II

34	Occupancy load	(Attach floor wise details separately if required)				
	Existing	Ground	1stflr	2ndflr	3rdflr	Total
	a)Regular	13	50	80	80	223
	b)Floating					15
36	Basement	NO BASEMENT				
	a) If basement extends beyond building profile	Not Applicable				
	b) Use of the basement	Not Applicable				
	c) Is it being sprinkle red?	Not Applicable				
	d) Whether any cubicles present in the basement?	Not Applicable				
	If yes, their use to be specified	Not Applicable				
	f) Whether fire zones are defined?	Not Applicable				
	If yes, please provide details	Not Applicable				

Part- III

Provisions of means of escape

37	Number of staircases --→ One		
	Stairs Number		
	a)	Width of flight	1360 mm
	b)	Tread width	260mm
	c)	Riser Height	130 mm
	d)	Finish	Cemented
	e)	Width of stair door (FCD)	NIL
	f)	Height of stair head room	3048 mm
	g)	Height of stair handrail	850 mm
	h)	Area & location & profile of Fire Refuge Area	NIL
	i)	Width and type of door leading to Fire refugee area	NIL
	J)	Pressurization of staircase	No
	k)	Segregation of staircase	No
38	Number of Lifts installed→		
	Lift-Numbers		Nil
	a)	Type of door	Not Applicable
	b)	Fire resistance rating	Not Applicable
	c)	Area of lift car	Not Applicable
	d)	Capacity (no of persons)	Not Applicable
	e)	Capacity(in kg)	Not Applicable
	f)	Company	Not Applicable
	g)	Is communication system, installed in the lift car?	Not Applicable
	h)	Is a fireman's switch being installed in the car?	Not Applicable
	i)	Pressurization of lift	Not Applicable
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Not Applicable
39	Presence of proper signage in all the exit route		Yes/No
40	Is it posted with illuminated signage?		Yes/No
41	Whether it is landing to fire assembly point?		Yes/No
42	Any form of Public address system available?		Yes/No
43	Width form of internal road within the Premises?		No such internal Road
44	Width of the Entry / exit of Gate		2870mm
45	Height of the Entry / exit of Gate		2340 mm

PART IV

Provision of Fire Safety Arrangement

46	Is any water reservoir for firefighting available? (at ground level / overhead)	No dedicated water overhead tank could be checked for Fire. No Access	
	a) If yes, specify the distance from the building	UG tank is adjacent to the building	
	b) If yes, specify the capacity (in liters) as approved by WBF & ES.	NA, Estimated around 40,00,ltr	
	c) Specify the condition of the reservoir	Satisfactory	
47	Is any public or other water storage facility available nearby?	Yes/No	
	a) Is it readily accessible?	Yes/No	
	b) If yes, specify the distance from the building	800 Mtr	
	c) Specify the condition and type of the reservoir	Water Body	
48	Are internal hydrants being provided?	No	
	If so, please indicate no of hydrants in each floor	Not applicable	
49	Are first aid hose reels being provided ? If so please indicate	Yes But all valves were found jammed	
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes directly to the riser	Bore and length of hose reel tubing on each reel: 25 mm, 30 mtr
	b) Size (bore) and type of nozzle fitted to each hose reel	5 mm, spray type	
	d) No of hose reels on each floor	One in each floor	
50	Are fire hoses being provided near each hydrant? If so, please indicate	No	
	a) Total no of hoses provided near each hydrant	Not applicable	
51	Have wet risers/dry risers been provided?	No	
	If yes, please indicate the number of risers and internal diameter of each	Not Applicable	
52	Has any down comer been provided? If so, please give details	Yes- Connected to the roof top tank, which is not dedicated to Fire. There is a 5 HP motor for boosting the pressure in the pipe line	
53	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	No	
	a) Number of pumps	Not Applicable	
	b) Size of suction and delivery connection to each pump/Output/Head	Not Applicable	
	c) Output of each pump:	Not Applicable	
	d) Max head against which the pump can operate at the output mentioned in:	Not Applicable	
	e) Is the pump automatic in action?	Not Applicable	
	f) Is the water pressure sufficient at max distance from the pump?	Not Applicable	

54.	Sprinkler system	No		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	No		
	a) Type of detectors used	None		
55	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	YesBut These are not functioning		
56	Alarm receiving system	No		
57	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations?	Yes	Total fire extinguisher Water Type 9 ltr DCP 5KG	6 3 3
	Expiry Date:		Not available	
c)	Location	At stair case only		
d)	Expire date of FE	Expired. No checking done		
58	Location and population of the FEs adequate	No		
59	Is Emergency Fire Alarm being provided in each floor?	Yes	No. of Fire Alarm: 1 (one) Location of Fire Alarm: In each floor These alarm are not functioning	
60	Indicate whether the Fire extinguishers bear the ISI certification mark?	NO		
62	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No		
63	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No		
64	Verification of Architectural drawing of building in line with the requirements of WB F &ES	No Drawing was available for verification		
65	Verification of 'As installed' circuit diagram of fire detection & Alarm system of the building in line with requirements of WBF & ES	No Drawing was available for verification. A down comer supply has been taken from the roof top tank. Hose reels are provided in the stair. There is no pressure gauge. Hose reels valves are jammed		
66	Status of NOC from WBF&ES	Last NOC valid up to 18.2.05 [Reff. No WBFES/1145/CALB/123/2001 (251)], Thereafter no action has been taken so far		

Part-V

Electrical, Cables and Ventilation

67	If the building is Centrally air –conditioned, please indicate,		NO Central AC
	a)	Material used for construction of ducts and its fittings	Not Applicable
	b)	Type of tinning used for ducts	Not Applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not Applicable
	d)	How the lagging is secured?	Not Applicable
	e)	If false ceiling is there?	Not Applicable
	f)	Material used for false ceiling	Not Applicable
	g)	Is a separate AHU being provided in each floor	Not Applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not Applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not Applicable
	j)	Will fire dampers be provided in AC duct?	Not Applicable
68	Is there any standby source of electric supply being provided?		No DG
69	Is the back supply automatic?		Not Applicable
70	Location of switch- gears and transformers		Outside the building
71	a)	Transformer capacity	No Transformer
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not Applicable
	c)	If outside, how far is it from the building?	Not Applicable
72	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Not Applicable
73	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Not Applicable
74	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		No
75	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not Applicable
76	Whether natural ventilation is relied upon? If so, give details.		YES
77	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No
78	Whether mechanical ventilation is being coupled with automatic detection system?		NO
79	Whether the refuge area is being provided?		NO

80	Whether certificate from Directorate of Electricity undertaking regarding provision to its satisfaction, of transformer, sub-station and ancillary power supply?	Not available
81	Storage of combustibles materials near electrical equipment/fuse units.	NO
82	RCCBs available??	Could not be checked as Electrician help was not available
83	Master switch in warehouses	Could not be checked as Electrician help was not available
84	Proper cable joint procedures as per manufacturer	Could not be checked as Electrician help was not available
85	Earthling Pit Tested??	Could not be checked as Electrician help was not available
86	Use of MCB??	Could not be checked as Electrician help was not available
87	Bypassing of protection devices	Could not be checked as no Electrician help was not available
88	Deteriorated insulation	Could not be checked as Electrician help was not available
89	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes
90	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Could not be checked as Electrician help was not available
91	Tracking possibility	Could not be checked as Electrician help was not available
92	Unused opening in the panels, etc.	Could not be checked as no Electrician help was not available
93	Possibility of ground fault/short circuit	Could not be checked as Electrician help was not available
94	Mechanical protection to cables	Could not be checked as Electrician help was not available
95	Loose terminations due to improper supports, crimping	Could not be checked as Electrician help was not available
96	Improper gland installation, wrong lug size	Could not be checked as Electrician help was not available
97	Over-rated uses, wrongly set protection relays, etc.	Could not be checked as Electrician help was not available
101	Switch yard and sub station	Could not be checked as Electrician help was not available
103	DG operation and maintenance	Could not be checked as Electrician help was not available
104	Reliability of the fire hydrant system	No
105	Emergency preparedness and response	No
106	Availability of Evacuation plan	No
107	Mock drill conducted??	No
108	Awareness of the people??	No
109	Sample basis validation of smoke detection system??	No
110	Condition of Lightning Arrestor	No lightning arrestor
111	Periodic test of UPS system (as applicable)	Not applicable

112	Handling of electrical work by competent electrician	Could not be assist as electrician was not available
113	Approval of receiving station, substation and DG	Not applicable
114	Storage if hazardous material, chemicals?	No
115	Use of signage?	No
116	Hydrants clear, access to public thorough fare open	No
117	Flame & work permits (as applicable)	No
118	Effective internal communication and public address system	No
119	Color coding system of hazardous chemical gas lines etc.	No
120	Management structure, role of safety officer, fire department etc.	No
121	Procedure for incident investigation and control	No

PART- VI

Other Information

122.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No
123	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
	Is Trade License available??	No
124	Name of the Insurance Company	None
125	Remarks (if any) 1. This building has sanctioned G+2, but roof top is being used for classes of Eng. Institute with a false ceiling at the top of the roof. 2. As such roof top tank connected to down comer could not be checked. No separate fire tank is available 3.The Down comer pump which is situated in the ladies toilet at 3rd floor is found not running 4. Manual call points are not working 5.6 Nos F/Ext have not been checked for a long time. As per the Occupancy more fire extinguishers are to be deployed 6. Some Fire Extinguishers do not bear the ISI mark 7.No smoke detectors are available	

	8. All the Valves of the Hose reels are fully jammed. Could not be open 9. Loose naked wires found hanging at number of places 10. There is no illuminated signage available 11. There is No fire Extinguishers available at Library or in the Ground floor godown. 12. Gate width & height are less than the specified norms 13. Housekeeping of the Talwar Bros is very poor. There is a fire hazard in this bag manufacturing company for the solvent based adhesives. 14. No Evacuation drill has been conducted so far 15. No Fire mock drill has been conducted so far 16. There is no identified assemble point. 17. No Valid Fire NOC is available. Last Noc no WBF ES/1145/Cal B/123/2001(251) was valid till 18.2.05. Since then no action has been taken. 18. No Emergency response plan is available 19. No fire alarm is available

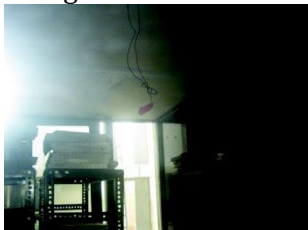
Auditor I

Auditor II

Signature & date of Inspecting and Reporting Authority With seal

NDITA

Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1.	Fire pump at the top floor is covered with unwanted material. It is not running at all. 	All the unwanted materials to be cleared from the pump. Pump should run to build up the pressure in the hose reel system
2	Loose bare wire hanging at the Library- Fire Hazard. There is no Fire extinguisher available 	Loose wire to be removed or dressed. Fire Extinguisher is to be provided

3	All the valves of the Hose reels are found completely jammed, could not be open 	Valves are to be serviced immediately
4	Fire Extinguishers are not checked 	To be checked & tagged periodically
5	Fire Extinguishers have no ISI mark 	Fire Extinguishers should have ISI mark
6.	Bare loose wires are hanging In the classes 	Loose wire to be removed or dressed
7.	Fire Extinguishers & Hose reels are blocked by the materials 	Access to the Firefighting system should be kept clear always
8	Manual call points are not working	MCP to be made operational
9	No smoke detectors are available	Smoke detector is to be provided
10	There is no illuminated signage available	Exit Signage is to be provided
11	Gate width & height are less than the specified norms	Width & Height of main gate is to be corrected
12	Housekeeping of the Talwar Bros is very poor. There is a fire hazard in this bag manufacturing company for the solvent based adhesives.	Proper Housekeeping is to be done

13	No Evacuation drill has been conducted so far	Evacuation drill is to be conducted periodically with all occupants
14	No Fire mock drill has been conducted so far	Fire mock drill is to be conducted periodically with Fire squad
15	No Valid Fire NOC is available. Last Noc no WBF ES/1145/Cal B/123/2001(251) was valid till 18.2.05. Since then no action has been taken.	NOC to be obtained at the earliest
16	No Emergency response plan is available	Emergency response plan is to be prepared

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

SHAKTI TOWER



EXECUTIVE SUMMARY

Part I & II

General Information

SHAKTI TOWER is situated at EN-60, Sector V, Salt Lake, Kolkata 700091, The structure is G + 5 & built up area is 12341 Sq. ft. , in total 5.17 Kattah of land.

In the Ground floor .there is Fire water pump room, electric meter room, a reception area and office of Perficio. The 1st floor It is rented to M/s RBS Infosolutions. The 2nd floor is rented to M/s Quantum Business Management, 3rd floor to Mecgele, 4th floor to Vasundhara and the 6th floor to Shivam Knowledge. micals. .

Building Plan was sanctioned in 2006.

There is balcony which can be treated as refuge area on all floors from 1st to 5.

There are two stair cases & One Lifts of 8 Person carrying capacity. Form C is not available.

There is no central AC system in the building.

NOC from WBF&Es is available and valid till 16.9.2013

Occupancy Load as on audit date was found as

Existing -- 92 persons
Floating -- 20 persons

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two nos Staircases available. There are one Lifts available.

No Evacuation Drill has been conducted so far.

There are a few Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is wet riser, sprinkler, smoke detectors& portable fire extinguishers.

Wet riser

There is an Under- ground fire tank of 50,000ltr capacity. There is a main pump of 60HP a stand by main pump of 60 HP& a jockey pump of 15 HPcapacities for building the pressure in the pipe line.

Sprinkler system. Smoke detectors are already installed in all the floors

Alternate source of water is the Water body approx 800 mtr away

Buildings is equipped with Fire detection system like smoke detectors

Total 14 Nos Portable fire extinguishers are found deployed throughout the building.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises ,near the Electrical installation

There is DG of 125 KVA at the ground floor as an alternate source of supply

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	EN 60	
2.	Premises Name (if any):	Shakti Tower	
3.	Name of the owner /occupier/lessee	Stanvet Products Pvt. Ltd.,	
4.	Permanent Address	EN 60, Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	Mr. JagdishBhartia	
7.	Phone No of Contact Person	9830022330	
8.	E-mail	jagdish@bhartia.in	
9.	Purpose of the Land Use The entire building is rented different organizations	Principal Use	Residential
		Mixed Use ☐	Educational ☐
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	5.17 kathas	
11.	Build up area(as informed to the Auditor)	1146.52 sq m.	
12.	No of Floors	G + 5	
13.	Date of Sanction of Building Plan	14.10.2006	
14.	Whether P.O.C/OC received from local body?	Not Available	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Premierfeild Total Security Services (PTSS)	
16.	No of Security Personnel engaged	4 persons in daytime 2 persons in Night	
17.	Whether Records of Vehicles (No & type entering into the building are kept	No	
18.	Whether records of Visitors entering into the building are kept	No	
19.	Whether Metal detectors are used at the entry point	No	
20.	Whether Monitoring System through Close circuit TV available	No	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organization	one	
22.	No of Vehicles for which parking space is available in the premises	None	
23.	Whether parking space available for visitors within the premises	none	
24.	Place where excess vehicles (if any) are parked	Outside the building	

GENERAL MAINTENANCE		
25	Garbage Clearing	Through NDITA garbage clearing system
26	Drainage System	Connected to NDITA Drainage system
27	Maintenance of Road	Inside road maintained by owner of the plot. The road is made by kotastone and in satisfactory condition
TELEPHONE TOWER		
28	No of Towers	NIL
29	Statutory Clearance from AAI	Not applicable
30	Any Other Clearance	Not applicable

PART - II

31	Occupancy load	(Attach floor wise details separately if required)						
	Existing	G	1	2	3	4	5	
	a)Regular	15	8	26	18	20	5	Total = 92 persons
	b)Floating	Total = 20 persons						
32	Basement	NIL						

Part- III

Provisions of means of escape

33	Number of staircases -->		Two on either sides of the building	
			# 1	# 2
a)	Width of flight in mm		1340 mm	1340 mm
b)	Tread width in mm		260 mm	270 mm
c)	Riser Height in mm		150 mm	170 mm
d)	Finish		Marble	Kota stone
e)	Width of stair door (FCD) THERE IS NO FCD-Ordinary door		1100 mm wooden	1100 mm
f)	Height of stair head room		3657.6 mm	3657,6 mm
g)	Height of stair handrail		1020 mm	990 mm
h)	Area & location & profile of Fire Refuge Area		Though no refuge areas are there, the balconies from 1 st to 5 th floor can be treated as refuge areas	
i)	Width and type of door leading to Fire refugee area		1200 mm glass doors	
j)	Pressurization of staircase		No	
k)	Segregation of staircase		Yes	

34	Number of Lifts installed→		One
	Lift-Numbers		1
	a)	Type of door	Metallic
	b)	Fire resistance rating	2 hours
	c)	Area of lift car	1100 x 1300 sq mm
	d)	Capacity (no of persons)	8 persons
	e)	Capacity(in kg)	544
	f)	Company	Kone
	g)	Is communication system, installed in the lift car?	Yes
	h)	Is a fireman's switch being installed in the car?	Yes
	i)	Pressurization of lift	No
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Not available
35	Presence of proper signage in all the exit route		Yes, but very few. Some more signages would be better
36	Is it posted with illuminated signage ?		No
37	Whether it is landing to fire assembly point?		No, no assembly point demarked
38	Any form of Public address system available?		Yes
39	Width form of internal road within the Premises?		3200 mm.
40	Width of the Entry / exit of Gate		3000 mm
41	Height of the Entry / exit of Gate		OPEN TO SKY

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available ? (at ground level / over head)		U/G – 50,000 ltrs O/H – 2 x 1000 ltrs
	a)	If yes, specify the distance from the building	Adjacent to the pump room, less than 1 m
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	Could not be verified as provisional NOC is not available
	c)	Specify the condition of the reservoir	Satisfactory
42	Is any public or other water storage facility available nearby ?		Yes Specify the distance from the building→800mtr
	a)	Is it readily accessible?	Yes Condition and type of the reservoir→ Water body
44	Are internal hydrants being provided ?		Yes
	If so, please indicate no of hydrants in each floor		One in each floor
45	Are first aid hose reels being provided ? If so please indicate		Yes No of hose reels on each floor :One
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes Bore and length of hose reel tubing on each reel:→ 20mm, 30 Mtr
	b)	Size (bore) and type of nozzle fitted to each hose reel	5 mm, Jet Type

46	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	Type of hose: Canvas Size of hose: 63 mm Length of hose:15 Mtr	
	a)	Total no of hoses provided near each hydrant	One		
47	Have wet risers/dry risers been provided?		Yes, wet riser only		
	If yes, please indicate the number of risers and internal diameter of each		one		
48	Has any down comer been provided? If so, please give details		No		
49	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes		
	a)	Number of pumps	3 nos, 1 main pump – 60 HP, 1 Jockey – 15 HP, 1 stand by pump – 60 HP		
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction: 150 mm Delivery: 150 mm Output of Main pump:38.05 Ltr/Sec Output of Jockey pump: 3.0 Ltr/Sec Output of Diesel pump: 38.08 Ltr/Sec Max head against which the pump can operate at the output mentioned in: 70 Mtr		
	e)	Is the pump automatic in action?	No, moreover the pump is at present run by the generator only		
	f)	Is the water pressure sufficient at max distance from the pump?	Could not be checked as there is no pressure gauge at the top floor, pressure at ground floor was found 5.5 kgs/sqcm		
50.	Sprinkler system		Yes		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes.Smoke detectors and sprinklers are provided		
	a)	Type of detectors used	Smoke detector, and sprinklers		
51	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes.		
52	Alarm receiving system		Yes.		
53	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity – Found Valid till 15.2.2013		Yes	Type/ Capacity Water CO2-9 ltrs DCP – 5 kgs	Number of FE 6 nos 8 nos
54	Location and population of the FEs adequate		Near stair case no 2(fire exit),but the quantity o FEs are quite indaquate		

55	Are Emergency Fire Alarm being provided in each floor ?	Yes, one on each floor
56	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No
57	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No
58	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available
59	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not Available
60	Status of NOC from WBF&ES	Valid upto 16.9.13 vide memo no. WBFES/3150/12/Kol-CB/37/06(41/06) dated 17,9,12

Part-V

Electrical, Cables and Ventilation

61	If the building is Centrally air -conditioned, please indicate,		NO CENTRAL AC IS available
	a)	Material used for construction of ducts and its fittings	Not applicable
	b)	Type of tinning used for ducts	Not applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d)	How the lagging is secured?	Not applicable
	e)	If false ceiling is there?	Not applicable
	f)	Material used for false ceiling	Not applicable
	g)	Is a separate AHU being provided in each floor	Not applicable
	h)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j)	Will fire dampers be provided in AC duct?	Not applicable
62	Is there any standby source of electric supply being provided?		DG set 125 KVA
	Is the back supply automatic?		No, Manual Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump☐ ■Emergency Light☐ ■Lift☐ ■ Office☐
63	Location of switch- gears and transformers		No transformer is provided,connection form WBSEB through underground cable

64	a)	Transformer capacity	Not applicable
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable
	c)	If outside, how far is it from the building?	Not applicable
65		What precautions will be taken to prevent a possible fire in the transformers from spreading?	Not applicable
66		Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Yes ducting is provided through the walls which is open between all the floors but is outside the exit door of the building
67		Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	NO
75		Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
76.		Whether natural ventilation is relied upon? If so, give details.	Yes, windows with cross ventilation is provided
77.		Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO
78.		Whether mechanical ventilation is being coupled with automatic detection system?	NO
79.		Whether the refuge area is being provided?	None, but balconies are provided on all floors from 1 st to 5 th
80.		Storage of combustibles materials near electrical equipment/fuse units.	No
81.		RCCBs available??	No
82.		Master switch in warehouses	Not applicable
83.		Proper cable joint procedures as per manufacturer	Yes
84.		Earthing Pit Tested??	No Record available
85.		Use of MCB??	Yes
86.		Bypassing of protection devices	No
87.		Deteriorated insulation	No
88.		Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes but are not adequate
89.		Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No, but pass through the staircase no 2 outside the exit doors
90.		Tracking possibility	No
91.		Unused opening in the panels, etc.	No
92.		Possibility of ground fault/short circuit	No
93.		Mechanical protection to cables	Yes
94.		Loose terminations due to improper supports, crimping	No
95.		Improper gland installation, wrong lug size	No
96.		Over-rated uses, wrongly set protection relays, etc.	No
97.		Switch yard and sub station	Not applicable

98.	DG operation and maintenance	Yes, by Jackson under guarantee period
99.	Reliability of the fire hydrant system	Yes if run on auto mode
100.	Emergency preparedness and response	No
101.	Availability of Evacuation plan	No
102.	Mock drill conducted??	Yes but no Record is available
103.	Awareness of the people??	Poor
104.	Sample basis validation of smoke detection system??	NO
105.	Condition of Lightning Arrestor	No lightning arrestor is provided
106.	Periodic test of UPS system (as applicable)	Not applicable
107.	Handling of electrical work by competent electrician	Yes, done by outsourced licensed electrician
108.	Approval of receiving station, substation and DG	No DG approval is not available
109.	Storage if hazardous material, chemicals?	No
110.	Use of signage?	NO
111.	Hydrants clear, access to public thorough fare open	YES
112.	Flame & work permits (as applicable)	NO
113.	Effective internal communication and public address system	YES
114.	Colour coding system of hazardous chemical gas lines etc.	Not applicable
115.	Management structure, role of safety officer, fire department etc.	NO
116.	Procedure for incident investigation and control	NO

PART- VI

Other Information

117.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes a few noted in the observation column
118	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
	Is Trade License available??	Not required
119	Name of the Insurance Company	None
120	Remarks (if any). In all the Four buildings: No Evacuation Drill has been conducted in the building. Fire mock drill is conducted once three months back records not kept and regularity not maintained. No Emergency response Plan is available building. No signage is available in the Stairs in none of the building apart from few Emergency exits. Fire Pumps are found not connected with the electricity line (connected only to DG line) also not in auto mode Fire reels are not connected properly (bent and will obstruct flow of water.	

REVIEWER

AUDITOR

Signature & date Inspecting and Reporting Authority With seal

NDITA

Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1	No Evacuation Drill has been conducted	Evacuation drill is to be conducted with all Occupants. Record to be maintained
2	Mock drill done only with maintenance staff only once,	Should be done with all the occupants at least once in six months and records maintained
3	No Emergency response Plan is available	Emergency response plan is to be prepared
4	No proper signage are available	Proper illuminated signage are to be put
5	Fire Pumps are found not in auto mode	Fire pumps should run 24 Hrs in auto mode

6	Hose reels in many floors are not  connected properly	To be rectified and connected properly
7	No pressure gauge at the top floor	Pressure Gauge is to be provided at the top floor.
8	No lightning arrestor found	Same to be provided and continuity test done once in a year
9	The doors of the rented offices all open inside	To be rectified and open outside
10	Many electrical wires found open in the  stair case no 2	Te be removed if not required or properly taped
11	The lift room is not provided with smoke detectors and fire extinguishers	Same to be provided
12	No FEs are found in the rented offices	At least three FEs to be provided on each floor
13	Two cars are found parked in the  driveway	Driveway must be free from any obstructions

REVIEWER

AUDITOR

Signature & date Inspecting and Reporting Authority With seal

ICE KING



EXECUTIVE SUMMARY

Part I & II

General Information

The name of the building is ICE KING and is having G+ 9 structures. The building is jointly owned by Mr Vinod Chowdhury & other 2 coowners. The total plot area is approx. 345.8 sq.mtrs and built up area is approx. 1345.58sq.mtrs

The owners have rented out all the 9 floors to 9 companies.

As per record the building plan has been sanctioned.

The clearance certificates (CC) have been obtained from Bidhannagar Municipality (4nos. of CCs attached).

NOC from WBFES has Expired on 23.12.11 vide Memo

WBFES/977/10/Bidhan/113/320/05(66/10) dated 24.2.10

The name of the main security agency engaged is Fire Shield. However, other agencies are also engaged at various floors.

Occupancy Load(including all floors) was found as

Existing -- 83
Floating -- 10.

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows:

There are two Staircases available for use one of which is called emergency stair. There are also two KONE made lifts available, with auto sliding type door. The Lift can carry 5 persons(max) Both the lifts are provided with communication system from inside and fire man's switches are also available

C forms for the lifts from appropriate authorities have not been taken.

The 8th floor has been provided with fire refuge area

Fire emergency drill has not been conducted.

There is instructive Signage available at various locations like EXIT Route etc.

Assembly point has not been marked clearly near the gate.

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is underground water reservoir (2,00,000 litres capacity) ,fire water pumps, wet riser and portable fire extinguishers located at staircase landings as well as floors(floor and types of extinguishers etc. are provided as attachment).

There are two fire water pumps (the main pump & Sprinkler pump are of 60 HP rating) and the jockey pump (15HP rating) to charge the wet riser. There is one stand by water pump of 60 HP. The pump capacity is 40 litres per second and the head is 70 mtr .. Also there is no pressure .gauge at the wet riser top end to know the pressure at the top

Fire hydrant (single nozzle) and hose reel connection at each landing points are available.

Water Sprinkler system, smoke detection system and fire alarm system are in place at each floor. There are MCP (manual call point) at each floor. The fire alarm panel is at the ground floor. But MCP, Smoke detector is found not working. Reason cited as the control panel is being shifted to pump room

PART V

ELECTRICAL FIRE HAZARDS

The power supply is thru installed transformer having 125KVA capacity and DG set of capacity 125 KVA can be started if required. The DG set is to be started up manually.

There is no ELCB or RCCB in the circuit.

There is no Lightning arrestor AT THE ROOF TOP.

Electrical attendant (Sankar) do not have Electrical license.

PART VI

OTHER INFORMATION

NIL

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 62	
2.	Premises Name (if any):	ICE KING	
3.	Name of the owner /occupier/lessee	MrVinodChowdhury + 2 other co owner	
4.	Permanent Address	EN 62, Salt Lake,Sector V , Kolkata 700 091.	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Lease hold.	
6.	Name of the Contact Person	Ranjit Thakur	
7.	Phone No of Contact Person	98319 20595	
8.	E-mail	NIL	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	345.8sq.mtr	
11.	Build up area(as informed to the Auditor)	1345.58sq.mtr	
12.	No of Floors	G+9	
14.	Date of Sanction of Building Plan	Date: Not found	
15.	Whether P.O.C/OC received from local body?	Yes/No	OC Issuing Authority Bidhan Nagar Municipality/ NDITA Dated:
SECURITY SETUP DETAILS			
16.	Name of the SECURITY AGENCY engaged	Fire Shield	
17.	No of Security Personnel engaged	3	
18.	Whether Records of Vehicles (No & type entering into the building are kept	No	
19.	Whether records of Visitors entering into the building are kept	YES	
20.	Whether Metal detectors are used at the entry point	No	
21.	Whether Monitoring System through Close circuit TV available	NONE.	
VEHICLES VOLUME			
22.	No of Vehicles Engaged by the Organization	1	
23.	No of Vehicles for which parking space is available in the premises	3	

24	Whether parking space available for visitors within the premises	5
25	Place where excess vehicles (if any) are parked	No
		Outside Road
GENERAL MAINTENANCE		
26	Garbage Clearing	NDITA garbage clearing system
27	Drainage System	Connected to NDITA Drainage system
28	Maintenance of Road	Internal Roads are maintained by owner
TELEPHONE TOWER		
29	No of Towers	Nil
30	Statutory Clearance from AAI	Not Applicable
31	Any Other Clearance	Not Applicable

PART - II

V-Vacant

32	Occupancy load	(Attach floor wise details separately if required)										
	Existing	G	1	2	3	4	5	6	7	8	9	T
	a)Regular	6	20	2	6	6	V	13	8	12	10	83
	b)Floating											10
33	Basement	Nil										
	a)	If basement extends beyond building profile	Not applicable									
	b)	Use of the basement	Not applicable									
	c)	Is it being sprinklered?	Not applicable									
	d)	Whether any cubicles present in the basement?	Not applicable									
		If yes, their use to be specified	Not applicable									
	f)	Whether fire zones are defined?	Not applicable									
		If yes, please provide details	Not applicable									

Part- III

Provisions of means of escape

34	Number of staircases -->			
	Stairs Number		#1	#2
	a)	Width of flight	1390 mm	1390 mm
	b)	Tread width	270 mm	270mm
	c)	Riser Height	165 mm	170mm
	d)	Finish	Marble	Kota Stone
	e)	Width of stair door (FCD)	NIL	NIL
	f)	Height of stair head room	8 ft	8 ft
	g)	Height of stair handrail	900 mm	890mm
	h)	Area & location & profile of Fire Refuge Area	On 8th floor -8500 mm X 1550 mm	
	i)	Width and type of door leading to Fire refugee area	1050mm Glass door	
	j)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	
35	Number of Lifts installed->			
	Lift-Numbers		#1	#2
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2 hrs	2 hrs
	c)	Area of lift car	1100mmX860 mm	1100mmX860 mm
	d)	Capacity (no of persons)	5 persons	5 persons
	e)	Capacity(in kg)	340 kgs	340 kgs
	f)	Company	KONE	KONE
	g)	Is communication system, installed in the lift car?	No	
	h)	Is a fireman's switch being installed in the car?	Yes	Yes
	i)	Pressurization of lift	No	
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Yes/No	Reference No: Valid upto:
36	Presence of proper signage in all the exit route		No	
37	Is it posted with illuminated signage?		No	
38	Whether it is landing to fire assembly point?		No	
39	Any form of Public address system available?		Yes	
40	Width form of internal road within the Premises?		3250	
41	Width of the Entry / exit of Gate		3210	
42	Height of the Entry / exit of Gate		Open to Sky	

PART IV

Provision of Fire Safety Arrangement

Provision of Fire Safety Arrangement				
43	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G: 200000 Ltr O/H 5000 Ltr
	a)	If yes, specify the distance from the building	Adjustment to Bids	
	b)	If yes, specify the capacity (in liters) as approved by WBF& ES.	None	
	c)	Specify the condition of the reservoir	Statutory	
44	Is any public or other water storage facility available nearby ?		Yes	Specify the distance from the building: 800 mtr
	a)	Is it readily accessible?	Yes	Condition and type of the reservoir: Water body
45	Are internal hydrants being provided?		Yes	
	If so, please indicate no of hydrants in each floor		One on each floor with single outlet	
46	Are first aid hose reels being provided ? If so please indicate		Yes	
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	
	b)	Size (bore) and type of nozzle fitted to each hose reel	5 mm, jet type, 25 mm, 30mtr	
47	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	
	a)	Total no of hoses provided near each hydrant	One	
48	Have wet risers/dry risers been provided?		No	
	If yes, please indicate the number of risers and internal diameter of each		Two- Spr-1 HYD-1	
49	Has any down comer been provided? If so, please give details		No	
50	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes	
	a)	Number of pumps		
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction: 150 Delivery: 150 Output of each pump:40 ltr/sec Max head against which the pump can operate at the output mentioned in:70 mtr	
	e)	Is the pump automatic in action?	Yes	
	f)	Is the water pressure sufficient at max distance from the pump?	No	
51.	Sprinkler system			
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes	
	a)	Type of detectors used	Smoke Detector (not working)	

52	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	Yes		
53	Alarm receiving system	Yes		
54	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Expired on dec. 2012	Number of FE Type/ Capacity ABC (5KG) Co ₂	10 09 01
55	Location and population of the FEs adequate	Stair case (corner area)		
56	Are Emergency Fire Alarm being provided in each floor?	Yes	No. of Fire Alarm:9 (Nine) Location of Fire Alarm: in each floor	
57	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No		
58	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No		
59	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
60	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
61	Status of NOC from WBF&ES	NOC (Ref no WBFES/ 977/10/Bidhan-113/320/05(66/10) dated 24.2.10 valid up to 23.2.11. Renewal application made On 12.5.12		

Part-V

Electrical, Cables and Ventilation

62	If the building is Centrally air -conditioned, please indicate,		NO Central AC
	a)	Material used for construction of ducts and its fittings	Not applicable
	b)	Type of tinning used for ducts	Not applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable

	d)	How the lagging is secured?	Not applicable		
	e)	If false ceiling is there?	Not applicable		
	f)	Material used for false ceiling	Not applicable		
	g)	Is a separate AHU being provided in each floor	Not applicable		
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable		
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable		
	j)	Will fire dampers be provided in AC duct?	Not applicable		
63	Is there any standby source of electric supply being provided?		Yes	DG Capacity	UPS Cap acity
	Is the back supply automatic?		Through generator		
64	Location of switch- gears and transformers		Inside the building open to sky		
65	a)	Transformer capacity	250 KVA		
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Outside the building		
	c)	If outside, how far is it from the building?	3 mtr		
66	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Totally covered		
67	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		No Shafts are there		
68	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		No		
69	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable		
70	Whether natural ventilation is relied upon? If so, give details.		Yes		
71	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No		
72	Whether mechanical ventilation is being coupled with automatic detection system?		No		
73	Whether the refuge area is being provided?		Yes	On which floor:8 th floor Area of Fire Refuge Area: 8500mm x 1550 mm Width of Fire Refuge Area:1550	
74	Storage of combustibles materials near electrical equipment/fuse units.		None		

75	RCCBs available??	No
76	Master switch in warehouses	No
77	Proper cable joint procedures as per manufacturer	Yes
78	Earthing Pit Tested??	Record no availed
79	Use of MCB??	Yes
80	Bypassing of protection devices	No
81	Deteriorated insulation	No
82	Selection, deployment of PFFs (Portable Fire Extinguishers)	yes
83	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No
84	Tracking possibility	Yes
85	Unused opening in the panels, etc.	No
86	Possibility of ground fault/short circuit	No
87	Mechanical protection to cables	Yes
88	Loose terminations due to improper supports, crimping	No
89	Improper gland installation, wrong lug size	No
90	Over-rated uses, wrongly set protection relays, etc.	No
91	Switch yard and sub station	No
92	DG operation and maintenance	Yes (125)
93	Reliability of the fire hydrant system	No
94	Emergency preparedness and response	No
95	Availability of Evacuation plan	No
96	Mock drill conducted??	No
97	Awareness of the people??	No
98	Sample basis validation of smoke detection system??	No
99	Condition of Lightning Arrestor	No
100	Periodic test of UPS system (as applicable)	Not available
101	Handling of electrical work by competent electrician	Yes
103	Approval of receiving station, substation and DG	Not available
104	Storage of hazardous material, chemicals?	No
105	Use of signage?	No
106	Hydrants clear, access to public thorough fare open	Yes
107	Flame & work permits (as applicable)	No
108	Effective internal communication and public address system	No
109	Colour coding system of hazardous chemical gas lines etc.	No
110	Management structure, role of safety officer, fire department etc.	No
111	Procedure for incident investigation and control	No
112	Lighting Detector	No

PART- VI

Other Information

113.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes	■Deviation: NOC of WBFFS
114	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No	
115	Name of the Insurance Company	None	
116	Remarks (if any) 1. No Valid NOC is available. 2. No CC is available. 3. Sanctioned Building is not available. 4. No lightening arrestor is available. 5. No earth Pit test has been conducted. 6. No evacuation drill has been conducted 7. Valid C-forms is not available.		

Auditor I

Auditor II

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Nonconformity tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
	No Valid NOC is available.	Valid NOC from WBF& ES is to be obtained.
	No CC is available.	CC to be obtained
	Sanctioned Building is not available	Sanctioned building is to be made available
	No lightening arrestor is available	Lightening arrestor to installed
	No earth Pit test has been conducted.	Earth Pit test has to be conducted.
	No fire mock drill has been conducted.	Fire mock drill has to be conducted periodically
	No evacuation drill has been conducted	Evacuation drill has to be conducted periodically
	Valid C-forms is not available.	Vailid C-Form for the lift to be obtained from West Bengal goverment

Auditor I

Auditor II

Signature & date Inspecting and Reporting Authority With seal

United Industries Building



EXECUTIVE SUMMARY

Part I & II

General Information

United Industries Building is situated at EN 66, Sector V Salt Lake City, Pin:700091. In the plot area 2.25 Kattah of land & built up area is 2800 Sqft. Building plan was sanctioned on 23.2.2005.

This is G +3 building. 1st, 2nd floor & 3rd floor is rented to IT & ITES Companies. 3rd floor is being renovated.

NOC from WBFE&S is not available

The date of OC (Occupation Certificate) is not available.

Estimated Occupancy Load was found as

	Existing -- 46
Floating -- 7	

Part III

PROVISION OF MEANS OF ESCAPE

In the Building there is one stair & one Lift is available.

Evacuation Drill has not been conducted

Signage not available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is Down comer (with a pump), MCPs. Smoke detectors. Tenants are installing the CCTV surveillance.

There is a Fire tank of approx 5000 Ltr capacity at the roof top available.

Alternate source of water is the Water body approx 800 mtr away from the building.

NO Portable fire extinguishers are found deployed at the Buildings at common areas or in the Tenants office.

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation.

The building has no DG-set as an alternate source of power.

There is no transformer,

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVAY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 66	
2.	Premises Name (if any):	United Industries	
3.	Name of the owner /occupier/lessee	MrViveakNagaria	
4.	Permanent Address	EN 66,Sector-V salt lake city, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Lease hold	
6.	Name of the Contact Person	MrT.K.Singh	
7.	Phone No of Contact Person	96747 58883	
8.	E-mail	viveak@nangaliagroup.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational ☐
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
		IT/ITES ☐	
10.	Plot Area(as informed to the Auditor)	2.25 Kattah	
11.	Build up area(as informed to the Auditor)	2800 Sq Ft	
12.	No of Floors	G+3	
13.	Date of Sanction of Building Plan	23.2.05	
14.	Whether P.O.C/OC received from local body?	Not Available	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	P.S Security	
16.	No of Security Personnel engaged	2	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Not applicable	
18.	Whether records of Visitors entering into the building are kept	YES	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	NO	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	None	
22.	No of Vehicles for which parking space is available in the premises	None	

23.	Whether parking space available for visitors within the premises	Not applicable
24.	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
25.	Garbage Clearing	NDITA Garbage clearing system
26.	Drainage System	Connected to NDITA Drainage system
27.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	Not applicable
30.	Any Other Clearance	Not applicable

PART - II

V= Vacant

31.	Occupancy load	(Based on Estimates)				
	Existing	G	1	2	3	Total
	a)Regular	7	3	11	25	45
	b)Floating					7
32.	Basement	NO				

Part- III

Provisions of means of escape

33.	Number of staircases --→One	
	Stairs Number	
a)	Width of flight	1300
b)	Tread width	265
c)	Riser Height	150
d)	Finish	Marbal
e)	Width of stair door (FCD)-	Nil
f)	Height of stair head room	8"
g)	Height of stair handrail	930 ⁰
h)	Area & location & profile of Fire Refuge Area	Nil
i)	Width and type of door leading to Fire refugee area	Nil
J)	Pressurization of staircase	NO
k)	Segregation of staircase	YES

34.	Number of Lifts installed→Two	
	Lift-Numbers	
	a) Type of door	Collapsible
	b) Fire resistance rating	N.A
	c) Area of lift car	1100 X 830
	d) Capacity (no of persons)	5
	e) Capacity(in kg)	340
	f) Company	ICON
	g) Is communication system, installed in the lift car?	No
	h) Is a fireman's switch being installed in the car?	No
	i) Pressurization of lift	NO
	j) Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Not Available
35.	Presence of proper signage in all the exit route	NO
36.	Is it posted with illuminated signage ?	NO
37.	Whether it is landing to fire assembly point?	None
38.	Any form of Public address system available ?	NO
39.	Width form of internal road within the Premises ?	None
40.	Width of the Entry / exit of Gate	2400 mm
41.	Height of the Entry / exit of Gate	Open to sky

PART IV

Provision of Fire Safety Arrangement

42.	Is any water reservoir for firefighting available ? (at ground level / overhead)	Yes	U/G7000ltr O/H 5000 Ltr
	a) If yes, specify the distance from the building		U/G-Adjacent
	b) If yes, specify the capacity (in litres)as approved by WBF & ES.		None
	c) Specify the condition of the reservoir		Satisfactory
43.	Is any public or other water storage facility available nearby ?	Yes	■specify the distance from the building ---- 800Mtr
	a) Is it readily accessible ?	Yes	■condition and type of the reservoir—Water body
44.	Are internal hydrants being provided ?		NO
	If so, please indicate no of hydrants in each floor		Not applicable

45.	Are first aid hose reels being provided ? If so please indicate		Yes.
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	YES, directly to the Down comer line
	b)	Size (bore) and type of nozzle fitted to each hose reel	20 mm,30 mtr
46.	Are fire hoses being provided near each hydrant? If so, please indicate		No
	a)	Total no of hoses provided near each hydrant	Not applicable
47.	Have wet risers/dry risers been provided?		No
48.	If yes, please indicate the number of risers and internal diameter of each		Not applicable
49.	Has any down comer been provided? If so, please give details		Yes. There is a pump of 7.5 HP at the top floor for building up the pressure
50.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		NO
	a)	Number of pumps	Not applicable
	b)	Size of suction and delivery connection to each pump/Output/Head	Not applicable
	c)	Is the pump automatic in action?	Not applicable
	d)	Is the water pressure sufficient at max distance from the pump?	Could not be checked as there is no pressure gauge at the bottom
51.	Sprinkler system		NO
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Smoke detectors
	a)	Type of detectors used	Addressable smoke detectors
52.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		YES in each floor
	a)	Alarm receiving system	Yes
53.	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark?		NO Fire Extinguishers are available in the entire building Not applicable
	Date of Validity		
	Location		Not applicable
54.	Are Emergency Fire Alarm being provided in each floor ?		YES

55.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	None
56.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (mintwice a year)?	No record is available
57.	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available
58.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available
59.	Status of NOC from WBF&ES	Not available

Part-V

Electrical, Cables and Ventilation

60.	If the building is Centrally air –conditioned, please indicate,		No Central AC
	a)	Material used for construction of ducts and its fittings	Not applicable
	b)	Type of tinning used for ducts	Not applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d)	How the lagging is secured?	Not applicable
	e)	If false ceiling is there?	Not applicable
	f)	Material used for false ceiling	Not applicable
	g)	Is a separate AHU being provided in each floor	Not applicable
	h)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j)	Will fire dampers be provided in AC duct?	Not applicable
61.	Is there any standby source of electric supply being provided?		None
	Is the back supply automatic?		Not applicable
62.	Location of switch- gears and transformers		NIL
63.	a)	Transformer capacity	Not applicable
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable
	c)	If outside, how far is it from the building?	Not applicable
64.	What precautions is taken to prevent a possible fire in the transformers from spreading?		Not applicable
65.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor		Not applicable

	or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	
66.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	NO
67.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
68.	Whether natural ventilation is relied upon? If so, give details.	Yes
69.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO
70.	Whether mechanical ventilation is being coupled with automatic detection system?	Not applicable
71.	Whether the refuge area is being provided?	None
72.	Storage of combustibles materials near electrical equipment/fuse units.	NO
73.	RCCBs available??	None found
74.	Master switch in warehouses	NO
75.	Proper cable joint procedures as per manufacturer	YES
76.	Earthing Pit Tested??	Records are not available
77.	Use of MCB??	YES
78.	Bypassing of protection devices	None found
79.	Deteriorated insulation	None found
80.	Selection, deployment of PFFs (Portable Fire Extinguishers)	None
81.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Not applicable
82.	Tracking possibility	Yes
83.	Unused opening in the panels, etc.	None found
84.	Possibility of ground fault/short circuit	None found
85.	Mechanical protection to cables	Yes.
86.	Loose terminations due to improper supports, crimping	None found
87.	Improper gland installation, wrong lug size	None found.
88.	Over-rated uses, wrongly set protection relays, etc.	NO Protection relay
89.	Earthing layout & it's effectiveness	Not available
90.	Switch yard and sub station	No
91.	DG operation and maintenance	NO
92.	Reliability of the fire hydrant system	YES
93.	Emergency preparedness and response	None found
94.	Availability of Evacuation plan	None found
95.	Mock drill conducted??	No record is available
96.	Awareness of the people??	Average

97.	Sample basis validation of smoke detection system??	No record found
98.	Storage if hazardous material, chemicals??	NO
99.	Use of signage??	NO
100.	Hose reel clear, access to public thorough fare open	YES
101.	Flame & work permits (as applicable)	None found
102.	Effective internal communication and public address system	No
103.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
104.	Management structure, role of safety officer, fire department etc.	NO
105.	Procedure for incident investigation and control	NO

PART- VI

Other Information

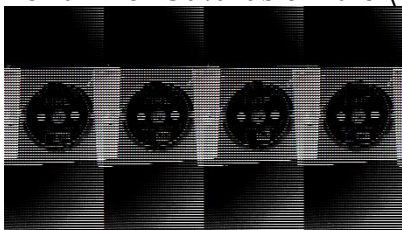
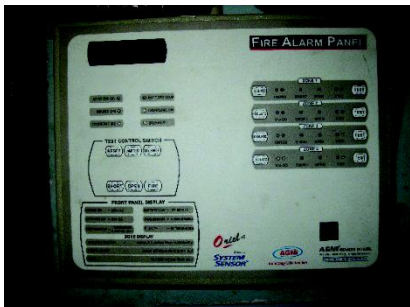
106.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	None found as no NOC is available
107.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
108.	Is Trade License available??	Not available
109.	Name of the Insurance Company	Information not available
110.	Remarks (if any) 25. No assembly point is identified 26. There is no pressure gauge at the bottom floor of the hydrant 27. No record of fire Mock drill& Evacuation is available 28. There is no signage is available for the Emergency Exit 29. No record of validation of smoke detector is available 30. No NOC from WBFES is found available 31. No C form for the lifts are available 32. Down comer system found not in operation 33. No hammer is available in the \MCPs 34. Intelligent panel at ground floor is found not working 35. Only Exit Stair case is blocked at 1st & 2nd floor with unwanted material	

Auditor

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	No assembly point is identified	Assembly point is to be identified
2.	There is no pressure gauge at the bottom floor of the hydrant	pressure gauge is to be installed at the top floor of the hydrant
3.	No record of fire Mock drill & Evacuation is available	Records are to be maintained
4.	There is no signage is available for the Emergency Exit	Proper Illuminated signage to be provided for the emergency route
5.	No record of validation of smoke detector is available	Smoke detectors are to be validated periodically. Records are to be kept
6	No NOC from WBFES is found available	NOC from WBFES is to be obtained
7	No C form for the lifts are available	C certificate from WB govt is to be obtained
8	Down comer system is found not in operation 	Wet riser pumps are to run 24 X 7 in auto mode
9	No hammer is available in the MCPs 	Hammers are to be provided in MCPs
10	Intelligent panel at ground floor is found not working 	Intelligent panel should be in operation

11	Only Exit Stair case is blocked at 1st& 2nd floor with unwanted material 	Emergency Exit should be kept always clear for easy escape

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

ALIAH UNIVERSITY



EXECUTIVE SUMMARY

Part I & II

General Information

The building is situated at EN 68, at sector V, Salt lake, Kolkata 700091.

This building is in 5 cottah of land. Build up area 6600 sq ft. It is G + 5 Floor

The whole building is rented to Aliah University

There is no central AC system in the building.

OC (Occupational Certificate) is not available

Provisional NOC from WBF & ES has been obtained recently.

Estimated Occupancy Load was found as

Existing	--	75
Floating	--	10

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two stair cases available. There is one Lift available. With communication & fire control switch.

Evacuation Drill at has not been conducted

There is no Signage available in the building

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is Wet riser, Smoke detector, Sprinkler, MCps, But the intelligent panel was found shut off. Fire pumps were found not working. It was informed they are waiting for enhancing the Electrical power to run the fire pumps

NO fire extinguishers are available

There is an underground 50000 ltr capacity. There is one riser in the building.

There is Sprinkler system is available

Alternate source of water is the Water body approx. 500 mtr away

PART V

ELECTRICAL FIRE HAZARDS

There is no RCCBELCB in the distribution board

Earth pits were not found marked and tested.

Generally no combustible material is stored in the premises, near the Electrical installation

There is No DG supply available as an alternate source of power supply

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	EN 68	
2.	Premises Name (if any):	None	
3.	Name of the owner /occupier/lessee	Mr. BijonHaldar	
4.	Permanent Address	EN 68, Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	MrBijanHaldar	
7.	Phone No of Contact Person	90516 45677	
8.	E-mail	Calcuttaoversees2010@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational ☐
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	5 Cottah	
11.	Build up area(as informed to the Auditor)	6600 Sqft	
12.	No of Floors	G+5	
13.	Date of Sanction of Building Plan	Date: Not available	
14.	Whether P.O.C/OC received from local body?	No	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Own	E.A.T.S
16.	No of Security Personnel engaged	1	2
17.	Whether Records of Vehicles (No & type entering into the building are kept	NO	
18.	Whether records of Visitors entering into the building are kept	NO	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	NO	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	NIL	
22.	No of Vehicles for which parking space is available in the premises	5	
23.	Whether parking space available for visitors within the premises	NO	
24.	Place where excess vehicles (if any) are parked	NO	

GENERAL MAINTENANCE		
25	Garbage Clearing	NDITA Garbage clearing system
26	Drainage System	Connected to NDITA Drainage system
27	Maintenance of Road	Internal Road maintained by owner
TELEPHONE TOWER		
28	No of Towers	NIL
29	Statutory Clearance from AAI	Not applicable
30	Any Other Clearance	Not applicable

PART - II

31	Occupancy load		(Attach floor wise details separately if required)						
	Existing		Gr	1	2	3	4	5	Total
	a)Regular		10	10	25	15	15	Vacant	75
	b)Floating								10
32	Basement		NIL						
	a)	If basement extends beyond building profile	Not Applicable						
	b)	Use of the basement	Not Applicable						
	c)	Is it being sprinkle red?	Not Applicable						
	d)	Whether any cubicles present in the basement?	Not Applicable						
		If yes, their use to be specified	Not Applicable						
	f)	Whether fire zones are defined?	Not Applicable						
		If yes, please provide details	Not Applicable						

Part- III

Provisions of means of escape

33	Number of staircases --→ TWO			
	Stairs Number		#1	#2
	a)	Width of flight	1390 mm	1390 mm
	b)	Tread width	260 mm	260 mm
	c)	Riser Height	165 mm	165 mm
	d)	Finish	Marble	Marble
	e)	Width of stair door (FCD)	NIL	NIL
	f)	Height of stair head room	3048 mm	3048 mm
	g)	Height of stair handrail	920 mm	920 mm
	h)	Area & location & profile of Fire Refuge Area	NIL	
	i)	Width and type of door leading to Fire refugee area	NOT APPLICABLE	
	j)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	

34	Number of Lifts installed → ONE		
	Lift-Numbers		#1
	a)	Type of door	Metallic
	b)	Fire resistance rating	2 Hrs
	c)	Area of lift car	1110 mm X 1300 mm
	d)	Capacity (no of persons)	8 Persons
	e)	Capacity(in kg)	544
	f)	Company	OTIS
	g)	Is communication system, installed in the lift car?	Yes
	h)	Is a fireman's switch being installed in the car?	Yes
	i)	Pressurization of lift	No
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	No
35	Presence of proper signage in all the exit route		No
36	Is it posted with illuminated signage?		No
37	Whether it is landing to fire assembly point?		No
38	Any form of Public address system available?		No
39	Width form of internal road within the Premises?		4500 mm
40	Width of the Entry / exit of Gate		4670 mm
41	Height of the Entry / exit of Gate		Open to Sky

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G50000Ltr O/H6000 Ltr
	a)	If yes, specify the distance from the building	Adjacent to the building	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	None	
	c)	Specify the condition of the reservoir	Satisfactory	
43	Is any public or other water storage facility available nearby?		Yes	Specify the distance from the building 800 mtr
	a)	Is it readily accessible?	Yes	Condition and type of the reservoir Water body
44	Are internal hydrants being provided ?		Yes	Single outlets.
	If so, please indicate no of hydrants in each floor		Single	
45	Are first aid hose reels being provided ? If so please indicate		Yes	No of hose reels on each floor : One
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel: 25 mm, 30 mtr
	b)	Size (bore) and type of nozzle fitted to each hose reel	5mm , jet type	
46	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	Type of hose: Canvas Size of hose: 63 mm Length of hose: 15 Mtr
	a)	Total no of hoses provided near each hydrant	One	

48	Have wet risers/dry risers been provided?	Yes- Wet Riser	
	If yes, please indicate the number of risers and internal diameter of each	One, 150 mm	
49	Has any down comer been provided? If so, please give details	No	
50	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Yes	
	a) Number of pumps	4 nos	
	b) Size of suction and delivery connection to each pump/Output/Head	Suction: 150 mm Delivery: 150 mm Output of each pump: 2400 mm Max head against which the pump can operate at the output mentioned in: 70 mtr	
	e) Is the pump automatic in action?	Installed not yet started	
	f) Is the water pressure sufficient at max distance from the pump?	Not applicable	
51.	Sprinkler system	Yes	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	Yes	
	a) Type of detectors used	Smoke detector	
52	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	Yes, but operation has not started yet	
53	Alarm receiving system	Yes, but operation has not started yet	
54	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark?	No Fire Extinguisher is available	
	Date of Validity	Not applicable	
55	Location and population of the FEs adequate	Not applicable	
56	Are Emergency Fire Alarm being provided in each floor?	Yes	No. of Fire Alarm: one Location of Fire Alarm: in each floor, But not in operation
67	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No	
58	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No	
59	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available	
60	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available	
61	Status of NOC from WBF&ES	Not available	

Part-V

Electrical, Cables and Ventilation

62	If the building is Centrally air -conditioned, please indicate,		No Central AC is available
	a)	Material used for construction of ducts and its fittings	Not Applicable
	b)	Type of tinning used for ducts	Not Applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not Applicable
	d)	How the lagging is secured?	Not Applicable
	e)	If false ceiling is there?	Not Applicable
	f)	Material used for false ceiling	Not Applicable
	g)	Is a separate AHU being provided in each floor	Not Applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not Applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not Applicable
	j)	Will fire dampers be provided in AC duct?	Not Applicable
63	Is there any standby source of electric supply being provided?		No DG is available
	Is the back supply automatic?		No DG is available
64	Location of switch- gears and transformers		No Transformer is available
65	a)	Transformer capacity	Not Applicable
66.	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not Applicable
67.	c)	If outside, how far is it from the building?	Not Applicable
68.	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Not Applicable
69.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Not Applicable
70.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		NO
71.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not Applicable
72.	Whether natural ventilation is relied upon? If so, give details.		Yes
73.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		NO
74.	Whether mechanical ventilation is being coupled with automatic detection system?		NO
75.	Whether the refuge area is being provided?		No

76.	Storage of combustibles materials near electrical equipment/fuse units.	No
77.	RCCBs available??	No
78.	Master switch in warehouses	Not Applicable
79.	Proper cable joint procedures as per manufacturer	Yes
80.	Earthing Pit Tested??	NO
81.	Use of MCB??	Yes
82.	Bypassing of protection devices	NO
83.	Deteriorated insulation	NO
84.	Selection, deployment of PFFs (Portable Fire Extinguishers)	NO
85.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Not Applicable
86.	Tracking possibility	Yes
87.	Unused opening in the panels, etc.	NO
88.	Possibility of ground fault/short circuit	NO
89.	Mechanical protection to cables	YES
90.	Loose terminations due to improper supports, crimping	NO
91.	Improper gland installation, wrong lug size	NO
92.	Over-rated uses, wrongly set protection relays, etc.	NO
93.	Switch yard and sub station	Not Applicable
94.	DG operation and maintenance	NO
95.	Reliability of the fire hydrant system	Not applicable
96.	Emergency preparedness and response	NO
97.	Availability of Evacuation plan	NO
98.	Mock drill conducted??	NO
99.	Awareness of the people??	NO
100.	Sample basis validation of smoke detection system??	NO
101.	Condition of Lightning Arrestor	Not available
102.	Periodic test of UPS system (as applicable)	Not available
103.	Handling of electrical work by competent electrician	Yes
104.	Approval of receiving station, substation and DG	Not applicable
105.	Storage if hazardous material, chemicals?	Not applicable
106.	Use of signage?	NO
107.	Hydrants clear, access to public thorough fare open	Not applicable
108.	Flame & work permits (as applicable)	Not applicable
109.	Effective internal communication and public address system	NO
110.	Colour coding system of hazardous chemical gas lines etc.	Not applicable
111.	Management structure, role of safety officer, fire department etc.	NO
112.	Procedure for incident investigation and control	NO

PART- VI

Other Information

113.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No
114	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
	Is Trade License available??	No
115	Name of the Insurance Company	No
116	Remarks (if any) Fire Pumps,MCP , Fire alarm, Intelligent panel, smoke detectors are installed recently, but not yet in operation for want of Proper Electricity. Owner is after WBSedCL for installation of a transformer & enhances the available current to run the fire installation.	

Reviewer

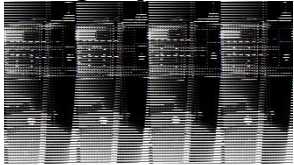
Auditor

Signature& date of Inspecting and Reporting Authority With seal

NDITA

Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	No Fire Mock drill has been conducted	Fire mock drill is to be conducted periodically. Record is to be maintained
	No Evacuation drill has been conducted	Evacuation drill with all occupants is to be conducted periodically. Record is to be maintained
	NO MCP, Smoke detector are found operational	MCPs are to be put into operation
	No Nozzle available with Fire Hose 	Nozzle is to be put in FHC

	Intelligent panel is off 	Intelligent panel is to be put in operation
	Fire pump pressure is Zero as it is not running 	Fire pumps to be run for 24 Hrs in auto mode
	No trained fire fighting men are available	Trained Fire Fighting personnel are to be deployed
	No Lightning arrestor is found	Lightning arrestor is to be installed
	No pressure gauge is available at the top	Pressure Gauge is to be installed
	No Emergency procedure is available	Emergency Procedure to be made

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

ALIAH UNIVERSITY



EXECUTIVE SUMMARY

Part I & II

General Information

The building is situated at EN 69, at sector V , Salt lake, Kolkata 700091.

This building is in 5 Kattah of land. Build up area 6600 sq. ft. It is G + 5 Floor

The whole building is rented to Aliah University

There is no central AC system in the building.

OC(Occupational Certificate) is not available

Provisional NOC from WBF & ES has been obtained recently.

Estimated Occupancy Load was found as

Existing	--	105
Floating	--	10

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are two stair cases available. There is one Lift available. With communication & fire control switch.

Evacuation Drill at has not been conducted

There is no Signage available in the building

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is Wet riser, Smoke detector, Sprinkler, MCps, But the intelligent panel was found shut off. Fire pumps were found not working. It was informed they are waiting for enhancing the Electrical power to run the fire pumps

No fire extinguishers are available.

There is an underground 50000 ltr capacity. There is one riser in the building.

There is Sprinkler system is available

Alternate source of water is the Water body approx 500 mtr away

PART V

ELECTRICAL FIRE HAZARDS

There is no RCCBELCB in the distribution board

Earth pits were not found marked and tested.

Generally no combustible material is stored in the premises ,near the Electrical installation

There is No DG supply available as an alternate source of power supply

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	EN 69	
2.	Premises Name (if any):	None	
3.	Name of the owner /occupier/lessee	Swapn Kr Saha	
4.	Permanent Address	EN 69, Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	MrSwapn Kr Saha	
7.	Phone No of Contact Person	98300 93012	
8.	E-mail	Calcuttaoversees2010@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational ☐
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	5 Cottah	
11.	Build up area(as informed to the Auditor)	6600 Sqft	
12.	No of Floors	G+5	
13.	Date of Sanction of Building Plan	Date→Not available	
14.	Whether P.O.C/OC received from local body?	No	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Own	E.A.T.S
16.	No of Security Personnel engaged	1	2
17.	Whether Records of Vehicles (No & type entering into the building are kept	NO	
18.	Whether records of Visitors entering into the building are kept	NO	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	NO	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	NIL	
22.	No of Vehicles for which parking space is available in the premises	5	
23.	Whether parking space available for visitors within the premises	NO	

24	Place where excess vehicles (if any) are parked	NO
GENERAL MAINTENANCE		
25	Garbage Clearing	NDITA Garbage clearing system
26	Drainage System	Connected to NDITA Drainage system
27	Maintenance of Road	Internal Road maintained by owner
TELEPHONE TOWER		
28	No of Towers	NIL
29	Statutory Clearance from AAI	Not applicable
30	Any Other Clearance	Not applicable

PART - II

31	Occupancy load	(Attach floor wise details separately if required)						
	Existing	Gr	1	2	3	4	5	Total
	a)Regular	20	20	20	20	20	5	105
	b)Floating							10
32	Basement	NIL						
	a) If basement extends beyond building profile	Not Applicable						
	b) Use of the basement	Not Applicable						
	c) Is it being sprinklered?	Not Applicable						
	d) Whether any cubicles present in the basement?	Not Applicable						
	If yes, their use to be specified	Not Applicable						
	f) Whether fire zones are defined?	Not Applicable						
	If yes, please provide details	Not Applicable						

Part- III

Provisions of means of escape

33	Number of staircases --→ TWO		
	Stairs Number	#1	#2
	a) Width of flight	1390 mm	1390 mm
	b) Tread width	260 mm	260 mm
	c) Riser Height	165 mm	165 mm
	d) Finish	Marble	Marble
	e) Width of stair door (FCD)	NIL	NIL
	f) Height of stair head room	3048 mm	3048 mm
	g) Height of stair handrail	920 mm	920 mm
	h) Area & location & profile of Fire Refuge Area	NIL	
	i) Width and type of door leading to Fire refugee area	NOT APPLICABLE	
	J) Pressurization of staircase	No	
	k) Segregation of staircase	Yes	

34	Number of Lifts installed→ ONE		
	Lift-Numbers		#1
	a)	Type of door	Metallic
	b)	Fire resistance rating	2 Hrs
	c)	Area of lift car	1110 mm X 1300 mm
	d)	Capacity (no of persons)	8 Persons
	e)	Capacity(in kg)	544
	f)	Company	OTIS
	g)	Is communication system, installed in the lift car?	Yes
	h)	Is a fireman's switch being installed in the car?	Yes
	i)	Pressurization of lift	No
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	No
35	Presence of proper signage in all the exit route		No
36	Is it posted with illuminated signage ?		No
37	Whether it is landing to fire assembly point?		No
38	Any form of Public address system available ?		No
39	Width form of internal road within the Premises ?		4500 mm
40	Width of the Entry / exit of Gate		4670 mm
41	Height of the Entry / exit of Gate		Open to Sky

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available ? (at ground level / overhead)		Yes	U/G50000Ltr O/H6000 Ltr
	a)	If yes, specify the distance from the building	Adjacent to the building	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	None	
	c)	Specify the condition of the reservoir	Satisfactory	
43	Is any public or other water storage facility available nearby ?		Yes	Specify the distance from the building 800 mtr
	a)	Is it readily accessible ?	Yes	Condition and type of the reservoir Water body
44	Are internal hydrants being provided ?		Yes	Single outlets.
	If so, please indicate no of hydrants in each floor		Single	
45	Are first aid hose reels being provided? If so please indicate		Yes	No of hose reels on each floor : One
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel: 25 mm, 30 mtr
	b)	Size (bore) and type of nozzle fitted to each hose reel	5mm , jet type	

46	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	Type of hose: Canvas Size of hose: 63 mm Length of hose: 15 Mtr
	a)	Total no of hoses provided near each hydrant	One	
47	Have wet risers/dry risers been provided?		Yes- Wet Riser	
	If yes, please indicate the number of risers and internal diameter of each		One, 150 mm	
48	Has any down comer been provided? If so, please give details		No	
49	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes	
	a)	Number of pumps	4 nos	
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction: 150 mm Delivery: 150 mm Output of each pump: 2400 mm Max head against which the pump can operate at the output mentioned in: 70 mtr	
	e)	Is the pump automatic in action?	Installed not yet started	
	f)	Is the water pressure sufficient at max distance from the pump?	Not applicable	
50.	Sprinkler system		Yes	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes	
	a)	Type of detectors used	Smoke detector	
51	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes, but operation has not started yet	
52	Alarm receiving system		Yes, but operation has not started yet	
53	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		No Fire Extinguisher is available Not applicable Not applicable	
54	Location and population of the FEs adequate		Not applicable	
55	Are Emergency Fire Alarm being provided in each floor?		Yes	No. of Fire Alarm: one Location of Fire Alarm: in each floor, But not in operation
56	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		No	
57	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?		No	

58	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available
59	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available
60	Status of NOC from WBF&ES	Not available

Part-V

Electrical, Cables and Ventilation

61	If the building is Centrally air –conditioned, please indicate,	No Central AC is available
	a) Material used for construction of ducts and its fittings	Not Applicable
	b) Type of tinning used for ducts	Not Applicable
	c) Type of lagging used, if any for insulating any portion of the duct	Not Applicable
	d) How the lagging is secured?	Not Applicable
	e) If false ceiling is there?	Not Applicable
	f) Material used for false ceiling	Not Applicable
	g) Is a separate AHU being provided in each floor	Not Applicable
	H) Whether automatic shutdown of AHU is coupled with detection system?	Not Applicable
	i) Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not Applicable
	j) Will fire dampers be provided in AC duct?	Not Applicable
62	Is there any standby source of electric supply being provided?	No DG is available
	Is the back supply automatic?	No DG is available
63	Location of switch- gears and transformers	No Transformer is available
64	a) Transformer capacity	Not Applicable
	b) If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not Applicable
	c) If outside, how far is it from the building?	Not Applicable
65	What precautions will be taken to prevent a possible fire in the transformers from spreading?	Not Applicable
66	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Not Applicable
67	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	NO
68	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not Applicable
69	Whether natural ventilation is relied upon? If so, give details.	Yes
70	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO
71	Whether mechanical ventilation is being coupled with automatic detection system?	NO

72.	Whether the refuge area is being provided?	No
	Storage of combustibles materials near electrical equipment/fuse units.	No
73.	RCCBs available??	No
74.	Master switch in warehouses	Not Applicable
75.	Proper cable joint procedures as per manufacturer	Yes
76.	Earthing Pit Tested??	NO
77.	Use of MCB??	Yes
78.	Bypassing of protection devices	NO
79.	Deteriorated insulation	NO
80.	Selection, deployment of PFFs (Portable Fire Extinguishers)	NO
81.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Not Applicable
82.	Tracking possibility	Yes
83.	Unused opening in the panels, etc.	NO
84.	Possibility of ground fault/short circuit	NO
85.	Mechanical protection to cables	YES
86.	Loose terminations due to improper supports, crimping	NO
87.	Improper gland installation, wrong lug size	NO
88.	Over-rated uses, wrongly set protection relays, etc.	NO
89.	Switch yard and sub station	Not Applicable
90.	DG operation and maintenance	NO
91.	Reliability of the fire hydrant system	Not applicable
92.	Emergency preparedness and response	NO
93.	Availability of Evacuation plan	NO
94.	Mock drill conducted??	NO
95.	Awareness of the people??	NO
96.	Sample basis validation of smoke detection system??	NO
97.	Condition of Lightning Arrestor	Not available
98.	Periodic test of UPS system (as applicable)	Not available
99.	Handling of electrical work by competent electrician	Yes
100.	Approval of receiving station, substation and DG	Not applicable
101.	Storage of hazardous material, chemicals?	Not applicable
102.	Use of signage?	NO
103.	Hydrants clear, access to public thorough fare open	Not applicable
104.	Flame & work permits (as applicable)	Not applicable
105.	Effective internal communication and public address system	NO
106.	Colour coding system of hazardous chemical gas lines etc.	Not applicable
107.	Management structure, role of safety officer, fire department etc.	NO
108.	Procedure for incident investigation and control	NO

PART- VI

Other Information

110	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No
111	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
112	Is Trade License available??	No
113	Name of the Insurance Company	No
114	Remarks (if any) Fire Pumps , MCP , Fire alarm, Intelligent panel, smoke detectors are installed recently, but not yet in operation for want of Proper Electricity. Owner is after WBSedCL for installation of a transformer & enhance the available current to run the fire installation.	

Reviewer

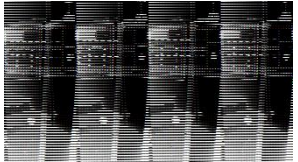
Auditor

Signature& date of Inspecting and Reporting Authority With seal

NDITA

Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	No Fire Mock drill has been conducted	Fire Mock Drill is to be conducted periodically, Record to be maintained
2	No Evacuation drill has been conducted	Evacuation drill is to be conducted with all occupants periodically. Record is to be maintained
3	NO MCP, Smoke detector are found operational	MCPs are to be made operational
4	No Nozzle available with Fire Hose 	Nozzles are to be kept in FHC

5	Water connection pipe to Hose reel is badly bend to restrict the water supply to the Hose reel 	Water connection should not have any kink to arrest the flow of water
6	Emergency Stair is jammed with Chairs 	Emergency Exit should be kept free always
7	Intelligent panel is off 	Intelligent panel should be set right
8	Fire pump pressure is Zero as it is not running 	Fire pumps should run for 24 Hrs in auto mode
9	No trained fire fighting men are available	Trained firefighting personnel to be deployed
10	No Lightning arrestor is found	Lightning arrestor is to be installed
11	No pressure gauge is available at the top	Pressure gauge at the top is to be installed
12	No Emergency procedure is available	Emergency response plan is to be made

Reviewer

Auditor

Signature & date Inspecting and Reporting Authority With seal

**ANTHROPOLOGICAL SURVEY
OF
INDIA**



EXECUTIVE SUMMARY

Part I & II

General Information

Anthropological Survey of India is situated at EN-79, Sector V, Salt Lake, Kolkata 700091 ,The structure is G + 2 in total 5 Acres of land.

There is no central AC system in the building

OC(Occupational Certificate)is not available

NOC from WBF & ES is not available.

Occupancy Load was found as

Existing -- 31

Floating -- 10

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are Two Staircase available . There is no Lift available. There is no refuse area because of height of the building is G+2 only.

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is only portable fire extinguishers.At ground floor there are smoke detectors & at 2nd floor there are MCPs

There is no Fire pump as there are no Fire Hydrant system

There is no Sprinkler system

Alternate source of water is the Water body approx 800 mtr away

Buildings are equipped with Fire detection system like smoke detectors at ground floor which is not found working.

6Nos Portable fire extinguishers are found deployed but the dates have expired

MCPs are not working. control panel was found out of order

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is one DG supply available

PART VI

OTHER INFORMATION

NIL

NDITA- FIRE SURVAY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EN 79	
2.	Premises Name (if any):	Anthropological Survey of India	
3.	Name of the owner /occupier/lessee	Govt of India	
4.	Permanent Address	EN7 9,Sector-V salt lake city, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Lease hold	
6.	Name of the Contact Person	T.K.Manna	
7.	Phone No of Contact Person	94321 o8882	
8.	E-mail	NIL	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational
			Institutional ☐
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	5.0 Acres	
11.	Build up area(as informed to the Auditor)	Not Available	
12.	No of Floors	G+2	
13.	Date of Sanction of Building Plan	Not Availabe	
14.	Whether P.O.C/OC received from local body?	Not Available	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Biswas Security Agencies	
16.	No of Security Personnel engaged	12	
17.	Whether Records of Vehicles (No & type entering into the building are kept	NO	
18.	Whether records of Visitors entering into the building are kept	NO	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	NO	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	One	
22.	No of Vehicles for which parking space is available in the premises	6Nos	
23.	Whether parking space available for visitors within the premises	YES	
24.	Place where excess vehicles (if any) are parked	Outside Road	

GENERAL MAINTENANCE		
25.	Garbage Clearing	NDITA Garbage clearing system
26.	Drainage System	Connected to NDITA Drainage system
27.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	Not applicable
30.	Any Other Clearance	Not applicable

PART - II

V= Vacant

31.	Occupancy load	(Based on Estimates)			
	Existing	G	1	2	Total
	a)Regular	4	25	2	31
	b)Floating				10
32.	Basement	NO			

Part- III

Provisions of means of escape

33.	Number of staircases --→TWO NOS			
	Stairs Number		#1	#2
	a)	Width of flight	1420 mm	1420 mm
	b)	Tread width	330 mm	330 mm
	c)	Riser Height	140 mm	140 mm
	d)	Finish	Marble	Marble
	e)	Width of stair door (FCD)-	NIL	NIL
	f)	Height of stair head room	11'	11'
	g)	Height of stair handrail	930 mm	930 mm
	h)	Area & location & profile of Fire Refuge Area	NIL	
	i)	Width and type of door leading to Fire refugee area	NIL	
	j)	Pressurization of staircase	NO	
	k)	Segregation of staircase	YES	
34.	Number of Lifts installed→NIL			
	Lift-Numbers			
	a)	Type of door	Not applicable	
	b)	Fire resistance rating	Not applicable	
	c)	Area of lift car	Not applicable	
	d)	Capacity (no of persons)	Not applicable	
	e)	Capacity(in kg)	Not applicable	
	f)	Company	Not applicable	
	g)	Is communication system, installed in the lift car?	Not applicable	
	h)	Is a fireman's switch being installed in the car?	Not applicable	
	i)	Pressurization of lift	Not applicable	
	j)	Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Not applicable	

35.	Presence of proper signage in all the exit route	NO
36.	Is it posted with illuminated signage ?	NO
37.	Whether it is landing to fire assembly point?	None
38.	Any form of Public address system available ?	NO
39.	Width form of internal road within the Premises ?	3800 mm
40.	Width of the Entry / exit of Gate	3800 mm
41.	Height of the Entry / exit of Gate	Open to sky

PART IV

Provision of Fire Safety Arrangement

42.	Is any water reservoir for firefighting available? (at ground level / overhead)	Yes	U/G No Fire Tank O/H Not availble
	a) If yes, specify the distance from the building		Not applicable
	b) If yes, specify the capacity (in litres)as approved by WBF & ES.		Not applicable
	c) Specify the condition of the reservoir		Not applicable
43.	Is any public or other water storage facility available nearby ?	Yes	■specify the distance from the building ----800 Mtr
	a) Is it readily accessible ?	Yes	■condition and type of the reservoir—Water body
44.	Are internal hydrants being provided ?		No
	If so, please indicate no of hydrants in each floor		Not applicable
45.	Are first aid hose reels being provided ? If so please indicate		No
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?		Not applicable
	b) Size (bore) and type of nozzle fitted to each hose reel		Not applicable
46.	Are fire hoses being provided near each hydrant? If so, please indicate		NO
	a) Total no of hoses provided near each hydrant		Not applicable
47.	Have wet risers/dry risers been provided?		NO
48.	If yes, please indicate the number of risers and internal diameter of each		Not applicable
49.	Has any down comer been provided? If so, please give details		No
50.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Not applicable
	a) Number of pumps		Not applicable
	b) Size of suction and delivery connection to each pump/Output/Head		Not applicable
	c) Is the pump automatic in action?		Not applicable
	d) Is the water pressure sufficient at max distance from the pump?		Not applicable

51.	Sprinkler system	NO		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	YES, Smoke detectors at ground floor only		
	a) Type of detectors used	Addressable smoke detectors		
52.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	YES at Ground & 2 nd floor only		
	a) Alarm receiving system	Yes		
53.	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Yes Expired	Number of FE	6 nos
	Location	At Ground floor, 2 nd floor & Electrical Installations		
54.	Are Emergency Fire Alarm being provided in each floor ?	YES only in 2 nd floor		
55.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	None		
56.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min twice a year)?	No record is available		
57.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
58.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
59.	Status of NOC from WBF&ES	Not available		

Part-V

Electrical, Cables and Ventilation

60.	If the building is Centrally air -conditioned, please indicate,	No Central AC
	a) Material used for construction of ducts and its fittings	Not applicable
	b) Type of tinning used for ducts	Not applicable
	c) Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d) How the lagging is secured?	Not applicable
	e) If false ceiling is there?	Not applicable
	f) Material used for false ceiling	Not applicable
	g) Is a separate AHU being provided in each floor	Not applicable
	H) Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i) Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j) Will fire dampers be provided in AC duct?	Not applicable

61.	Is there any standby source of electric supply being provided?		YES. DG of 125 KVA 2 nos
	Is the back supply automatic?		NO. Operates manually
62.	Location of switch- gears and transformers		Out side
63.	a)	Transformer capacity	2nos. of 400Kva oil cool Transformer.
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable
	c)	If outside, how far is it from the building?	Far Away from Main building
64.	What precautions is taken to prevent a possible fire in the transformers from spreading?		Fire Extinguishers but dates are expired
65.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		No Shafts
66.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		NO
67.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable
68.	Whether natural ventilation is relied upon? If so, give details.		Yes
69.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		NO
70.	Whether mechanical ventilation is being coupled with automatic detection system?		Not applicable
71.	Whether the refuge area is being provided?		NO
72.	Storage of combustibles materials near electrical equipment/fuse units.		NO
73.	RCCBs available??		None found
74.	Master switch in warehouses		NO
75.	Proper cable joint procedures as per manufacturer		YES
76.	Earthing Pit Tested??		Records are not available
77.	Use of MCB??		NO
78.	Bypassing of protection devices		None found
79.	Deteriorated insulation		None found
80.	Selection, deployment of PFFs (Portable Fire Extinguishers)		YES
81.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)		Not applicable
82.	Tracking possibility		Yes
83.	Unused opening in the panels, etc.		None found
84.	Possibility of ground fault/short circuit		None found
85.	Mechanical protection to cables		Yes.
86.	Loose terminations due to improper supports, crimping		None found

87.	Improper gland installation, wrong lug size	None found.
88.	Over-rated uses, wrongly set protection relays, etc.	NO Protection relay
89.	Earthing layout & it's effectiveness	Not available
90.	Switch yard and sub station	No
91.	DG operation and maintenance	YES
92.	Reliability of the fire hydrant system	YES
93.	Emergency preparedness and response	None found
94.	Availability of Evacuation plan	None found
95.	Mock drill conducted??	No record is available
96.	Awareness of the people??	Poor
97.	Sample basis validation of smoke detection system??	No record found
98.	Storage if hazardous material, chemicals??	NO
99.	Use of signage??	NO
100.	Hydrants clear, access to public thorough fare open	YES
101.	Flame & work permits (as applicable)	None found
102.	Effective internal communication and public address system	YES
103.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
104.	Management structure, role of safety officer, fire department etc.	NO
105.	Procedure for incident investigation and control	NO

PART- VI

Other Information

106.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	None found as no NOC is available
107.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
108.	Is Trade License available??	Not available
109.	Name of the Insurance Company	Information not available
110.	Remarks (if any) 36. No assembly point is identified 37. No record of fire Mock drill & Evacuation is available 38. There is no signage is available for the Emergency Exit 39. No record of validation of smoke detector is available 40. No NOC from WBFES is found available 41. Tank oil level came down below minimum level. Of both the transformers 42. No Earth pit was marked & earth pit test record not found 43. HT Switch gear room door could not be opened. There is a big crack on the wall of sub station 44. Intelligent panel is not working in the main building 45. No knowledge of Intelligent panel is found amongst the Security personnel 46. In the pump room there are lots of loose wiring 47. All the Fire extinguishers are found invalid	

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	No assembly point is identified	Assembly point is to be identified
2.	No Earth pit was marked & earth pit test record not found	
3.	No record of fire Mock drill & Evacuation is available	Records are to be maintained
4.	There is no signage is available for the Emergency Exit	Proper Illuminated signage to be provided for the emergency route
5.	No record of validation of smoke detector is available	Smoke detectors are to be validated periodically. Records are to be kept
6	No NOC from WBFES is found available	NOC from WBFES is to be obtained
7	Tank oil level came down below minimum level. Of both the transformers	These are to be serviced
8	HT Switch gear room door could not be opened. There is a big crack on the wall of sub station	Wall is to repaired immediately
9	Intelligent panel is not working in the main building	Intelligent Panel is to be set right
10	No knowledge of Intelligent panel is found amongst the Security personnel	Training is to be provided on how to handle the panel's signal
11	In the pump room there are lots of loose wiring	All loose wires are to be dressed
12	All the Fire extinguishers are found invalid	Fire Extinguishers are to be refilled immediately

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

**VOCATIONAL
REHABILITATION CENTRE
FOR
HANDICAPPED**



EXECUTIVE SUMMARY

Part I & II

General Information

VRCH (Vocational Rehabilitation Centre for Handicapped) is situated at EN 81, Sector V Salt Lake City, Pin: 700091. The structure is only Ground floor + 1st floor in total land of 3 Acres. The handing over has not yet been completed by PWD.

Lease of the property is taken by Govt of India, Ministry of Labour & Employment DGE & T, New Delhi. The architectural design has been done as per International Standards for Physically impaired person.

NOC of Fire is Not available

OC (Occupation Certificate) is not available

Occupancy Load was found as

	Existing -- 100
Floating -- 25	

Part III

PROVISION OF MEANS OF ESCAPE

There are 3 Nos. stairs at the main office & 3 Nos. stairs at the Hostel. There are 2 Nos. Lifts at main office & two nos. lifts at the Hostel. There is all-round ramp from the ground floor to 1st floor of both the main office and the hostel

No Evacuation Drill has been conducted so far.

There is Signage available in the EXIT Route in both buildings

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers only.

MCPs along with intelligent panel is available

Alternate source of water is the Water body approx 1000 mtr away from the building.

99 Nos Portable fire extinguishers are found deployed at the Building.

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises ,near the Electrical installation.

The building has a DG-set of 125 KVA as alter source of power.

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE INSPECTION CHECKLIST

General Information

PART – I

1.	Plot No/Premises No:	EN 81	
2.	Premises Name (if any):	Vocational Rehabilitation Centre for Handicapped	
3.	Name of the owner /occupier/lessee	Govt of India Ministry of Labour& Employment DGE&T , New Delhi	
4.	Permanent Address	EN 81,Sector-V salt lake city, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Lease Hold	
6.	Name of the Contact Person	MsD.N.Gaitry	
7.	Phone No of Contact Person	9477635249	
8.	E-mail	Vrchkol.wbl@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional ☐
			Assembly
			Business
			Mercantile
			Industrial
			Storage
10.	Plot Area(as informed to the Auditor)	3.0 Acres	
11.	Build up area(as informed to the Auditor)	Not Available. Handing over process is not yet completed	
12.	No of Floors	G+1	
14.	Date of Sanction of Building Plan	Not available	
15.	Whether P.O.C/OC received from local body?	Not available	
SECURITY SETUP DETAILS			
17.	Name of the SECURITY AGENCY engaged	Confident Security Agency	
18.	No of Security Personnel engaged	6(all Ex-servicemen)	
19.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
20.	Whether records of Visitors entering into the building are kept	Yes	
21.	Whether Metal detectors are used at the entry point	NO	
22.	Whether Monitoring System through Close circuit TV available	No	
VEHICLES VOLUME			
23.	No of Vehicles Engaged by the Organisation	One	
24.	No of Own Vehicles engaged by Employees	NIL	
25.	No of Vehicles for which parking space is available in the premises	3Nos	
26.	Whether parking space available for visitors within the premises	Yes	

27	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
28	Garbage Clearing	NDITA Garbage clearing system
29	Drainage System	Connected to NDITA Drainage system
30	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
31	No of Towers	NIL
32	Statutory Clearance from AAI	Not applicable
33	Any Other Clearance	Not applicable

PART – II

34	Occupancy load	(Based on estimates))		
	Existing	G	1	Total
	a)Regular	30	70	100
	b) Floating			25
36	Basement	NIL		

Part- III

Provisions of means of escape

37	Number of staircases --→ Six Nos in both the buildings			
	Stairs Number		Main #1 to #3	Hostel #4 to #6
	a)	Width of flight	1750 mm	1380 mm
	b)	Tread width	290 mm	300 mm
	c)	Riser Height	160 mm	150 mm
	d)	Finish	Kota stone	Kota Stone
	e)	Width of stair door (FCD)	1720 mm	1720 mm
	f)	Height of stair head room	10 Ft	10 ft
	g)	Height of stair handrail	920 mm	780 mm
	h)	Area & location & profile of Fire Refuge Area	NIL	
	i)	Width and type of door leading to Fire refugee area	NIL	
	J)	Pressurization of staircase	NIL	
	k)	Segregation of staircase	Yes	
38	Number of Lifts installed→2nos			
	Lift-Numbers	NIL	#1& #2	#3 & #4
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2 Hrs	2 hrs
	c)	Area of lift car	1120 mm X 1320 mm	O/C
	d)	Capacity (no of persons)	8	13
	e)	Capacity(in kg)	544	
	f)	Company		
	g)	Is communication system, installed in the lift car?	Emergency Bell is available only	
	h)	Is a fireman’s switch being installed in the car?	None	
	i)	Pressurization of lift	NO	
	j)	Whether validity of “Form-C” from appropriate authority obtained?	Not applicable	

		(If yes, attach a photocopy of the same)	
39	Presence of proper signage in all the exit route		YES
40	Is it posted with illuminated signage ?		YES
41	Whether it is landing to fire assembly point?		Fire assembling point is not identified
42	Any form of Public address system available ?		NO
43	Width form of internal road within the Premises ?		4860 mm
44	Width of the Entry / exit of Gate		4860 mm
45	Height of the Entry / exit of Gate		Open to sky

PART IV

Provision of Fire Safety Arrangement

46	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G No Fire Tank O/HNA
	a)	If yes, specify the distance from the building	NA	
	b)	If yes, specify the capacity (in litres) as approved by WBF & ES.	None	
	c)	Specify the condition of the reservoir	Not available	
47	Is any public or other water storage facility available nearby?		Yes	■ specify the distance from the building ---- 1000 Mtr
	a)	Is it readily accessible?	Yes	■ condition and type of the reservoir—Water body
48	Are internal hydrants being provided ?		NO	
	If so, please indicate no of hydrants in each floor		Not applicable	
49	Are first aid hose reels being provided ? If so please indicate		NO	
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	NO	
	b)	Size (bore) and type of nozzle fitted to each hose reel	Not applicable	
50	Are fire hoses being provided near each hydrant? If so, please indicate		No	
	a)	Total no of hoses provided near each hydrant	Not applicable	
51	Have wet risers/dry risers been provided?		NO	
52	If yes, please indicate the number of risers and internal diameter of each		Not applicable	
53	Has any down comer been provided? If so, please give details		No	
54	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		NO	
	a)	Number of pumps	Not applicable	
	b)	Size of suction and delivery connection to each pump/Output/Head	Not applicable	
	e)	Is the pump automatic in action?	Not applicable	
	f)	Is the water pressure sufficient at max distance from the pump?	Not applicable	

55.	Sprinkler system	NO		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	NO		
	a) Type of detectors used	Not applicable		
56	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	Yes		
	a) Alarm receiving system	Yes		
57	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Yes 10. 9.1 3 —	Number of FE Type/ Capacity Co2(4.5 Kg)----- ABC(5Kg)----- P(25 Kg)	9 9 N os 5 8 n os · 3 8 N os · 3 N os
	Location	At Lobby, Stair & Hostel, Electrical Installation		
59	Are Emergency Fire Alarm being provided in each floor ?	■Yes s —	■No. of Fire Alarm15 nos ■Location of Fire Alarm in the lobby	
60	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	NO		
61	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	NO		
62	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
63	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
64	Status of NOC from WBF&ES	Not available		

Part-V

Electrical, Cables and Ventilation

67	If the building is Centrally air –conditioned, please indicate,		No Central AC
	a)	Material used for construction of ducts and its fittings	Not applicable
	b)	Type of tinning used for ducts	Not applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d)	How the lagging is secured?	Not applicable
	e)	If false ceiling is there?	Not applicable
	f)	Material used for false ceiling	Not applicable
	g)	Is a separate AHU being provided in each floor	Not applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j)	Will fire dampers be provided in AC duct?	Not applicable
68	Is there any standby source of electric supply being provided?		Yes DG Capacity 125 KVA
	Is the back supply automatic?		Yes Specify the functions that can be maintained simultaneously by such back ups ■Emergency Light☐ ■Lift☐ ■Office & Hostel☐
70	Location of switch- gears and transformers		NO Transformer
71	a)	Transformer capacity	Not applicable
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable
	c)	If outside, how far is it from the building?	Not applicable
72	What precautions is taken to prevent a possible fire in the transformers from spreading?		Not applicable
73	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Not applicable
74	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		NO
75	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable
76	Whether natural ventilation is relied upon? If so, give details.		Yes
77	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		NO
78	Whether mechanical ventilation is being coupled with automatic detection system?		Not applicable

79	Whether the refuge area is being provided?	No
81	Storage of combustibles materials near electrical equipment/fuse units.	
82	RCCBs available??	No
83	Master switch in warehouses	NO
84	Proper cable joint procedures as per manufacturer	YES
85	Earthing Pit Tested??	Records are not available
86	Use of MCB??	yes
87	Bypassing of protection devices	NO
88	Deteriorated insulation	NO
89	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
90	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Not applicable
91	Tracking possibility	Yes
92	Unused opening in the panels, etc.	No
93	Possibility of ground fault/short circuit	NO
94	Mechanical protection to cables	YES
95	Loose terminations due to improper supports, crimping	None found
96	Improper gland installation, wrong lug size	None Found
97	Over-rated uses, wrongly set protection relays, etc.	None Found
100	Earthing layout & it's effectiveness	Not available
101	Switch yard and sub station	No
103	DG operation and maintenance	YES
104	Reliability of the fire hydrant system	NO
105	Emergency preparedness and response	NO
106	Availibilty of Evacuation plan	NO
107	Mock drill conducted??	NO
108	Awareness of the people??	Poor
109	Sample basis validation of smoke detection system??	Not applicable
110	Storage if hazardous material, chemicals??	NO
111	Use of signage??	YES. Brail systems are there for indication
112	Hydrants clear, access to public thorough fare open	Not applicable
113	Flame & work permits (as applicable)	Not applicable
114	Effective internal communication and public address system	No public address system
115	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
116	Management structure, role of safety officer, fire department etc.	NO
117	Procedure for incident investigation and control	NO

PART- VI

Other Information

118.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	■No
119	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
	Is Trade License available??	No
120	Name of the Insurance Company	NO
121	Remarks (if any)	

Signature& date of Inspecting and Reporting Authority With seal

NDITA

Nonconformity tracking report

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1	NIL	
2		

Signature & date Inspecting and Reporting Authority With seal

SOUTH CITY PINNACLE



EXECUTIVE SUMMARY

Part I & II

General Information

SOUTH CITY PINNACLE promoted by South City Projects Kolkata Ltd is situated at EP 11/1, Sector V, Salt Lake, Kolkata 700091 the plot area is around 4050 Sq. Mt & the built up area is approx. 10292.50 Sq. Mtr

It has two tier garages in each floor from basement to 3rd floor. From 4th floor to 13th floor these floors are rented to tenants.

Building sanction plan obtained on 20.7.2008

Clearance Certificate obtained on 10.9.2010 from NDITA

Last NOC from WBF & ES (Ref No WBFES/1069/Bidhan-Ins /B/87/02(423) valid up to 26.2.2004

Estimated Occupancy Load was found as

	Existing -- 400
Floating -- 100	

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are Eight two staircases available &. Eight nos Lifts available, including a service lift.. There is refuse areas at 6/7th, 9/10th, 11/12th floor in the building .

No evacuation drill/mock drill was found conducted Last done on 12.1.13

There are signages available in each floor

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers & wet risers, Sprinklers, smoke detectors. But all these are found working.

Wet Riser

There is an underground tank of 130000 ltr capacity For Fire only. There are three nos pumps housed in a separate building. Main pump capacity is 125 HP & that of Jockey pump is of 15 HP There is a stand by pump.

Alternate source of water is the Water body approx 800 mtr away from the building.

PAS is available

Close circuit TV monitoring is available

Total 105 Nos fire extinguishers are found deployed at different places of the buildings

Intelligent panels is in operation

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB but RCCB found at the distribution board

Generally no combustible material is stored in the premises, near the Electrical installation

There is a D-G set in the Building. Transformer & switch gear are in side separate building

There is a central AC working in the building. AHUs are found coupled with the smoke detectors

PART VI

OTHER INFORMATION

This building is insured with L & T.

NDITA-FIRE SURVAY AND SEFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EP 11/1	
2.	Premises Name (if any):	SOUTH CITY PINNACLE	
3.	Name of the owner /occupier/lessee	South City Projects Kolkata Ltd	
4.	Permanent Address	EP 11/1, SectorV, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	MrSujoyGanguli	
7.	Phone No of Contact Person	98310 53430	
8.	E-mail	mail.selvaraj@rediffmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial)
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	4050 sq. Mtr.	
11.	Build up area(as informed to the Auditor)	10292.50 Sq. Mtr	
12.	No of Floors	B + G + 13	
13.	Date of Sanction of Building Plan	20.7.2008	
14.	Whether P.O.C/OC received from local body?	10.9.20101 from NDITA	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Globe Industrial Securities	
16.	No of Security Personnel engaged	25	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	Yes	
19.	Whether Metal detectors are used at the entry point	Yes	
20.	Whether Monitoring System through Close circuit TV available	Yes	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	NIL	
22.	No of Vehicles for which parking space is available in the premises	280	
23.	Whether parking space available for visitors within the premises	Yes	

24.	Place where excess vehicles (if any) are parked	Outside Road Parking area
GENERAL MAINTENANCE		
25.	Garbage Clearing	NDITA Garbage clearing system
26.	Drainage System	Connected to NDITA Drainage system
27.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	Not applicable
30.	Any Other Clearance	Not applicable

PART – II

31.	Occupancy load	(Based on Estimates)															
	Existing	B	G	1	2	3	4	5	6	7	8	9	10	11	12	13	T
	a)Regular	20	10	10	10	10	5	5	5	5	80	50	50	10	50	80	400
	b)Floating																100
32.	Basement	NIL															
	a)	If basement extends beyond building profile								YES							
	b)	Use of the basement								Car parking , Office room, Pump room							
	c)	Is it being sprinkled?								Yes,							
	d)	Whether any cubicles present in the basement?								Not applicable							
		If yes, their use to be specified								One office							
	f)	Whether fire zones are defined?								No							
		If yes, please provide details								Not applicable							

Part- III

Provisions of means of escape

33.	Number of staircases --→Three Nos		MAIN BUILDING	
	Stairs Number		#1(Main)	#2
	a)	Width of flight	1900 mm	1860 mm
	b)	Tread width	310 mm	300 mm
	c)	Riser Height	160 mm	150 mm
	d)	Finish	Kota Stone	Kota stone
	e)	Width of stair door (FCD)—Ordinary Door	1100 mm	1100 mm
	f)	Height of stair head room	15 ft	15 ft
	g)	Height of stair handrail	820mm	920 mm
	h)	Area & location & profile of Fire Refuge Area	On 6/7th,9/10th,11/12th floor	
	i)	Width and type of door leading to Fire refugee area	FCD 1080 mm	
	J)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	
	Number of staircases --□Seven Nos		#1	#2
	Stairs Number			
	a)	Width of flight	1090 mm	1330
	b)	Tread width	260 mm	320
	c)	Riser Height	160 mm	150
	d)	Finish	Kota stone	Kota stone
	e)	Width of stair door (FCD)—Ordinary Door	NIL FCD	NIL FCD
	f)	Height of stair head room	12 ft	12 ft
	g)	Height of stair handrail	750mm	890 mm
	h)	Area & location & profile of Fire Refuge Area	NIL	NIL
	i)	Width and type of door leading to Fire refugee area	NIL	NIL
	J)	Pressurization of staircase	NO	
	k)	Segregation of staircase	YES	
34.	Number of Lifts installed→2nos		Main Building	
	Lift-Numbers		#1 to 6	#Sevice Lift
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2 Hrs	2 Hrs
	c)	Area of lift car	2000 X 1600	1550 X 1350
	d)	Capacity (no of persons)	20	
	e)	Capacity(in kg)	1350	1000
	f)	Company	OTIS	OTIS
	g)	Is communication system, installed in the lift car?	Yes	Yes

	h)	Is a fireman's switch being installed in the car?	Yes	Yes
	i)	Pressurization of lift	NO	NO
	j)	Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Yes-- Valid	
35.		Presence of proper signage in all the exit route	Yes	
36.		Is it posted with illuminated signage?	Yes	
37.		Whether it is landing to fire assembly point?	Yes	
38.		Any form of Public address system available ?	Yes	
39.		Width form of internal road within the Premises?	5100 mm	
40.		Width of the Entry / exit of Gate	5640mm	
41.		Height of the Entry / exit of Gate	Open to sky	

PART IV

Provision of Fire Safety Arrangement

42.	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G130,000 ltr (Two inter connected tanks)
	a)	If yes, specify the distance from the building	Adjacent to the building.	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	No recommendation found	
	c)	Specify the condition of the reservoir	Satisfactory	
43.	Is any public or other water storage facility available nearby?		Yes	■specify the distance from the building ----800Mtr
	a)	Is it readily accessible?	Yes	■condition and type of the reservoir—Water body
44.	Are internal hydrants being provided ?		Yes	Single outlets
	If so, please indicate no of hydrants in each floor		Two	
45.	Are first aid hose reels being provided? If so please indicate		Yes	■No of hose reels on each floor-----Two in each floor
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes Separate line	■Bore and length of hose reel tubing on each reel---- - 25mm 33Mtr
	b)	Size (bore) and type of nozzle fitted to each hose reel	5 mm, Jet type	
46.	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	■Type of hose--Canvas ■Size of hose—mm ■Length of hose—15 mtr
	a)	Total no of hoses provided near each hydrant	One in hydrant point	

47.	Have wet risers/dry risers been provided?		Yes, wet riser															
	If yes, please indicate the number of risers and internal diameter of each		Two + Two, 150 mm & 100 mm															
48.	Has any down comer been provided? If so, please give details		No															
49.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes															
	a)	Number of pumps	Three (one main), one jockey-15 HP, One stand by (125 HP)															
	b)	Size of suction and delivery connection to each pump/Output/Head	■ Suction: 150mm ■ Delivery 150mm ■ Output of each pump: 110 Ltr /sec ■ Max head against which the pump can operate at the output mentioned in 105M															
	e)	Is the pump automatic in action?	Yes															
	f)	Is the water pressure sufficient at max distance from the pump?	5.5 Kg/Cm ² at the top															
50.	Sprinkler system		YES															
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes, Smoke detectors															
	a)	Type of detectors used	Addressable optical Smoke detector															
51.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes															
	a)	Alarm receiving system	Yes															
52.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		■ No ■ Yes	<table border="1"> <tr> <td>Number of FE Type/ Capacity</td> <td>105</td> </tr> <tr> <td>DCP (5 Kg)</td> <td>50</td> </tr> <tr> <td>Water (9 Ltr)</td> <td>35</td> </tr> <tr> <td>CO2 (4.5 Kgs)</td> <td>5</td> </tr> <tr> <td>Foam 50 Ltr</td> <td>1</td> </tr> <tr> <td>Foam 9 Ltr</td> <td>2</td> </tr> <tr> <td>Auto DCP (5.5 Kg)</td> <td>12</td> </tr> </table>	Number of FE Type/ Capacity	105	DCP (5 Kg)	50	Water (9 Ltr)	35	CO2 (4.5 Kgs)	5	Foam 50 Ltr	1	Foam 9 Ltr	2	Auto DCP (5.5 Kg)	12
Number of FE Type/ Capacity	105																	
DCP (5 Kg)	50																	
Water (9 Ltr)	35																	
CO2 (4.5 Kgs)	5																	
Foam 50 Ltr	1																	
Foam 9 Ltr	2																	
Auto DCP (5.5 Kg)	12																	
	Location		Stair case & in the working area															
53.	Are Emergency Fire Alarm being provided in each floor ?		■ Yes _____	■ No. of Fire Alarm – Two in each floor ■ Location of Fire Alarm— near stair case														
54.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		■ Yes															

55.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	■Yes Last done on 12.1.13
56.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available
57.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Verified
58.	Status of NOC from WBF&ES	NOC valid upto 4.4.13 Ref WBFES/DG/FP/717/12/Bidhan/IT/14-06 dated 5.4.12

Part-V

Electrical, Cables and Ventilation

59.	If the building is Centrally air - conditioned, please indicate,	■YES→ Central AC 345 TR X 3 Nos
	a) Material used for construction of ducts and its fittings	Aluminum Sheet
	b) Type of tinning used for ducts	Al Sheets
	c) Type of lagging used, if any for insulating any portion of the duct	Glass wool
	d) How the lagging is secured?	Wire mesh
	e) If false ceiling is there?	Yes
	f) Material used for false ceiling	Gypsum Board
	g) Is a separate AHU being provided in each floor	Yes. Two AHUs in each floor
	H) Whether automatic shutdown of AHU is coupled with detection system?	Yes each AHUs
	i) Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Yes
	j) Will fire dampers be provided in AC duct?	Yes
60.	Is there any standby source of electric supply being provided?	Yes DG of 1800 KVA & 11225 KVA
	Is the back supply automatic?	• Yes Specify the functions that can be maintained simultaneously by such back ups ▪ Fire Pump ☐ ▪ Emergency Light ☐ - To offices
61.	Location of switch- gears and transformers	Inside the Building

62.	a)	Transformer capacity	1600 KVA X 2 nos
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Yes
	c)	If outside, how far is it from the building?	Not applicable
63.		What precautions is taken to prevent a possible fire in the transformers from spreading?	Auto Fire Extinguishers
64.		Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Yes
65.		Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	No
66.		Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
67.		Whether natural ventilation is relied upon? If so, give details.	Yes
68.		Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO
69.		Whether mechanical ventilation is being coupled with automatic detection system?	No
70.		Whether the refuge area is being provided?	Yes on 6/7 th ,8/9 th ,12/13 th floor Area : 9700 mm X 1700 mm (W)
71.		Storage of combustibles materials near electrical equipment/fuse units.	No
72.		RCCBs available??	Yes
73.		Master switch in warehouses	Not applicable
74.		Proper cable joint procedures as per manufacturer	Yes
75.		Earthing Pit Tested??	Records are not available
76.		Use of MCB??	Yes
77.		Bypassing of protection devices	None found
78.		Deteriorated insulation	None found
79.		Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
80.		Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Yes
81.		Tracking possibility	Yes
82.		Unused opening in the panels, etc.	None found
83.		Possibility of ground fault/short circuit	None found

84.	Mechanical protection to cables	Yes
85.	Loose terminations due to improper supports, crimping	None found
86.	Improper gland installation, wrong lug size	None found
87.	Over-rated uses, wrongly set protection relays, etc.	None found
88.	Earthing layout & it's effectiveness	Yes but Earth pit test report not found
89.	Switch yard and sub station	Yes
90.	DG operation and maintenance	Yes
91.	Reliability of the fire hydrant system	yes
92.	Emergency preparedness and response	NO
93.	Availability of Evacuation plan	NO Except in the tenants premises
94.	Mock drill conducted??	Yes. Last done 12.1.13
95.	Awareness of the people??	Satisfactory
96.	Sample basis validation of smoke detection system??	Yes
97.	Storage if hazardous material, chemicals??	None found
98.	Use of signage??	Yes
99.	Hydrants access clear,	Yes
100.	Flame & work permits (as applicable)	Not applicable
101.	Effective internal communication and public address system	Yes
102.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
103.	Management structure, role of safety officer, fire department etc.	NO
104.	Procedure for incident investigation and control	NO

PART- VI

Other Information

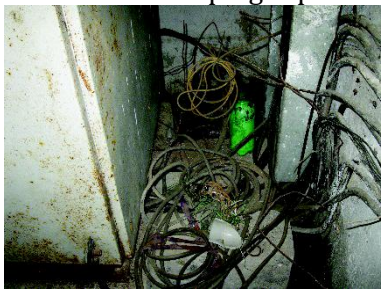
105.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	■No
106.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
107.	Is Trade License available??	Yes. CE No 003834009936 for 20012-2013
108.	Name of the Insurance Company	Yes with L & T
109.	Remarks (if any) 1. Electrical Lines in the STP room is in bad Shape. Fire hazard 2.No Evacuation plan is found displayed except in Tenants place be displayed 3. BACK SIDE OF Electrical panel in STP room House keeping is poor	

Auditor

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	Electrical Lines in the STP room is in bad Shape. Fire hazard 	Electrical Lines in the STP room needs replacement and relocation
2	No Evacuation plan is found displayed except in Tenants place be displayed	Evacuation plan is to be displayed
	BACK SIDE OF Electrical panel in STP room House keeping is poor 	Housekeeping is to be done

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

**TATA CONSULTANCY SERVICES
LIMITED**



EXECUTIVE SUMMARY

Part I & II

General Information

TATA CONSULTANCY SERVICES LIMITED is situated at Block EP & GP Plot B1 and Block EP Plot C, Sector V, Salt Lake, Kolkata 700091. This report illustrates the details of Block EP, Plot C. There are two buildings named as LORDS (B+G+7) and WANDERERS (G+3). The plot area of C plot i.e. Lords & Wanderers is approx. 1.74 acre. The total build up area is 2,80,413 sq. ft.(C) All the three buildings of Plot- B1 & C are situated within a common boundary wall. All the floors are used by TCS themselves. Canteen, its kitchen, auditorium are situated in Wanderers building. The AC plants, Electrical panels, hydrant pumps are placed in the basement of Lords building.

NOC from WBF & ES are available for all the buildings.

Based on estimation the occupancy load was found as:-

Regular:- 1754 (Lords) + 31 (Wanderers) = 1785

Floating:- 36 (Lords) + 477 (Wanderers) = 513

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are total 6 nos Staircases are available in two buildings. Altogether, there are five nos. passenger lift, , one no. service lift available. These lifts are having with fire man switch with ARD & emergency alarm switch. These Lifts do have valid "C"-Certificates from Govt. of west Bengal. There are refuge areas and Evacuation Drill has been conducted.

There is Signage available in the EXIT Route .

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises are the Wet Riser, sprinklers ,portable fire extinguishers., Auto-extinguisher, Smoke detector, Beam detector, heat detectors, MCPs, Fire alarm and Centralized Supervisory system with MIMIC Generation at BMS room. Total 154 nos. fire extinguishers are deployed near common areas, electrical installation & other places. In addition, there are 37 nos. (Common for both the plots) are kept as buffer stock. Various validity dates are found depending on re-filing date i.e. from 30.05.2013 to 11.01.2015.

Wet Riser

There are total 6 nos. pump, including one no. diesel stand by pump. All are installed at the basement of the building. One no. fire water U/G reservoir is available with capacity1, 74,000 ltr. Both the U/G reservoir of both the plot are inter connected with valve. As alternate source of water, a water body is available about 100 mtr. Away.

PART V

ELECTRICAL FIRE HAZARDS

There is no RCCB in the distribution board. DG supply is available as an alternate source of power. Electrical installation is under maintenance contract. Earth connection is tested by external agency.

PART VI

OTHER INFORMATION

There is Insurance coverage with ICICI Lumberg.

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	BLOCK-EP, PLOT-C	
2.	Premises Name (if any):	Delta Park- Lords & Wanderers (Two Buildings)	
3.	Name of the owner /occupier/lessee	Tata Consultancy Services Ltd.	
4.	Permanent Address	EP & GP, Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	Mr. Santosh Raha , Fire Advisor Mr. Subhabrata Majumdar, Asst.Mngr.	
7.	Phone No of Contact Person	9433878855 9231071362	
8.	E-mail	Santosh.raha@tcs.com Subhabrata.majumdar@tcs.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
		IT/ITES ☐	
10.	Plot Area(as informed to the Auditor)	1.74 acre	
11.	Build up area(as informed to the Auditor)	2,80,413 sq.ft. (Floor Area)	
12.	No of Floors	Lords:-B+G+7 Wanderers:- G+3	
13.	Date of Sanction of Building Plan	V/BM/169/R2 dtd. 19.01.2001	
14.	Whether P.O.C/OC received from local body?	CC for Water/Sewerage (B1 Plot) Dtd. 26.03.2001. by BNM.	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	G4s	
16.	No of Security Personnel engaged	Men:- 29 Women:- 03	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes (Automated)	
18.	Whether records of Visitors entering into the building are kept	Yes (Computerised with capturing of photograph)	
19.	Whether Metal detectors are used at the entry point	Yes	
20.	Whether Monitoring System through Close circuit TV available	Yes	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	09 nos.	

22.	No of Vehicles for which parking space is available in the premises	Basement:-34(Lords Open Space:- 76
23.	Whether parking space available for visitors within the premises	NO
24.	Place where excess vehicles (if any) are parked	Out side the building
GENERAL MAINTENANCE		
25.	Garbage Clearing	Through NDITA Garbage clearing system
26.	Drainage System	Connected to the drainage system
27.	Maintenance of Road	Internal Road is maintained by the owner. Condition is satisfactory
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	NA
30.	Any Other Clearance	NA

PART - II

V=vacant

31.	Occupancy load	(Based on Estimates).									
	Existing	B	G	1	2	3	4	5	6	7	TTL
	a)Regular										
	Building(Lords)	05	02	48	222	294	295	296	296	296	1754
	Building(Wanderers)	X	14	02	08	07	X	X	X	X	31
	Floating										
	Building(Lords)	02	02	20	02	02	02	02	02	02	36
	Building(Wanderers)	X	02	300	150	25	X	X	X	X	477
32.	Basement	YES									
	a) If basement extends beyond building profile	NO									
	b) Use of the basement	Car Parking, Electrical panel, pumps									
	c) Is it being sprinkled?	YES									
	d) Whether any cubicles present in the basement?	YES									
	If yes, their use to be specified	Lords:- Civil Maintenance office									
	e) Whether fire zones are defined?	Yes									
	If yes, please provide details	Basement									

Part- III

Provisions of means of escape

33.	Number of staircases --→6 nos (3+3)			
	Stairs Number		#1	#2 & #3
	a)	Width of flight (mm)	1690	1320
	b)	Tread width(mm)	310	310
	c)	Riser Height(mm)	140	160
	d)	Finish	Kota stone	Kota stone
	e)	Width of stair door (FCD)	1400	960
	f)	Height of stair handrail(mm)	870	850
	g)	Height of stair head room(ft)	15	15
	h)	Area & location & profile of Fire Refuge Area	All floors 10 ft x20 ft. each 1020 mm	
	i)	Width and type of door leading to Fire refuge area		
	j)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	
34.	Number of Lifts installed→ 06 Nos		Passanger Lords:-03, Wanderers:-02	Service Wanderers:-01
	Lift-Numbers		Lift 1 to 05	Lift 06
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2 Hrs	2 Hrs
	c)	Area of lift car (mm ²)	1600 mm X 1650 mm	
	d)	Capacity (no of persons)	20 each	
	e)	Capacity(in kg)	1360 each	500
	f)	Company	Kone	Kone
	g)	Is communication system, installed in the lift car?	No, However, Emergency switch provided inside the Car. Upon activation the display is available in the reception.	
	h)	Is a fireman's switch being installed in the car?	YES	
	i)	Pressurization of lift	NO	
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Yes , valid till 25.10.2013 & 27.12.2013	
35.	Presence of proper signage in all the exit route		Yes except in kitchen	
36.	Is it posted with illuminated signage ?		No	
37.	Whether it is landing to fire assembly point?		Yes	
38.	Any form of Public address system available ?		Yes	
39.	Width of internal road inside Premises ?		5000mm to 6020mm	
40.	Width of the Entry / exit of Gate		Total Two nos. Width of each gate 4200mm.	
41.	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

42.	Is any water reservoir for fire fighting available ? (at ground level / over head)		Yes	Lords:- 1,74,000 ltr. (U/G)
	a)	If yes, specify the distance from the building	Adjacent to the buildings	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	No such recommendation is found	
	c)	Specify the condition of the reservoir	Satisfactory	
43.	Is any public or other water storage facility available nearby ?		Yes	Specify the distance from the building→ 100 mtr
	a)	Is it readily accessible ?	No	Condition and type of the reservoir→ Water Body
44.	Are internal hydrants being provided ?		Yes	Lords:- 03, W:-02
	If so, please indicate no of hydrants in each floor		LRDS.-03,WNDRS-02	
45.	Are first aid hose reels being provided ? If so please indicate		Yes	No of hose reels on each floor : Three & Two
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel:→ 20 mm, 30 mtr
	b)	Size (bore) and type of nozzle fitted to each hose reel	5mm, Jet Type	
46.	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	Type of hose: canvas Size of hose: 63 mm Length of hose: 15 Mtr & 06 Mtr.
	a)	Total no of hoses provided near each hydrant	Two	
47.	Have wet risers/dry risers been provided?		Yes wet riser	
	If yes, please indicate the number of risers and internal diameter of each		07 nos	
48.	Has any down comer been provided? If so, please give details		Yes, only in Wanderers building but not in Lords.	
49.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes.	
	a)	Number of pumps		Lords & wanderers -06 nos. Hydrant – 75 Kw Sprinkler – 75 Kw Jockey – 11 Kw Booster 1 -11 Kw Booster 2 – 11 Kw Diesel - 100 BHP
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction 200 mm Delivery 150 mm Main pump out put→ 171 M3/Hr Jockey pump output → 10.8 M3/Hr	

		Head : 85 mtr
c)	Is the pump automatic in action?	YES
d)	Is the water pressure sufficient at max distance from the pump?	Yes,

50.	Sprinkler system	Yes		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	Yes, Centralised monitoring and data acquisition system with intelligent mimic Generation.		
	a) Type of detectors used	Addressable, Smoke, Heat, Beam		
51.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	YES		
52.	Alarm receiving system	YES		
53.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Yes 30.05.2013 To 11.01.2015	No. of FE CO2:- 49+60 DCP:- 10+21 W-CO2:- 1+0 M-Foam:- 3+10	= 109 = 31 = 01 = 13
54.	Location and population of the FEs adequate	Yes, in all the common areas & own office & electrical installations.		
55.	Are Emergency Fire Alarm being provided in each floor ?	YES		
56.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	Yes		
57.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	YES		
58.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
59.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
60.	Status of NOC from WBF&ES	Yes valid till 20.4.2013.(Eden) & 11.12.2013(Lords) Ref WBFES/DG/FP/966/12/Bidhan-OB/105/03(59/03)dtd..20.04.12 & WBFES/5285/12/Bidhan-OB/105/03(59/03) dtd.11.12.12		

Part-V

Electrical, Cables and Ventilation

61.	If the building is Centrally air –conditioned, please indicate,	Flooded type water cooled chiller :- 330 Tr. X 3 nos. (Lords)
	a) Material used for construction of ducts and its fittings	GI sheet ,MS Angle, Nut,Bolt.
	b) Type of tinning used for ducts	
	c) Type of lagging used, if any for insulating any portion of the duct	Glass wool, Perforated sheet, Al net. Insulation materials are Thermocol,net,Pluster.
	d) How the lagging is secured?	Al foil
	e) If false ceiling is there?	Yes
	f) Material used for false ceiling	Gypsum board
	g) Is a separate AHU being provided in each floor	Yes
	H) Whether automatic shutdown of AHU is coupled with detection system?	Yes
	i) Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Yes
	j) Will fire dampers be provided in AC duct?	Yes
62.	Is there any standby source of electric supply being provided?	Yes .DG 1500 KVA X 2 NOS.at Eden <u>UPS</u> Lrds:- 250kva-2 nos.,120kva-2nos. Wndrs:- 120 kva-2 nos.
63.	Is the back supply automatic?	Yes
64.	Location of switch- gears and transformers	Basement of Eden
65.	a) Transformer capacity	2000 KVA & 2500 KVA X 2
	b) If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Yes
	c) If outside, how far is it from the building?	Not applicable
66.	What precautions is taken to prevent a possible fire in the transformers from spreading?	Manual Fire Extinguishers
67.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Yes.
68.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	Installed inside LT panel
69.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
70.	Whether natural ventilation is relied upon? If so, give details.	Yes
71.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No such plan

72.	Whether mechanical ventilation is being coupled with automatic detection system?	YES
73.	Whether the refuge area is being provided?	YES. Lords- All floor 20 ft. x10 ft. each.
74.	Storage of combustibles materials near electrical equipment/fuse units.	YES
75.	RCCBs available??	NO
76.	Master switch in warehouses	Not applicable
77.	Proper cable joint procedures as per manufacturer	Yes
78.	Earthing Pit Tested??	record found
79.	Use of MCB??	YES
80.	Bypassing of protection devices	No such incidence found
81.	Deteriorated insulation	No such incidence found
82.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
83.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Yes.
84.	Tracking possibility	YES
85.	Unused opening in the panels, etc.	No unusual opening is found
86.	Possibility of ground fault/short circuit	No such possibility found at this moment
87.	Mechanical protection to cables	Yes
88.	Loose terminations due to improper supports, crimping	Test being done at an interval and maintain the records.
89.	Improper gland installation, wrong lug size	Do
90.	Over-rated uses, wrongly set protection relays, etc.	Not found
91.	Switch yard and sub station	Ok
92.	DG operation and maintenance	DG is being maintained & under AMC
93.	Reliability of the fire hydrant system	YES
94.	Emergency preparedness and response	available
95.	Availability of Evacuation plan	Available
96.	Mock drill conducted??	Being done at an interval. Record is being maintained
97.	Awareness of the people??	Satisfactory
98.	Sample basis validation of smoke detection system??	Yes done periodically
99.	Condition of Lightning Arrestor	Condition checking done periodically.
100.	Periodic test of UPS system (as applicable)	YES . Under AMC.
101.	Handling of electrical work by competent electrician	Yes. Has valid License
102.	Approval of receiving station, substation and DG	Yes available
103.	Storage if hazardous material, chemicals?	Yes, Wood sraps,empty cartoons,empty containers etc. are kept at basement
104.	Use of signage?	Yes,

105.	Hydrants clear, access to public thorough fare open	YES
106.	Flame & work permits (as applicable)	Yes, system is there
107.	Effective internal communication and public address system	Yes. EPABX, Portable mega phone, PAS
108.	Colour coding system of hazardous chemical gas lines etc.	Not found in LPG pipeline.
109.	Management structure, role of safety officer, fire department etc.	YES available with fire dept.,Fire advisor, Safety committee, internal audit etc
110.	Procedure for incident investigation and control	YES

PART- VI

Other Information

111.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	NO
112.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
113.	Is Trade License available??	NO.
114.	Name of the Insurance Company	ICICI Lumberg
115.	Remarks (if any) 1 All LPG pipeline shall be painted with colour code. 2. All test records shall contain the Acceptance Criteria and Acceptance Limit/Range. 3. All scrap materials shall be kept at suitable place outside basement and building area. 4. Auto Extinguish systems are available in Server, EPABX room utilizing FM-200, NOVAC-1230,but not found in Transformer, LT panel area. 5. During working hours, movement of Fire Appliances may be difficult due to congested Public road in front of the office premise.	

Auditor

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

NDITA
OBSERVATIONS tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1	Colour code not marked on LPG pipeline	All LPG pipe line shall be painted with colour code.
2.	In the Test reports acceptance criteria is not recorded.	All the test report should be contained with Acceptance Criteria as well as Acceptance limit / range of parameter to be measured.
3.	Scrap materials like wood piece, cartoon, empty container are kept in the basement.	Such materials should be kept at suitable place outside basement and building area.
4.	Auto-Extinguishers are not available in transformer, Electrical panel area.	Same should be available in these area.
5.	In BMS room , continuous monitoring system is available round the clock to monitor the status of fire detectors, CCTV surveillance, Access control. But no such facility available for online monitoring of pressure of hydrant, sprinkler.	For better efficiency, it is envisaged to install centralized monitoring system to monitor the pressure parameter at least at the bottom and top point of each hydrant along with pre warning facility.

Auditor

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

**TATA CONSULTANCY SERVICES
LIMITED**



EXECUTIVE SUMMARY

Part I & II

General Information

TATA CONSULTANCY SERVICES LIMITED is situated at Block EP & GP Plot B1 and Block EP Plot C, Sector V, Salt Lake, Kolkata 700091. This report illustrates the details of Block EP & GP Plot B1. There is only one building named as EDEN (B+G+5). The plot area is:- B1 plot i.e Eden – 1.76 acre. The total build up area is approx. 1,44,625 sq. ft.(B1) . All the three buildings of Block EP & GP Plot B1 and Block EP Plot C are situated within a common boundary wall. All the floors are used by TCS themselves. AC plant, Transformer, Electrical Panel, Hydrant Pumps, Generator are placed in the basement of Eden building. There is no provision of car parking in the basement and ground floor.

NOC from WBF & ES are available for the building .

Based on estimation the occupancy load was found as:-

Regular:- 1272 (Eden)

Floating:- 70 (Eden)

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are 2 nos Staircase, 2 nos. passenger lift, and one no. material lift available. These lifts are having with fire man switch with ARD & emergency alarm switch. These Lifts do have valid “C”-Certificates from Govt. of west Bengal. There are refuge areas and Evacuation Drill has been conducted.

There is Signage available in the EXIT Route .

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises are the Wet Riser, sprinklers ,portable fire extinguishers., Auto-extinguisher, Smoke detector, Beam detector, heat detectors, MCPs, Fire alarm and Centralised Supervisory system with MIMIC Generation at BMS room. Total 164 nos.fire extinguishers are deployed near common areas, electrical installation & other places. In addition, there are 37 nos. are kept as buffer stock (common for both the plot).Various validity dates are found depending on re-filing date i.e. from 30.05.2013 to 11.01.2015.

Wet Riser

There are 3 nos. pump. All are installed at the basement of the building. One no. fire water U/G reservoir is available with capacity of 1,50,000 ltr. U/G reservoir of both the plots are inter connected through valve. As an alternate source of water, a water body is available about 100 mtr. away.

PART V**ELECTRICAL FIRE HAZARDS**

There is no RCCB in the distribution board. DG supply is available as an alternate source of power. Electrical installation is under maintenance contract. Earth connection is tested by external agency.

PART VI**OTHER INFORMATION**

There is Insurance coverage with ICICI Lumberg.

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	BLOCK-EP & GP,PLOT-B1	
2.	Premises Name (if any):	Delta Park- EDEN (One Building)	
3.	Name of the owner /occupier/lessee	Tata Consultancy Services Ltd.	
4.	Permanent Address	EP & GP, Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	Mr. Santosh Raha , Fire Advisor Mr. Subhabrata Majumdar, Asst.Mngr.	
7.	Phone No of Contact Person	9433878855 9231071362	
8.	E-mail	Santosh.raha@tcs.com Subhabrata.majumdar@tcs.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	1.76 acre	
11.	Build up area(as informed to the Auditor)	1,,44,625 sq.ft. (Floor Area)	
12.	No of Floors	Eden:- B+G+5	
13.	Date of Sanction of Building Plan	V/BM/169/R2 dtd. 19.01.2001	
14.	Whether P.O.C/OC received from local body?	CC for Water/Sewerage (B1 Plot) Dtd. 26.03.2001. by BNM.	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	G4s	
16.	No of Security Personnel engaged	Men:- 42 Women:- 03	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes (Automoted)	
18.	Whether records of Visitors entering into the building are kept	Yes (Computerised with capturing of photograph)	
19.	Whether Metal detectors are used at the entry point	Yes	
20.	Whether Monitoring System through Close circuit TV available	Yes	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	09 nos.	

22.	No of Vehicles for which parking space is available in the premises	Basement:- Nil Open Space:- 75
23.	Whether parking space available for visitors within the premises	NO
24.	Place where excess vehicles (if any) are parked	Out side the building
GENERAL MAINTENANCE		
25.	Garbage Clearing	Through NDITA Garbage clearing system
26.	Drainage System	Connected to the drainage system
27.	Maintenance of Road	Internal Road is maintained by the owner. Condition is satisfactory
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	NA
30.	Any Other Clearance	NA

PART - II

V=vacant

31.	Occupancy load	(Based on Estimates).									
	Existing	B	G	1	2	3	4	5	6	7	TTL
	a)Regular										
	Building(Eden)	15	40	248	248	225	248	248	X	X	1272
	b)Floating										
	Building(Eden)	05	40	05	05	05	05	05	X	X	70
32.	Basement	YES									

Part- III

Provisions of means of escape

33.	Number of staircases --→2 Nos			
	Stairs Number		#1	#2
	a)	Width of flight (mm)	1686	1600
	b)	Tread width(mm)	296	300
	c)	Riser Height(mm)	140	140
	d)	Finish	Kota stone	Kota stone
	e)	Width of stair door (FCD)	1060	1090
	f)	Height of stair handrail(mm)	900	840
	g)	Height of stair head room(ft)	12	20
	h)	Area & location & profile of Fire Refuge Area	4th floor(both side) 10 ft x 20 ft each	
	i)	Width and type of door leading to Fire refugee area	1020 mm	
	J)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	

34.	Number of Lifts installed→ 03 Nos		Passanger Eden:- 02,	Service Eden:-01
	Lift-Numbers		Lift 01 to 02	Lift 03
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2 Hrs	2 Hrs
	c)	Area of lift car (mm ²)	1600 mm X 1650 mm	
	d)	Capacity (no of persons)	20 each	
	e)	Capacity(in kg)	1360 each	1500
	f)	Company	Kone	Kone
	g)	Is communication system, installed in the lift car?	No, However, Emergency switch provided inside the Car. Upon activation the display is available in the reception.	
	h)	Is a fireman's switch being installed in the car?	YES	
	i)	Pressurization of lift	NO	
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Yes , valid till 25.10.2013 & 27.12.2013	
35.	Presence of proper signage in all the exit route		Yes	
36.	Is it posted with illuminated signage ?		No	
37.	Whether it is landing to fire assembly point?		Yes	
38.	Any form of Public address system available ?		Yes	
39.	Width of internal road inside Premises ?		5000mm to 6020mm	
40.	Width of the Entry / exit of Gate		Two nos.(1 no Main Entry /Exit, 1 no. Emergency) Width of each gate 4200mm.	
41.	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

42.	Is any water reservoir for fire fighting available ? (at ground level / over head)		Yes	Eden:- 1,50,000 ltr. (U/G)
	a)	If yes, specify the distance from the building	Adjacent to the buildings	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	No such recommendation is found	
	c)	Specify the condition of the reservoir	Satisfactory	
43.	Is any public or other water storage facility available nearby ?		Yes	Specify the distance from the building→ 100 mtr
	a)	Is it readily accessible ?	No	Condition and type of the reservoir→ Water Body
44.	Are internal hydrants being provided ?		Yes	Eden:- 02
	If so, please indicate no of hydrants in each floor		EDN.-02	

45.	Are first aid hose reels being provided ? If so please indicate		Yes	No of hose reels on each floor : Two	
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel:→ 20 mm, 30 mtr	
	b)	Size (bore) and type of nozzle fitted to each hose reel	5mm, Jet Type		
46.	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	Type of hose: canvas Size of hose: 63 mm Length of hose: 15 Mtr & 06 Mtr.	
	a)	Total no of hoses provided near each hydrant	Two		
47.	Have wet risers/dry risers been provided?		Yes wet riser		
	If yes, please indicate the number of risers and internal diameter of each		02 nos		
48.	Has any down comer been provided? If so, please give details		No		
49.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes.		
	a)	Number of pumps	Eden- 03 nos. Hydrant- 75 Kw Sprinkler- 75 Kw Jockey- 75 Kw		
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction 200 mm Delivery 150 mm Main pump out put→ 171 M3/Hr Jockey pump output → 10.8 M3/Hr Head : 85 mtr		
	e)	Is the pump automatic in action?	YES		
	f)	Is the water pressure sufficient at max distance from the pump?	Yes,		
50.	Sprinkler system		Yes		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes, Centralized monitoring and data acquisition system with intelligent mimic Generation.		
	a)	Type of detectors used	Addressable, Smoke, Heat, Beam		
51.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		YES		
52.	Alarm receiving system		YES		
53.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations?		Yes	No. of FE CO2:- 137 DCP:- 21	= 137
	If yes, indicate				

	Indicate whether the Fire extinguishers bear the ISI certification mark?	Yes	W-CO2:- 1	= 21
	Date of Validity	30.0 5.20 13 To 11.0 1.20 15	M-Foam:- 5	= 01 = 05
54.	Location and population of the FEs adequate	Yes, in all the common areas & own office & electrical installations.		
55.	Are Emergency Fire Alarm being provided in each floor ?	YES		
56.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	Yes		

57.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	YES		
58.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
59.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
60.	Status of NOC from WBF&ES	Yes valid till 20.4.2013.(Eden) & 11.12.2013(Lords) Ref WBFES/DG/FP/966/12/Bidhan-OB/105/03(59/03)dtd..20.04.12 & WBFES/5285/12/Bidhan-OB/105/03(59/03) dtd.11.12.12		

Part-V

Electrical, Cables and Ventilation

61.	If the building is Centrally air -conditioned, please indicate,		Flooded type water cooled chiller :- 270 Tr. X 3 nos.(Eden)
	a)	Material used for construction of ducts and its fittings	GI sheet ,MS Angle, Nut,Bolt.
	b)	Type of tinning used for ducts	
	c)	Type of lagging used, if any for insulating any portion of the duct	Glass wool, Perforated sheet, Al net. Insulation materials are Thermocol,net,Pluster.
	d)	How the lagging is secured?	Al foil
	e)	If false ceiling is there?	Yes
	f)	Material used for false ceiling	Gypsum board

	g)	Is a separate AHU being provided in each floor	Yes
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Yes
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Yes
	j)	Will fire dampers be provided in AC duct?	Yes
62.		Is there any standby source of electric supply being provided?	Yes .DG 1500 KVA X 2 NOS. <u>UPS</u> Edn .:- 80 kva-2 nos.,40 kva 10 nos
63.		Is the back supply automatic?	Yes
64.		Location of switch- gears and transformers	Basement of Eden
	a)	Transformer capacity	2000 KVA & 2500 KVA X 2
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Yes
	c)	If outside, how far is it from the building?	Not applicable
65.		What precautions is taken to prevent a possible fire in the transformers from spreading?	Manual Fire Extinguishers
66.		Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Yes.
67.		Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	Installed inside LT panel
68.		Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
69.		Whether natural ventilation is relied upon? If so, give details.	Yes
70.		Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No such plan
71.		Whether mechanical ventilation is being coupled with automatic detection system?	YES
72.		Whether the refuge area is being provided?	YES. Eden- 4 th floor both side 20 ft. x 10 ft each.
73.		Storage of combustibles materials near electrical equipment/fuse units.	YES
74.		RCCBs available??	NO
75.		Master switch in warehouses	Not applicable
76.		Proper cable joint procedures as per manufacturer	Yes
77.		Earthing Pit Tested??	record found
78.		Use of MCB??	YES
79.		Bypassing of protection devices	No such incidence found
80.		Deteriorated insulation	No such incidence found
81.		Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
82.		Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Yes.

83.	Tracking possibility	YES
84.	Unused opening in the panels, etc.	No unusual opening is found
85.	Possibility of ground fault/short circuit	No such possibility found at this moment
86.	Mechanical protection to cables	Yes
87.	Loose terminations due to improper supports, crimping	Test being done at an interval and maintain the records.
88.	Improper gland installation, wrong lug size	Do
89.	Over-rated uses, wrongly set protection relays, etc.	Not found
90.	Switch yard and sub station	Ok
91.	DG operation and maintenance	DG is being maintained & under AMC
92.	Reliability of the fire hydrant system	YES
93.	Emergency preparedness and response	available
94.	Availability of Evacuation plan	Available
95.	Mock drill conducted??	Being done at an interval. Record is being maintained
96.	Awareness of the people??	Satisfactory
97.	Sample basis validation of smoke detection system??	Yes done periodically
98.	Condition of Lightning Arrestor	Condition checking done periodically.
99.	Periodic test of UPS system (as applicable)	YES . Under AMC.
100.	Handling of electrical work by competent electrician	Yes. Has valid License
101.	Approval of receiving station, substation and DG	Yes available
102.	Storage if hazardous material, chemicals?	Yes, Wood srapts,empty cartoons,empty containers of lubricant etc. are kept at basement of Eden.
103.	Use of signage?	Yes,
104.	Hydrants clear, access to public thorough fare open	YES
105.	Flame & work permits (as applicable)	Yes, system is there
106.	Effective internal communication and public address system	Yes. EPABX, Portable mega phone, PAS
107.	Colour coding system of hazardous chemical gas lines etc.	No LPG pipeline.
108.	Management structure, role of safety officer, fire department etc.	YES available with fire dept, Fire advisor, Safety committee, internal audit etc.
109.	Procedure for incident investigation and control	YES

PART- VI

Other Information

110.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	NO
111.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
112.	Is Trade License available??	NO.
113.	Name of the Insurance Company	ICICI Lumberg
114.	Remarks (if any) 1. All test records shall contain the Acceptance Criteria and Acceptance Limit/ Range. 2. All scrapt materials shall be kept at suitable place outside basement and building area. 3. Auto Extinguish systems are available in Server, EPABX room utilizing FM-200, NOVAC- 1230, but not found in Transformer, LT panel area. 4. During working hours, movement of Fire Appliances may be difficult due to congested Public road in front of the office premise.	

Auditors

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

NDITA
OBSERVATIONS tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1.	In the Test reports acceptance criteria is not recorded.	All the test report should be contained with Acceptance Criteria as well as Acceptance limit / range of parameter to be measured.
2.	Scrap materials like wood piece, cartoon, empty container of lubricants are kept in the basement.	Such materials should be kept at suitable place outside basement and building area.
3.	Auto-Extinguishers are not available in transformer, Electrical panel area.	Same should be available in these area.
4.	In BMS room , continuous monitoring system is available round the clock to monitor the status of fire detectors, CCTV surveillance, Access control. But no such facility available for online monitoring of pressure of hydrant, sprinkler.	For better efficiency, it is envisaged to install centralized monitoring system to monitor the pressure parameter at least at the bottom and top point of each hydrant along with pre warning facility.

Auditors

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

**INSTITUTE OF ENGINEERING
&
MANAGEMENT**



EXECUTIVE SUMMARY

Part I & II

General Information

INSTITUTE OF ENGINEERING & MANAGEMENT, namely IEM ,a WORLD BANK funded Institute was set up by NRIs in the year 2006 to impart technical and managerial education system.The Institute Campus is situated at different plots one of which is at Plot No.EPGP- D /1,Sector – V,Salt Lake Electronics Complex , Kolkata–700091, named as **MANAGEMENT HOUSE**.

The building structure is G+3 against approved provision of G+9 structure and 4th floor is under construction.The land area is about 1 Acre which comprises of built up area of 68000 sq. feet.There are class rooms in each floor including other infrastructure spread over the building and a Bank in the ground floor.The details are as follows :-

Ground Floor – BANK[IDBI] , Class Room , Faculty Room , Laboratory.

First Floor – Class Room.

Second Floor–Class Room ,Laboratory, Administrative Office.

Third Floor –Class Room .

Fourth Floor -Under Construction.

Trade Licencefor current year is available against Registered Office.

WBF&ESprovisional N.O.C. was obtained in the year 2006 for extension of a G+ IX storied Educational Building vide Memo No. WBFES / 6584 / Bidhan –B /86 /02 (422) Dated 01.06.2006 in cancellation of previous one. Submission of application to WBFES is under processing stage for obtaining Final N.O.C.

WBDOE registration ID is available.

Occupancy Clearance is available.

Building Planapproval is available.

Occupancy Load (Existing and Floating)was estimatedas715 and 15 respectively.

Centralised HVAC system is not installed in the building.

Part III

PROVISION OF MEANS OF ESCAPE

The building is divided into two parts and each part contains one Staircase, i.e. one at north part and other at south part of the building without any FCD. The Exit route signage is not available anywhere in the building and also the Evacuation Plan. The drive way up to the end of gate is clearly available. Altogether three gates are available for entry and exit.

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes portable fire extinguisher only at strategic points of entire building. List of portable fire extinguisher is available. The refilling period is found valid. Record is maintained for periodic checking of FE system. Dedicated Underground Water Reservoir and Overhead Water Tank for firefighting are not available. Alternative source is water body about 15mtr away. The building is not equipped with Fire detection system and Fire alarm system.

PART V

ELECTRICAL FIRE HAZARDS

DG of 1 x 30 KVA capacity is installed outside the building. External Condition of cable is found satisfactory.

Electrical Meter location inside building is not properly maintained and not equipped with proper Fire Extinguisher. Approval has been obtained from Competent Authority in December ' 2012 for shifting of Electrical Meters to other location and the work is under execution stage.

There is no ELCB or RCCB found in the distribution board. There is no identification found in the Earth PIT and record for measuring earth pit resistance or servicing of the same is not maintained.

PART VI

OTHER INFORMATION

Explosive materials and Chemicals are not stored in the building. Final N.O.C. from WBFES has not been obtained and deviations have been observed from the recommendation of WBFES in terms of provisional N.O.C. dated 01.06.2006.

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART - I

General Information

1.	Plot No/Premises No:	Block -EPGP, Plot No. D-1	
2.	Premises Name (if any):	Management House	
3.	Name of the owner /occupier/lessee	Institute of Engineering & Management	
4.	Permanent Address	EPGP/ D-1, Salt Lake Electronics complex,Sector-V, Kolkata-700091.	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/ Any other	Leasehold	
6.	Name of the Contact Person	Mr. DebasishChakraborty	
7.	Phone No of Contact Person	9836885951	
8.	E-mail	iem.accounts@gmail.com	
9.	Purpose of the Land Use	Principal Use	Educational
10.	Plot Area(as informed to the Auditor)	1 Acre (approx.)	
11.	Build up area(as informed to the Auditor)	68000 sq ft.	
12.	No of Floors	G+3 (4 TH Floor under construction)	
13.	Date of Sanction of Building Plan	14.07.2006	
14.	Whether P.O.C/OC received from local body?	Yes	OC Issuing Authority Bidhan Nagar municipality Dated : 13.02.2006
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Trident Security & Allied Services Pvt. Ltd.	
16.	No of Security Personnel engaged	6 (2 + 2 + 2) / 24 Hours	
17.	Whether Records of Vehicles (No & type entering into the building are kept	No	
18.	Whether records of Visitors entering into the building are kept	No	
19.	Whether Metal detectors are used at the entry point	No	
20.	Whether Monitoring System through Close circuit TV available	No	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	5 + 15(Personal)	
22.	No of Vehicles for which parking space is available in the premises	25	
23.	Whether parking space available for visitors within the premises	Yes	
24.	Place where excess vehicles (if any) are parked	Outside	

GENERAL MAINTENANCE		
25.	Garbage Clearing	NDITA
26.	Drainage System	NDITA
27.	Maintenance of Road	Own
TELEPHONE TOWER		
28.	No of Towers	No
29.	Statutory Clearance from AAI	No
30.	Any Other Clearance	No

PART - II

31.	Occupancy load	(Biased on estimates)				
	Existing	G	1	2	3	Total
	a)Regular	200	170	175	170	715
	b)Floating	10	0	5	0	15
32.	Basement	No				

PART - III

Provisions of means of escape

33.	Number of staircases		2 Nos.	
	Stairs Number		Stair (North)	Stair (South)
	a)	Width of flight (mm)	1700	1525
	b)	Tread width(mm)	300	300
	c)	Riser Height(mm)	140	150
	d)	Finish	Marble	Cement concrete
	e)	Width of stair door (FCD)-mm	No	No
	f)	Height of stair handrail(mm)	760	790
	g)	Height of stair head room(ft)	10	10
	h)	Area & location & profile of Fire Refuge Area	No	
	i)	Width and type of door leading to Fire refugee area	No	
	j)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	
34.	Number of Lifts installed		No	
35.	Presence of proper signage in all the exit route		No	
36.	Is it posted with illuminated signage ?		No	
37.	Whether it is landing to fire assembly point?		No	
38.	Any form of Public address system available ?		No	
39.	Width form of internal road within the Premises (mm) ?		No.1/ 3350, No.2/ 4270	

40.	Width of the Entry / exit of Gate (mm)	No. 1/ 3710 , No. 2/ 3225, No. 3/5260
41.	Height of the Entry / exit of Gate	Open to sky.

PART IV

Provision of Fire Safety Arrangement

42.	Is any water reservoir for fire fighting available ? (at ground level / over head)	No
	a) If yes, specify the distance from the building	No
	b) If yes, specify the capacity (in litres) as approved by WBF& ES.	No
	c) Specify the condition of the reservoir	N.A.
43.	Is any public or other water storage facility available nearby ?	Yes Specify the distance from the building → 15 Mtr.
	a) Is it readily accessible ?	Yes Condition and type of the reservoir → Water Body
44.	Are internal hydrants being provided ?	No
	If so, please indicate no of hydrants in each floor	N.A.
45.	Are first aid hose reels being provided ? If so please indicate	No
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	No
	b) Size (bore) and type of nozzle fitted to each hose reel	N.A.
46.	Are fire hoses being provided near each hydrant? If so, please indicate	No
	a) Total no of hoses provided near each hydrant	N.A.
47.	Have wet risers/dry risers been provided?	No
	If yes, please indicate the number of risers and internal diameter of each	N.A.
48.	Has any down comer been provided? If so, please give details	No
49.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	No
50.	Sprinkler system	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	No
	a) Type of detectors used	No
51.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	No

52.	Alarm receiving system	No	
53.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Yes Refilling due in January ' 2014	Number of FE - 24 G - 7Nos. 1 ST - 4Nos, 2 ND - 8Nos, 3 RD - 5Nos. Type/ Capacity . As per attached list.
54.	Location and population of the FEs adequate	Not properly distributed	
55.	Are Emergency Fire Alarm being provided in each floor ?	No	
56.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No	
57.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months(min.2 /Yr.)	No	
58.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available.	
59.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available.	
60.	Status of NOC from WBF&ES	Final N.O.C is not available against provisional N.O.C. vide Memo. No. WBFES /6584/ Bidhan -B /86/02(422) dated 01.06.2006 of WBF&E.S.	

Part-V

Electrical, Cables and Ventilation

61.	If the building is Centrally air – conditioned, please indicate,	No		
62.	Is there any standby source of electric supply being provided?	Yes	DG Capacity 1 X 30 KVA	UPS Capacity No
	Is the back supply automatic?	No	Specify the functions that can be maintained simultaneously by such back ups. - Emergency Light - Entire office building	
63.	Location of switch- gears and transformers	No		

64.	a	Transformer capacity	N.A.
	b	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	N.A.
	c	If outside, how far is it from the building?	N.A.
65.		What precautions is taken to prevent a possible fire in the transformers from spreading?	N.A.
66.		Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	No Pass.
67.		Is Earth Leakage Circuit Breaker (ELCB) in every distribution board?	No ELCB is installed.
68.		Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	N.A.
69.		Whether natural ventilation is relied upon? If so, give details.	Yes
70.		Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No
71.		Whether mechanical ventilation is being coupled with automatic detection system?	No
72.		Whether the refuge area is being provided?	No
73.		Storage of combustibles materials near electrical equipment/fuse units.	No
74.		RCCBs available??	No
75.		Master switch in warehouses	No
76.		Proper cable joint procedures as per manufacturer	Yes
77.		Earthing Pit Tested??	Yes in October '2012. No Record is kept.
78.		Use of MCB??	Yes
79.		Bypassing of protection devices	No
80.		Deteriorated insulation	No
81.		Selection, deployment of PFFs (Portable Fire Extinguishers)	Own Arrangement
82.		Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No pass
83.		Tracking possibility	Possible

84.	Unused opening in the panels, etc.	N.A.
85.	Possibility of ground fault/short circuit	No
86.	Mechanical protection to cables	Yes
87.	Loose terminations due to improper supports, crimping	No
88.	Improper gland installation, wrong lug size	No
89.	Over-rated uses, wrongly set protection relays, etc.	No
90.	Switch yard and sub station	N.A.
91.	DG operation and maintenance	Operation -Own arrangement . AMC on Sub-vendor(Technocon) of OEM. Last AMC action was taken In January'2013.
92.	Reliability of the fire hydrant system	N.A.
93.	Emergency preparedness and response	Not Done
94.	Availability of Evacuation plan	Not Done
95.	Mock drill conducted??	Not Done
96.	Awareness of the people??	Not Done
97.	Sample basis validation of smoke detection system??	N.A.
98.	Condition of Lightning Arrestor	N.A.
99.	Periodic test of UPS system (as applicable)	N.A.
100.	Handling of electrical work by competent electrician	Yes
101.	Approval of receiving station, substation and DG	Document on DGset is available. DOE Registration No. 21-740 (New)
102.	Storage if hazardous material, chemicals?	No
103.	Use of signage?	No
104.	Hydrants clear, access to public thoroughfare open	N.A.
105.	Flame & work permits (as applicable)	Not done.
106.	Effective internal communication and public address system	No
107.	Colour coding system of hazardous chemical , gas lines etc.	N.A.
108.	Management structure, role of safety officer, fire department etc.	Not done.
109.	Procedure for incident investigation and control	Not done.

PART- VI

Other Information

110.	Is there any deviation from the existing recommendation, if any , already been provided by Fire & Emergency Services	Yes	Deviation is observed with reference to condition of provisional N.O.C. of WBFES. Final N.O.C.is not available.
111.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No	
112.	Is Trade License available?	Yes . Trade Licenced dated 22.05.2012 for the year 2012-2013 for Registered Office is available. Copy is attached.	
113.	Name of the Insurance Company	National Insurance Co.	
114.	Remarks (if any) :- Provisional N.O.C. for G+IX was issued by WBF&ES cancelling previous provisional N.O.C. in the year 2006 for compliance action to obtain final N.O.C. which is not available.Submission of application to WBF&ES for obtaining final N.O.C. is under processing stage as informed during Audit.Deviations have been observed. Observations have been marked in the observation tracking report (Summary Sheet).		

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No.	OBSERVATIONS	RECOMMENDATIONS
1.	Clear gaps have been observed with reference to recommendation of provisional N.O.C. dated 01.06.2016 of WBFES.	Final N.O.C. of WBF & ES needs to be obtained.
2.	Deviation w.r.t. Staircase clause has been observed.	
3.	Deviation w.r.t. Fire Fighting Water clause has been observed.	
4.	Deviation w.r.t. Hydrant System clause has been observed.	Final N.O.C. of WBF & ES needs to be obtained.
5.	Deviation w.r.t. Sprinkler installation clause has been observed.	
6.	Deviation w.r.t. Fire Pump clause has been observed.	
7.	Deviation w.r.t. Electrical installation clause has been observed.	Final N.O.C. of WBF & ES needs to be obtained.
8.	Deviation w.r.t. Detection , Alarm clause has been observed.	
9.	Deviation w.r.t. General recommendation clause has been observed.	

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

CONVERGENCE CONTACT CENTRE



EXECUTIVE SUMMARY

Part I & II

General Information

CONVERGENCE CONTACT CENTRE premises issituated at EP&GP D-2/2, at sector V, Salt Lake, Kolkata 700091.the Building is G+7 storied. Ground floor there is admin office & Electrical Installation & pump room. Rest from 1st floor to 7th floor is rented to ICTEAS & ICRA ON LINE.

This building built up area is 3713.50 SQ Mtr in 937.48sqMtr of land.

There are no central AC systems in the building.

Sanction date of building plan is 8.2.2005

OC (Occupational Certificate)for the buildings obtained on 15.3.2006

NOC from WBF & ES has been obtained & valid upto 28.2.13 .Ref WBFES/DG/FP/280/12/OB/187/049)

Estimated Occupancy Load was found as

	Existing -- 455
Floating -- 60	

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

In the CONVERGENCE CONTACT CENTRE thereare two stair cases &2 Liftsare available.

Last Evacuation Drill has been conductedon 8.12.12

There is Signage available in the building except in the stair with direction

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

In the CONVERGENCE CONTACT CENTREProvision for Fire safety arrangement includes Wet riser ,Smoke detector, Sprinkler, MCPs,

There are 4Nos fire extinguishers are available in the common areas & in Electrical installations at the ground floor. Rest of the tenants at different floor has their own set of Fire extinguishers

In the CONVERGENCE CONTACT CENTRE there is an underground 100000ltr capacity.

Alternate source of water is the Water body approx.500 mtr away

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board

Earth pits were not found marked and tested.

Generally no combustible material is stored in the premises, near the Electrical installation

There is a DG supply of 500 KVA as an alternate source of power supply

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	EP& GP D-2/2	
2.	Premises Name (if any):	Convergence Contact Centre	
3.	Name of the owner /occupier/lessee	Convergence Contact Centre	
4.	Permanent Address	EP & GP D-2/2,Sector- V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	MrMainakGhosh	
7.	Phone No of Contact Person	98302 57284	
8.	E-mail	mghoshl@wdc.in	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	937.48sqmtr	
11.	Build up area(as informed to the Auditor)	3713.50sqmtr	
12.	No of Floors	G+7	
13.	Date of Sanction of Building Plan	8.2.2005	
14.	Whether P.O.C/OC received from local body?	15.3.2006	
SECURITY SETUP DETAILS			
15	Name of the SECURITY AGENCY engaged	Group 3 Security	
16	No of Security Personnel engaged	18	
17	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18	Whether records of Visitors entering into the building are kept	YES	
19	Whether Metal detectors are used at the entry point	NO	
20	Whether Monitoring System through Close circuit TV available	NO	
VEHICLES VOLUME			
21	No of Vehicles Engaged by the Organisation	NIL	
22	No of Vehicles for which parking space is available in the premises	12Nos	
23	Whether parking space available for visitors within the premises	YES	
24	Place where excess vehicles (if any) are parked	Outside the building	
GENERAL MAINTENANCE			
25	Garbage Clearing	Through NDITA garbage clearing System	

26	Drainage System	Connected to NDITA drainage connection
27	Maintenance of Road	Internal road is being maintained by the occupier. Condition is satisfactory
TELEPHONE TOWER		
28	No of Towers	Reliance Tower → One
29	Statutory Clearance from AAI	Ref No AAI/ER/NOC/(390/12)/2269-2271 dated 13.08.12
30	Any Other Clearance	Not available

PART – II

V= Vacant

31	Occupancy load	(Based on Estimates)								
	Existing	G	1	2	3	4	5	6	7	TOTAL
	a)Regular	13	70	78	v	60	80	89	65	455
	b)Floating									60
32	Basement	NO								
	a) If basement extends beyond building profile	Not Applicable								
	b) Use of the basement	Not Applicable								
	c) Is it being sprinklered?	Not Applicable								
	d) Whether any cubicles present in the basement?	Not Applicable								
	If yes, their use to be specified	Not Applicable								
	f) Whether fire zones are defined?	Not Applicable								
	If yes, please provide details	Not Applicable								

Part- III

Provisions of means of escape

33	Number of staircases --→ Two Nos			
	Stairs Number		#1	#2
	a)	Width of flight in mm	1400	1400
	b)	Tread width in mm	300	300
	c)	Riser Height in mm	150	150
	d)	Finish	Kota Stone	Kota Stone
	e)	Width of stair door (FCD)- in mm	1050	1050
	f)	Height of stair head room in ft	12	12
	g)	Height of stair handrail in mm	810	900
	h)	Area & location & profile of Fire Refuge Area	4th floor & 6 th floor 14.5 mtr X 1.7 Mtr X 2 nos	

	i)	Width and type of door leading to Fire refugee area	FCD- 1090 mm	
	J)	Pressurization of staircase	No	
	k)	Segregation of staircase	YES	
34	Number of Lifts installed→Two			
	Lift-Numbers		#1	#2
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2 Hrs	2 Hrs
	c)	Area of lift car	1400 mm X 1200 mm	1400 mm X 1200 mm
	d)	Capacity (no of persons)	9	9
	e)	Capacity(in kg)	612	612
	f)	Company	Schneider	Schneider
	g)	Is communication system, installed in the lift car?	Yes	YES
	h)	Is a fireman's switch being installed in the car?	Yes	YES
	i)	Pressurization of lift	NO	
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Available	
35	Presence of proper signage in all the exit route		Only in Emergency exit. None found in Main stair	
36	Is it posted with illuminated signage?		NO	
37	Whether it is landing to fire assembly point?		NO Fire assembly point found	
38	Any form of Public address system available ?		Yes at the Security room	
39	Width form of internal road within the Premises ?		4500mm	
40	Width of the Entry / exit of Gate		4200 mm	
41	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G100000 ltr
	a)	If yes, specify the distance from the building	Adjacent to the building	
	b)	If yes, specify the capacity (in liters)as approved by WBF & ES.	None found	
	c)	Specify the condition of the reservoir	Satisfactory	
43	Is any public or other water storage facility available nearby ?		Yes	Specify the distance from the building 800mtr
	a)	Is it readily accessible?	Yes	Condition and type of the reservoir water body
44	Are internal hydrants being provided ?		Yes	
	If so, please indicate no of hydrants in each floor		one	

45	Are first aid hose reels being provided ? If so please indicate		Yes	
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Directly to the riser	
	b)	Size (bore) and type of nozzle fitted to each hose reel	5 mm, Jet type	
46	Are fire hoses being provided near each hydrant? If so, please indicate		YES	
	a)	Total no of hoses provided near each hydrant	YES	
47	Have wet risers/dry risers been provided?		Yes Wet riser	
	If yes, please indicate the number of risers and internal diameter of each		one	
48	Has any down comer been provided? If so, please give details		No	
49	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Main pump- 60 HP stand by- 60 HP Jockey -15 HP	
	a)	Number of pumps	Three	
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction -200 mm , Delivery – 150 mm Output of main pump 171M ³ /Hr Head height is 75Mtr	
	e)	Is the pump automatic in action?	Yes,	
	f)	Is the water pressure sufficient at max distance from the pump?	YES	
50.	Sprinkler system		YES	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes. Smoke detectors	
	a)	Type of detectors used	Addressable type smoke detector	
51	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes.	
52	Alarm receiving system		Yes,	
53	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		Yes 2013 to 2014	Number of FE Type/ Capacity BC (5 Kg) ABC (5 Kg) Rest tenants in other floors have their own Fleet of Fire Extinguishers 4 2 2
54	Location and population of the FEs adequate		In the ground floor& in electrical installation ,	
55	Are Emergency Fire Alarm being provided in each floor ?		Yes	No. of Fire Alarm:two Location of Fire Alarm:in each floor
56	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		No.	

57	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	Yes. Last done on 8.12.12. Schedule is Twice a year
58	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not Available
59	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Verified
60	Status of NOC from WBF&ES	NOC from WBF & ES has been obtained & valid up to 28.2.13 .Ref WBFES/DG/FP/280/12/OB/187 (049)

Part-V

Electrical, Cables and Ventilation

61	If the building is Centrally air -conditioned, please indicate,		NO
62.	a)	Material used for construction of ducts and its fittings	Not available
63.	b)	Type of tinning used for ducts	Not available
64.	c)	Type of lagging used, if any for insulating any portion of the duct	Not available
65.	d)	How the lagging is secured?	Not available
66.	e)	If false ceiling is there?	Not available
67.	f)	Material used for false ceiling	Not available
68.	g)	Is a separate AHU being provided in each floor	Not applicable
69.	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
70.	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
71.	j)	Will fire dampers be provided in AC duct?	Not applicable
72.	Is there any standby source of electric supply being provided?		Yes DG of 500KVA
73.	Is the back supply automatic?		YES
74.	Location of switch- gears and transformers		Outside the building
75.	a)	Transformer capacity	1000 KVA
76.	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	YES
77.	c)	If outside, how far is it from the building?	Not applicable
78.	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Fire Extinguishers
79.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Hydrant shaft &Electrical shaft not sealed
80.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		None found

81.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
82.	Whether natural ventilation is relied upon? If so, give details.	Yes
83.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No
84.	Whether mechanical ventilation is being coupled with automatic detection system?	Not applicable
85.	Whether the refuge area is being provided?	Yes at 4th floor & 6 th floor
86.	Storage of combustibles materials near electrical equipment/fuse units.	NO
87.	RCCBs available??	None found
88.	Master switch in warehouses	Not applicable
89.	Proper cable joint procedures as per manufacturer	Yes
90.	Earthing Pit Tested??	No record found
91.	Use of MCB??	Yes
92.	Bypassing of protection devices	Not evidenced
93.	Deteriorated insulation	Not evidenced
94.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
95.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	NO
96.	Tracking possibility	Yes
97.	Unused opening in the panels, etc.	Not found
98.	Possibility of ground fault/short circuit	Not found
99.	Mechanical protection to cables	Yes
100.	Loose terminations due to improper supports, crimping	Not found
101.	Improper gland installation, wrong lug size	Not found
102.	Over-rated uses, wrongly set protection relays, etc.	Not found
103.	Switch yard and sub station	Yes
104.	DG operation and maintenance	Yes with AMC
105.	Reliability of the fire hydrant system	YES
106.	Emergency preparedness and response	Not available
107.	Availability of Evacuation plan	Not available
108.	Mock drill conducted??	YES .Last done on 18.12.12
109.	Awareness of the people??	Poor
110.	Sample basis validation of smoke detection system??	Yes but no record is available
111.	Condition of Lightning Arrestor	Earth pit test has not been conducted
112.	Periodic test of UPS system (as applicable)	Not applicable
113.	Handling of electrical work by competent electrician	Yes
114.	Approval of receiving station, substation and DG	available
115.	Storage if hazardous material, chemicals?	None
116.	Use of signage?	Yes in Emergency stair case only

117.	Hydrants clear, access to public thorough fare open	YES
118.	Flame & work permits (as applicable)	Not applicable
119.	Effective internal communication and public address system	YES
120.	Colour coding system of hazardous chemical gas lines etc.	Not applicable
121.	Management structure, role of safety officer, fire department etc.	No
122.	Procedure for incident investigation and control	NO

PART- VI

Other Information

123	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes from WBF&ES recommendation
124	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
125	Is Trade License available??	No
126	Name of the Insurance Company	None
127	Remarks (if any) 1. There is no evacuation plan is available 2. There is no signage. In the emergency exit route in the main stair case 3. One of the Emergency Exit stair the door of the Refuse area is blocked by material materials 4. There is no ELCB or RCCB found in any DB 5. The Electrical shaft & the Hydrant shaft is not found sealed 6. Fire Hose cabinet has worn out 7. No hose found in the cabinet 8. Fire door seal at the ground floor is found damaged	

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	There is no evacuation plan is available	In Each floor Evacuation plan is to be displayed
2	There is no signage. In the emergency exit route in the main stair case	Proper illuminated signage to be provided
3	One of the Emergency Exit stair the door of the Refuse area is blocked by material 	Door of the refuse area must be kept free always
4	There is no ELCB or RCCB found in any DB	ELCB or RCCB is to be provided in the DB
5	The Electrical shaft & the Hydrant shaft is not found sealed 	To be sealed with noncombustible material preferably in each floor
6	Fire Hose cabinet has worn out 	To be replaced

7	No hose found in the cabinet 	Fire hoses with nozzle are to be kept
8	Fire door seal at the ground floor is found damaged 	To be repaired or replaced

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

STESALIT TOWERS



EXECUTIVE SUMMARY

Part I & II

General Information

STESALIT TOWERS is situated at E 2/3, Block EP GP, Sector V, Salt Lake, Kolkata 700091, the structure is B + G + 9 & built up area is 9809.075 sq.mtr. , in total 0.522 ACRES of land.

The owner of this property is Liggin Hospitality Ltd., and is used for rental purpose. The tenants of different floors are as follows:- 1st Floor – M/s Stesalit Ltd., 2nd Floor is vacant, 3rd Floor is Vacant, 4th Floor – M/s Magus customer Care Dialogue Pvt. Ltd., 5th Floor – Matrix Media, Siemens and Infusive , 6th Floor – M/s. Senes Consultants India Pvt. Ltd., Lemongrass and Emars Ltd., 7th Floor – Tatua Technology, 8th Floor – Tatua BPO and 9th Floor is vacant.

The basement has chiller plant for the central AC , pump house and parking space of about eighty cars

There is a central AC system in the building

Clearance Certificate of basement, ground, and 1st floor to 8th floor was obtained from Nabadiganta Industrial Township Authority on 20.3.10 and for the 9th floor and roof was obtained on 3.11.2010. Valid trade license for the owner is not available.

NOC from WBF &ES is valid till 24th May 2013 (Memo No. WBFS/DG/FP/1507/12/Bidhan-IT/97/05(105/05) dated 25.05.1012

Occupancy Load was found as

Existing -- 1781 persons
Floating -- 100 persons

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two Staircases available. There are five nos Lifts available. There are two refuse areas on the 6th floor northern side front and back of the building.

No Evacuation Drill has been conducted so far.

There are very few signages available in the EXIT Route.

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers, wet risers, Sprinklers & smoke detectors. Heat detector is present only in the pantry which is equipped only with induction cooking device. MCPs are present in both the stair cases.

Wet Riser

There is an underground tank of 1, 80,000ltr capacity for Fire only. There are four nos pumps housed in the basement. The main pump capacity is 75 HP, stand by pump of 75 HP, Sprinkler pump of 75 HP & that of Jockey pump is of 20 HP. The pumps are in auto mode and had a pressure of 5 Kg/sq cm at the basement.

Alternate source of water is the Water body approx. 300 mtr away

PAS is available.

Close circuit TV monitoring is available

46Nos Portable fire extinguishers are found deployed near the staircase, parking & in the common area. In addition to this the individual offices have their own fire extinguishers.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is one 750 KVA DG supply is as alternate source of power. This is operated in auto mode.

PART VI

OTHER INFORMATION

The building has no overhead storage facility for water. They are having a pressurized, from the underground domestic tank; source of water. The basement also has mechanical drafting system.

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	E 2/3, Block EP & GP	
2.	Premises Name (if any):	Stesalit Towers	
3.	Name of the owner /occupier/lessee	Messrs. Loginn Hospitality Ltd.,	
4.	Permanent Address	E 2/3, Block EP &GP, Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	Mr.C Gupta	Mr.Ranjan Dutta
7.	Phone No of Contact Person	98314 82985 46994,40650083	89721
8.	E-mail	Fm.stesalite@bgspl.com	
9.	Purpose of the Land Use	Principal Use Mixed Use ☐	Residential Educational Institutional Assembly Business ☐ Mercantile Industrial Storage IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	0.522 acres	
11.	Build up area(as informed to the Auditor)	9809.075sqmtr	
12.	No of Floors	B +G+9	
13.	Date of Sanction of Building Plan	■Yes/■Date 18.7.08 vide sanction no. 1607/BM(P) dated 18.7.08 Bidhan Nagar Municipality	
14.	Whether P.O.C/OC received from local body?	Yes Available	OC Issuing Authority NDITA Dated:20.3.2010 vide memo no:370(3)/NDITA/W-52/08 for B+G+8 & 3.11.2010 vide memo no 1428/1(4)/NDITA/W-52/08 for 9 th floor + roof
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	NIS	
16.	No of Security Personnel engaged	6 for A shift + 6 for B shift + 3 for night + 2 relievers = total 17 nos	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	YES	
19.	Whether Metal detectors are used at the entry point	No	

20	Whether Monitoring System through Close circuit TV available	YES
VEHICLES VOLUME		
21	No of Vehicles Engaged by the Organization	Nil
22	No of Own Vehicles engaged by Employees	
23	No of Vehicles for which parking space is available in the premises	120 (basement + ground)
24	Whether parking space available for visitors within the premises	Yes
25	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
26	Garbage Clearing	NDITA Garbage clearing system
27	Drainage System	Connected to NDITA Drainage system
28	Maintenance of Road	Internal road maintained by owner, condition found satisfactory
TELEPHONE TOWER		
29	No of Towers	No of towers: NIL
30	Statutory Clearance from AAI	Not applicable
31	Any Other Clearance	Not applicable

PART - II

V=VACANT

32	Occupancy load	(Attach floor wise details separately if required)											
	Existing	B	G	1	2	3	4	5	6	7	8	9	T
	a)Regular	0	17	17 5	V	V	500	84+28+30= 142	30+28+35 =93	354	50 0	V	1781
	b)Floating												100
33	Basement	Yes											
	a)	If basement extends beyond building profile						No					
	b)	Use of the basement						Parking space, Pump room,HVAC room (chiller plant)					
	c)	Is it being sprinkle red?						Yes					
	d)	Whether any cubicles present in the basement?						Yes					
		If yes, their use to be specified						Pump room, HVAC (chiller plant)					
	f)	Whether fire zones are defined?						No					
		If yes, please provide details						Not applicable					

Part- III

Provisions of means of escape

34	Number of staircases --→TWO Nos				
	Stairs Number		#1	#2	
	a)	Width of flight	1400 mm	1400 mm	
	b)	Tread width	280 mm	280 mm	
	c)	Riser Height	150 mm	150 mm	
	d)	Finish	Kota stone	Kota stone	
	e)	Width of stair door (FCD)	1100 mm	1100 mm	
	f)	Height of stair head room	3658 mm	3658 mm	
	g)	Height of stair handrail	980 mm	980 mm	
	h)	Area & location & profile of Fire Refuge Area	Two nos on 6th floor Northern side front & back – 8 m x 1.6 m		
	i)	Width and type of door leading to Fire refugee area	1100 mm (FCD)		
	J)	Pressurization of staircase	Yes	No	
	k)	Segregation of staircase	Yes	No	
35	Number of Lifts installed→5 nos				
	Lift-Numbers		#1& #2	# 3 & #4	#5(service)
	a)	Type of door	Metallic	Metallic	Metallic
	b)	Fire resistance rating	2 Hrs	2 Hrs	2 Hrs
	c)	Area of lift car	1900 x 1540 sq mm	1350 x 1350 sqmm	1400 x1810 sq mm
	d)	Capacity (no of persons)	20	10	15
	e)	Capacity(in kg)	1360 kg	680 kg	1000
	f)	Company	Kone	Kone	Kone
	g)	Is communication system, installed in the lift car?	■Yes		
	h)	Is a fireman's switch being installed in the car?	■Yes		
	i)	Pressurization of lift	No		
	j)	Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Not available, have applied for renewal		
36	Presence of proper signage in all the exit route		Very few		
37	Is it posted with illuminated signage?		Yes		
38	Whether it is landing to fire assembly point?		No		
39	Any form of Public address system available?		Yes		
40	Width form of internal road within the Premises?		5000 mm (North), 3500 mm (South)		
41	Width of the Entry / exit of Gate		5200mm(North), 6000 mm (South)		
42	Height of the Entry / exit of Gate		Open to sky		

PART IV

Provision of Fire Safety Arrangement

43	Is any water reservoir for fire fighting available ? (at ground level / over head)		■Yes	U/G1 ,80,000 ltr O/H no tank,pressurized pipeline maintained
	a)	If yes, specify the distance from the building	Adjacent to building, less than 1 m	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	Could not be checked as provisional NOC not available	
	c)	Specify the condition of the reservoir	Satisfactory	
44	Is any public or other water storage facility available nearby?		■Yes	■specify the distance from the building ---- 300Mtr approx
	a)	Is it readily accessible?	■Yes	■condition and type of the reservoir—Water body
45	Are internal hydrants being provided?		■Yes	■single or twin outlets.----- Single
	If so, please indicate no of hydrants in each floor		■Double	
46	Are first aid hose reels being provided? If so please indicate		■Yes	No of hose reels on each floor-- ---Two in each floor
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	■Yes To the riser	■Bore and length of hose reel tubing on each reel----- 25 mm,30 Mtr
	b)	Size (bore) and type of nozzle fitted to each hose reel	5 mm, jet type	
57	Are fire hoses being provided near each hydrant? If so, please indicate		■Yes	■Type of hose--Canvas ■Size of hose—63 mm ■Length of hose—15 mtr
	a)	Total no of hoses provided near each hydrant	Two in hydrant point	
48	Have wet risers/dry risers been provided?		Yes ☐ wet riser	
49	If yes, please indicate the number of risers and internal diameter of each		One, 150 mm	
50	Has any down comer been provided? If so, please give details		No	

51	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes
	a)	Number of pumps	Four, one main (75 HP) one stand by(75HP), one for sprinkler(75HP) one jockey-15 HP
	b)	Size of suction and delivery connection to each pump/Output/Head	■Suction:200mm ■Delivery: 150 mm ■Output of each pump: 144cu.m/hr(main)&10.8 cu.m./hr(jockey) ■Max head against which the pump can operate at the output mentioned in :88 M
	e)	Is the pump automatic in action?	Yes
	f)	Is the water pressure sufficient at max distance from the pump?	Could not be checked as no pressure gauge found at top floor; pressure at pump room was 4,5kgs/sq.cm.

52.	Sprinkler system		YES
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes,Smoke detectors ,sprinklers and heat detectors(only in pantry)
	a)	Type of detectors used	Smoke detector,sprinklers and heat detectors
53	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes_/_
	a)	Alarm receiving system	Yes_/_
54	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		■Yes ☐ ■Yes☐ _____ Number of FE Type/ Capacity Water type(9 ltrs) ABC Type (2Kgs) ABC Type (5 Kgs) 27.12.13, 5.1.14, 28.3.14,& 28.12.15 46 6 nos 33 nos 7 nos
	Location		Both the staircases, Ground floor,parking areas, basement,Electrical rooms,roof & lift rooms
55	Are Emergency Fire Alarm being provided in each floor?		No _____ ■No. of Fire Alarm – Not applicable ■Location of Fire AlarmNA
56	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		■Yes ☐ but certificates are not available

57	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	■Yes□ last done on 15.11.12, 20.12.12 & 16.1.13
58	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available
59	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available
60	Status of NOC from WBF&ES	Valid NOC is valid upto 24.5.13 vide memo no. WBFS/DG/FP/1507/12/Bidhan-IT/97/05(105/05) dated 25.5.12

Part-V

Electrical, Cables and Ventilation

61	If the building is Centrally air -conditioned, please indicate,	■Yes, The building has central AC		
	a) Material used for construction of ducts and its fittings	GI sheet metal		
	b) Type of tinning used for ducts	GI		
	c) Type of lagging used, if any for insulating any portion of the duct	Glass wool		
	d) How the lagging is secured?	Aluminium foil and then refractory material		
	e) If false ceiling is there?	Yes		
	f) Material used for false ceiling	Gypsum board		
	g) Is a separate AHU being provided in each floor	No, there are five AHU and three FCUs jointly connected to the building		
	h) Whether automatic shutdown of AHU is coupled with detection system?	No		
	i) Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	No -, continuous		
	j) Will fire dampers be provided in AC duct?	No		
62	Is there any standby source of electric supply being provided?	■Yes	DG 750 KVA Capacity	UPS no UPS
	Is the back supply automatic?	■Yes	Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump□ ■Emergency Light□ ■Lift□ Offices□ HVAC□	

63	Location of switch- gears and transformers	Back side, inside the bldg
64	a) Transformer capacity	1500 KVA dry type
	b) If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Separated by 150 mm RCC wall
	c) If outside, how far is it from the building?	
65	What precautions are taken to prevent a possible fire in the transformers from spreading?	Fire extinguishers and sand bucket
66	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Electrical shafts, riser shafts & HVAC shafts are not sealed
67.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	NO
68.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
69.	Whether natural ventilation is relied upon? If so, give details.	Yes, windows are provided
70.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No, only in the basement mechanical ventilation is provided
71.	Whether mechanical ventilation is being coupled with automatic detection system?	NO
72.	Whether the refuge area is being provided?	■Yes□ two nos on the 6 th Floor
73.	Storage of combustibles materials near electrical equipment/fuse units.	No
74.	RCCBs available??	No
75.	Master switch in warehouses	Not applicable
76.	Proper cable joint procedures as per manufacturer	Yes
77.	Earthing Pit Tested??	Records are not available
78.	Use of MCB??	Yes
79.	Bypassing of protection devices	NO
80.	Deteriorated insulation	NO
81.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
82.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	NO- not done in any shaft
83.	Tracking possibility	YES
84.	Unused opening in the panels, etc.	No
85.	Possibility of ground fault/short circuit	No
86.	Mechanical protection to cables	Yes
87.	Loose terminations due to improper supports, crimping	NO
88.	Improper gland installation, wrong lug size	NO
89.	Over-rated uses, wrongly set protection relays, etc.	NO

90.	Earthing layout & it's effectiveness	Yes, but Earth pit test report not found
91.	Switch yard and sub station	Yes
92.	DG operation and maintenance	Yes, AMC with Garuda Power
93.	Reliability of the fire hydrant system	Yes
94.	Emergency preparedness and response	NO
95.	Availibility of Evacuation plan	NO
96.	Mock drill conducted??	Yes
97.	Awareness of the people??	NIL
98.	Sample basis validation of smoke detection system??	NO
99.	Storage if hazardous material, chemicals??	No
100.	Use of signage??	Yes but very few, more signage are required
101.	Hydrants clear, access to public thorough fare open	Yes
102.	Flame & work permits (as applicable)	NO
103.	Effective internal communication and public address system	YES
104.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
105.	Management structure, role of safety officer, fire department etc.	NO
106.	Procedure for incident investigation and control	NO

PART- VI

Other Information

1078.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	■Yes	■Deviation from WBF&ES NOC
108	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO	
	Is Trade License available??	Not Available	
109	Name of the Insurance Company	NO	

110	Remarks (if any) 48. No Evacuation drill has been conducted 49. There is no rubbermat in front of LT panel room, and also in AC control panel room 50. Housekeeping is poor in the Transformer room, and no rubber matt is provided. Two fire extinguishers found in the Transformer room was found to be expired 51. Proper signage are not found in the building 52. Housekeeping in LT panel room is also poor 53. The hydrant pipelines are severely rusted in many places maintenance and painting to Be done immediately 54. Hose boxes are not found in many places near the hydrant. 55. The trade license is not available, 8 th floor of M/s. Tatua BPO was found to have all Expired extinguishers.

Reviewer

Auditor

Signature & date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	No evacuation drill has been conducted	Same to be conducted periodically
2.	No rubber matt found in Transformer room, LT panel room, Ac panel room 	Same to be provided everywhere 
3	The extinguishers found in transformer room is expired, sand bucket is almost empty 	Fire extinguishers are to be refilled and sand bucket filled
4	Transformer room is not equipped with automatic CO2 or DCP fire extinguisher	Same to be provided

5.	Hose boxes are found empty at many places near the hydrants due to theft 	Proper preventive measure to be taken against theft and hose boxes to be replaced
6.	Trade licence not found	To be applied and made available
7.	9 th Floor BPO office of M/s Tatura was found to have only 3 FEs and that too expired	All floors tenants must refill their FEs and also keep adequate numbers
8.	The hydrant pipes were found in an extremely rusted condition	Must be painted and thoroughly checked
9.	CC TV does not observe all the floors	Should observe all the floor
10.	No Evacuation plan displayed	Same to be made and displayed
11	AHUs are not separate for all floors and its tripping is not connected automatic detection system	Same to be corrected immediately
12.	Very few signage are found	More illuminated signage to be provided especially in front of lifts and escape routes

Reviewer

Auditor

Signature & date of Inspecting and Reporting Authority With seal

INFINITY BENCH MARK



EXECUTIVE SUMMARY

Part I & II

INFINITY BENCH MARK is situated at EP &GP G-1, Sector V, Salt Lake, Kolkata 700091, the building is B+G+ 18 floors in 1.006 acres of plot of land. The basement is used for garage , Facility Management Office, DG room, Pump room, Dish washing room of a restaurant AC plant STP Plant . Garage facility is available in ground floor, 2nd floor, 3rd floor, 4th floor & 5th floor. In the ground floor there is a restaurant, bank ATM, Electrical installations. As on audit date 7th & 17th floors are vacant. Total built up area is around 540602.74Sq ft.

There is central **AC system** in the building , having separate AHU in each floor.

OC (Occupation Certificate is not available

NOC from WBF & ES is valid up to 6.5.2013. Ref : WBFES/DG/FP/1195/12.

Estimated Occupancy Load was found as

Existing -- 2000
Floating -- 40

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are total 3 Nos Staircases available. There is total 9 nos Lifts available including one service lift. There is refuse area on 6th & 8th floor

Evacuation Drill is being conducted in every 6 months.

There are Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

There is no provision for Fire safety arrangement in the building, like Fire Extinguishers, MCPs, Smoke detectors, Fire hydrants & sprinklers.

Alternate source of water is the Water body approx.100 mtr away

PART V

ELECTRICAL FIRE HAZARDS

There are ELCB & RCCB available in the distribution board

Generally no combustible material is stored in the premises, near the Electrical installation

There are DGsupplies available as an alternate source of Power supply.

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	EP & GP G-1	
2.	Premises Name (if any):	Infinity Benchmark	
3.	Name of the owner /occupier/lessee	Infinity Infotech parks Ltd	
4.	Permanent Address	GP A-3, Sector V, salt lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	MrBipulTarafdar	
7.	Phone No of Contact Person	98316 98924	
8.	E-mail	btarafdar@infinitypark.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	1.006 Acres	
11.	Build up area(as informed to the Auditor)	540602.74Sqft	
12.	No of Floors	B+G+18	
13.	Date of Sanction of Building Plan	18.07.2006	
14.	Whether P.O.C/OC received from local body?	23.06.2008	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	A 2 Z	
16.	No of Security Personnel engaged	22	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	Yes	
19.	Whether Metal detectors are used at the entry point	Yes	
20.	Whether Monitoring System through Close circuit TV available	Yes	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	8	
22.	No of Vehicles for which parking space is available in the premises	150	
23.	Whether parking space available for visitors within the premises	Yes (pay parking)	
24.	Place where excess vehicles (if any) are parked	Outside the building	

GENERAL MAINTENANCE		
25	Garbage Clearing	NDITA garbage clearing system
26	Drainage System	Connected to NDITA drainage system
27	Maintenance of Road	Internal Road is maintained by Occupier. Condition is satisfactory
TELEPHONE TOWER		
28	No of Towers	NIL
29	Statutory Clearance from AAI	Not available
30	Any Other Clearance	Not available

PART - II

31	Occupancy load		Based on Estimates
	Existing		Individual floor wise could not be provided At present 7 th & 17 th floor are vacant
	a)	Regular	2000
	b)	Floating	40
32	Basement		YES
	a)	If basement extends beyond building profile	NO
	b)	Use of the basement	Car parking, Facility Management Office, DG room, Pump room, Dish washing room of a restaurant AC plant STP Plant .
	c)	Is it being sprinklered?	YES
	d)	Whether any cubicles present in the basement?	NO
		If yes, their use to be specified	Not applicable
	f)	Whether fire zones are defined?	NO
		If yes, please provide details	Not applicable

Part- III

Provisions of means of escape

33	Number of staircases --→ Only 3 nos				
	Stairs Number		East	West	South
	a)	Width of flight	1380 mm	1380 mm	1380 mm
	b)	Tread width	270 mm	270 mm	270 mm
	c)	Riser Height	160 mm	160 mm	160 mm
	d)	Finish	Kota stone	Kota stone	Kota stone
	e)	Width of stair door (FCD)	990 mm	990 mm	990 mm
	f)	Height of stair head room	4500 mm	4500 mm	4500 mm
	g)	Height of stair handrail	770 mm	770 mm	770 mm
	h)	Area & location & profile of Fire Refuge Area	8 th & 12 th & 18 th floor 9800mm X 2260mm each		
	i)	Width and type of door leading to Fire refugee area	FCD-1090mm		
	J)	Pressurization of staircase	No		
	k)	Segregation of staircase	Yes		

34	Number of Lifts installed→ 6 passenger + 2 service lifts			
	Lift-Numbers			
			No 1 to8	Service lift
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2 hrs	2 hrs
	c)	Area of lift car	2000 mm X 1600 mm	2000 mm X 1600 mm
	d)	Capacity (no of persons)	20	20
	e)	Capacity(in kg)	1350	1350
	f)	Company	OTIS	OTIS
	g)	Is communication system, installed in the lift car?	YES	YES
	h)	Is a fireman's switch being installed in the car?	YES	YES
	i)	Pressurization of lift	NO	NO
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	YES	YES
34	Presence of proper signage in all the exit route		YES	
36	Is it posted with illuminated signage ?		YES	
37	Whether it is landing to fire assembly point?		YES	
38	Any form of Public address system available ?		YES	
39	Width form of internal road within the Premises?		5000 mm	
40	Width of the Entry / exit of Gate		4500 mm	
41	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available ? (at ground level / overhead)		Yes	U/G2,50,000 Ltr O/H70000 including domestic
	a)	If yes, specify the distance from the building	Adjacent to the building	
	b)	If yes, specify the capacity (in litres) as approved by WBF& ES.	2,50,000 Ltr	
	c)	Specify the condition of the reservoir	Satisfactory	
43	Is any public or other water storage facility available nearby?		Yes	Specify the distance from the building 100 mtr
	a)	Is it readily accessible ?	Yes	Condition and type of the reservoir water body
44	Are internal hydrants being provided ?		Yes	
	If so, please indicate no of hydrants in each floor		Three nos in each floor	

45	Are first aid hose reels being provided ? If so please indicate		Yes
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	One in each stair in each floor
	b)	Size (bore) and type of nozzle fitted to each hose reel	20 mm,30 mtr
46	Are fire hoses being provided near each hydrant? If so, please indicate		Yes
	a)	Total no of hoses provided near each hydrant	one
47	Have wet risers/dry risers been provided?		Yes –Wet risers
	If yes, please indicate the number of risers and internal diameter of each		Three risers
48	Has any down comer been provided? If so, please give details		No
49	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		yes
	a)	Number of pumps	5 Nos Main Pump-90KW SpareDG Pump-98KW Jockey pump-15 HP Jockey Main- 15 HP Sprinkler Jockey-15 HP
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction 150 mm Delivery 150 mm Output17.1 M ³ /hr(J) 23.4 M ³ /Hr(M) Head 105Mtr
	e)	Is the pump automatic in action?	YES
	f)	Is the water pressure sufficient at max distance from the pump?	Yes – 4 Kg/cm ²
50.	Sprinkler system		Yes
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes, Smoke detectors
	a)	Type of detectors used	Addressable
51	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes
52	Alarm receiving system		Yes
53	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark?		Yes Water CO2(9Ltr)→ 40 nos DCP (5 Kgs)→ 41 Nos DCP (10kgs)→ 15 ABC (5 Kgs) →2 nos ABC (2 Kgs) →4nos CO2(4.5 Kgs)→10 nos CO2(3 Kgs)→1 no CO2(2 Kgs)→6 nos
	Date of Validity		13.2.13

54	Location and population of the FEs adequate	Common areas, Electrical Installations, stair cases & own offices
55	Are Emergency Fire Alarm being provided in each floor ?	Yes
56	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	Yes, there are 4 Nos available round the shifts
57	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No Yes in every Quarter. Last done on 9.11.12
58	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available
59	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available
60	Status of NOC from WBF&ES	Yes. Valid up to 6.5.2013. Ref : WBFES/DG/FP/1195/12.

Part-V

Electrical, Cables and Ventilation

61	If the building is Centrally air -conditioned, please indicate,	YES 450 TR (two Nos) & one 270 Tr as stand by
	a) Material used for construction of ducts and its fittings	Galvanised steel sheet
	b) Type of tinning used for ducts	Refractory Lining
	c) Type of lagging used, if any for insulating any portion of the duct	Could not be checked
	d) How the lagging is secured?	Could not be checked
	e) If false ceiling is there?	YES
	f) Material used for false ceiling	Gypsum BOARD
	g) Is a separate AHU being provided in each floor	Yes
	H) Whether automatic shutdown of AHU is coupled with detection system?	Yes
	i) Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Yes. Isolated form each floor
	j) Will fire dampers be provided in AC duct?	YES
62	Is there any standby source of electric supply being provided?	YES
	Is the back supply automatic?	YES
63	Location of switch- gears and transformers	inside the main building
64	a) Transformer capacity	2500 KVA X 2 Nos, 11 KV,/415 V
	b) If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Yes
	c) If outside, how far is it from the building?	Not applicable

65.	What precautions will be taken to prevent a possible fire in the transformers from spreading?	Automatic ABC fire extinguishers
66.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Shafts are in stair case separately Alternate floor sealed
67.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	No at kitchen
68.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
69.	Whether natural ventilation is relied upon? If so, give details.	Yes
70.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO
71.	Whether mechanical ventilation is being coupled with automatic detection system?	Yes
72.	Storage of combustibles materials near electrical equipment/fuse units.	None found
73.	RCCBs available??	NO
74.	Master switch in warehouses	Not applicable
75.	Proper cable joint procedures as per manufacturer	Not applicable
76.	Earthing Pit Tested??	Yes
77.	Use of MCB??	YES
78.	Bypassing of protection devices	None found
79.	Deteriorated insulation	None found
80.	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes
81.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Yes
82.	Tracking possibility	Yes
83.	Unused opening in the panels, etc.	None found
84.	Possibility of ground fault/short circuit	None found
85.	Mechanical protection to cables	YES
86.	Loose terminations due to improper supports, crimping	None found
87.	Improper gland installation, wrong lug size	None found
88.	Over-rated uses, wrongly set protection relays, etc.	None found
89.	Switch yard and sub station	Inside the building with heat detector
90.	DG operation and maintenance	Yes
91.	Reliability of the fire hydrant system	Yes
92.	Emergency preparedness and response	Yes
93.	Availability of Evacuation plan	Yes
94.	Mock drill conducted??	Yes in every Quarter

95.	Awareness of the people??	Yes
96.	Sample basis validation of smoke detection system??	Yes
97.	Condition of Lightning Arrestor	Satisfactory
98.	Periodic test of UPS system (as applicable)	Yes
99.	Handling of electrical work by competent electrician	YES. License holder
100.	Approval of receiving station, substation and DG	Not available
101.	Storage of hazardous material, chemicals?	NO
102.	Use of signage?	Yes
103.	Hydrants clear, access to public thorough fare open	Yes
104.	Flame & work permits (as applicable)	Issued depending upon the job
105.	Effective internal communication and public address system	Yes. In BMS room
106.	Colour coding system of hazardous chemical gas lines etc.	Yes
107.	Management structure, role of safety officer, fire department etc.	Yes
108.	Procedure for incident investigation and control	There is no exact format. Investigations are done if incidence occurs

PART- VI

Other Information

109	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No.
110	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
	Is Trade License available??	Not applicable
111	Name of the Insurance Company	
112	Remarks (if any) 1. One heat detector found missing on one of the restaurant canteen 2. No FCD found in the ground floor	

NDITA
Nonconformity tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	One heat detector found missing on one of the restaurant canteen	Heat detector is to be provided
2.	No FCD found in the ground floor	FCD is to be replaced

Reviewer

Auditor

Signature & date Inspecting and Reporting Authority Withseal

METALOGIC SYSTEMS PVT. LTD



EXECUTIVE SUMMARY

Part I & II

General Information

Metalogic Systems Pvt. Ltd. is an IT Business Organization situated in the plot No. EPGP-J1/1, Salt Lake Electronics Complex, Sector – V, Kolkata – 700091 since 2005. The building structure is G+2. The land area is about 953.44 Sq. Mtr which comprises of built up area of 1227.70Sq.Mtr covering ground floor, first floor and second floor. The facilities are distributed as follows:-

Ground Floor – Reception, Conference Room , Office.

First Floor – Office , Work Station.

Second Floor – Vacant.

WBF&ES Provisional N.O.C. dated 13.11.2002 is available. Final N.O.C. was applied on 21.01.2013.

WBDOE approval for installation of Transformer is available.

Trade Licence for current year is available.

Building Plan approval is available.

WBDOE approval for installation of DG Set is not available.

Occupancy Clearance is not available.

Occupancy Load (Existing and Floating) was estimated as 45 and 10 respectively.

Centralised HVAC system is not installed in the building.

Part III

PROVISION OF MEANS OF ESCAPE

This building has two stairs without FCD . The exit signage is available at exit stair at each floor without any floor identification and illumination. Two gates are available for entry and exit.

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Fire safety arrangement includes portable fire extinguishers at strategic points. The portable fire extinguishers are not properly distributed. The refilling period of FE is found valid. The building is equipped with Fire detection system. Dedicated Underground water reservoir for firefighting is available. Alternative source is water body about 200 mtr away. The Fire Pumps and Hydrant system are not been installed.

PART V

ELECTRICAL FIRE HAZARDS

Transformer of 1 x 125 KVA and DG of 1 x 63 KVA capacity are Installed outside of the building. Management could produce approved document of “ Director of Electricity “ for Transformer. The same for DG Set is not available. External Condition of cable is found satisfactory. There is no ELCB or RCCB found in the distribution board and no identification found in the Earth Pit. The record for measuring earth pit resistance or servicing of the same is not maintained.

PART VI

OTHER INFORMATION

Explosive materials and Chemicals are not stored in the building.

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	Block –EPGP, Plot No. J1/1
2.	Premises Name (if any):	MetalogicSystems Pvt. Ltd.
3.	Name of the owner /occupier/lessee	MetalogicSystems Pvt. Ltd.
4.	Permanent Address	EPGP - J1 /1, Salt Lake Electronics Complex, Sector – V , Kolkata – 700091.
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold
6.	Name of the Contact Person	Miss. Smita Das
7.	Phone No of Contact Person	033-23578991(4 Lines)
8.	E-mail	smitad@metallogicsystems.com
9.	Purpose of the Land Use	Principal Use IT
10.	Plot Area(as informed to the Auditor)	953.44 Sq. Mtr.
11.	Build up area(as informed to the Auditor)	1227.70 Sq. Mtr.
12.	No of Floors	G+2
13.	Date of Sanction of Building Plan	No. V/BM/272 R ² Dated 28.09.2004
14.	Whether P.O.C/OC received from local body?	Not Available

SECURITY SETUP DETAILS

15.	Name of the SECURITY AGENCY engaged	Own Security Arrangement
16.	No of Security Personnel engaged	2 (1+1) / 24 Hours
17.	Whether Records of Vehicles (No & type entering into the building are kept	No
18.	Whether records of Visitors entering into the building are kept	Yes
19.	Whether Metal detectors are used at the entry point	No
20.	Whether Monitoring System through Close circuit TV available	No

VEHICLES VOLUME

21.	No of Vehicles Engaged by the Organisation	8
22.	No of Vehicles for which parking space is available in the premises	6 →Transformer front space is also used for car parking.
23.	Whether parking space available for visitors within the premises	Not allowed
24.	Place where excess vehicles (if any) are parked	Outside

GENERAL MAINTENANCE

25.	Garbage Clearing	NDITA
26.	Drainage System	NDITA
27.	Maintenance of Road	Own

TELEPHONE TOWER		
28.	No of Towers	No
29.	Statutory Clearance from AAI	No
30.	Any Other Clearance	No

PART - II

31.	Occupancy load	(Biased On Estimates)			
	Existing	G	1	2	Total
	a)Regular	20	25	0	45
	b)Floating	10	0	0	10
32.	Basement	No			

PART - III

Provisions of means of escape

33.	Number of staircases	2 Nos.	
	Stairs Number	#1	#2
	a) Width of flight (mm)	1340	1400
	b) Tread width(mm)	260	260
	c) Riser Height(mm)	150	140
	d) Finish	Marble	Marble
	e) Width of stair door (FCD)-mm	No	830 (Not FCD)
	f) Height of stair handrail(mm)	900	890
	g) Height of stair head room(ft)	12	12
	h) Area & location & profile of Fire Refuge Area	No	
	i) Width and type of door leading to Fire refuge area	No	
	j) Pressurization of staircase	No	
	k) Segregation of staircase	Yes	
34.	Number of Lifts installed	No	
35.	Presence of proper signage in all the exit route	At exit stair only	
36.	Is it posted with illuminated signage ?	No	
37.	Whether it is landing to fire assembly point?	No	
38.	Any form of Public address system available ?	No	
39.	Width form of internal road within the Premises (mm) ?	3600	
40.	Width of the Entry / exit of Gate (mm)	No. 1/3600, No. 2/ 2350	
41.	Height of the Entry / exit of Gate	Open to sky	

PART IV

Provision of Fire Safety Arrangement

42.	Is any water reservoir for firefighting available ? (at ground level / over head)	Yes	U/G Res. - 14 KL O/H Tank - 1 KL x 2
	a) If yes, specify the distance from the building	2 Mtr.	
	b) If yes, specify the capacity (in litres)as approved by WBF& ES.	100000Ltr.	
	c) Specify the condition of the reservoir	Clear	
43.	Is any public or other water storage facility available nearby?	Yes	Specify the distance from the building→200Mtr.
	a) Is it readily accessible?	Yes	Condition and type of the reservoir→ Water Body
44.	Are internal hydrants being provided ?	No	
	If so, please indicate no of hydrants in each floor	Not applicable	
45.	Are first aid hose reels being provided ? If so please indicate	No	
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	No	
	b) Size (bore) and type of nozzle fitted to each hose reel	No	
46.	Are fire hoses being provided near each hydrant? If so, please indicate	No	
	a) Total no of hoses provided near each hydrant	No	
47.	Have wet risers/dry risers been provided?	No	
	If yes, please indicate the number of risers and internal diameter of each	No	
48.	Has any down comer been provided? If so, please give details	No	
49.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	No	
	a) Number of Pumps	No	
	b) Size of suction and delivery connection to each pump / Output / Head	Not applicable	
	c) Is the pump automatic in action	Not applicable	
	d) Is the water pressure sufficient at max distance from the pump	Not applicable	
50.	Sprinkler system	No	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	No	
	a) Type of detectors used	Smoke Detector G + 1ST + 2ND Total 6 + 4 + 0 10	

51.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	No	
52.	Alarm receiving system	Yes at Reception	
53.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Yes Refilling due on 24.01.2014	Number of FE - 14 G - 6Nos. 1 ST - 4No, 2 ND - 4No, Type/ Capacity . CO ² /3KG - 4,4.5KG- 4 2KG -3,10 KG -2,5KG-1
54.	Location and population of the FEs adequate	Yes	
55.	Are Emergency Fire Alarm being provided in each floor ?	Yes , 1 No in Each Floor	
56.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	Yes ,Security persons are trained.	
57.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.2 /Yr.)	Yes, Record is not available.	
58.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not Available	
59.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not Available	
60.	Status of NOC from WBF&ES	Provisional N.O.C. issued in Nov'2002. Applied for Final N.O.C. in Jan '2013.	

Part-V

Electrical, Cables and Ventilation

61.	If the building is Centrally air - conditioned, please indicate,	No	
62.	Is there any standby source of electric supply being provided?	Yes	DG Capacity 63 KVA UPS Capacity No
	Is the back supply automatic?	Yes	Specify the functions that can be maintained simultaneously by such back ups • Emergency Light • Partly to Office

63.	Location of switch- gears and transformers		Outside
64.	a	Transformer capacity	125 KVA / Oil type
	b	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	No
	c	If outside, how far is it from the building?	4 Mtr
65.	What precautions is taken to prevent a possible fire in the transformers from spreading?		→No Fire Extinguisher Provided. →No Rubber Mat Provided →No Sand Bracket Provided →No Exhaust Fan Provided →No illumination Provided.
66.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		No Seal.
67.	Is Earth Leakage Circuit Breaker (ELCB) in every distribution board?		No
68.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		N.A.
69.	Whether natural ventilation is relied upon? If so, give details.		Yes
70.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No
71.	Whether mechanical ventilation is being coupled with automatic detection system?		No
72.	Whether the refuge area is being provided?		No
73.	Storage of combustibles materials near electrical equipment/fuse units.		No
74.	RCCBs available?		No
75.	Master switch in warehouses		No
76.	Proper cable joint procedures as per manufacturer		Yes
77.	Earthing Pit Tested??		Yes, Record is not Kept
78.	Use of MCB??		Yes
79.	Bypassing of protection devices		No
80.	Deteriorated insulation		No

81.	Selection, deployment of PFFs (Portable Fire Extinguishers)	Own Arrangement
82.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No Seal
83.	Tracking possibility	No
84.	Unused opening in the panels, etc.	No
85.	Possibility of ground fault/short circuit	No
86.	Mechanical protection to cables	Yes
87.	Loose terminations due to improper supports, crimping	No
88.	Improper gland installation, wrong lug size	No
89.	Over-rated uses, wrongly set protection relays, etc.	No
90.	Switch yard and sub station	No
91.	DG operation and maintenance	AMC on Technocon
92.	Reliability of the fire hydrant system	Not applicable
93.	Emergency preparedness and response	Not done
94.	Availability of Evacuation plan	Not done
95.	Mock drill conducted??	Yes, Record is not kept.
96.	Awareness of the people??	Yes
97.	Sample basis validation of smoke detection system??	Yes
98.	Condition of Lightning Arrestor	2 Nos at roof top
99.	Periodic test of UPS system (as applicable)	Yes
100.	Handling of electrical work by competent electrician	License holder contactor – J.M.Engg.
101.	Approval of receiving station, substation and DG	Yes for Transformer
102.	Storage if hazardous material, chemicals?	No
103.	Use of signage?	At Exit Route
104.	Hydrants clear, access to public thoroughfare open	Not applicable
105.	Flame & work permits (as applicable)	No
106.	Effective internal communication and public address system	No
107.	Colour coding system of hazardous chemical , gas lines etc.	No
108.	Management structure, role of safety officer, fire department etc.	Safety committee meeting is done but record is not kept.
109.	Procedure for incident investigation and control	Not done

PART- VI

Other Information

110.	Is there any deviation from the existing recommendation, if any , already been ProvidedbyFire & Emergency Services	Yes	Deviation. Final N.O.C. is not available.
111.	Particulars of premises or part of premises used for storage, use, process of substances require FireLicense	No	
112.	Is Trade License available?	Dated 20.04.2012. Copy attached	
113.	Name of the Insurance Company	SBI General Insurance	
114.	Remarks (if any) :- Clear gaps are found from the provisional N.O.C. of WBFES.Final N.O.C. is not available.		

Auditor

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No.	OBSERVATIONS	RECOMMENDATIONS
1.	Gaps have been found w.r.t. recommendation of provisional N.O.C. dated 13.11.2002 of WBFES.	Final N.O.C. of WBFES needs to be obtained. (Final N.O.C. is applied on 21.01.2013.)
2.	 Car Parking space in front of Transformer	Electrical Installation Area must be kept free from car parking.
3.	 Car Parking space in the drive way.	Drive way must be kept free from car parking.
4.	Fire Prevention Maintenance Register is not available in spite of formation of Safety Committee.	FPM Register needs to be kept.
5.	Safety Committee Meeting Record is not available.	Record of Safety Committee meeting is to be documented.
6.	General Recommendations of provisional N.O.C. of WBFES is found to be not followed properly.	Recommendations must be followed strictly.

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

BIKALPA SHAKTI BHAWAN

EXECUTIVE SUMMARY

Part I & II

General Information

BIKALPA SHAKTI BHAWAN is situated at Plot No.EPGP - J1 /10 ,Sector - V,Salt Lake Electronics Complex , Kolkata-700091.The building structure is G+3 .The land area is about0.2687 Acre (11705 sq. feet) which comprises of built up area of 2000 (500 x 4) sq. feet.There are offices in each floor.The details are as follows :-

Ground Floor – West Bengal Renewable Energy Development Agency Office.

First Floor – West Bengal Renewable Energy Development Agency Office.

Second Floor–Atomic Energy Commission Office.

Third Floor –West Bengal Renewable Energy Development Agency Office (Part).

Third Floor -West Bengal Electricity Regulatory Commission Office(Part).

Entire Roof - Full of Solar Panel connected with Electrical System / Grid.

WBFES N.O.C. is not available.

WBDOE approval is not available.

Occupancy Clearance isnot available.

Building Planapproval is not available.

Trade License is not available .

Occupancy Load (Existing and Floating)was estimatedas130 and 20 respectively.

Centralized HVAC system is not installed in the building.

Part III

PROVISION OF MEANS OF ESCAPE

Thebuilding has two staircaseswithout any FCD.One lift is also operating without any “ C ” Form. The Exit route signage and Evacuation Plan are not available anywhere. Altogether two gates are available for entry and exit.

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes portable fire extinguisher only. Record is not maintained for periodic checking of FE system since expired FE is also found available. Dedicated Underground Water Reservoir for firefighting are not available. Alternative source is water body about 4mtr away. The building is not equipped with Fire detection system or Fire alarm system.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB found in the distribution board. There is no identification found in the Earth PIT and record for measuring earth pit resistance or servicing of the same is not maintained.

Solar Panel is installed in the roof floor and same is connected with electrical system / Grid.

PART VI

OTHER INFORMATION

Explosive materials and Chemicals are not stored in the building.

NDITA-FIRE SURVEY AND SAFETY AUDIT CHECKLIST

PART - I

General Information

1.	Plot No/Premises No:	Block -EPGP, Plot No. J1/10	
2.	Premises Name (if any):	Bikalpa Shakti Bhawan	
3.	Name of the owner /occupier/lessee	West Bengal Renewable Energy Development Agency	
4.	Permanent Address	Block-EPGP, Plot No. J1/10, Salt Lake Electronics Complex, Sector – V ,Kolkata-700091.	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	Mr. Samir Kumar Dey	
7.	Phone No of Contact Person	9830390631	
8.	E-mail	wbreda@cal.vsnl.net.in samirdey46@gmail.com	
9.	Purpose of the Land Use	Principal Use	Industrial
10.	Plot Area(as informed to the Auditor)	0.2687 Acre (11705 Sq. ft.)	
11.	Build up area(as informed to the Auditor)	2000 Sq. ft.	
12.	No of Floors	G+3	
13.	Date of Sanction of Building Plan	No data available	
14.	Whether P.O.C/OC received from local body?	No data available	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Gold Star Security Agency Gupta Shopping Complex T.N. Mukherjee Road, Hoogly-712311	
16.	No of Security Personnel engaged	4 / 24 Hours	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	Yes	
19.	Whether Metal detectors are used at the entry point	No	
20.	Whether Monitoring System through Close circuit TV available	No	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	5	
22.	No of Vehicles for which parking space is available in the premises	10 (App.)	
23.	Whether parking space available for visitors within the premises	Not allowed	
24.	Place where excess vehicles (if any) are parked	Outside	

GENERAL MAINTENANCE		
25.	Garbage Clearing	NDITA
26.	Drainage System	NDITA
27.	Maintenance of Road	Own
TELEPHONE TOWER		
28.	No of Towers	No
29.	Statutory Clearance from AAI	No
30.	Any Other Clearance	No

PART - II

31.	Occupancy load	(Attach floor wise details separately if required)				
	Existing	G	1	2	3	Total
	a)Regular	40	40	15	35	130
	b)Floating	10	5	5	0	20
32.	Basement	No				

PART - III

Provisions of means of escape

33	Number of staircases	2 Nos.	
	Stairs Number	#1	#2
	a) Width of flight (mm)	1400	1400
	b) Tread width(mm)	265	280
	c) Riser Height(mm)	150	150
	d) Finish	Kota Stone	Kota Stone
	e) Width of stair door (FCD)-mm	No	No
	f) Height of stair handrail(mm)	950	970
	g) Height of stair head room(ft)	10	10
	h) Area & location & profile of Fire Refuge Area	No	
	i) Width and type of door leading to Fire refugee area	No	
	j) Pressurization of staircase	No	
	k) Segregation of staircase	Yes	
34.	Number of Lifts installed	1	
	a) Type of Door	Metal	
	b) Fire Resistant Rating	2 Hours	
	c) Area of Lift Car (mm x mm)	1300 x 1070	
	d) Capacity (No of Person)	8	
	e) Capacity (KG)	544	
	f) Company	OTIS	
	g) Is communication system installed in lift car?	Yes	

	h)	Is Fireman's switch being installed in the car?	Yes at Ground Floor
	i)	Pressurization of Lift	No
	j)	Whether validity of " Form - C " from appropriate authority obtained ?	Not available
35.		Presence of proper signage in all the exit route	No
36.		Is it posted with illuminated signage?	No
37.		Whether it is landing to fire assembly point?	No
38.		Any form of Public address system available ?	No
39.		Width form of internal road within the Premises (mm)?	3900
40.		Width of the Entry / exit of Gate (mm)	2900 (2 Nos.)
41.		Height of the Entry / exit of Gate	Open to sky.

PART IV

Provision of Fire Safety Arrangement

42.		Is any water reservoir for firefighting available ? (at ground level / over head)	No
	a)	If yes, specify the distance from the building	N.A.
	b)	If yes, specify the capacity (in litres) as approved by WBF& ES.	Not available
	c)	Specify the condition of the reservoir	N.A.
43.		Is any public or other water storage facility available nearby ?	Yes Specify the distance from the building → 4Mtr.
	a)	Is it readily accessible ?	Yes Condition and type of the reservoir → Water Body
44.		Are internal hydrants being provided ?	No
		If so, please indicate no of hydrants in each floor	N.A.
45.		Are first aid hose reels being provided ? If so please indicate	No
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	No
	b)	Size (bore) and type of nozzle fitted to each hose reel	No
46.		Are fire hoses being provided near each hydrant? If so, please indicate	No
	a)	Total no of hoses provided near each hydrant	No
47.		Have wet risers/dry risers been provided?	No
		If yes, please indicate the number of risers and internal diameter of each	

48.	Has any down comer been provided? If so, please give details	No
49.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	No
	a) Number of Pumps	No
	b) Size of suction and delivery connection to each pump / Output / Head	N.A
	c) Is the pump automatic in action	N.A.
	d) Is the water pressure sufficient at max distance from the pump	N.A.
50.	Sprinkler system	No
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	No
	a) Type of detectors used	No
51.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	No
52.	Alarm receiving system	No
53.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Yes Lot Supply on 04.07. 2011. Others are found Valid. Number of FE - 36 12 Nos - ABC (5 KG) 5 Nos – CO² (2 KG) 6 Nos – DCP (5 KG) 6 Nos. – CO² (9 LTR) 7 Nos. – CO² (2 KG) Expired FE is found at Ground Floor.
54.	Location and population of the FEs adequate	Not properly distributed.
55.	Are Emergency Fire Alarm being provided in each floor ?	No
56.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No
57.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months(min.2 /Yr.)	Not done
58.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available
59.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available
60.	Status of NOC from WBF&ES	Not available

Part-V

Electrical, Cables and Ventilation

61.	If the building is Centrally air –conditioned, please indicate,	No
62.	Is there any standby source of electric supply being provided?	No
	Is the back supply automatic?	No
63.	Location of switch- gears and transformers	No
64.	a Transformer capacity	No
	b If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	N.A.
	c If outside, how far is it from the building?	N.A.
65.	What precautions is taken to prevent a possible fire in the transformers from spreading?	N.A.
66.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Outside
67.	Is Earth Leakage Circuit Breaker (ELCB) in every distribution board?	No
68.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	N.A.
69.	Whether natural ventilation is relied upon? If so, give details.	Yes
70.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No
71.	Whether mechanical ventilation is being coupled with automatic detection system?	No
72.	Whether the refuge area is being provided?	No
73.	Storage of combustibles materials near electrical equipment/fuse units.	No
74.	RCCBs available??	No
75.	Master switch in warehouses	No
76.	Proper cable joint procedures as per manufacturer	Yes
77.	Earthing Pit Tested??	No
78.	Use of MCB??	Yes
79.	Bypassing of protection devices	No
80.	Deteriorated insulation	No
81.	Selection, deployment of PFFs (Portable Fire Extinguishers)	Own Arrangement

82.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Outside
83.	Tracking possibility	No
84.	Unused opening in the panels, etc.	No
85.	Possibility of ground fault/short circuit	No
86.	Mechanical protection to cables	Yes
87.	Loose terminations due to improper supports, crimping	No
88.	Improper gland installation, wrong lug size	No
89.	Over-rated uses, wrongly set protection relays, etc.	No
90.	Switch yard and sub station	No
91.	DG operation and maintenance	N.A.
92.	Reliability of the fire hydrant system	N.A.
93.	Emergency preparedness and response	Not done
94.	Availability of Evacuation plan	Not done
95.	Mock drill conducted??	Not done
96.	Awareness of the people??	Not done
97.	Sample basis validation of smoke detection system??	N.A.
98.	Condition of Lightning Arrestor	1No. available.
99.	Periodic test of UPS system (as applicable)	N.A.
100.	Handling of electrical work by competent electrician	Yes
101.	Approval of receiving station, substation and DG	N.A.
102.	Storage if hazardous material, chemicals?	No
103.	Use of signage?	No
104.	Hydrants clear, access to public thoroughfare open	N.A.
105.	Flame & work permits (as applicable)	Not done
106.	Effective internal communication and public address system	Not available
107.	Colour coding system of hazardous chemical , gas lines etc.	N.A.
108.	Management structure, role of safety officer, fire department etc.	Not done
109.	Procedure for incident investigation and control	Not done

PART- VI

Other Information

110.	Is there any deviation from the existing recommendation, if any, already been Provided by Fire & Emergency Services	WBFES N.O.C. is not available
111.	Particulars of premises or part of premises used for storage, use, process of substances require FireLicense	No
112.	Is Trade License available?	No
113.	Name of the Insurance Company	No
114.	Remarks (if any) :- No supporting document is available.	

Auditor

Reviewer

Signature & date Inspecting and Reporting Authority With seal

NDITA OBSERVATIONS TRACKING REPORT(SUMMARY SHEET)

Sl.No.	OBSERVATIONS	RECOMMENDATIONS
1.	Provisional and Final N.O.C. of WBFES is not available.	Immediate action must be taken to have N.O.C. of WBFES.
2.	 floor.	Periodic checking must be done to keep valid all FE.

3.	 Documents are stored without FE.	FE should be properly distributed to cover such storing area also .
4.	 Exit Route is full of furnitures.	Exit Route must be kept clear.
5.	Lift is operating without valid " C"-Form.	Immediate action must be taken to have valid " C " Form .

Auditor

Reviewer

Signature & date Inspecting and Reporting Authority With seal

KREDENT TOWER



EXECUTIVE SUMMARY

Part I & II

General Information

KREDENT TOWER is situated at EP GP J1-14, Sector V Salt Lake City, Pin: 700091. The ground floor there is Car parking space, DG set, pump room, & Transformer room. 1st & 2nd floor is of Kredent Software Company. 4th, 5th & 6th floors are lying vacant. In the 3rd, 7th, 8th, 9th floors are rented to IIFT (Indian Institute of Foreign trade. The Building is G= 9 floor. Refuse areas are in 5th, 6th, & 8th floor. This building is situated in 1087.5 sqmtr of land & built up area is 5302.98 sqft

NOC of Fire Valid up to 22.5.2013, Ref WBFS/DG/FP/1484/12/Cal-B/100/2001(203/01) dated 23.5.12

OC (Occupation Certificate) is not available

Occupancy Load was found as

	Existing -- 256
Floating -- 35	

Part III

PROVISION OF MEANS OF ESCAPE

In the Building there are two stairs only & Two Nos Lifts are available.

Evacuation Drill has been conducted

There is Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers Wet Riser, Sprinklers, MCPs, Smoke detectors along with CCTV surveillance

There is a Fire tank of 180000 Ltr capacity available. Alternate source of water is the Water body approx 800 mtr away from the building.

38 nos Portable fire extinguishers are found deployed at the Buildings.

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises ,near the Electrical installation.

The building has a DG-set of 500 KVA as an alternate source of power.

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EP GP J 1-14	
2.	Premises Name (if any):	KREDENT TOWER	
3.	Name of the owner /occupier/lessee	MrBikash Bajaj	
4.	Permanent Address	EP GP J 1-14,Sector-V salt lake city, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Lease hold	
6.	Name of the Contact Person	Mr.Robin Banerjee	
7.	Phone No of Contact Person	99032 46613	
8.	E-mail	Banerjee.kredent@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational
			Institutional ☐
			Assembly
			Business
			Mercantile
			Industrial
			Storage
		IT/ITES ☐	
10.	Plot Area(as informed to the Auditor)	1087.5 sqmtr	
11.	Build up area(as informed to the Auditor)	5302.98 sqft	
12.	No of Floors	G +9	
13.	Date of Sanction of Building Plan	Not available	
14.	Whether P.O.C/OC received from local body?	27.1.2005 from Bidhan Nagar municipality	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	GDS	
16.	No of Security Personnel engaged	5 nos	
17.	Whether Records of Vehicles (No & type entering into the building are kept	YES	
18.	Whether records of Visitors entering into the building are kept	YES	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	YES	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	Seven	
22.	No of Vehicles for which parking space is available in the premises	11Nos	

23.	Whether parking space available for visitors within the premises	Yes
24.	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
25.	Garbage Clearing	NDITA Garbage clearing system
26.	Drainage System	Connected to NDITA Drainage system
27.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	Not applicable
30.	Any Other Clearance	Not applicable

PART - II

V= Vacant

31.	Occupancy load	(Based on Estimates)										
	Existing	G	1	2	3	4	5	6	7	8	9	total
	a)Regular	9	35	40	22	V	V	V	50	50	50	256
	b)Floating											35
32.	Basement	NIL										

Part- III

Provisions of means of escape

33.	Number of staircases --→two			
	Stairs Number		#1	#2
	a)	Width of flight	1800 mm	1400 mm
	b)	Tread width	310 mm	300 mm
	c)	Riser Height	169 mm	150 mm
	d)	Finish	Marble/Kota stone	Kota stone
	e)	Width of stair door (FCD)- Ordinary door	1210 mm	1140 mm
	f)	Height of stair head room	11 ft	11 ft
	g)	Height of stair handrail	840 mm	940 mm
	h)	Area & location & profile of Fire Refuge Area	5 th ,6 th ,8 th floor 4500 mm X 2800 mm Each	
	i)	Width and type of door leading to Fire refugee area	Ordinary door -1100 mm	
	J)	Pressurization of staircase	NO	
	k)	Segregation of staircase	YES	

34.	Number of Lifts installed→Two		
	Lift-Numbers	#1	#2
	a) Type of door	Metallic	Metallic
	b) Fire resistance rating	2 hrs	2 hrs
	c) Area of lift car	1100 mm X 2100 mm	1100 mm X 2100 mm
	d) Capacity (no of persons)	13	13
	e) Capacity(in kg)	884	884
	f) Company	KONE	KONE
	g) Is communication system, installed in the lift car?	NO only alarm	NO only alarm
	h) Is a fireman's switch being installed in the car?	YES	YES
	i) Pressurization of lift	NO	
	j) Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Yes. Valid upto 27.1,14	
35.	Presence of proper signage in all the exit route	YES	
36.	Is it posted with illuminated signage?	YES	
37.	Whether it is landing to fire assembly point?	Fire assembling point is not identified	
38.	Any form of Public address system available?	YES	
39.	Width form of internal road within the Premises?	3530 mm	
40.	Width of the Entry / exit of Gate	4500 mm	
41.	Height of the Entry / exit of Gate	Open to sky	

PART IV

Provision of Fire Safety Arrangement

42.	Is any water reservoir for fire fighting available ? (at ground level / over head)	☐ Yes ☐ No	U/G1,80,000 ltr O/h 20,000 ltr
	a) If yes, specify the distance from the building	Adjacent	
	b) If yes, specify the capacity (in liters)as approved by WBF & ES.	None	
	c) Specify the condition of the reservoir	Satisfactory	
43.	Is any public or other water storage facility available nearby ?	Yes	☐ specify the distance from the building ----800Mtr
	a) Is it readily accessible ?	Yes	☐ condition and type of the

			reservoir—Water body
44.	Are internal hydrants being provided ?		Yes
	If so, please indicate no of hydrants in each floor		One in each floor
45.	Are first aid hose reels being provided ? If so please indicate		Yes. In all floors including ground floor
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	YES, directly to the riser
	b)	Size (bore) and type of nozzle fitted to each hose reel	20 mm,30 mtr
46.	Are fire hoses being provided near each hydrant? If so, please indicate		yes
	a)	Total no of hoses provided near each hydrant	one
47.	Have wet risers/dry risers been provided?		Wet riser provided
48.	If yes, please indicate the number of risers and internal diameter of each		one
49.	Has any down comer been provided? If so, please give details		No
50.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Main -60 HP Stand by -60 HP Jockey-15 HP
	a)	Number of pumps	3 nos
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction 200 mm & Delivery is 150 mm Discharge 119 M3/Hr Head Height- 88 Mtr
	e)	Is the pump automatic in action?	YES
	f)	Is the water pressure sufficient at max distance from the pump?	Could not be checked as there is no pressure gauge at the top
51.	Sprinkler system		YES
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		YES, Smoke detectors
	a)	Type of detectors used	Addressable smoke detectors
52.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		YES in each floor
	a)	Alarm receiving system	Yes
53.	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate		■Yes _/ Yes Number of FE Type/ Capacity DCP(5 Kg)----- CO2(4.5Kg)----- 2 nos

	Indicate whether the Fire extinguishers bear the ISI certification mark?	14.1.14	Water (9 Ltr) ----- CO2 (2 Kgs)-----	. 10 Nos
	Date of Validity			. 11 Nos 15 Nos
	Location	At office & Electrical Installations		
54.	Are Emergency Fire Alarm being provided in each floor ?	YES		
55.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	NO. Trained persons are there		
56.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	Yes .Last done on 12.1.13		
57.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
58.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
59.	Status of NOC from WBF&ES	Valid upto 22.5.2013 Ref WBFS/DG/FP/1484/12/Cal-B/100/2001(203/01) dated 23.5.12		

Part-V

Electrical, Cables and Ventilation

60.	If the building is Centrally air -conditioned, please indicate,		■No Central AC
	a)	Material used for construction of ducts and its fittings	Not applicable
	b)	Type of tinning used for ducts	Not applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d)	How the lagging is secured?	Not applicable
	e)	If false ceiling is there?	Not applicable
	f)	Material used for false ceiling	Not applicable
	g)	Is a separate AHU being provided in each floor	Not applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j)	Will fire dampers be provided in AC duct?	Not applicable

61.	Is there any standby source of electric supply being provided?	YES. DG of 500 KVA
	Is the back supply automatic?	NO. Operates manually
62.	Location of switch- gears and transformers	IN side the building
63.	a) Transformer capacity	11 KVA
	b) If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	YES
	c) If outside, how far is it from the building?	Not applicable
64.	What precautions is taken to prevent a possible fire in the transformers from spreading?	Fire Extinguisher
65.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Electrical shafts in the staircase is found not sealed
66.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	NO
67.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
68.	Whether natural ventilation is relied upon? If so, give details.	Yes
69.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO
70.	Whether mechanical ventilation is being coupled with automatic detection system?	Not Applicable
71.	Whether the refuge area is being provided?	YES, on 5 th ,6 th , 8 th floor
72.	Storage of combustibles materials near electrical equipment/fuse units.	NO
73.	RCCBs available??	None found
74.	Master switch in warehouses	NO
75.	Proper cable joint procedures as per manufacturer	YES
76.	Earthing Pit Tested??	Records are not available
77.	Use of MCB??	YES
78.	Bypassing of protection devices	None found
79.	Deteriorated insulation	None found
80.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
81.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	NO
82.	Tracking possibility	Yes
83.	Unused opening in the panels, etc.	None found
84.	Possibility of ground fault/short circuit	None found

85.	Mechanical protection to cables	Yes.
86.	Loose terminations due to improper supports, crimping	None found
87.	Improper gland installation, wrong lug size	None found.
88.	Over-rated uses, wrongly set protection relays, etc.	NO Protection relay
89.	Earthing layout & it's effectiveness	Not available
90.	Switch yard and sub station	No
91.	DG operation and maintenance	YES
92.	Reliability of the fire hydrant system	YES
93.	Emergency preparedness and response	None found
94.	Availibilty of Evacuation plan	None found
95.	Mock drill conducted??	YES
96.	Awareness of the people??	Average
97.	Sample basis validation of smoke detection system??	YES
98.	Storage if hazardous material, chemicals??	NO
99.	Use of signage??	YES
100.	Hydrants clear, access to public thorough fare open	YES
101.	Flame & work permits (as applicable)	None found
102.	Effective internal communication and public address system	YES
103.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
104.	Management structure, role of safety officer, fire department etc.	NO
105.	Procedure for incident investigation and control	NO

PART- VI

Other Information

106.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No
107.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
108.	Is Trade License available??	YES. Ref No 00206 dated 8.1.13 for 20012-2013
109.	Name of the Insurance Company	YES with Tata Alg
110.	Remarks (if any) 56.NO FCD found. All are ordinary doors 57.No hammer found in MCPs 58.No assembly point is identified 59. Transformer room is full of unwanted materials 60.Electrical shafts was found not sealed 61. There is no pressure gauge at the top floor of the hydrant	

Auditor

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	NO FCD found. All are ordinary doors	FCDs are to be provided.
2	No hammer found in MCPs 	
3	No assembly point is identified	Assembly point is to be marked
4	Transformer room is full of unwanted materials  	All trash material is to be kept clear from the transformer room
5	Electrical shafts was found not sealed	Electrical shaft should be sealed with noncombustible materials
6	There is no pressure gauge at the top floor of the hydrant	One pressure gauge is to be provided at the top of the hydrant point

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

SHAILA TOWER



EXECUTIVE SUMMARY

Part I & II

General Information

SHAILA TOWER is situated at EP GP J1-16, Sector V Salt Lake City, Pin: 700091. The basement floor there is Car parking space, pump room, Pump Room & Facility management room. Transformer room, DG, Parking space, a driving school & two restaurants are in Ground floor. 1st floor to 9th floor are rented to different companies.

This building is situated in 0.2687 acres of land & built up area is approx. 77442.135 sqft

NOC of Fire Valid up to 02.01.2014, Ref WBFS/5881/13/Bidhan -IT/182/02(192/06) dated 3.1.13

The date of OC (Occupation Certificate) is 20.1.12

Occupancy Load was found as

	Existing -- 225
Floating -- 30	

Part III

PROVISION OF MEANS OF ESCAPE

In the Building there are two stairs only & Two Nos Lifts are available.

Evacuation Drill has not been conducted

There is Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers, Wet Riser, Sprinklers, MCPs, Smoke detectors along with CCTV surveillance

There is a Fire tank of 100000 Ltr capacity available. Alternate source of water is the Water body approx. 800 mtr away from the building.

21 nos Portable fire extinguishers are found deployed at the Buildings at common areas

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation.

The building has a DG-set of 500 KVA as an alternate source of power.

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EP GP J 1-16	
2.	Premises Name (if any):	SHAILA TOWER	
3.	Name of the owner /occupier/lessee	MrB.K.Chakravorty	
4.	Permanent Address	EP GP J 1-16,Sector-V salt lake city, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Lease hold	
6.	Name of the Contact Person	Mr.B.K.Chakravorty	
7.	Phone No of Contact Person	98316 79920	
8.	E-mail	Bipcal_1@biptronic.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	0.2687 Acres	
11.	Build up area(as informed to the Auditor)	77442.135sqft	
12.	No of Floors	B+G +9	
13.	Date of Sanction of Building Plan	14.6.2011	
14.	Whether P.O.C/OC received from local body?	20.1.2012 from NDITA	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	MS Securities & Allied Service	
16.	No of Security Personnel engaged	11nos	
17.	Whether Records of Vehicles (No & type entering into the building are kept	YES	
18.	Whether records of Visitors entering into the building are kept	YES	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	YES	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	NIL	
22.	No of Vehicles for which parking space is available in the premises	30Nos	
23.	Whether parking space available for visitors within the premises	NO	

24.	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
28	Garbage Clearing	NDITA Garbage clearing system
29	Drainage System	Connected to NDITA Drainage system
30	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
25.	No of Towers	NIL
26.	Statutory Clearance from AAI	Not applicable
27.	Any Other Clearance	Not applicable

PART – II

V= Vacant

28.	Occupancy load	(Based on Estimates)											
	Existing	B	G	1	2	3	4	5	6	7	8	9	total
	a)Regular	5	10	V	25	35	25	50	20	30	V	25	225
	b)Floating												30
29.	Basement	YES											

Part- III

Provisions of means of escape

30.	Number of staircases --→two			
	Stairs Number		#1	#2
a)	Width of flight		1800 mm	1400 mm
b)	Tread width		310 mm	300 mm
c)	Riser Height		169 mm	150 mm
d)	Finish		Marble/Kota stone	Kota stone
e)	Width of stair door (FCD)- Ordinary door		1210 mm	1140 mm
f)	Height of stair head room		11 ft	11 ft
g)	Height of stair handrail		840 mm	940 mm
h)	Area & location & profile of Fire Refuge Area		There are Balconies in each floor from 2nd floor to 9th floor. Identified Refuse area is 7th floor 11000 mm X 1700 mm Each	
i)	Width and type of door leading to Fire refugee area		630 mm	
J)	Pressurization of staircase		NO	
k)	Segregation of staircase		YES	

31.	Number of Lifts installed→Two		
	Lift-Numbers	#1	#2
	a) Type of door	Metallic	Metallic
	b) Fire resistance rating	2 hrs	2 hrs
	c) Area of lift car	1700 mm X 1400 mm	1700 mm X 1400 mm
	d) Capacity (no of persons)	14	14
	e) Capacity(in kg)	1088	1088
	f) Company	UT LTD	UT LTD
	g) Is communication system, installed in the lift car?	YES	YES
	h) Is a fireman's switch being installed in the car?	YES	YES
	i) Pressurization of lift	NO	
	j) Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Not available	
32.	Presence of proper signage in all the exit route	NO	
33.	Is it posted with illuminated signage?	NO	
34.	Whether it is landing to fire assembly point?	Fire assembling point is not identified	
35.	Any form of Public address system available?	NO	
36.			
37.	Width form of internal road within the Premises?	3000 mm	
38.	Width of the Entry / exit of Gate	2700 mm	
39.	Height of the Entry / exit of Gate	Open to sky	

PART IV

Provision of Fire Safety Arrangement

40.	Is any water reservoir for firefighting available? (at ground level / overhead)	Yes	U/G100000ltr
	a) If yes, specify the distance from the building	Adjacent	
	b) If yes, specify the capacity (in litres) as approved by WBF & ES.	None	
	c) Specify the condition of the reservoir	Satisfactory	

41.	Is any public or other water storage facility available nearby?	Yes	■specify the distance from the building ----800Mtr
	a) Is it readily accessible?	Yes	■condition and type of the reservoir—Water body
42.	Are internal hydrants being provided ?	Yes	
	If so, please indicate no of hydrants in each floor	One in each floor	
43.	Are first aid hose reels being provided? If so please indicate	Yes.	
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	YES, directly to the riser	
	b) Size (bore) and type of nozzle fitted to each hose reel	20 mm,30 mtr	
44.	Are fire hoses being provided near each hydrant? If so, please indicate	yes	
	a) Total no of hoses provided near each hydrant	one	
45.	Have wet risers/dry risers been provided?	Wet riser provided	
46.	If yes, please indicate the number of risers and internal diameter of each	One Main + One sprinkler	
47.	Has any down comer been provided? If so, please give details	No	
48.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Main pump -75 HP Stand by pump -75 HP Sprinkler pump-75 HP Jockey pump-15 HP	
	a) Number of pumps	4nos	
	b) Size of suction and delivery connection to each pump/Output/Head	Suction 150 mm & Delivery is 150 mm Discharge 132 M3/Hr Head Height- 80Mtr	
	e) Is the pump automatic in action?	YES	
	f) Is the water pressure sufficient at max distance from the pump?	Could not be checked as there is no pressure gauge at the top	
49.	Sprinkler system	YES	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	YES, Smoke detectors	
	a) Type of detectors used	Addressable smoke detectors	

50.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	YES in each floor		
	a) Alarm receiving system	Yes		
51.	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Yes 14.1.14 _____	Number of FE Type/ Capacity DCP(5 Kg)----- CO2(4.5Kg)----- Water (9 Ltr) -----	21 nos 10nos. 1No. 10Nos
	Location	At common areas& Electrical Installations		
52.	Are Emergency Fire Alarm being provided in each floor ?	YES		
53.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	Trained persons are there		
54.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	NO		
55.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
56.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
57.	Status of NOC from WBF&ES	Valid upto 2.1.14 Ref WBFS/5881/13/Bidhan-IT/182/02(192/06) dated 3.1.13		

Part-V

Electrical, Cables and Ventilation

58.	If the building is Centrally air - conditioned, please indicate,		No Central AC
	a)	Material used for construction of ducts and its fittings	Not applicable
	b)	Type of tinning used for ducts	Not applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d)	How the lagging is secured?	Not applicable
	e)	If false ceiling is there?	Not applicable
	f)	Material used for false ceiling	Not applicable
	g)	Is a separate AHU being provided in each floor	Not applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j)	Will fire dampers be provided in AC duct?	Not applicable
59.	Is there any standby source of electric supply being provided?		YES. DG of 500 KVA
	Is the back supply automatic?		NO. Operates manually
60.	Location of switch- gears and transformers		IN side the building
61.	a)	Transformer capacity	1000 KVA
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	YES
	c)	If outside, how far is it from the building?	Not applicable
62.	What precautions is taken to prevent a possible fire in the transformers from spreading?		None. No Fire Extinguishers are available
63.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Electrical shafts in the staircase is found not sealed
64.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		NO

65.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
66.	Whether natural ventilation is relied upon? If so, give details.	Yes
67.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO
68.	Whether mechanical ventilation is being coupled with automatic detection system?	NO
69.	Whether the refuge area is being provided?	YES, identified on 7th floor. There is a balcony in each floor from 2 nd to 9 th floor
70.	Storage of combustibles materials near electrical equipment/fuse units.	NO
71.	RCCBs available??	None found
72.	Master switch in warehouses	NO
73.	Proper cable joint procedures as per manufacturer	YES
74.	Earthing Pit Tested??	Records are not available
75.	Use of MCB??	YES
76.	Bypassing of protection devices	None found
77.	Deteriorated insulation	None found
78.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
79.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	NO
80.	Tracking possibility	Yes
81.	Unused opening in the panels, etc.	None found
82.	Possibility of ground fault/short circuit	None found
83.	Mechanical protection to cables	Yes.
84.	Loose terminations due to improper supports, crimping	None found
85.	Improper gland installation, wrong lug size	None found.
86.	Over-rated uses, wrongly set protection relays, etc.	NO Protection relay
87.	Earthing layout & it's effectiveness	Not available
88.	Switch yard and sub station	No
89.	DG operation and maintenance	YES
90.	Reliability of the fire hydrant system	Could not be checked as the pumps were found not running
91.	Emergency preparedness and response	None found
92.	Availability of Evacuation plan	None found
93.	Mock drill conducted??	NO
94.	Awareness of the people??	Poor

95.	Sample basis validation of smoke detection system??	YES
96.	Storage if hazardous material, chemicals??	NO
97.	Use of signage??	NO
98.	Hydrants clear, access to public thorough fare open	YES
99.	Flame & work permits (as applicable)	None found
100.	Effective internal communication and public address system	NO
101.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
102.	Management structure, role of safety officer, fire department etc.	NO
103.	Procedure for incident investigation and control	NO

PART- VI

Other Information

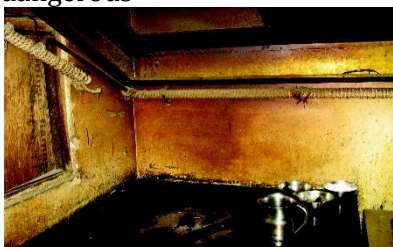
104.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	■Yes. From NOC issued on 13.1.13
105.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
106.	Is Trade License available??	Not available
107.	Name of the Insurance Company	NO
108.	Remarks (if any) 62.No assembly point is identified 63.Transformer room do not have any Fire Extinguishers 64.Electrical shafts was found not sealed 65.There is no pressure gauge at the top floor of the hydrant 66.No fire Mock drill has been conducted 67.No Evacuation drill has been conducted 68.Most of the balconies are full with Split A/Cs 69.In Ground Floor in the Restaurant “ BRISTO” is having their Gas cylinder bank very near to an electrical motor 70.In the Same Restaurant BRISTO the LPG line is not painted Yellow & running above the Tandoor Oven. To avoid the heat a cotton rope has been wound around. This is very dangerous 71.The coupling is missing in the hydrant point 72.Smoke detector is found O/C at ground floor 73.At Basement position of the Hose reel is jamming against the wall 74.Lots of dirt at the bottom of the fire extinguishers 75.Most of all the smoke detectors cap is found closed 76.Hydrant points are found kept wrapped up 77.Wet riser Pumps were found not running 78. No rubber mat found in front of LT room	

Auditor

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	No assembly point is identified	Assembly point is to be identified
2.	Transformer room do not have any Fire Extinguishers	Auto Fire Extinguishers are to be provided in the Transformer room
3.	Electrical shafts was found not sealed 	Electrical shaft is to be sealed
4.	There is no pressure gauge at the top floor of the hydrant	pressure gauge is to be provided at the top floor of the hydrant
5.	No fire Mock drill has been conducted	Fire mock drill is to be conducted & record to be maintained
6.	No Evacuation drill has been conducted	Evacuation drill is to be conducted & record to be maintained
7.	Most of the balconies are full with Split A/Cs	To be kept clear for emergencies
8.	In Ground Floor in the Restaurant “BRISTO” is having their Gas cylinder bank very near to an electrical motor 	LPG gas bank is to be relocated
9.	In the Same Restaurant BRISTO the LPG line is not painted Yellow & running above the Tandoor Oven. To avoid the heat a cotton rope has been wound around. This is very dangerous 	Gas line should be painted yellow & immediately to be relocated away from the Tandoori Oven

10	The coupling is missing in the hydrant point 	Coupler is to be replaced
	Smoke detector is found O/C at ground floor 	Smoke detector is to be set in order
11	At Basement position of the Hose reel is jamming against the wall 	Hose reel set is to be relocated
	Lots of dirt at the bottom of the fire extinguishers 	Housekeeping is to be done
	Most of all the smoke detectors cap is found closed 	Smoke detector cap is to be removed

	At the top of transformer smoke detector cap is found closed 	Smoke detector cap is to be removed
	Wet riser Pumps were found not running 	Wet riser pump should run for 24 X 7 in auto mode For any repair if this is not running ,then all the tenants should be notified
	Hydrant points are found kept wrapped up 	To be kept ready always
	The smoke detector above the kitchen was found capped 	Cap should be removed
	No rubbermat found in front of LT room 	Rubber mat is to be provided

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

JAIN LINK PRIVATE LIMITED



EXECUTIVE SUMMARY

Part I & II

General Information

Jain Link Private Limited is situated at J 2 , Block EP & GP, Sector V, Salt Lake, Kolkata 700 091. The structure of the building is G + 6 and has a built up area of 2752.75 sq.meters in total 1210 sq. meters of land.

The building is utilized for rental purpose . In the ground floor there is the Opium Bar cum restaurant, the 2nd floor is rented to M/s. Transistics Data Technologies Pvt.Ltd, and the 4th floor is rented to Prithvi Information solutions Limited. The 5th and 6th floors are still under construction.

The sanction date of the building plan and the CC from local body was not available. Approx year of sanction of Building Plan was 2002.

There are at present one stair case and one more is being constructed . A lift is also being installed and the work at the time of inspection was not complete.

There is no central AC system in the building.

NOC from WBF&Es has being applied for.

Occupancy Load as on audit date was found as

Existing -- 319 persons
Floating -- 30 to 35 persons

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are one nos Staircases available. Another stair case is being constructed. There are no Lifts available at present but construction is going on for its installation.

No Evacuation Drill has been conducted so far.

There is a no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement in the premises is smoke detectors(only in the 4th floor) & portable fire extinguishers(in the ground floor, 2nd Floor and 4th Floor).

Wet riser

There is an Under- ground fire tank of approx. 75,000 ltr capacity. But no wet riser or downcomer is present in the building.

Sprinkler system.& Smoke detectors are not installed in all the floors

Alternate source of water is the Water body approx 500 mtr away

Buildings is not equipped with any Fire detection system like smoke detectors except the 4th floor

Total 18 Nos Portable fire extinguishers are found deployed throughout the building.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises ,near the Electrical installation except gas bank in the ground floor

There is DG of 125 KVA at the ground floor as an alternate source of supply

PART VI

OTHER INFORMATION

NIL

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART - I

1.	Plot No/Premises No:	J2, Block EP & GP	
2.	Premises Name (if any):	Jain Link Private Limited	
3.	Name of the owner /occupier/lessee_/_	Jain Link Private Limited	
4.	Permanent Address	J 2, Block EP & GP, Sector V, Salt Lake City, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	Mr. Manoj Kumar	
7.	Phone No of Contact Person	9830611920	
8.	E-mail	Nil	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	1210 sq. meters	
11.	Build up area(as informed to the Auditor)	2752.75 sq. meters	
12.	No of Floors	G + 6	
13.	Date of Sanction of Building Plan	Date: Exact date is not available, approx 2002	
14.	Whether P.O.C/OC received from local body?	Yes/No Not available	OC Issuing Authority Bidhan Nagar Municipality/ NDITA Not available Dated:
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Own security	
16.	No of Security Personnel engaged	One	
17.	Whether Records of Vehicles (No & type entering into the building are kept	No	
18.	Whether records of Visitors entering into the building are kept	No	
19.	Whether Metal detectors are used at the entry point	No	
20.	Whether Monitoring System through Close circuit TV available	Only the gates are monitored by CC TV	

VEHICLES VOLUME		
21	No of Vehicles Engaged by the Organization	One
22	No of Vehicles for which parking space is available in the premises	No parking space is available
23	Whether parking space available for visitors within the premises	Not applicable
24	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
25	Garbage Clearing	By NDITA clearing system
26	Drainage System	Connected to NDITA sewerage
27	Maintenance of Road	Own and found satisfactory
TELEPHONE TOWER		
28	No of Towers	Nil
29	Statutory Clearance from AAI	No
30	Any Other Clearance	No

PART - II

31	Occupancy load	(Biased on Estimates)							
	Existing	G	1	2	3	4	5	6	Total
	a)Regular (persons)	30	35	120	9	125	V	V	319
	b)Floating	Exact number could not be ascertained, approx 30 to 35 persons							
32	Basement	Nil							

Part- III

Provisions of means of escape

33	Number of staircases --→Two: One staircase iscomplete and stair #2 is not yet finished			
	Stairs Number		#1	#2
	a)	Width of flight	1400 mm	1400 mm
	b)	Tread width	250 mm	260 mm
	c)	Riser Height	170 mm	140 mm
	d)	Finish	Kota Stone	Not finished
	e)	Width of stair door (FCD)(wooden door not FCD)	920 mm	920 mm
	f)	Height of stair head room	3657.6 mm	3352.8 mm
	g)	Height of stair handrail	970 mm	Not yet made
	h)	Area & location & profile of Fire Refuge Area	No refuge area	No refuge area
	i)	Width and type of door leading to Fire refugee area	Not applicable	Not applicable
	J)	Pressurization of staircase	Not applicable	
	k)	Segregation of staircase	Not applicable	

34	Number of Lifts installed →One lift is found being installed but work is not complete			
	Lift-Numbers		#1	#2
	a)	Type of door	Not applicable	Not applicable
	b)	Fire resistance rating	Not applicable	Not applicable
	c)	Area of lift car	Not applicable	Not applicable
	d)	Capacity (no of persons)	Not applicable	Not applicable
	e)	Capacity(in kg)	Not applicable	Not applicable
	f)	Company	Not applicable	Not applicable
	g)	Is communication system, installed in the lift car?	Not applicable	Not applicable
	h)	Is a fireman's switch being installed in the car?	Not applicable	Not applicable
	i)	Pressurization of lift	Not applicable	Not applicable
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Not applicable	
35	Presence of proper signage in all the exit route		No	
36	Is it posted with illuminated signage?		No	
37	Whether it is landing to fire assembly point?		No	
38	Any form of Public address system available?		No	
39	Width form of internal road within the Premises?		2500 mm	
40	Width of the Entry / exit of Gate		3550 mm	
41	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G approx: 75,000 liters(as measured from outside) O/H 2 x 2000 liters
	a)	If yes, specify the distance from the building	Less than one meter	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	No capacity is as yet approved by WBF&ES	
	c)	Specify the condition of the reservoir	Satisfactory	
43	Is any public or other water storage facility available nearby ?		Yes	Specify the distance from the building 500 meters
	a)	Is it readily accessible?	Yes	Condition and type of the reservoir Water body
44	Are internal hydrants being provided ?		No	Single or twin outlets.
	If so, please indicate no of hydrants in each floor		Single/Double Not applicable	
45	Are first aid hose reels being provided? If so please indicate		No	No of hose reels on each floor : Not applicable
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	No	Bore and length of hose reel tubing on each reel: Not applicable
	b)	Size (bore) and type of nozzle fitted to each hose reel	Not applicable	

55	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No
56	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not applicable
57	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not applicable
58	Status of NOC from WBF&ES	The application for provisional NOC was made on 8.8.12

Part-V

Electrical, Cables and Ventilation

59	If the building is Centrally air - conditioned, please indicate,		No, only split ACs are present		
	a)	Material used for construction of ducts and its fittings	Not applicable		
	b)	Type of tinning used for ducts	Not applicable		
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable		
	d)	How the lagging is secured?	Not applicable		
	e)	If false ceiling is there?	Not applicable		
	f)	Material used for false ceiling	Not applicable		
	g)	Is a separate AHU being provided in each floor	Not applicable		
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable		
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable		
	j)	Will fire dampers be provided in AC duct?	Not applicable		
60	Is there any standby source of electric supply being provided?		Yes	DG 125 KVA Capacity	UPS fewsmall for computers Capacity
	Is the back supply automatic?		Yes	Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump ■Emergency Light□ ■Lift ■Partly to Office□ ■ Others□(except ACs)	
61	Location of switch- gears and transformers		Nil		
62	a)	Transformer capacity	Not applicable		
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable		
	c)	If outside, how far is it from the building?	Not applicable		

63	What precautions will be taken to prevent a possible fire in the transformers from spreading?	Not applicable	
64	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	No passes are present, concealed wiring is done through the walls with PVC casing	
65	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	No	
66	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	No	
67	Whether natural ventilation is relied upon? If so, give details.	Yes, windows are provided everywhere	
68	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No	
69	Whether mechanical ventilation is being coupled with automatic detection system?	No	
70	Whether the refuge area is being provided?	No	On which floor: Not applicable Area of Fire Refuge Area: Not applicable Width of Fire Refuge Area: Not applicable
71	Storage of combustibles materials near electrical equipment/fuse units.	No	
72	RCCBs available??	No	
73	Master switch in warehouses	Not applicable	
74	Proper cable joint procedures as per manufacturer	Yes	
75	Earthing Pit Tested??	No	
76	Use of MCB??	Yes	
77	Bypassing of protection devices	None found	
78	Deteriorated insulation	None found	
79	Selection, deployment of PFFs (Portable Fire Extinguishers)	Done but not adequate	
80	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No cable passes are found, concealed wiring is done	
81	Tracking possibility	No	
82	Unused opening in the panels, etc.	Yes, at the main meter room, all panels are found in open condition	
83	Possibility of ground fault/short circuit	No	
84	Mechanical protection to cables	Yes	
85	Loose terminations due to improper supports, crimping	No	
86	Improper gland installation, wrong lug size	No	
87	Over-rated uses, wrongly set protection relays, etc.	No	
88	Switch yard and sub station	No	

89	DG operation and maintenance	Yes, AMC with manufacturer
90	Reliability of the fire hydrant system	Not applicable
91	Emergency preparedness and response	No
92	Availability of Evacuation plan	No
93	Mock drill conducted??	No
94	Awareness of the people??	No
95	Sample basis validation of smoke detection system??	No
96	Condition of Lightning Arrestor	No lightning arrestor is found
97	Periodic test of UPS system (as applicable)	No
98	Handling of electrical work by competent electrician	Hired from outside when required
99	Approval of receiving station, substation and DG	Not available
100	Storage of hazardous material, chemicals?	One gas bank
101	Use of signage?	None found
102	Hydrants clear, access to public thoroughfare open	Not applicable
103	Flame & work permits (as applicable)	No
104	Effective internal communication and public address system	No
105	Color coding system of hazardous chemical gas lines etc.	Gas pipes are not color coded
106	Management structure, role of safety officer, fire department etc.	No management structure found
107	Procedure for incident investigation and control	Nil

PART- VI

Other Information

108.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No, as NOC has just been applied for	■ Deviation
109.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	A gas bank of four cylinders	
	Is Trade License available??	No	
110	Name of the Insurance Company	No	

111	Remarks (if any) 1. The construction of the building is not yet complete. Construction is going on at the 5th and 6th floors, back stair case, and lift. 2. The party has just applied for NOC (provisional) to WBF&ES 3. There is a Bar cum Restaurant on the ground floor(OPIUM BAR) with a gas bank. Transistics Data Technologies Pvt. Ltd. is on the 2nd floor and Prithvi Information Solutions Ltd. on the 4th floor 4. The gas bank has no door and is open. Moreover no LPG gas detectors are found both in the gas bank and in the kitchen 5. Fire Extinguishers are only found in Opium Bar{Ground Floor}, Trans. Data Technologies Pvt.Ltd.,(2nd. Floor),andPrithvi Information (4th.floor), which are quite in adequate. No FEs are provided in the stair cases and common places. 6. There are no wet riser or down comer in the building 7. No Signage's are present and no assembly point demarked 8. Mock drill and evacuation drill is not done

Reviewer

Auditor

Signature & date of Inspecting and Reporting Authority With seal

NDITA

Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	Panel Boxes in main meter room is found open	Boxes to be kept closed and maintained neat and clean with no loose wires
2.	No signage's are found in the entire building	Proper signage's are to be placed along with a assembly point. Exit signs should lead to the assembly point
3.	Fire extinguishers are not adequate. None are found in the stair case and ground floor, 3 rd floor	Same are to be provided
4.	No fire alarms are found	MCPs and other fire alarms to be provided
5.	The Gas Bank has no door and no LPG leakage detector	Same are to be provided
6.	No mock drills and evacuation drills are conducted	To be conducted periodically(at least once in six months) and its records to be maintained
7.	No lightening arrestor found	Lightning arrestor to be provided immediately

Reviewer

Auditor

Signature & date of Inspecting and Reporting Authority With seal

SUGAM BUSINESS PARK



EXECUTIVE SUMMARY

Part I & II

General Information

Sugam Business park is situated at EP & GP J-6, Sector V, Salt Lake ,Kolkata 700091 in the plot area of 1200 sqMtr& build up area is around 6599.081 sqMtr

Date of Sanction of Building plan is 30.05.2005

OC (OccupationalCertificate)is not available

Last NOC from **WBFES** was found valid up to 20.8.12

Estimated Occupancy Load Regular 504

Floating 30

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuge area are available as follows:

There are two stair cases which are segregated &two lifts are available

Last Mock drill was conducted

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

There is a Separate Fire tank of approx. 150000 ltravailable in the ground floor.

There is a wet riser available

The alternate source of water body is approximately 800 mtr away,

There are total 32 nos Fire Extinguishers available throughout the building

MCPs are available in the building

PART V

ELECTRICAL

There is no RCCB or ELCB in the distribution board

Earth pits were not found marked and tested.

Generally no combustible material is stored in the premises, near the Electrical installation

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EP & GP J-6	
2.	Premises Name (if any):	Sugam Business Park	
3.	Name of the owner /occupier/lessee	SukamReality Pvt. Ltd.	
4.	Permanent Address	EP & GP J-6, Sector V, Salt Lake ,Kol-91.	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	Mr. SubhankarMohanta	
7.	Phone No of Contact Person	9836155296	
8.	E-mail	sales@suqamhomes.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use✓	Educational
			Institutional
			Assembly
			Business ✓
			Mercantile
			Industrial
			Storage
			IT/ITES✓
10.	Plot Area(as informed to the Auditor)	1200M ²	
11.	Build up area(as informed to the Auditor)	6599.08M ²	
12.	No of Floors	B+G+10	
13.	Date of Sanction of Building Plan	Date: 30/05/05 No : V/BM/ 264	
14.	Whether P.O.C/OC received from local body?	No	OC Issuing Authority Bidhan Nagar Municipality/ NDITA Dated:
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Suraskha	
16.	No of Security Personnel engaged	(Security -12) 12+2(Supervisor)	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	Yes	
19.	Whether Metal detectors are used at the entry point	No	

20	Whether Monitoring System through Close circuit TV available	Yes
VEHICLES VOLUME		
21	No of Vehicles Engaged by the Organisation	No
22	No of Vehicles for which parking space is available in the premises	40
23	Whether parking space available for visitors within the premises	No
24	Place where excess vehicles (if any) are parked	Outside
GENERAL MAINTENANCE		
25	Garbage Clearing	Through NDITA Garbage clearing system
26	Drainage System	Connected to NDITA drainage system
27	Maintenance of Road	Internal Road is being maintained by occupier
TELEPHONE TOWER		
28	No of Towers	No
29	Statutory Clearance from AAI	No
30	Any Other Clearance	Not applicable

PART – II V=Vacant

31	Occupancy load		(Based on estimates)											
	Existing		B	4	1	2	3	4	5	6	7	8	9	10
	a)Regular		4	30	100	100	100	V	V	1060	100	V	V	
	b)Floating		30											
32	Basement		Yes											
	a)	If basement extends beyond building profile	No											
	b)	Use of the basement	Parking						Pump room					
	c)	Is it being sprinklered?	Yes but Not Working											
	d)	Whether any cubicles present in the basement?	Yes--- Only pump room											
		If yes, their use to be specified	Pump room -											
	f)	Whether fire zones are defined?	No											
		If yes, please provide details	Not applicable											

Part- III

Provisions of means of escape

33	Number of staircases --→ 2 (Two)		
	Stairs Number	#1 mm	#2 mm
	a) Width of flight	1420	1380
	b) Tread width	260	260
	c) Riser Height	150	150
	d) Finish	Kota stone	Kota stone
	e) Width of stair door (FCD)	910{FCD}	860(not FCD wooden)
	f) Height of stair head room	10 feet	10 feet
	g) Height of stair handrail	1000mm	1040mm
	h) Area & location & profile of Fire Refuge Area (Found Locked)	on the 6 th and 8 th floor (North Side) 6400mm×1830mm	
	i) Width and type of door leading to Fire refugee area	5600mm glass door	
	j) Pressurization of staircase	No	
	k) Segregation of staircase	Yes	
34	Number of Lifts installed→	Two	
	Lift-Numbers	#1	#2
	a) Type of door	Metallic	Metallic
	b) Fire resistance rating	2 Hours	2 Hours
	c) Area of lift car	2060×1260mm ²	2060×1260 mm ²
	d) Capacity (no of persons)	16	16
	e) Capacity(in kg)	1088	1088
	f) Company	KONE	KONE
	g) Is communication system, installed in the lift car?	Yes	Yes
	h) Is a fireman's switch being installed in the car?	Yes	Yes
	i) Pressurization of lift	No	No
	j) Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	No	
35	Presence of proper signage in all the exit route	Nothere are no signage found	
36	Is it posted with illuminated signage ?	No	
37	Whether it is landing to fire assembly point?	No assembly point de marked	
38	Any form of Public address system available?	Yes	
39	Width form of internal road within the Premises?	3.2Mtr	
40	Width of the Entry / exit of Gate	3.8Mtr	
41	Height of the Entry / exit of Gate	Open to sky	

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G 150000Ltr O/H 25000Ltr
	a)	If yes, specify the distance from the building	Adjacent to the building	
	b)	If yes, specify the capacity (in litres) as approved by WBF& ES.	Provisional NOC not available hence not verified	
	c)	Specify the condition of the reservoir	satisfactory	
43	Is any public or other water storage facility available nearby?		Yes	Specify the distance from the building 800m
	a)	Is it readily accessible?	Yes	Condition and type of the reservoir water body
44	Are internal hydrants being provided ?		Yes	Single outlets.
	If so, please indicate no of hydrants in each floor		Double	
45	Are first aid hose reels being provided? If so please indicate		Yes	No of hose reels on each floor :Two
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet? Here nozzles are necessary in a number of places	Yes	Bore and length of hose reel tubing on each reel: 20mm -15 Mtr
	b)	Size (bore) and type of nozzle fitted to each hose reel	5mm spray type	
45	Are fire hoses being provided near each hydrant? If so, please indicate Hose nozzles are necessary In the hose boxes		Yes	Type of hose: Canvas Size of hose: 63mm Length of hose: 15m
	a)	Total no of hoses provided near each hydrant	Two	
46	Have wet risers/dry risers been provided?		Yes	
	If yes, please indicate the number of risers and internal diameter of each		These are on stairs I →100mm dia stair II →100 mmdia stair I→ 80mm dia for sprinkler	
47	Has any down comer been provided? If so, please give details		No	
	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes	
	a)	Number of pumps	4 Nos Main → 75 KW Stand By → 75 KW Sprinkler Main→75 KW Jockey→15 KW	

	b)	Size of suction and delivery connection to each pump/Output/Head	Suction: 200mm Delivery: 150mm Output of each pump: Main 171 M ³ /hr Max head against which the pump can operate at the output mentioned in: 88M		
	e)	Is the pump automatic in action?	No		
	f)	Is the water pressure sufficient at max distance from the pump?	There is no pressure as the pump is not running moreover NO pressure gauge is found at top floor.		
48.	Sprinkler system		Yes , Not running as water is sprinkles hydrant is empty		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		YesSmoke Detectors		
	a)	Type of detectors used	addressable		
49	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes two one each floor on each stair case		
50	Alarm receiving system		Yes Intelligence board is switched off		
51	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		Yes 		

56	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available
57	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available
58	Status of NOC from WBF&ES	Renewal for NOC has been applied copy enclosed on 20/8/12 Memo No. WBFCS /2058/11BidhanIT/ 352 /04(408/04) Dt. 19/08/11

Part-V

Electrical, Cables and Ventilation

59	If the building is Centrally air – conditioned, please indicate,	Yes	
	a) Material used for construction of ducts and its fittings	Refractory materials fixed and hence could not be seen	
	b) Type of tinning used for ducts	Could not be seen	
	c) Type of lagging used, if any for insulating any portion of the duct	Could not be seen	
	d) How the lagging is secured?	Sealed with refractory materials	
	e) If false ceiling is there?	Yes	
	f) Material used for false ceiling	Gypsum board	
	g) Is a separate AHU being provided in each floor	yes	
	H) Whether automatic shutdown of AHU is coupled with detection system?	No	
	i) Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Isolated	
	j) Will fire dampers be provided in AC duct?	NO	
60	Is there any standby source of electric supply being provided?	Yes	DG Capacity 500 KVA X 2 nos
	Is the back supply automatic?	No	Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump✓ ■Emergency Light✓ ■Lift✓ ■Partly to Office✓ ■ Others

61	Location of switch-gears and transformers		Inside the building on ground floor	
62	a)	Transformer capacity	1000kva 11kv 413v dry type	
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	YES.	
	c)	If outside, how far is it from the building?	Not applicable	
63	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Fire extinguisher and sand bucket	
64	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Not sealed	
65	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		None found	
66	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable	
67	Whether natural ventilation is relied upon? If so, give details.		Yes windows are provided	
68	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No	
69	Whether mechanical ventilation is being coupled with automatic detection system?		No	
70	Whether the refuge area is being provided?		Yes	On which floor: 6 th & 8 th Area of Fire Refuge Area: 6400 mm X 1830 mm Width of Fire Refuge Area: 1830mm
71	Storage of combustibles materials near electrical equipment/fuse units.		None found	
72	RCCBs available??		None found	
73	Master switch in warehouses		Not applicable	
74	Proper cable joint procedures as per manufacturer		yes	
75	Earthing Pit Tested??		No	
76	Use of MCB??		Yes on each floor	
77	Bypassing of protection devices		Not found	

78	Deteriorated insulation	Not found
79	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes
80	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No
81	Tracking possibility	Yes
82	Unused opening in the panels, etc.	No
83	Possibility of ground fault/short circuit	no
84	Mechanical protection to cables	Yes
85	Loose terminations due to improper supports, crimping	No
86	Improper gland installation, wrong lug size	No
87	Over-rated uses, wrongly set protection relays, etc.	No
88	Switch yard and sub station	Yes
89	DG operation and maintenance	yes
90	Reliability of the fire hydrant system	No
91	Emergency preparedness and response	No
92	Availability of Evacuation plan	No
93	Mock drill conducted??	No
94	Awareness of the people??	No
95	Sample basis validation of smoke detection system??	No
96	Condition of Lightning Arrestor	satisfactory
97	Periodic test of UPS system (as applicable)	Not applicable
98	Handling of electrical work by competent electrician	Yes
99	Approval of receiving station, substation and DG	Not applicable
100	Storage if hazardous material, chemicals?	Gasbank is found
101	Use of signage?	No
102	Hydrants clear, access to public thorough fare open	yes
103	Flame & work permits (as applicable)	Not applicable
104	Effective internal communication and public address system	Yes but not working
105	Colour coding system of hazardous chemical gas lines etc.	Gas pipe from gas bank and kitchen are not painted Yellow
106	Management structure, role of safety officer, fire department etc.	No structure found
107	Procedure for incident investigation and control	No

PART- VI

Other Information

Other Information			
108.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes	■ Deviation Given in the non-conformity report
109.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	Gas bank fire license not available	
	Is Trade License available??	License not found but receipt no. 019703 dt. 21/11/12 enclosed	
110	Name of the Insurance Company	Bajaj Allianz	
111	Remarks (if any) There is a general negligence in maintenances in the firefighting facility. The building is rented on some floor with an occupancy load of more than 100 though at present some are vacant the following are immediately rectified. 1. Pump to be run on auto mode so as on top floor at present the top floor may around 3.5kg/cm² 2. The fire extinguish are to be refilled and maintained 3. Signage mockdills evacuation drills with evacuation plan should be should be regularly(within 6 month) done 4. The transformer was recently serviced and it was observed that the sound and heat was areon higher side.It should be checked 5. The exit passage must be clear from any obstruction, found block in one place on stair II 6. The fire license for gas is to be acquired and LPG leaked detector is to be properly installed		

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	OC from NDITA not available	To be acquired
2.	Pumps are not running in auto mode with proper pressure setting	To be run in Auto mode for 24X7
3.	Refuge areas are found locked	The access is to be clear always
4.	Fire extinguish are not refilled dates are not exhibited	The validity is to be made and maintained
5.	The intelligent panel box on ground floor not working	It is to be in working condition
6.	No nozzles are present in hose boxes	Nozzle are to be kept in hose boxes
7.	Cycles are packed in transformer room. Sand buckets are empty and FE are not refilled	The transformer room to be kept free of any unwanted materials. Filled sand buckets & Valid Fire extinguishers are to be provided.
8.	Nozzles are missing in many hose reels	To be replaced
9.	Stair II found blocked	To be kept clean from any obstruction
10.	Panel boxes on top found open	Should be properly closed
11.	Smoke detectors found covered in VIIth floor	Should be in working condition
	The kitchen is connected with the gas bank- A) Pipes are not color coded B) No heat detectors are found C) No LPG leak detectors are found D) Fire license for gas barrel are not available	A) Pipes are to be painted B) Heat detectors are to be provided C) LPG leak detectors are to be provided D) Fire license for gas Bank to be obtained
12.	No signage are found even in front of lift	Signage (illuminated) are to be provided everywhere
13.	Mock drills evacuation are not done	Same to be done regularly with proper evacuation plan.

Reviewer

Auditor

Signature & date of Inspecting and Reporting Authority With seal

RDB BOULEVARD



EXECUTIVE SUMMARY

Part I & II

General Information

RDB BOULEVARD is situated at EP&GP K - 1, V91 at sector V, Salt Lake, Kolkata 700091.

This building is in 0.8377 Acres of land. Build up area is 228810 sq.ft in B+G+ 8 constructions. The basement is used for car parking & Pump room. Ground floor is rented to a book stall & 4 nos of restaurants & VLCC. 1st floor the Ivory Banquet is rented out for parties. 2nd & 3rd floor are having Multiplexes for screening cinema. 4th floor is rented to Green, Wave, Deskler, AGC Networks, & SMS Meer. 5th floor rented to Thiess India, SMS India. 6th floor is rented to AMITY University. 7th floor is RDB ORG Office & M.N.Dastur office. 8th floor is under renovation by Regus & Mystique

There is central **AC system** in the building with AHU in each floor. These AHU are coupled with fire detection system. Chillers are at the roof top.

OC (Occupational Certificate) has been issued by Bidhan Nagar Municipality on 22.02.08 & 13.06.08 in two stages.

NOC from WBF & ES is valid up to 20.08.2013 (Ref WBFES/DG/FP/2324/12/Cal-B/44/96(388/04))

Estimated Occupancy Load was found as

	Existing -- 1594
Floating -- 60	

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are five numbers staircase available. There are four numbers lift and two nos goods lift available. There are two nos escalators connecting between 2nd & 3rd floor. There are two nos refuse area on 5th floor

No Evacuation Drill has been conducted so far.

There is no Signage with direction available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is Wet riser, portable fire extinguishers smoke detectors, MCPs. There are 100 Nos fire extinguishers are available in the common areas & in Electrical installations. Tenants except Amity University at 6th floor are having their own fleet of fire extinguishers. Amity University which is having approx. 200 students does not have any fire extinguisher.

There are 39 nos of FHCs & 38 nos hose reel in the building

There is an underground tank of 2,00,000ltr capacity There two risers in the building.
There is Sprinkler system available including the basement car parking place

Alternate source of water is the Water body approx. 200 mtr away

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises ,near the Electrical installation

There is a DG supply of 360 KVA available

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART - I

General Information

1.	Plot No/Premises No:	EP&GP K - 1, V91	
2.	Premises Name (if any):	RDB Boulavard	
3.	Name of the owner /occupier/lessee	MrKamal Bansal	
4.	Permanent Address	EP&GP K - 1, V91, Sector- V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	MrTapashChakravorty	
7.	Phone No of Contact Person	92305 54481	
8.	E-mail	com@rdborganization.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use ☐	Educational
			Institutional ☐
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	0.8377 Acres	
11.	Build up area(as informed to the Auditor)	228810 Sqft	
12.	No of Floors	B+G+8	
13.	Date of Sanction of Building Plan	27.12.2007	
14.	Whether P.O.C/OC received from local body?	22.2.08 & 13.6.08 in two stages from Bidhan Nagar Municipality	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	NIS Facility Management Services	
16.	No of Security Personnel engaged	34	
17.	Whether Records of Vehicles (No & type entering into the building are kept	YES	
18.	Whether records of Visitors entering into the building are kept	YES	
19.	Whether Metal detectors are used at the entry point	YES, but recently it has gone for repair	
20.	Whether Monitoring System through Close circuit TV available	YES	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	3	
22.	No of Vehicles for which parking space is available in the premises	75Nos	
23.	Whether parking space available for visitors within the premises	Yes (Pay Parking)	
24.	Place where excess vehicles (if any) are parked	Outside the building	

GENERAL MAINTENANCE		
25	Garbage Clearing	Through NDITA garbage clearing System
26	Drainage System	Connected to NDITA drainage connection
27	Maintenance of Road	Internal road is being maintained by the occupier. Condition is satisfactory
TELEPHONE TOWER		
28	No of Towers	NIL
29	Statutory Clearance from AAI	Not applicable
30	Any Other Clearance	Not applicable

PART – II

V= Vacant

31	Occupancy load		(Based on Estimates)										
	Existing		B	G	1	2	3	4	5	6	7	8	TTL
	a)Regular		20	4+20	450	300	300	150	100	200	50	V	1594
	b)Floating												60
32	Basement		YES										
	a)	If basement extends beyond building profile	NO										
	b)	Use of the basement	Parking and pump house										
	c)	Is it being sprinklered?	YES										
	d)	Whether any cubicles present in the basement?	NO										
		If yes, their use to be specified	Not Applicable										
	f)	Whether fire zones are defined?	NO										
		If yes, please provide details	Not Applicable										

Part- III

Provisions of means of escape

33	Number of staircases --→ 5 nos							
	Stairs Number		#1	#2	#3	#4	#5	
	a)	Width of flight	1440 mm	1440 mm	1440 mm	1440 mm	1440 mm	
	b)	Tread width	300 mm	300 mm	300 mm	300 mm	300 mm	
	c)	Riser Height	160 mm	160 mm	160 mm	160 mm	160 mm	
	d)	Finish	Kota Stone	Kota Stone	Kota Stone	Kota Stone	Kota Stone	
	e)	Width of stair door (FCD)-	1090	1090	1090	1090	1090	
	f)	Height of stair head room	12 ft	12 ft	12 ft	12 ft	12 ft	
	g)	Height of stair handrail	900 mm	900 mm	900 mm	900 mm	900 mm	
	h)	Area & location & profile of Fire Refuge Area	On 5th floor Two Nos 6680 mm X 1700 mm each					
	i)	Width and type of door leading to Fire refugee area	840 mm					
	J)	Pressurization of staircase	No					
	k)	Segregation of staircase	Yes					
34	Number of Lifts installed→Five nos							
	Lift-Numbers Five nos		#1	#2	#3	#4	#5	#6
	a)	Type of door	Metall c	Metalli c	Metalli c	Metalli c	Metalli c	Metalli c
	b)	Fire resistance rating	2 Hrs	2 Hrs	2 Hrs	2 Hrs	2 Hrs	2 Hrs
	c)	Area of lift car	1490 mm X 1340 mm	1490 mm X 1340 mm	1400 mm X 1320 mm	1400 mm X 1320 mm	1290 mmX 1040 mm	1290 mmX 1040 mm
	d)	Capacity (no of persons)	15	15	13	13	9	9
	e)	Capacity(in kg)	1020	1020	884	884	630	612
35	f)	Company	Mitshubisi					
	g)	Is communication system, installed in the lift car?	Yes	Yes	Yes	Yes	Yes	Yes
	h)	Is a fireman’s switch being installed in the car?	Yes	Yes	Yes	Yes	NO	NO
	i)	Pressurization of lift	NO					
	j)	Whether validity of “Form-C” from appropriate authority obtained?(If yes, attach a photocopy)	YES.					

36	Presence of proper signage in all the exit route	No Directional Signage available. No proper signage in front of the Lift
37	Is it posted with illuminated signage ?	No
38	Whether it is landing to fire assembly point?	No
39	Any form of Public address system available ?	No
40	Width form of internal road within the Premises ?	4300 mm
41	Width of the Entry / exit of Gate	4200 mm
42	Height of the Entry / exit of Gate	Open to sky

PART IV

Provision of Fire Safety Arrangement

43	Is any water reservoir for firefighting available ? (at ground level / overhead)	Yes/No	U/G Not available 200000 ltr O/H60000 Ltr
	a) If yes, specify the distance from the building		Adjacent to the building
	b) If yes, specify the capacity (in litres)as approved by WBF & ES.		200000 Ltr
	c) Specify the condition of the reservoir		Satisfactory
44	Is any public or other water storage facility available nearby ?	Yes	Specify the distance from the building 200mtr
	a) Is it readily accessible ?	Yes	Condition and type of the reservoir water body
45	Are internal hydrants being provided ?		Yes
	If so, please indicate no of hydrants in each floor		one
46	Are first aid hose reels being provided ? If so please indicate		YES
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?		To the riser
	b) Size (bore) and type of nozzle fitted to each hose reel		20 mm, 30 mtr
47	Are fire hoses being provided near each hydrant? If so, please indicate		Yes
	a) Total no of hoses provided near each hydrant		one
48	Have wet risers/dry risers been provided?		Yes -Wet riser
	If yes, please indicate the number of risers and internal diameter of each		Two
49	Has any down comer been provided? If so, please give details		No
50	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Yes	Main pump- 60 HP Stand by - 60 HP Jockey -15 HP
	a) Number of pumps		Three
	b) Size of suction and delivery connection to		Suction -150 mm , Delivery – 150 mm

		each pump/Output/Head	Output of main pump 137 M ³ /Hr& jockey 11 M ³ /Hr Head height is 80 Mtr		
	e)	Is the pump automatic in action?	Yes		
	f)	Is the water pressure sufficient at max distance from the pump?	Could not be checked as no pressure gauge found at the top		
51.	Sprinkler system		YES		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes.		
	a)	Type of detectors used	Addressable type smoke detector		
52	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes.		
53	Alarm receiving system		Yes,		
54	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		Yes Yes Yes Feb 2013	Number of FE Type/ Capacity Co ₂ (4.5Kg) water (9 Ltr) DCP (5 Kg) These are for common areas. Apart from the above Tenants have their own Fire extinguishers	100 6 47 47
55	Location and population of the FEs adequate		In all the Common areas& in electrical installation		
56	Are Emergency Fire Alarm being provided in each floor ?		Yes	No. of Fire Alarm:36 Location of Fire Alarm: stair case Near the Exit points	
57	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		No		
58	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?		No		
59	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES		Not Available		
60	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES		Not Available		
61	Status of NOC from WBF&ES		valid upto 20.08.2013 (Ref WBFES/DG/FP/2324/12/Cal-B/44/96(388/04)		

Part-V

Electrical, Cables and Ventilation

62	If the building is Centrally air -conditioned, please indicate,		YES
	a)	Material used for construction of ducts and its fittings	Could not be checked
	b)	Type of tinning used for ducts	Could not be checked
	c)	Type of lagging used, if any for insulating any portion of the duct	Could not be checked
	d)	How the lagging is secured?	Could not be checked
	e)	If false ceiling is there?	Yes
	f)	Material used for false ceiling	Gypsum Board
	g)	Is a separate AHU being provided in each floor	Yes in each floor
	H)	Whether automatic shutdown of AHU is coupled with detection system?	YES
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	YES
	j)	Will fire dampers be provided in AC duct?	NO
63	Is there any standby source of electric supply being provided?		Yes DG1050 KVA X 3 Nos UPS 60 KVA + Individual tenants are having UPS
	Is the back supply automatic?		YES
64	Location of switch- gears and transformers		Inside the building
65	a)	Transformer capacity	1500KVA X 2 nos- dry type
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Yes
	c)	If outside, how far is it from the building?	Not applicable
66	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Fire Extinguishers
67	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Not applicable
68.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		None found
69.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable
70.	Whether natural ventilation is relied upon? If so, give details.		Yes
71.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		Not available
72.	Whether mechanical ventilation is being coupled with automatic detection system?		NO
73.	Whether the refuge area is being provided?		Yes at 5th floor- two nos
74.	Storage of combustibles materials near electrical equipment/fuse units.		No

75.	RCCBs available??	None found
76.	Master switch in warehouses	Not applicable
77.	Proper cable joint procedures as per manufacturer	Yes
78.	Earthing Pit Tested??	Not done
79.	Use of MCB??	Yes
80.	Bypassing of protection devices	Not evidenced
81.	Deteriorated insulation	Not evidenced
82.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
83.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Yes
84.	Tracking possibility	Yes
85.	Unused opening in the panels, etc.	Yes
86.	Possibility of ground fault/short circuit	Not found
87.	Mechanical protection to cables	Yes
88.	Loose terminations due to improper supports, crimping	Not found
89.	Improper gland installation, wrong lug size	Not found
90.	Over-rated uses, wrongly set protection relays, etc.	Not found
91.	Switch yard and sub station	Not applicable
92.	DG operation and maintenance	Yes with AMC
93.	Reliability of the fire hydrant system	YES
94.	Emergency preparedness and response	Not available
95.	Availability of Evacuation plan	Available only with Thiess India
96.	Mock drill conducted??	Not Done
97.	Awareness of the people??	poor
98.	Sample basis validation of smoke detection system??	Not carried out
99.	Condition of Lightning Arrestor	Earth pit test has been conducted
100.	Periodic test of UPS system (as applicable)	Maintained by individual tenants
101.	Handling of electrical work by competent electrician	Yes
102.	Approval of receiving station, substation and DG	YES
103.	Storage if hazardous material, chemicals?	None
104.	Use of signage?	Yes. But more signage to be given
105.	Hydrants clear, access to public thorough fare open	Yes
106.	Flame & work permits (as applicable)	Not applicable
107.	Effective internal communication and public address system	NO
108.	Colour coding system of hazardous chemical gas lines etc.	YES
109.	Management structure, role of safety officer, fire department etc.	No
110.	Procedure for incident investigation and control	No

PART- VI

Other Information

111.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes from WBF&ES recommendation
112	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
	Is Trade License available??	Available
113	Name of the Insurance Company	NO
114	Remarks (if any) 9. No Evacuation drill has been conducted 10. No mock drill has been conducted 11. No Assembly point has been unmarked 12. There is no evacuation plan is available 13. There is no fire trained person available 14. There is no ELCB or RCCB installed 15. FHC cabinet found empty at the stair 16. The sand buckets are fixed very high near the electrical installation. 17. Fire Licenses for the two LPG gas banks could not be evidenced at the restaurants 18. Amity University is having approx. 200 students do not have any Fire extinguishers in their premises	

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1	No Evacuation drill has been conducted	Evacuation drill is to be periodically with all occupants & record is to be maintained
2	No Fire mock drill has been conducted	To be conducted periodically & record to be maintained
3	No Assembly point has been unmarked	An assembly point is to be provided outside the building with proper identification
4	There is no evacuation plan is available except Thiess India	Evacuation plan is to be provided in each office
5	There is no fire trained person available	Fire trained people is to be provided
6	There is no ELCB or RCCB installed	At least ELCB is to be installed
7	FHC cabinet found empty in the stair case 	These are removed for painting .Hoses are to be kept FHC as early as possible
8	The sand buckets are fixed very high near the electrical installation. 	Sand buckets are to be fixed at a lower height
9.	Fire Licenses for the two LPG gas banks could not be evidenced at the restaurants	One of the Owners of the restaurant do not know that license is required more than 100 Kg of LPG
10	Amity University is having approx 200 students do not have any Fire extinguishers in their premises	Should immediately install Fire Extinguishers with proper coverage

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

WEBEL BHABAN



EXECUTIVE SUMMARY

Part I & II

General Information

WEBEL BHABAN premises has two buildings named WSEBEL BHABAN & Moni Bhandar (State Data center, in it's plot is situated at EP &GP, at sector V, Salt lake, Kolkata 700091.

This buildingsare in 2.67 acres of land. Build up area Webel Bhaban is 3500 SqMtr& that of Moni bhandar is 65000 Sq ft. Webel Bhaban is G + 3 Floor & Moni Bhandar is G + 7 floor.

There areno central **AC system** in the both the buildings.

Sanction date of building plan is not available for both buildings

OC(Occupational Certificate)for both the buildings are not available

Provisional NOC from WBF & ES has been obtained recently for both buildings.

Estimated Occupancy Load was found as

	Existing -- 80 + 80
Floating -- 25	

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

In the WebelBhaban there are two stair cases available . There is one Lift available. Nut the lift do not have communication & Fire control switch. The ground floor is lying vacant now

In the MoniBhandar there are two stair cases available . There are two Lifts available. Both the lifts have communication facilities & Fire control switches. Ground, 2nd, 4th, 6th ,7th floor are lying vacant now.

Evacuation Drill at has not been conducted

There is no Signage available in the Webel Bhaban building

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

In the WebelBhaban Provision for Fire safety arrangement includes in the premises is Smoke detector, Sprinkler, MCPs, But the intelligent panel was found shut off. It was told that they given AMC recently & they are checking & working on it.

In the MoniBhandar Provision for Fire safety arrangement includes in the premises is Wet riser, Smoke detector, Sprinkler, MCPs, But the intelligent panel was found shut off. It was told that they given AMC recently & they are checking & working on it. Fire pumps were found switched off

There are 72Nos fire extinguishers are available in the common areas & in Electrical installations. & in the offices

In the WebelBhaban there is an underground 26000ltr capacity. There is no wet riser in the building.

In the MoniBhandar There is an Underground tank of 1,80,000ltr capacity & Overhead tank capacity is 70000 Ltr

Sprinkler system is available at MoniBhandar

Alternate source of water is the Water body approx 500 mtr away

PART V

ELECTRICAL FIRE HAZARDS

There is no RCCB in the distribution board

Earth pits were not found marked and tested .

Generally no combustible material is stored in the premises ,near the Electrical installation

There is no DG supply at WebelBhaban but there are DG supply of 500 KVA+ 250 KVA + 62.5 KVA available at MoniBhandar as an alternate source of power supply

PART VI

OTHER INFORMATION

The building is under group insurance with National Insurance company

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	EP & GP	
2.	Premises Name (if any):	WEBEL BHABAN	
3.	Name of the owner /occupier/lessee	WEBEL	
4.	Permanent Address	EP & GP ,Sector- V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	MrA.P.sarkar	
7.	Phone No of Contact Person	98318 59424	
8.	E-mail	Arun.sarkar@webel-india.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	2.67 Acres	
11.	Build up area(as informed to the Auditor)	3500 sqmtr	65000 sqft
12.	No of Floors	G+3	G+7
13.	Date of Sanction of Building Plan	Not available	
14.	Whether P.O.C/OC received from local body?	Not available	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Indian Ex-service men Link	
16.	No of Security Personnel engaged	19 including Gun Men & supervisor	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	YES	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	NO	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	20	
22.	No of Vehicles for which parking space is available in the premises	40Nos	
23.	Whether parking space available for visitors within the premises	YES	
24.	Place where excess vehicles (if any) are parked	Out side the building	

GENERAL MAINTENANCE		
25	Garbage Clearing	Through NDITA garbage clearing System
26	Drainage System	Connected to NDITA drainage connection
27	Maintenance of Road	Internal road is being maintained by the occupier. Condition is satisfactory
TELEPHONE TOWER		
28	No of Towers	In MoniBhander –Airtel , one no
29	Statutory Clearance from AAI	Not available
30	Any Other Clearance	Not available

PART – II

V= Vacant

31	Occupancy load		(Based on Estimates)								
	Existing		G	1	2	3	4	5	6	7	Total
	a)Regular										
	WebelBhaban		V	50	15	15					80
	MoniBhander		V	25	V	40	V	15	V	V	80
	b)Floating										25
32	Basement		NIL								
	a)	If basement extends beyond building profile	Not Applicable								
	b)	Use of the basement	Not Applicable								
	c)	Is it being sprinklered?	Not Applicable								
	d)	Whether any cubicles present in the basement?	Not Applicable								
		If yes, their use to be specified	Not Applicable								
	f)	Whether fire zones are defined?	Not Applicable								
		If yes, please provide details	Not Applicable								

Part- III

Provisions of means of escape

33	Number of staircases --→ Three Nos		WebelBhaban		MoniBhandar	
	Stairs Number		#1	#2	#3	#4
	a)	Width of flight in mm	1350	1280	1400	1420
	b)	Tread width in mm	260	250	270	260
	c)	Riser Height in mm	170	160	150	140
	d)	Finish	Marble	Marble	Kota stone	Kota stone
	e)	Width of stair door (FCD)- Only Glass door	990 mm	990 mm	1036	1036
	f)	Height of stair head room in ft	12	12	15	15
	g)	Height of stair handrail in mm	890	810	780	750
	h)	Area & location & profile of Fire Refuge Area	NIL		In 4 th & 7 th floor 1) 4600 mmx 1120 mm X 2 nos 2) 1360 mmx990 mm	
	i)	Width and type of door leading to Fire refugee area			FCD- 1090 mm	
	j)	Pressurization of staircase	No			
	k)	Segregation of staircase	YES			
34	Number of Lifts installed→Three		WEBEL BHABAN		MONI BHANDAR	
	Lift-Numbers		#1	#2	#3	
	a)	Type of door	Metallic		Metallic	Metallic
	b)	Fire resistance rating	2 Hrs		2 Hrs	2 Hrs
	c)	Area of lift car				
	d)	Capacity (no of persons)				
	e)	Capacity(in kg)				
35	f)	Company	OTIS		OTIS	OTIS
	g)	Is communication system, installed in the lift car?	NO		YES	YES
	h)	Is a fireman’s switch being installed in the car?	NO		YES	YES
	i)	Pressurization of lift	NO			
	j)	Whether validity of “Form-C” from appropriate authority obtained?(If yes, attach a photocopy)	Not available			
36	Presence of proper signage in all the exit route		NO in WebelBhaban, Yes in MoniBhandar			
37	Is it posted with illuminated signage ?		NoNO in WebelBhaban, Yes in MoniBhandar			
38	Whether it is landing to fire assembly point?		No			
39	Any form of Public address system available ?		No			
40	Width form of internal road within the Premises ?		2450 mm			
41	Width of the Entry / exit of Gate		3650 mm			
42	Height of the Entry / exit of Gate		Open to sky			

PART IV

Provision of Fire Safety Arrangement

43	Is any water reservoir for fire fighting available ? (at ground level / over head)	Yes/No	U/G 35000 ltr (WebelBhaan) U/G 1,80,000 Ltr (moniBhandar)
	a) If yes, specify the distance from the building		Adjacent to the building
	b) If yes, specify the capacity (in litres) as approved by WBF & ES.		None found
	c) Specify the condition of the reservoir		Satisfactory
44	Is any public or other water storage facility available nearby ?	Yes	Specify the distance from the building 500mtr
	a) Is it readily accessible ?	Yes	Condition and type of the reservoir water body
45	Are internal hydrants being provided ?		Yes in MoniBhandar
	If so, please indicate no of hydrants in each floor		one
46	Are first aid hose reels being provided ? If so please indicate		Yes
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?		Directly to the riser
	b) Size (bore) and type of nozzle fitted to each hose reel		5 mm, Jet type
47	Are fire hoses being provided near each hydrant? If so, please indicate		Yes
	a) Total no of hoses provided near each hydrant		one
48	Have wet risers/dry risers been provided?		Yes Wet riser in MoniBhandar
	If yes, please indicate the number of risers and internal diameter of each		one
49	Has any down comer been provided? If so, please give details		No
50	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Yes	Main pump- 60 HP Stand by - 60 HP DG stand by- 92 HP Jockey -15 HP
	a) Number of pumps		Three
	b) Size of suction and delivery connection to each pump/Output/Head		Suction -150 mm , Delivery – 150 mm Out put of main pump 184M ³ /Hr Head height is 75Mtr
	e) Is the pump automatic in action?		Yes, But found switched off
	f) Is the water pressure sufficient at max distance from the pump?		Could not be checked as there is no pressure gauge at the top
51.	Sprinkler system		YES
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes. But the system found not working
	a) Type of detectors used		Addressable type smoke detector, but found not working in Monibhandar

52	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	Yes. but found not working		
53	Alarm receiving system	Yes, but found not working		
54	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark?	Yes	Number of FE Type/ Capacity DCP (5 Kg) Foam (9 Ltr)	72 15 4
		Yes	Co2 (4.5 kg) Water(9 Ltr)	33 20
	Date of Validity	26.7.13		
55	Location and population of the FEs adequate	In the office, in electrical installation , Stair case& office		
56	Are Emergency Fire Alarm being provided in each floor ?	Yes	No. of Fire Alarm:One Location of Fire Alarm:in each floor	
57	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No		
58	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No		
59	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not Available		
60	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not Available		
61	Status of NOC from WBF&ES	Provisional NOC received recently		

Part-V

Electrical, Cables and Ventilation

62	If the building is Centrally air -conditioned, please indicate,		NO	
	a)	Material used for construction of ducts and its fittings	Not available	
	b)	Type of tinning used for ducts	Not available	
	c)	Type of lagging used, if any for insulating any portion of the duct	Not available	
	d)	How the lagging is secured?	Not available	
	e)	If false ceiling is there?	Not available	
	f)	Material used for false ceiling	Not available	
	g)	Is a separate AHU being provided in each floor	Not applicable	
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable	
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable	
	j)	Will fire dampers be provided in AC duct?	Not applicable	
63	Is there any standby source of electric supply being		Ye	Webel→ NIL

	provided?	s	MoniBhandar→DG500 + 200 + 62.5 KVA
	Is the back supply automatic?	Not running at the time of audit	
64	Location of switch- gears and transformers	Inside the building	

65	a)	Transformer capacity	500 KVA	1500 KVA X 2 nos
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	YES	
	c)	If outside, how far is it from the building?	Not applicable	
66		What precautions will be taken to prevent a possible fire in the transformers from spreading?	Fire Extinguishers	
67		Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Electrical shaft not sealed	
68.		Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	YES	
69.		Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable	
70.		Whether natural ventilation is relied upon? If so, give details.	Yes	
71.		Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	No	
72.		Whether mechanical ventilation is being coupled with automatic detection system?	NO	
73.		Whether the refuge area is being provided?	NO	
74.		Storage of combustibles materials near electrical equipment/fuse units.	NO	
75.		RCCBs available??	None found	
76.		Master switch in warehouses	Not applicable	
77.		Proper cable joint procedures as per manufacturer	Yes	
78.		Earthing Pit Tested??	No record found	
79.		Use of MCB??	Yes	
80.		Bypassing of protection devices	Not evidenced	
81.		Deteriorated insulation	Not evidenced	
82.		Selection, deployment of PFFs (Portable Fire Extinguishers)	YES	
83.		Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Not applicable	
84.		Tracking possibility	Yes	
85.		Unused opening in the panels, etc.	No	
86.		Possibility of ground fault/short circuit	Not found	
87.		Mechanical protection to cables	Yes	

88.	Loose terminations due to improper supports, crimping	Not found
89.	Improper gland installation, wrong lug size	Not found
90.	Over-rated uses, wrongly set protection relays, etc.	Not found
91.	Switch yard and sub station	Not applicable
92.	DG operation and maintenance	Yes with AMC at MoniBhandar
93.	Reliability of the fire hydrant system	Yes reliable in MoniBhandar
94.	Emergency preparedness and response	Not available
95.	Availability of Evacuation plan	Not available
96.	Mock drill conducted??	Not done
97.	Awareness of the people??	NIL
98.	Sample basis validation of smoke detection system??	Not carried out
99.	Condition of Lightening Arrestor	Earth pit test has not been conducted
100.	Periodic test of UPS system (as applicable)	Yes
101.	Handling of electrical work by competent electrician	Yes
102.	Approval of receiving station, substation and DG	Not available
103.	Storage if hazardous material, chemicals?	None
104.	Use of signage?	Yes
105.	Hydrants clear, access to public thorough fare open	Yes
106.	Flame & work permits (as applicable)	Not applicable
107.	Effective internal communication and public address system	Not available
108.	Colour coding system of hazardous chemical gas lines etc.	Not applicable
109.	Management structure, role of safety officer, fire department etc.	No
110.	Procedure for incident investigation and control	No

PART- VI

Other Information

111	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes from WBF&ES recommendation
112	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
113	Is Trade License available??	No
114	Name of the Insurance Company	National Insurance company Ltd

115	Remarks (if any) 19. No Evacuation drill has been conducted 20. No mock drill has been conducted 21. No Assembly point has not been enmarked 22. There is no evacuation plan is available 23. There is no fire trained person available 24. Smoke detector/ MCP are found not working 25. Water pumps are found Switched off 26. There is no fire trained person is available 27. There is no signage. In the emergency exit route in WebelBhaban

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

NDITA

Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1	No Evacuation drill has been	Evacuation drill is to be done periodically with all occupants & record is to be maintained
2	No mock drill has been conducted	To be conducted periodically & record to be maintained
3	No Assembly point has been enmarked	An assembly point is to provided outside the building with proper identification
4	There is no evacuation plan is available	Evacuation plan is to be provided in each floor
5	There is no fire trained person available in both companies	Fire trained people is to be provided
6	Smoke detector/ MCP are found not working	Smoke detectors & MCPs are to be put in order
7	Water pumps are found Switched off	Water pump must run in auto mode for 24 X 7
8	There is no signage. In the emergency exit route	Illuminated signage is to be provided
9	There is no fire trained person is available	Fire trained persons are to be deployed

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

**SALT LAKE INCUBATION CENTRE
LTD.**



EXECUTIVE SUMMARY

Part I & II

General Information

Salt Lake Incubation Centre Ltd. is situated at EP&GP, X1-3/2, at sector V , Salt lake, Kolkata 700091.

This building is in 0.5 acres of land. Build up area 8300 sq ft. It is G + 3 Floor

There is no central AC system in the building.

OC(Occupational Certificate)is not available

Provisional NOC from WBF & ES has been obtained recently.

Estimated Occupancy Load was found as

	Existing -- 86
Floating -- 25	

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two stair cases available. There is one Lift available. With communication & fire control switch.

Evacuation Drill at has not been conducted

There is Signage available in the building

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is Wet riser, Smoke detector, Sprinkler, MCps, But the intelligent panel was found shut off. It was told that they given AMC recently & they are checking & working on it. Fire pumps were found not working.

There are 12Nos fire extinguishers are available in the common areas & in Electrical installations.

There is an underground 35000ltr capacity. There is one riser in the building.

There is Sprinkler system available

Alternate source of water is the Water body approx 500 mtr away

PART V

ELECTRICAL FIRE HAZARDS

There is no RCCB in the distribution board

Earth pits were not found marked and tested .

Generally no combustible material is stored in the premises ,near the Electrical installation

There is a DG supply of 200 KVA available as an alternate source of power supply

PART VI

OTHER INFORMATION

The building is under group insurance with National Insurance Company

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	EP & GP XI-3/2	
2.	Premises Name (if any):	Salt Lake Incubation Centre	
3.	Name of the owner /occupier/lessee	WEBEL	
4.	Permanent Address	EP & GP XI-3/2, Sector- V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	MrA.P.sarkar	
7.	Phone No of Contact Person	98318 59424	
8.	E-mail	Arun.sarkar@webel-india.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	0.5 Acres	
11.	Build up area(as informed to the Auditor)	8300 Sqft	
12.	No of Floors	G+3	
14.	Date of Sanction of Building Plan	Not available	
15.	Whether P.O.C/OC received from local body?	Not available	
SECURITY SETUP DETAILS			
17.	Name of the SECURITY AGENCY engaged	STAR	
18.	No of Security Personnel engaged	5	
19.	Whether Records of Vehicles (No & type entering into the building are kept	No	
20.	Whether records of Visitors entering into the building are kept	No	
21.	Whether Metal detectors are used at the entry point	NO	
22.	Whether Monitoring System through Close circuit TV available	NO	
VEHICLES VOLUME			
23.	No of Vehicles Engaged by the Organisation	NIL	
25.	No of Vehicles for which parking space is available in the premises	4Nos	
26.	Whether parking space available for visitors within the premises	NO	
27.	Place where excess vehicles (if any) are parked	Outside the building	

GENERAL MAINTENANCE		
28	Garbage Clearing	Through NDITA garbage clearing System
29	Drainage System	Connected to NDITA drainage connection
30	Maintenance of Road	Internal road is being maintained by the occupier. Condition is satisfactory
TELEPHONE TOWER		
31	No of Towers	NIL
32	Statutory Clearance from AAI	Not applicable
33	Any Other Clearance	Not applicable

PART - II

V= Vacant

34	Occupancy load		(Based on Estimates)				
	Existing		G	1	2	3	Total
	a)Regular		6	16	32	32	86
	b)Floating						25
36	Basement		NIL				
	a)	If basement extends beyond building profile	Not Applicable				
	b)	Use of the basement	Not Applicable				
	c)	Is it being sprinklered?	Not Applicable				
	d)	Whether any cubicles present in the basement?	Not Applicable				
		If yes, their use to be specified	Not Applicable				
	f)	Whether fire zones are defined?	Not Applicable				
		If yes, please provide details	Not Applicable				

Part- III

Provisions of means of escape

37	Number of staircases --→ TWO Nos			
	Stairs Number		#1	#2 Emergency
	a)	Width of flight	1300 mm	1300 mm
	b)	Tread width	270mm	270mm
	c)	Riser Height	140 mm	140 mm
	d)	Finish	Kota stone	Kota stone
	e)	Width of stair door (FCD)-	890 mm	890 mm
	f)	Height of stair head room	12 ft	12 ft
	g)	Height of stair handrail	890 mm	890 mm
	h)	Area & location & profile of Fire Refuge Area	NIL	
	i)	Width and type of door leading to Fire refugee area	Not applicable	
	J)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	

38	Number of Lifts installed→One		
	Lift-Numbers		
	a)	Type of door	Metallic
	b)	Fire resistance rating	2 Hrs
	c)	Area of lift car	1100 mm X 1100 mm
	d)	Capacity (no of persons)	8
	e)	Capacity(in kg)	544
100	f)	Company	OTIS
	g)	Is communication system, installed in the lift car?	YES
	h)	Is a fireman's switch being installed in the car?	YES
	i)	Pressurization of lift	NO
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	NOT available
39	Presence of proper signage in all the exit route		NO
40	Is it posted with illuminated signage?		No
41	Whether it is landing to fire assembly point?		No
42	Any form of Public address system available?		No
43	Width form of internal road within the Premises?		2600 mm
44	Width of the Entry / exit of Gate		2800 mm
45	Height of the Entry / exit of Gate		Open to sky

PART IV

Provision of Fire Safety Arrangement

46	Is any water reservoir for firefighting available ? (at ground level / overhead)		Yes/No	U/G35000 ltr O/H2000ltr
	a)	If yes, specify the distance from the building	Adjacent to the building	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	None found	
	c)	Specify the condition of the reservoir	Satisfactory	
47	Is any public or other water storage facility available nearby ?		Yes	Specify the distance from the building500mtr
	a)	Is it readily accessible?	Yes/No	Condition and type of the reservoir water body
48	Are internal hydrants being provided ?		Yes	
	If so, please indicate no of hydrants in each floor		one	
49	Are first aid hose reels being provided ? If so please indicate		Yes	
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Directly to the riser	
	b)	Size (bore) and type of nozzle fitted to each hose reel	5 mm, Jet type	
50	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	
	a)	Total no of hoses provided near each hydrant	one	

51	Have wet risers/dry risers been provided?	Yes Wet riser
	If yes, please indicate the number of risers and internal diameter of each	one
52	Has any down comer been provided? If so, please give details	No

53	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Yes Main pump- 60 HP Stand by - 60 HP Jockey -15 HP
	a) Number of pumps	Three
	b) Size of suction and delivery connection to each pump/Output/Head	Suction -150 mm , Delivery – 150 mm Out put of main pump 137 M3/HrHead height is 80 Mtr
	e) Is the pump automatic in action?	Yes
	f) Is the water pressure sufficient at max distance from the pump?	Could not be checked as there is no pressure gauge at the top
54.	Sprinkler system	YES
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	Yes. But the system found not working
	a) Type of detectors used	Addressable type smoke detector, but found not working
55	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	Yes. but found not working
56	Alarm receiving system	Yes, but found not working
57	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Number of FE 12 Type/ Capacity DCP (5 Kg) 5 Foam (9 Ltr) 1 Yes Co2 (4.5 kg) 6 26.7.13
58	Location and population of the FEs adequate	In the office, in electrical installation , Stair case
59	Are Emergency Fire Alarm being provided in each floor ?	Yes No. of Fire Alarm:One Location of Fire Alarm:in each floor
60	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No
61	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No
62	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not Available
63	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not Available
64	Status of NOC from WBF&ES	Provisional NOC received recently

Part-V

Electrical, Cables and Ventilation

67	If the building is Centrally air -conditioned, please indicate,		NO	
	a)	Material used for construction of ducts and its fittings	Not available	
	b)	Type of tinning used for ducts	Not available	
	c)	Type of lagging used, if any for insulating any portion of the duct	Not available	
	d)	How the lagging is secured?	Not available	
	e)	If false ceiling is there?	Not available	
	f)	Material used for false ceiling	Not available	
	g)	Is a separate AHU being provided in each floor	Not applicable	
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable	
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable	
	j)	Will fire dampers be provided in AC duct?	Not applicable	
68	Is there any standby source of electric supply being provided?		Yes	DG200 KVA
	Is the back supply automatic?		Not running at the time of audit	
70	Location of switch- gears and transformers		Inside the building	
71	a)	Transformer capacity	200 KVA	
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	YES	
	c)	If outside, how far is it from the building?	Not applicable	
72	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Fire Extinguishers	
73	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Electrical shaft not sealed	
74	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		YES	
75	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable	
76	Whether natural ventilation is relied upon? If so, give details.		Yes	
77	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No	
78	Whether mechanical ventilation is being coupled with automatic detection system?		NO	
79	Whether the refuge area is being provided?		NO	
81	Storage of combustibles materials near electrical equipment/fuse units.		NO	
82	RCCBs available??		None found	

83	Master switch in warehouses	Not applicable
84	Proper cable joint procedures as per manufacturer	Yes
85	Earthing Pit Tested??	No record found
86	Use of MCB??	Yes
87	Bypassing of protection devices	Not evidenced
88	Deteriorated insulation	Not evidenced
89	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
90	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Not applicable
91	Tracking possibility	Yes
92	Unused opening in the panels, etc.	No
93	Possibility of ground fault/short circuit	Not found
94	Mechanical protection to cables	Yes
95	Loose terminations due to improper supports, crimping	Not found
96	Improper gland installation, wrong lug size	Not found
97	Over-rated uses, wrongly set protection relays, etc.	Not found
101	Switch yard and sub station	Not applicable
103	DG operation and maintenance	Yes with AMC
104	Reliability of the fire hydrant system	Yes reliable
105	Emergency preparedness and response	Not available
106	Availability of Evacuation plan	Not available
107	Mock drill conducted??	Not done
108	Awareness of the people??	NIL
109	Sample basis validation of smoke detection system??	Not carried out
110	Condition of Lightning Arrestor	Earth pit test has not been conducted
111	Periodic test of UPS system (as applicable)	Yes
112	Handling of electrical work by competent electrician	Yes
113	Approval of receiving station, substation and DG	Not available
114	Storage of hazardous material, chemicals?	None
115	Use of signage?	Yes
116	Hydrants clear, access to public thorough fare open	Yes
117	Flame & work permits (as applicable)	Not applicable
118	Effective internal communication and public address system	Not available
119	Colour coding system of hazardous chemical gas lines etc.	Not applicable
120	Management structure, role of safety officer, fire department etc.	No
121	Procedure for incident investigation and control	No

PART- VI

Other Information

118.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes from WBF&ES recommendation
119	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
	Is Trade License available??	No
120	Name of the Insurance Company	National Insurance company Ltd
121	Remarks (if any) 28. No Evacuation drill has been conducted 29. No mock drill has been conducted 30. No Assembly point has not been enmarked 31. There is no evacuation plan is available 32. There is no fire trained person available 33. Smoke detector/ MCP are found not working 34. Water pumps are found Switched off 35. There is no fire trained person is available 36. There is no signage. In the emergency exit route	

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1	No Evacuation drill has been	Evacuation drill is to be done periodically with all occupants & record is to be maintained
2	No mock drill has been conducted	To be conducted periodically & record to be maintained
3	No Assembly point has been unmarked	An assembly point is to provided outside the building with proper identification
4	There is no evacuation plan is available	Evacuation plan is to be provided in each floor
5	There is no fire trained person available in both companies	Fire trained people is to be provided
6	Smoke detector/ MCP are found not working	Smoke detectors & MCPs are to be put in order
7	Water pumps are found Switched off	Water pump must run in auto mode for 24 X 7
8	There is no signage. In the emergency exit route	Illuminated signage is to be provided
9	There is no fire trained person is available	Fire trained persons are to be deployed
	Access to fire hydrant is blocked 	Access to Fire hydrant must be free always

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

RASMI BUILDING



EXECUTIVE SUMMARY

Part I & II

General Information

RASMI BUILDING is situated at EP GP X1-16, Sector V Salt Lake City, Pin: 700091. There are two distinct buildings, one is the main building & the other is Annex building. The main building is G +3 & the ground floor is rented to Axis bank, ATM, Union money transfer. 2nd, 3rd floor is lying vacant. In the Annex building ground floor is being used for manufacturing Rasmi Choke. 1st floor is rented to OCTOGEN Soft Ware & 2nd is rented to Reliance, Mycom & Endurance Companies.

This property is taken as Sub-lease from WEBEL. The name of the owner is Mr. Nitish Tosniwal

NOC of Fire is Not available

OC (Occupation Certificate) is not available

Occupancy Load was found as

	Existing	--	40 + 90
Floating	--	30	

Part III

PROVISION OF MEANS OF ESCAPE

In the main Building there are two stairs only. No Lift is available.

In the Annex building there are main two nos stairs, out of which one is terminated at 1st floor. There is one open goods lift outside the building

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers only. Though in the Annex building 1st floor Octogen Software is having their own sets of Fire Extinguishers, Smoke detectors, MCPs & signage. The same arrangement is found available in AXIS bank at the ground floor of main building along with CCTV surveillance

There is no Fire tank available. There is no wet riser, sprinkler system available in the whole building.

Alternate source of water is the Water body approx. 800 mtr away from the building.

Only 7 Nos Portable fire extinguishers are found deployed at the Buildings. Apart from these Tenants are having their own Fire Extinguishers .

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation.

The building has no DG-set.

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EP GP X1-16	
2.	Premises Name (if any):	Rasmi Building (Dhansree Electronics Ltd)	
3.	Name of the owner /occupier/lessee	MrNitishTosniwal	
4.	Permanent Address	EP GP X1-16 ,Sector-V salt lake city, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Sub Lease Hold from WEBEL	
6.	Name of the Contact Person	Mr.Asoke Jain	
7.	Phone No of Contact Person	98311 97250	
8.	E-mail	Ashok.jain@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial ☐ Manufacturing of CHOKE
			Storage
		IT/ITES	
10.	Plot Area(as informed to the Auditor)	Not Available	
11.	Build up area(as informed to the Auditor)	Not Available	
12.	No of Floors	G+3(Main0	G+2(Annexe)
13.	Date of Sanction of Building Plan	Not Available	
14.	Whether P.O.C/OC received from local body?	Not Available	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	DNG	
16.	No of Security Personnel engaged	4 (Tenants have their own securities)	
17.	Whether Records of Vehicles (No & type entering into the building are kept	NO	
18.	Whether records of Visitors entering into the building are kept	No	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	No	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	One	
22.	No of Vehicles for which parking space is available in the premises	30 Nos	
23.	Whether parking space available for visitors within the premises	Yes	
24.	Place where excess vehicles (if any) are parked	Outside Road	

GENERAL MAINTENANCE		
25.	Garbage Clearing	NDITA Garbage clearing system
26.	Drainage System	Connected to NDITA Drainage system
27.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	Not applicable
30.	Any Other Clearance	Not applicable

PART - II

V= Vacant

31.	Occupancy load	(Based on Estimates)				
	Existing	G	1	2	3	Total
	a)Regular					
	MAIN	40	V	V	V	40
	annexe	30	40	20	X	90
	b)Floating	30				
32.	Basement	NIL				

Part- III

Provisions of means of escape

33.	Number of staircases --→Four		Main Building		Annexe Building	
34.	Stairs Number		#1	#2	#1	#2
	a)	Width of flight	1400 mm	1530 mm	1310 mm	1560 mm
	b)	Tread width	280 mm	280 mm	270 mm	260 mm
	c)	Riser Height	160 mm	160 mm	150 mm	160 mm
	d)	Finish	Cemented	Cemented	Cemented	Cemented
	e)	Width of stair door (FCD)	NIL	NIL	NIL	NIL
	f)	Height of stair head room	Open		15 ft	8 ft
	g)	Height of stair handrail	860 mm	820mm	740 mm	1020 mm
	h)	Area & location & profile of Fire Refuge Area	NO t applicable			
	i)	Width and type of door leading to Fire refugee area	Not applicable			
	j)	Pressurization of staircase	NO			
k)	Segregation of staircase	YES				
35.	Number of Lifts installed→ One no Goods lift at the back side of Annexe Building					
	Lift-Numbers					
	a)	Type of door	OPEN three sides . Front door is Steel			
	b)	Fire resistance rating	NIL			
	c)	Area of lift car	2000 mm X 2000 mm			
	d)	Capacity (no of persons)	Not applicable			
	e)	Capacity(in kg)	Not available			
	f)	Company	Not available			
	g)	Is communication system, installed in the lift car?	NO			
	h)	Is a fireman's switch being installed in the car?	NO			

	i)	Pressurization of lift	NO
	j)	Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	NO
36.		Presence of proper signage in all the exit route	No
37.		Is it posted with illuminated signage ?	No
38.		Whether it is landing to fire assembly point?	Fire assembling point is not identified
39.		Any form of Public address system available ?	NO
40.			
41.		Width form of internal road within the Premises ?	8000 mm
42.		Width of the Entry / exit of Gate	4000 mm
43.		Height of the Entry / exit of Gate	Open to sky

PART IV

Provision of Fire Safety Arrangement

44.	Is any water reservoir for firefighting available ? (at ground level / overhead)	Yes	U/GNO Fire Tank
	a) If yes, specify the distance from the building		NA
	b) If yes, specify the capacity (in litres) as approved by WBF & ES.		None
	c) Specify the condition of the reservoir		NA
45.	Is any public or other water storage facility available nearby ?	Yes	■specify the distance from the building ----800Mtr
	a) Is it readily accessible?	Yes	■condition and type of the reservoir—Water body
46.	Are internal hydrants being provided ?		NO
	If so, please indicate no of hydrants in each floor		
47.	Are first aid hose reels being provided ? If so please indicate		NO
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?		Not Applicable
	b) Size (bore) and type of nozzle fitted to each hose reel		Not Applicable
48.	Are fire hoses being provided near each hydrant? If so, please indicate		
	a) Total no of hoses provided near each hydrant		Not Applicable
49.	Have wet risers/dry risers been provided?		NO

50.	If yes, please indicate the number of risers and internal diameter of each	Not Applicable		
51.	Has any down comer been provided? If so, please give details	No		
52.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	NO		
	a) Number of pumps	Not Applicable		
	b) Size of suction and delivery connection to each pump/Out put/Head	Not Applicable		
	e) Is the pump automatic in action?	Not Applicable		
	f) Is the water pressure sufficient at max distance from the pump?	Not Applicable		
53.	Sprinkler system	NO		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	NO		
	a) Type of detectors used	Not Applicable		
54.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	NO		
	a) Alarm receiving system	NO		
55.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Yes 18.9.13	Number of FE Type/ Capacity DCP(5 Kg)----- CO2(4.5Kg)----- Mechanical Foam(9Ltrs)----- 1nos.	5nos. 1No. 1 No
	Location	At office & production floor		
56.	Are Emergency Fire Alarm being provided in each floor ?	No		
57.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	NO		
58.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No		
59.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
60.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
61.	Status of NOC from WBF&ES	Not available		

Part-V

Electrical, Cables and Ventilation

62.	If the building is Centrally air –conditioned, please indicate,		■No Central AC
	a)	Material used for construction of ducts and its fittings	Not applicable
	b)	Type of tinning used for ducts	Not applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d)	How the lagging is secured?	Not applicable
	e)	If false ceiling is there?	Not applicable
	f)	Material used for false ceiling	Not applicable
	g)	Is a separate AHU being provided in each floor	Not applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j)	Will fire dampers be provided in AC duct?	Not applicable
63.	Is there any standby source of electric supply being provided?		No
	Is the back supply automatic?		No
64.	Location of switch- gears and transformers		Outside the building
65.	a)	Transformer capacity	500 KVA
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	NA
	c)	If outside, how far is it from the building?	5 mtr
66.	What precautions is taken to prevent a possible fire in the transformers from spreading?		Fire Extinguisher
67.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Not applicable
68.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		NO
69.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable
70.	Whether natural ventilation is relied upon? If so, give details.		Yes
71.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		NO
72.	Whether mechanical ventilation is being coupled with automatic detection system?		Not Applicable

73.	Whether the refuge area is being provided?	No
74.	Storage of combustibles materials near electrical equipment/fuse units.	NO
75.	RCCBs available??	No
76.	Master switch in warehouses	NO
77.	Proper cable joint procedures as per manufacturer	YES
78.	Earthing Pit Tested??	Records are not available
79.	Use of MCB??	NO
80.	Bypassing of protection devices	NO
81.	Deteriorated insulation	NO
82.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
83.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	NO Cable shaft
84.	Tracking possibility	Yes
85.	Unused opening in the panels, etc.	No
86.	Possibility of ground fault/short circuit	NO
87.	Mechanical protection to cables	Yes
88.	Loose terminations due to improper supports, crimping	NO
89.	Improper gland installation, wrong lug size	Most of the cables do not have gland.
90.	Over-rated uses, wrongly set protection relays, etc.	NO Protection relay
91.	Earthing layout & it's effectiveness	Not available
92.	Switch yard and sub station	No
93.	DG operation and maintenance	Not Applicable
94.	Reliability of the fire hydrant system	Not Applicable
95.	Emergency preparedness and response	NO
96.	Availability of Evacuation plan	NO
97.	Mock drill conducted??	NO
98.	Awareness of the people??	Poor
99.	Sample basis validation of smoke detection system??	Not Applicable
100.	Storage if hazardous material, chemicals??	NO
101.	Use of signage??	NO
102.	Hydrants clear, access to public thorough fare open	Not Applicable
103.	Flame & work permits (as applicable)	NO
104.	Effective internal communication and public address system	No public address system
105.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
106.	Management structure, role of safety officer, fire department etc.	NO
107.	Procedure for incident investigation and control	NO

PART- VI

Other Information

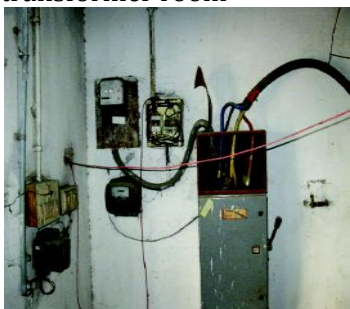
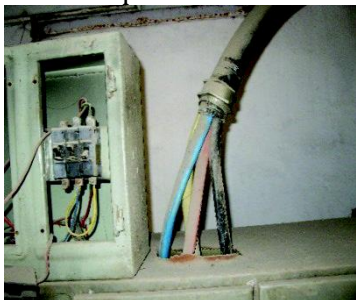
108.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No
109.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
110.	Is Trade License available??	Not Available
111.	Name of the Insurance Company	NO
112.	Remarks (if any) 79. No Fire mock drill has been conducted 80. No Evacuation drill has been conducted 81. No smoke detector. 82. There is no rubbermat inTransformer room 83. No exit signage. 84. Electrical boxes are found open in transformer room 85. No gland found fixed in the electrical panel 86. Electrical box found open	

Auditor

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	No Fire mock drill has been conducted	Fire Mock drill is to be conducted periodically. Record is to be maintained
2	No Evacuation drill has been conducted	Evacuation drill is to be conducted periodically with all employee
3	No smoke detector at production floor& offices Except in the Axis bank &Mycom	Smoke detector to be provided
4	Electrical boxes are found open in transformer room 	Electrical box lid should be kept closed always
5	No gland found fixed in the electrical panel 	Cable gland is to be provided in the Electrical boxes
6	Electrical switchbox lid found open 	Lid should be kept always
7	There is no signage available except in Axis Bank &Mycom	Illuminated signage is to be provided
8	There is no rubber mat in Transformer room	Rubber mat is to be provided

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

IBM BCS KOLKATA



EXECUTIVE SUMMARY

Part I & II

General Information

IBM BCS KOLKATA acquired this property at EP & GP X 1/7 , in 2001,. Since then it has found the major lapses that the building has no Sprinkler system & alternate power system has become old, As such they have taken up major renovation work including their Fire tank renovation which is like an open pond now. As a step towards the renovation work they have evacuated most all the floors except one.

This building is situated in 0.8755 Acres of Land & Built up area is around 1,15,000Sq ft. It is B+ G=6 storied. Part of the roof top is being used as cafeteria. & part is being for RO plant

Building sanction plan obtained on 13.12.99

Clearance Certificate obtained on 24.9.2002 from WBEIDCL

Last NOC valid up to 2.1.14 Ref WBFES/5882/13/Cal-B/111/9(Part(955/11) Estimated Occupancy

Load was found as

Floating --20
Existing -- 54

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are two two staircases available &. Four nos Lifts available, including two capsule lift. There is no assigned refuse area.

evacuation drill/mock drill were foundconducted.Last done on 12.1.13

There are signage available in each floor

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers& wet risers, Sprinklers ,smoke detectors.

Wet Riser

There is an Open tank of 150000 ltr capacity For Fire only. There are three nos pumps housed in the basement. Main pump capacity is 75 HP& that of Jockey pump is of 15 HP There is a stand byDiesel pump 0f 92 HP.

Alternate source of water is the Water body approx800 mtr away from the building.

PAS is available

Close circuit TV monitoring is available

Total 179Nos fire extinguishers are found deployed atdifferent places of the buildings

Intelligent panels is in operation

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCBbut RCCBfound at the distribution board of Lifts

Generally no combustible material is stored in the premises ,near the Electrical installation

There is a D-G set in the Building.Transformer & switch gear are In side separate building

There is a central AC working in the building. AHUs are found coupled with the smoke detectors

PART VI

OTHER INFORMATION

This building is Insured with F.M GLOBAL GROUP .

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART - I

1.	Plot No/Premises No:	EP & GP X 1/7	
2.	Premises Name (if any):	IBM BCS Kolkata	
3.	Name of the owner /occupier/lessee	South City Projects Kolkata Ltd	
4.	Permanent Address	EP & GP X 1/7, SectorV, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	MrRajesh Chatterjee MrSirsenduSenSarma	
7.	Phone No of Contact Person	98368 32664 98363 71286	
8.	E-mail	rajechat@in.ibm.com shsarma@in.ibm.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial)
			Storage
10.	Plot Area(as informed to the Auditor)	0.8755621 Acre	
11.	Build up area(as informed to the Auditor)	1,15,000 sqft	
12.	No of Floors	B + G + 13	
13.	Date of Sanction of Building Plan	13.12.99	
14.	Whether P.O.C/OC received from local body?	24.9.2002 from WBEIDCL	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	TOPs	
16.	No of Security Personnel engaged	15	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	Yes	
19.	Whether Metal detectors are used at the entry point	Yes	
20.	Whether Monitoring System through Close circuit TV available	Yes	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	NIL	
22.	No of Vehicles for which parking space is available in the premises	62 +1 for Handicapped	
23.	Whether parking space available for visitors within the premises	NO	
24.	Place where excess vehicles (if any) are parked	Outside Road Parking area	

GENERAL MAINTENANCE		
25.	Garbage Clearing	NDITA Garbage clearing system
26.	Drainage System	Connected to NDITA Drainage system
27.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	Not applicable
30.	Any Other Clearance	Not applicable

PART - II

V=Vacant

31.	Occupancy load		(Based on Estimates)								
	Existing		B	G	1	2	3	4	5	6	Total
	a)Regular		-	14	V	V	V	40	V	V	54
	b)Floating										20
32.	Basement						YES				
	a)	If basement extends beyond building profile				NO					
	b)	Use of the basement				Car parking, Pump room					
	c)	Is it being sprinkled?				Yes,					
	d)	Whether any cubicles present in the basement?				YES					
		If yes, their use to be specified				UPS room, Pump Room, Hazardous store					
	f)	Whether fire zones are defined?				No					
		If yes, please provide details				Not applicable					

Part- III

Provisions of means of escape

33.	Number of staircases --→For Nos		MAIN BUILDING			
	Stairs Number		31	#2	#3	#4
	a)	Width of flight (mm)	1680	1640	1640	1560
	b)	Tread width (mm)	205	205	205	205
	c)	Riser Height (mm)	150	150	150	150
	d)	Finish	Marble	Kota stone	Kota stone	Kota stone
	e)	Width of stair door (FCD)— Ordinary Door	850	1400 FCD	1400 FCD	1320
	f)	Height of stair head room	13 ft	13 ft	13 ft	13 ft
	g)	Height of stair handrail (mm)	1100	905	905	905
	h)	Area & location & profile of Fire Refuge Area	On 6/7th,9/10th,11/12th floor			
	i)	Width and type of door leading to Fire refugee area	FCD 905 mm			
	j)	Pressurization of staircase	No			
	k)	Segregation of staircase	Yes			

34.	Number of Lifts installed→2nos Capsule + 2 Nos					
	Lift-Numbers		Capsule#1	Capsule#2	#3	#4
	a)	Type of door	Metallic	Metallic	Metallic	Metallic
	b)	Fire resistance rating	1 Hr	1 Hr	1 Hr	1 Hr
	c)	Area of lift car	1050 mmX 2280 mm	1050 mm X 2280 mm	2000 mm X 1070 mm	2000 mm X 1070 mm
	d)	Capacity (no of persons)	10	10	13	13
	e)	Capacity(in kg)	680	680	844	844
	f)	Company	OTIS	OTIS	OTIS	OTIS
	g)	Is communication system, installed in the lift car?	Yes	Yes	Yes	Yes
	h)	Is a fireman's switch being installed in the car?	Yes	Yes	Yes	Yes
	i)	Pressurization of lift	No	No	No	No
	j)	Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Yes-- Valid			
35.	Presence of proper signage in all the exit route		Yes			
36.	Is it posted with illuminated signage ?		Yes			
37.	Whether it is landing to fire assembly point?		Yes			
38.	Any form of Public address system available ?		Yes			
39.	Width form of internal road within the Premises ?		5400 mm			
40.	Width of the Entry / exit of Gate		5200mm			
41.	Height of the Entry / exit of Gate		Open to sky			

PART IV

Provision of Fire Safety Arrangement

42.	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G150,000 ltr (Open Tank)
	a)	If yes, specify the distance from the building	Adjacent to the building.	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	No recommendation found	
	c)	Specify the condition of the reservoir	Satisfactory	
43.	Is any public or other water storage facility available nearby ?		Yes	■specify the distance from the building ---- 800Mtr
	a)	Is it readily accessible ?	Yes	■condition and type of the reservoir—Water body

44.	Are internal hydrants being provided ?		Yes	■single_/ outlets
	If so, please indicate no of hydrants in each floor		Two	
45.	Are first aid hose reels being provided ? If so please indicate		Yes	■No of hose reels on each floor-----Four in each floor
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes ☐ Separate line	■Bore and length of hose reel tubing on each reel---- - 25mm 33Mtr
	b)	Size (bore) and type of nozzle fitted to each hose reel	5 mm, Jet type	
46.	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	■Type of hose--Canvas ■Size of hose—mm ■Length of hose—15 mtr
	a)	Total no of hoses provided near each hydrant	Four in hydrant point	
47.	Have wet risers/dry risers been provided?		Yes_/ wet riser	
48.	If yes, please indicate the number of risers and internal diameter of each		Two + Two, 150 mm& 100 mm	
49.	Has any down comer been provided? If so, please give details		No	
50.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Yes	
	a)	Number of pumps	Three one main(75 HP), one jockey-15 HP, One stand by (92 HP)	
	b)	Size of suction and delivery connection to each pump/Output/Head	■Suction:200mm■Delivery150mm ■Output of each pump: 40Ltr /sec ■Max head against which the pump can operate at the output mentioned in70M	
	c)	Is the pump automatic in action?	Yes	
	d)	Is the water pressure sufficient at max distance from the pump?	3.5 Kg/Cm ² at the top	
51.	Sprinkler system		YES	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Yes, Smoke detectors	
	a)	Type of detectors used	Addressable optical Smoke detector	
52.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes	
	a)	Alarm receiving system	Yes	
53.	Is appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		■No ■Yes Valid	Number of FE Type/ Capacity DCP(5 Kg) Water (9Ltr) CO2(4.5 Kgs) Foam 50 Ltr Foam 9 Ltr Auto DCP(5.5 Kg)
	Location		Stair case & in the offices	

54.	Are Emergency Fire Alarm being provided in each floor?	■Yes	■No. of Fire Alarm –Four in each floor ■Location of Fire Alarm—near stair case
55.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	■No	
56.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	■Yes Last done on 15.1.2013	
57.	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available	
58.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available	
59.	Status of NOC from WBF&ES	NOC valid upto 2.1.14 Ref WBFES/5882/13/Cal-B/111/9(Part(955/11))	

Part-V

Electrical, Cables and Ventilation

60.	If the building is Centrally air -conditioned, please indicate,		■YES→ Central AC 190 TR X 3 Nos
	a)	Material used for construction of ducts and its fittings	Aluminium Sheet
	b)	Type of tinning used for ducts	Al Sheets
	c)	Type of lagging used, if any for insulating any portion of the duct	Glass wool
	d)	How the lagging is secured?	Wire mesh
	e)	If false ceiling is there?	Yes
	f)	Material used for false ceiling	Gypsum Board
	g)	Is a separate AHU being provided in each floor	Yes. Two AHUs in each floor(1 to 4 th floor & 3 Nos in 5 th & 6 th floor
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Yes each AHUs
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Yes
	j)	Will fire dampers be provided in AC duct?	YesElectrically operated
61.	Is there any standby source of electric supply being provided?		Yes DG of 380 KVA X 2 Nos
	Is the back supply automatic?		Yes Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump ■Emergency Light ■Lift ■Office ■One Chiller ■UPS room

62.	Location of switch- gears and transformers		Inside the Building
63.	a)	Transformer capacity	725 KVA X 2 nos
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Yes
	c)	If outside, how far is it from the building?	Not applicable
64.	What precautions is taken to prevent a possible fire in the transformers from spreading?		Fire Extinguishers
65.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Yes
66.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		No
67.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable
68.	Whether natural ventilation is relied upon? If so, give details.		Yes
69.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		NO
70.	Whether mechanical ventilation is being coupled with automatic detection system?		No
71.	Whether the refuge area is being provided?		There is no Assigned refuse area. They have a plan to convert the present balconies at 3 rd , 4 th , & 5 th floor of each 100 Sq feet area to refuse areas
72.	Storage of combustibles materials near electrical equipment/fuse units.		None found
73.	RCCBs available??		Yes→ only in lifts
74.	Master switch in warehouses		Not applicable
75.	Proper cable joint procedures as per manufacturer		Yes
76.	Earthing Pit Tested??		Records are not available
77.	Use of MCB??		Yes
78.	Bypassing of protection devices		None found
79.	Deteriorated insulation		None found
80.	Selection, deployment of PFFs (Portable Fire Extinguishers)		YES
81.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)		Yes
82.	Tracking possibility		Yes
83.	Unused opening in the panels, etc.		None found
84.	Possibility of ground fault/short circuit		None found
85.	Mechanical protection to cables		Yes
86.	Loose terminations due to improper supports, crimping		None found

87.	Improper gland installation, wrong lug size	None found
88.	Over-rated uses, wrongly set protection relays, etc.	None found
89.	Earthing layout & it's effectiveness	Yes but Earth pit test report not found
90.	Switch yard and sub station	Yes
91.	DG operation and maintenance	Yes
92.	Reliability of the fire hydrant system	yes
93.	Emergency preparedness and response	NO
94.	Availability of Evacuation plan	YES
95.	Mock drill conducted??	Yes. Last done 12.1.13
96.	Awareness of the people??	Could not be checked
97.	Sample basis validation of smoke detection system??	Yes
98.	Storage if hazardous material, chemicals??	None found
99.	Use of signage??	Yes
100.	Hydrants access clear,	Yes
101.	Flame & work permits (as applicable)	YES
102.	Effective internal communication and public address system	Yes
103.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
104.	Management structure, role of safety officer, fire department etc.	Yes
105.	Procedure for incident investigation and control	Yes

PART- VI

Other Information

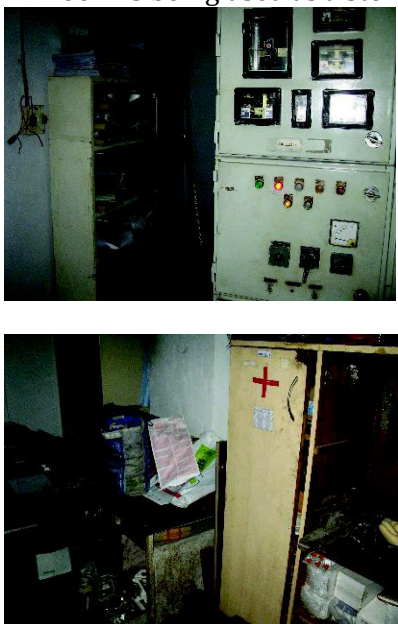
106.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	■No
107.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
108.	Is Trade License available??	Applied on 5.2.13
109.	Name of the Insurance Company	Yes with F M Global group
110.	Remarks (if any) 1. HT room is being used as a storage. 2. No smoke detectors found in the locked Electrical rooms in each floor 3. Auto Fire extinguishers are to be installed above the Electrical installations 4. Fire tank is open 5. Building being 27.03 Mtr but no Refuse area is found 6. Sprinkler facility is available only on Basement. Facility to be extended on other floors	

Auditor

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	HT room is being used as a storage. 	HT room should be kept absolutely clear
2	No smoke detectors found in the locked Electrical rooms in each floor	
3	No Auto Fire extinguishers are found above the Electrical installations	Auto Fire extinguishers are to be installed above the Electrical installations
4	Fire tank is open	Fire tank is to be covered
5	Building being 27.03 Mtr but no Refuse area is found	Refuse area has to be assigned
6	Sprinkler is available only on basement	Sprinkler facility is available only on Basement. Facility to be extended on other floors

Auditor

Reviewer

Signature & date of Inspecting and Reporting Authority With seal

QA BHAWAN OF BSNL



EXECUTIVE SUMMARY

Part I & II

General Information

QA Bhawan of BSNL is situated at EP & GP-X1(5&6) at sector V , Salt lake, Kolkata 700091.

This building is in 8700 sqmtr of land. Build up area is 2310 sqmtr. The building has two wings at the ground floor & two wings at 1st floor. These four wings are occupied by QA of BSNL, Trai Govt. of India, and Term of Department of Telecommunications & TEC of Department of Telecommunications

There is no central AC system in the building

OC(Occupational Certificate)is not available

NOC from WBF & ES is not available

Estimated Occupancy Load was found as

Existing -- 43
Floating -- 10

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are three numbers Staircase available . There is no Lift available. There is no refuse area because of height of the building is G+1 only.

No Evacuation Drill has been conducted so far.

There is Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is only portable fire extinguishers. These fire extinguishers are available only with QA department of BSNL & rest 3 nos offices do not have any fire protection devices. The no fire extinguishers are found inadequate & refilling date has expired.

There overhead tank with 4000 ltr capacity But there is no wet riser or down comer available

There is no Sprinkler system

Alternate source of water is the Water body approx.900 mtr away

Buildings is equipped with Fire detection system like smoke detectors.but these are not functioning

MCPs are not working.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises ,near the Electrical installation

There is one DG supply available but that is not operational at this time

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	EP & GP – X1(5 & 6)	
2.	Premises Name (if any):	QA Bhavan	
3.	Name of the owner /occupier/lessee	BSNL	
4.	Permanent Address	EP & GP – X1(5 & 6), Sector- V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	Ms.ChaitaliPyne, SD Admin	
7.	Phone No of Contact Person	2357 1865 94320 00711	
8.	E-mail	NIL	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business ☐
			Mercantile
			Industrial
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	8700 SqMtr	
11.	Build up area(as informed to the Auditor)	2310 Sq.Mtr	
12.	No of Floors	G+1	
13.	Date of Sanction of Building Plan	Date: Not available	
14.	Whether P.O.C/OC received from local body?	Not available	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	NIL	
16.	No of Security Personnel engaged	Not available	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Not available	
18.	Whether records of Visitors entering into the building are kept	Not available	
19.	Whether Metal detectors are used at the entry point	Not available	
20.	Whether Monitoring System through Close circuit TV available	Not available	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	One	
22.	No of Vehicles for which parking space is available in the premises	75 Nos	
23.	Whether parking space available for visitors within the premises	Yes	

24	Place where excess vehicles (if any) are parked	Out side
GENERAL MAINTENANCE		
25	Garbage Clearing	Through NDITA garbage clearing System
26	Drainage System	Connected to NDITA drainage connection
27	Maintenance of Road	Internal road is being maintained by the occupier. Condition is satisfactory
TELEPHONE TOWER		
28	No of Towers	BSNL TOWER - One
29	Statutory Clearance from AAI	No
30	Any Other Clearance	None

PART - II

31	Occupancy load	(Based on Estimates)		
	Existing	Ground Floor	1st Floor	Total
	a)Regular	16	27	43
	b)Floating			10
32	Basement	NIL		
	a) If basement extends beyond building profile	Not Applicable		
	b) Use of the basement	Not Applicable		
	c) Is it being sprinklered?	Not Applicable		
	d) Whether any cubicles present in the basement?	Not Applicable		
	If yes, their use to be specified	Not Applicable		
	f) Whether fire zones are defined?	Not Applicable		
	If yes, please provide details	Not Applicable		

Part- III

Provisions of means of escape

33	Number of staircases --→ Three Nos				
	Stairs Number		#1	#2	#3
	a)	Width of flight	1720 mm	1270 mm	1270 mm
	b)	Tread width	260 mm	260 mm	260 mm
	c)	Riser Height	140 mm	160 mm	160 mm
	d)	Finish	Kota stone	Kota stone	Kota stone
	e)	Width of stair door (FCD)-Ordinary door	NIL	1350 mm	1350 mm
	f)	Height of stair head room	12 ft	12 ft	12 ft
	g)	Height of stair handrail	1010 mm	905 mm	905 mm
	h)	Area & location & profile of Fire Refuge Area	NIL		
	i)	Width and type of door leading to Fire refugee area	Not applicable		
	j)	Pressurization of staircase	No		
	k)	Segregation of staircase	Yes		
34	Number of Lifts installed→		NIL		
	Lift-Numbers				
	a)	Type of door	Not applicable		
	b)	Fire resistance rating	Not applicable		
	c)	Area of lift car	Not applicable		
	d)	Capacity (no of persons)	Not applicable		
	e)	Capacity(in kg)	Not applicable		
35	f)	Company	Not applicable		
	g)	Is communication system, installed in the lift car?	Not applicable		
	h)	Is a fireman's switch being installed in the car?	Not applicable		
	i)	Pressurization of lift	Not applicable		
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Not applicable		
36	Presence of proper signage in all the exit route		Yes		
37	Is it posted with illuminated signage ?		No		
38	Whether it is landing to fire assembly point?		No		
39	Any form of Public address system available ?		No		
40	Width form of internal road within the Premises ?		9000 mm		
41	Width of the Entry / exit of Gate		6000 mm		
42	Height of the Entry / exit of Gate		Open to sky		

PART IV

Provision of Fire Safety Arrangement

43	Is any water reservoir for firefighting available? (at ground level / overhead)	Yes/No	U/G Not available O/H 4000 ltr
	a) If yes, specify the distance from the building	Not applicable	
	b) If yes, specify the capacity (in litres) as approved by WBF & ES.	Not applicable	
	c) Specify the condition of the reservoir	O/H Reservoirs are 4 nos PVC tanks	
44	Is any public or other water storage facility available nearby?	Yes	Specify the distance from the building 900 mtr
	a) Is it readily accessible?	Yes	Condition and type of the reservoir water body
45	Are internal hydrants being provided ?	NO	
	If so, please indicate no of hydrants in each floor	Not applicable	
46	Are first aid hose reels being provided ? If so please indicate	No	
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	Not applicable	
	b) Size (bore) and type of nozzle fitted to each hose reel	Not applicable	
47	Are fire hoses being provided near each hydrant? If so, please indicate	NO	
	a) Total no of hoses provided near each hydrant	Not applicable	
	Have wet risers/dry risers been provided?	No	
	If yes, please indicate the number of risers and internal diameter of each	Not applicable	
48	Has any down comer been provided? If so, please give details	No	
49	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	No	
	a) Number of pumps	Not applicable	
	b) Size of suction and delivery connection to each pump/Output/Head	Not applicable	
	e) Is the pump automatic in action?	Not applicable	
	f) Is the water pressure sufficient at max distance from the pump?	Not applicable	
50.	Sprinkler system	No	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	Yes. But the system found not working	
	a) Type of detectors used	Addressable type smoke detector, but found not working	
51	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	Yes. but found not working	
52	Alarm receiving system	Yes, but found not working	

53	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	Yes Yes Yes	Number of FE Type/ Capacity BC type(5Kg) The nos are insufficient in terms of space coverage	6 6
54	Location and population of the FEs adequate	No. Locations are the lobby of a certain department only		
55	Are Emergency Fire Alarm being provided in each floor?	Yes	No. of Fire Alarm: 4 nos Location of Fire Alarm: Near the Exit points	
56	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No		
57	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No		
58	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not Available		
59	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not Available		
60	Status of NOC from WBF&ES	Not Available		

Part-V

Electrical, Cables and Ventilation

61	If the building is Centrally air –conditioned, please indicate,	No		
	a) Material used for construction of ducts and its fittings	Not applicable		
	b) Type of tinning used for ducts	Not applicable		
	c) Type of lagging used, if any for insulating any portion of the duct	Not applicable		
	d) How the lagging is secured?	Not applicable		
	e) If false ceiling is there?	Not applicable		
	f) Material used for false ceiling	Not applicable		
	g) Is a separate AHU being provided in each floor	Not applicable		
	h) Whether automatic shutdown of AHU is coupled with detection system?	Not applicable		
	i) Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable		
	j) Will fire dampers be provided in AC duct?	Not applicable		
62	Is there any standby source of electric supply being provided?	Yes	DG 63 KVA But not working	
	Is the back supply automatic?	Not applicable		
63	Location of switch- gears and transformers	Not applicable		
64	a) Transformer capacity	Not applicable		
	b) If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable		
	c) If outside, how far is it from the building?	Not applicable		

65	What precautions will be taken to prevent a possible fire in the transformers from spreading?	
66	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Not applicable
67	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	NO
68	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
69	Whether natural ventilation is relied upon? If so, give details.	Not applicable
70	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	Not applicable
71	Whether mechanical ventilation is being coupled with automatic detection system?	Not applicable
72.	Whether the refuge area is being provided?	Not applicable
73.	Storage of combustibles materials near electrical equipment/fuse units.	No
74.	RCCBs available??	No
75.	Master switch in warehouses	Not applicable
76.	Proper cable joint procedures as per manufacturer	Yes
77.	Earthing Pit Tested??	Not done
78.	Use of MCB??	Yes
79.	Bypassing of protection devices	Not evidenced
80.	Deteriorated insulation	Not evidenced
81.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
82.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Not applicable
83.	Tracking possibility	Yes
84.	Unused opening in the panels, etc.	Not found
85.	Possibility of ground fault/short circuit	Not found
86.	Mechanical protection to cables	Yes
87.	Loose terminations due to improper supports, crimping	Not found
88.	Improper gland installation, wrong lug size	Not found
89.	Over-rated uses, wrongly set protection relays, etc.	Not found
90.	Switch yard and sub station	Not applicable
91.	DG operation and maintenance	Dg not being operated
92.	Reliability of the fire hydrant system	Not applicable
93.	Emergency preparedness and response	Not available
94.	Availability of Evacuation plan	Not available
95.	Mock drill conducted??	Not Done
96.	Awareness of the people??	NIL
97.	Sample basis validation of smoke detection system??	Not carried out
98.	Condition of Lightning Arrestor	No Lightning arrestor found

99.	Periodic test of UPS system (as applicable)	Not applicable
100.	Handling of electrical work by competent electrician	Yes
101.	Approval of receiving station, substation and DG	Not available
102.	Storage of hazardous material, chemicals?	None
103.	Use of signage?	Yes
104.	Hydrants clear, access to public thoroughfare open	Not applicable
105.	Flame & work permits (as applicable)	Not applicable
106.	Effective internal communication and public address system	No
107.	Colour coding system of hazardous chemical gas lines etc.	Not applicable
108.	Management structure, role of safety officer, fire department etc.	No
109.	Procedure for incident investigation and control	No

PART- VI

Other Information

118.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No recommendation from WBF&ES is available
119	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No
	Is Trade License available??	No
120	Name of the Insurance Company	None
121	Remarks (if any) 37. No Evacuation drill has been conducted 38. No mock drill has been conducted 39. Smoke detector panel was found dead. 40. MCP is found not working 41. MCP do not have hammer to break the glass 42. No fire extinguishers are available in three other companies except QA office 43. The total number of fire extinguisher is very less 44. Validity of Fire extinguisher is found expired. 45. There is no PAS. 46. No Assembly point has been unmarked 47. There is no evacuation plan is available 48. There is no fire trained person available 49. There is no ELCB or RCCB installed 50. One of the Emergency escape stairs was found locked. 51. There is no lighting arrestor found in the building 52. Electrical installation inside the building is in poor condition. There is a mark of fire in the switches in this room.	

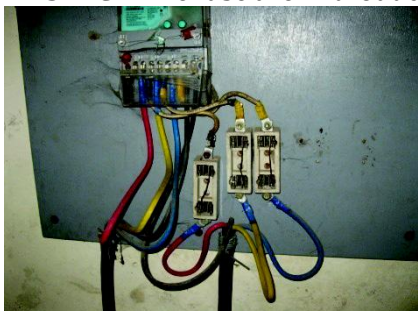
Reviewer

Auditor

Signature & date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl. No	OBSERVATIONS	RECOMMENDATIONS
1	No Evacuation drill has been conducted	Evacuation drill is to be periodically with all occupants & record is to be maintained
2	No Fire mock drill has been conducted	To be conducted periodically & record to be maintained
3	Smoke detector panel was found dead.  	Smoke detector system is to be made operational
4	MCP is found not working	MCP is to be made operational
5	MCP do not have hammer to break the glass 	Small hammer is to be provided with each MCP
6	No fire extinguishers are available in three other companies except QA office	Sufficient no of fire extinguishers are to be provided
7	The total number of fire extinguisher is very less	Sufficient no of fire extinguishers are to be provided
8	Validity of Fire extinguisher is found expired	To be checked/ refilled immediately
9	There is no PAS .(Public address system)	PAS system or emergency alarm is to be provided
10	No Assembly point has been unmarked	An assembly point is to provided outside the building with proper identification
11	There is no evacuation plan is available	Evacuation plan is to be provided in each office
12	There is no fire trained person available	Fire trained people is to be provided
13	There is no ELCB or RCCB installed	At least ELCB is to be installed

14	One of the Emergency escape stair was found locked 	Emergency route to be kept free always
15	There is no lightning arrestor found in the building	Lightning arrestor is to be installed
16	Electrical Distribution panel inside the building is in poor condition.  There is a mark of fire in the switches in this room. 	Wires to be dressed. Housekeeping is to be done. Floor is to be covered The said switch should be replaced & Smoke detector is to be provided at the top
17	WBSEDCL Line fuse are without cover 	Arrangement to be done to put the cover on the fuse box

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

KARIWALA TOWER



EXECUTIVE SUMMARY

Part I & II

General Information

KARIWALA TOWER is situated at EP-J1 / 5, Sector V, Salt Lake, Kolkata-700091 since 2006. The building structure is G+9. The total land area is 1087.5 sq. mtr and built up area is 5054.67 sq. mtr. Kariwala Industries Ltd., the owner of the House, is situated at the ground floor, 1ST floor and 7TH floor. Rest of the building is rented out to different IT companies and Other Business companies. The floorwise establishments are highlighted below:-

Floor	Company	Establishment	O. L. Existing	O.L. Floating
Gr.	Kariwala Industries	Reception, Store	15	0
1 ST	Kariwala Industries	Export Business	35	5
2 ND	Utsab Fashion	Business	100	15
3 RD	SunKnowledge	Business	10	0
4 TH	SunKnowledge	Vacant	0	0
5 TH	Taja TV	Business	30	10
6 TH	GSIL + Excellent Tech.	IT Business	70	10
7 TH	Kariwala Industries	Vacant	0	0
8 TH	Key Line Solution	IT Business	65	5
9 TH	KMG Infotech	IT Business	25	5
Roof	TATA + INDUS	Telecom Tower	0	0
Total			350	50

WBFESN.O.C. is available.

Building Plan approval is available.

Occupational Certificate is available.

WBSEB approval for HV installation is available.

Trade Licence is available

Occupancy Load (Existing & Floating) are estimated as 350 and 50 respectively.

WBDOE approval for installation of Transformer and DG are not available.

Aviation Clearance for high rise building with tower is not available.

Centralised HVAC system is not installed in the building.

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are total 2 nos staircase and 2 nos passenger Lift. These Lifts do not have valid C-Certificates .The way for refuge area situated at 6TH floor is full of discarded materials and exit door is found to be very narrow in size. There is no Signage available in the EXIT Route and floor identification is also not available. There are total two gates and both are operational.

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes Hydrant System ,Portable Fire extinguishers, Smoke detector, Heat Detector , Hooter etc. The tenants are having their Own fleet of Fire extinguishers, Smoke detector, MCPs& Fire alarm.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found. Earth Pit is found to be tested without having any record. Generally no combustible material is stored in the premises but huge documents have been stored nearby Electrical installation area. General condition of Electrical Distribution Panel near stair area of each floor is found to be very alarming stage.

PART VI

OTHER INFORMATION

Sample Room at ground floor is full of cloth pieces without having any fire protection system and emergency exit.

NDITA-FIRE SURVEY AND SAFETY AUDIT CHECKLIST

PART – I

General Information

1.	Plot No/Premises No:	EP / J1-5	
2.	Premises Name (if any):	Kariwala Tower	
3.	Name of the owner /occupier/lessee	Mr. Anil Kariwala	
4.	Permanent Address	EP / J1-5, Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/ Any other	Leasehold	
6.	Name of the Contact Person	1. Mr. Ranjan Banerjee 2. Mr. Kalyan Mukherjee	
7.	Phone No of Contact Person	1. 9830570787 2. 9830936799	
8.	E-mail	ranjan.banerjee@kariwala.com	
9.	Purpose of the Land Use	Principal Use	IT/ITES
		Mixed Use	Business
10.	Plot Area(as informed to the Auditor)	1087.5 Sq. Mtr	
11.	Build up area(as informed to the Auditor)	5054.67 Sq. Mtr	
12.	No of Floors	G+9	
13.	Date of Sanction of Building Plan	Date:31.03.2003. Copy is not available	
14.	Whether P.O.C/OC received from local body?	Yes	OC Issuing Authority Bidhan Nagar Municipality. No. 3475(3) Bm (P) Dated 09.12.2005. Copy is attached.
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Visual Securas Ltd., Kolkata – 700042.	
16.	No of Security Personnel engaged	4 Persons (2+2) / 24 Hours. Tenants have their own set of securities .	
17.	Whether Records of Vehicles (No & type entering into the building are kept	No	
18.	Whether records of Visitors entering into the building are kept	No	
19.	Whether Metal detectors are used at the entry point	No	
20.	Whether Monitoring System through Close circuit TV available	Yes	At Ground floor & at both Lift inside

VEHICLES VOLUME		
21	No of Vehicles Engaged by the Organisation	27
22	No of Vehicles for which parking space is available in the premises	30(Approx.)
23	Whether parking space available for visitors within the premises	Yes
24	Place where excess vehicles (if any) are parked	Outside the building
GENERAL MAINTENANCE		
25	Garbage Clearing	Through NDITA Garbage clearing system
26	Drainage System	NDITA
27	Maintenance of Road	Internal Road is maintained by the owner.
TELEPHONE TOWER		
28	No of Towers	Two Nos. / TATA&INDUS.
29	Statutory Clearance from AAI	No document is available.Tower area is locked.
30	Any Other Clearance	No document is available.Tower area is locked.

PART - II

31	Occupancy load	(As informed to Auditor).										
	Existing	G	1	2	3	4	5	6	7	8	9	Total
	a)Regular	15	35	100	10	0	30	70	0	65	25	350
	b)Floating	0	5	15	0	0	10	10	0	5	5	50
32	Basement	NIL										

Part- III

Provisions of means of escape

33	Number of staircases → 2Nos			
	Stairs Number		#1	#2
a)	Width of flight (mm)		1420	1160
b)	Tread width(mm)		280	270
c)	Riser Height(mm)		150	130
d)	Finish		Marble	Kota Stone
e)	Width of stair door (FCD)		1170 (Wooden Door)	1170 (Wooden Door)
f)	Height of stair handrail(mm)		860	Bothside Wall
g)	Height of stair head room(ft)		10	6
h)	Area & location & profile of Fire Refuge Area		Rectangular Shape of 8.5Mtr X 3.94Mtr at 6 TH Floor	

	i)	Width and type of door leading to Fire refugee area	450 mm Wooden Door.	
	j)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	
34	Number of Lifts installed→2Nos			
	Lift-Numbers		# 1	# 2
	a)	Type of door	Metallic	Metallic
	b)	Fire resistance rating	2 Hours	2 Hours
	c)	Area of lift car (mm ²)	1240 X 1210	1240 X 1210
	d)	Capacity (no of persons)	10	10
	e)	Capacity(in kg)	680	680
	f)	Company	Kone	Kone
	g)	Is communication system, installed in the lift car?	Yes	Yes
	h)	Is a fireman's switch being installed in the car?	Yes	Yes
	i)	Pressurization of lift	No	
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Form " C " - Expired on 28.12.2012. Applied for both Lift on 21.12.2012. [Regd. No. C - 10212 & C - 10213]	
35	Presence of proper signage in all the exit route		Signage is found only in 1 st Floor. No signage is found in 2 nd to 9 th Floor.	
36	Is it posted with illuminated signage ?		No	
37	Whether it is landing to fire assembly point?		Yes	
38	Any form of Public address system available ?		No	
39	Width form of internal road within the Premises ?		3200 mm	
40	Width of the Entry / exit of Gate		4000 mm(2 Nos.)	
41	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for fire fighting available ? (at ground level / over head)		Yes	U/G→1000KL X 1 O/H→Nil
	a)	If yes, specify the distance from the building	2Mtr	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	Not available	
	c)	Specify the condition of the reservoir	Satisfactory	
43	Is any public or other water storage facility available nearby ?		Yes	Specify the distance from the building→ 800 Mtr
	a)	Is it readily accessible ?	Yes	Condition and type of the reservoir→ Water Body

44	Are internal hydrants being provided ?	Yes	Single outlets.
	If so, please indicate no of hydrants in each floor	Single	
45	Are first aid hose reels being provided ? If so please indicate	Yes	No of hose reels on each floor: 1 Rubber + 1 Canvas
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes	Bore and length of hose reel tubing on each reel:→ 20 mm& 30 mtr
	b) Size (bore) and type of nozzle fitted to each hose reel	5mm, Jet Type/ Total 12 Nozzles.	
46	Are fire hoses being provided near each hydrant? If so, please indicate	Yes	Type of hose: canvas Size of hose: 63 mm Length of hose:15Mtr - Rubber, 30 Mtr - Canvas
	a) Total no of hoses provided near each hydrant	1 Rubber + 1 Canvas	
47	Have wet risers/dry risers been provided?	Yes, Wet.	
	If yes, please indicate the number of risers and internal diameter of each	1 No.	
48	Has any down comer been provided? If so, please give details	No.	
49	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Yes	
	a) Number of pumps	2 Nos. / Main-1 & Jockey -1.	
	b) Size of suction and delivery connection to each pump/Output/Head	Suction : 150 mm, Discharge : 150 mm. Power – Main : 45 KW, Power Jockey : 11KW, Head : 80Mtr	
	e) Is the pump automatic in action?	Yes	
	f) Is the water pressure sufficient at max distance from the pump?	Reported as sufficient pr. Is available. Data is not ensured since pr. Gauge is not available at top floor.	

50	Sprinkler system	No
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	Heat Detector are installed at Electrical Room with indication panel at G. Floor. Smoke Detectors are installed & zonal indicator panel situated at G. Floor. Floor wise SD details are as follows:- G - 5 , 1ST-28, 2ND - 30, 3RD-0, 4TH - 0, 5TH - 15 [Self Type], 6TH -28, 7TH -0, 8TH-28, 9TH -14. Zone distribution is as follows:- 1ST Zone - 1ST Floor – L.H.S. 2ND Zone – 1ST Floor – R.H.S. 3RDZone - 2ND Floor - L.H.S. 4THZone - 2ND Floor - R.H.S. 5THZone - 6TH Floor - Excellent Tech. 6THZone - 6TH Floor - G. S. Software. 7TH Zone - 7TH Floor - Blank 8TH Zone - 8TH Floor - Blank 9TH Zone - 9TH Floor - KMG Software 10TH Zone - 9TH Floor – Airtel 11TH Zone - Blank 12TH Zone - Blank 13TH Zone - Blank 14TH Zone - Blank 15TH Zone - Blank 16TH Zone –G. Floor Electrical Room.
	a) Type of detectors used	Smoke Detector & Heat Detector
51	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	Yes. 5 Nos. per Floor.
52	Alarm receiving system	At Ground Floor for:- Smoke Detector&Heat Detector

53	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations?	Yes	Number of FE Type/ Capacity	5 8
	If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark?	Yes	CO2(4.5 Kg) G.F. A type(9 Ltr)- 3 / Fl. DCP(5 Kg)- 3 / Fl.	4 9 x
	Date of Validity	Refilling is due in Feb'2013	FEs are deployed at Back & Front Gate side. Apart from above the Tenants are having their own fleet of FE which are not accounted here.	3 9 x 3
54	Location and population of the FEs adequate	Yes, in all the common areas & own office.		
55	Are Emergency Fire Alarm being provided in each floor ?	Yes. Partly	No. of Fire Alarm (Hooter) G. Floor(1No.), 6 TH Floor (2 Nos.) 8 TH Floor (1No.)	
56	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No		
57	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	Yes. Testing is done in every Sunday. Documentation is not done for such activity.		
58	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not available		
59	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available		
60	Status of NOC from WBF&ES	Final N.O.C. vide Memo No. WBFS / 1144 /Cal –B /46/2002 (353) Dated 28.08.2002 is available. Current document is not available. Copy of N.O.C. is attached.		

Part-V

Electrical, Cables and Ventilation

61	If the building is Centrally air – conditioned, please indicate,		No.		
62	Is there any standby source of electric supply being provided?		Yes	DG Capacity 160 KVA X 1	UPS Capacity Individual
63	Is the back supply automatic?		Yes	Specify the functions that can be maintained simultaneously by such back ups. • Fire Pump • Emergency Light (1No.) • Lift • Partly to Office.	
64	Location of switch- gears and transformers		Inside		
65	a)	Transformer capacity	750 KVA X 1		
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Rubber Mat is not found in Transformer Room , HT Room and AC Panel Room. Space is full of documents and used as Document Store Room. Aqua Guard water point is placed very close to Transformer area.		
	c)	If outside, how far is it from the building?	N.A.		
66	What precautions is taken to prevent a possible fire in the transformers from spreading?		No precaution is found to be taken.		
67	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		Sealed.		
68	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		Not installed		
69	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable		
70	Whether natural ventilation is relied upon? If so, give details.		Yes		
71	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No such plan		

72	Whether mechanical ventilation is being coupled with automatic detection system?	Not applicable	
73	Whether the refuge area is being provided?	Yes	On which Floor : 6 TH Floor Area of Fire Refuge Area : 8500mm X 3940mm Width of Fire Refuge Area : 3940mm
74	Storage of combustibles materials near electrical equipment/fuse units.	No	
75	RCCBs available??	Not found installed	
76	Master switch in warehouses	Not found at Ground Floor Store. Store at 9 TH Floor is found locked.	
77	Proper cable joint procedures as per manufacturer	Yes	
78	Earthing Pit Tested??	Tested but no such record is found	
79	Use of MCB??	Yes	
80	Bypassing of protection devices	No such incidence found	
81	Deteriorated insulation	No such incidence found	
82	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes	
83	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No - Gap found	
84	Tracking possibility	Yes	
85	Unused opening in the panels, etc.	No unusual opening is found	
86	Possibility of ground fault/short circuit	No such possibility found at this moment	
87	Mechanical protection to cables	Yes	
88	Loose terminations due to improper supports, crimping	No such loose termination found.	
89	Improper gland installation, wrong lug size	No such improper gland installation found.	
90	Over-rated uses, wrongly set protection relays, etc.	Not found	
91	Switch yard and sub station	N.A.	
92	DG operation and maintenance	As and when required basis by Garuda Power Pvt. Ltd.	
93	Reliability of the fire hydrant system	Tested on every Sunday but no such record is found. Pr. Gauge at top most point is not available to ensure availability of required pressure .	
94	Emergency preparedness and response	Not available	
95	Availability of Evacuation plan	Yes	
96	Mock drill conducted??	Yes but no record is available.	
97	Awareness of the people??	Poor	

98	Sample basis validation of smoke detection system??	Yes on every Sunday but no record is available.
99	Condition of Lightning Arrestor	There are 2nos Lightning arrestors found but record of continuity check is not found.
100	Periodic test of UPS system (as applicable)	Individual Tenants have own system.
101	Handling of electrical work by competent electrician	Yes by UPKEEP SERVICE
102	Approval of receiving station, substation and DG	No approved document is available except document No. PRG (S) / G / 3802A Dated 28.08.2004 of WBSEB .
103	Storage of hazardous material, chemicals?	None
104	Use of signage?	Only in 1 ST Floor
105	Hydrants clear, access to public thorough fare open	Yes
106	Flame & work permits (as applicable)	Not applicable
107	Effective internal communication and public address system	Not available
108	Colour coding system of hazardous chemical gas lines etc.	Not applicable
109	Management structure, role of safety officer, fire department etc.	Management Structure is available.
110	Procedure for incident investigation and control	Yes but no record is available

PART- VI

Other Information

111	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes.	Deviation. Final N.O.C is available but recommendation document is not available.
112	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No	
113	Is Trade License available??	Yes vide No. 001879 Dated 07.06.2012 for 2012-2013.	
114	Name of the Insurance Company	TATA AIG	

115	Remarks (if any) 1. Condition of Electrical Distribution Panel near staircase is in bad condition in each Floor. Proper insulation is not found in the panel door. The same for 2ND Floor and 9TH Floor are in most irregular condition. 2. Condition of Electrical Installation at Ground Floor is not upto the mark from protection aspect. Proper HV rated rubber mat is not found. The vacant space at Electrical room is used as Document Store. 3. The Aqua Guard water point is found to be very close to Electrical area. 4. The door width of 450 mm at Fire Refuge area is found to be very narrow. The way to Fire Refuge area is full of discarded computers. 5. Store Room at Ground Floor is without any SD, FE and Emergency Exit. 6. Store Room at 9TH Floor is found locked and FE is reported to be not available inside. 7. Sample Room at Ground Floor is full of cloth pieces without any SD, FE and Emergency Exit. 8. Expired FE is kept in the Tower area of INDUS at Roof and the area is found locked. 9. Pr. Gauge is not found at top floor of Hydrant System to ensure healthiness. 10. Lifts are running without valid " C " Form. 11. Dedicated SD is not found at Electrical Distribution panel area near staircase. 12. Nozzle is not found in Hose Box.

Auditor

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

NDITA

OBSERVATIONS tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	Storage is found in Electrical area. 	Electrical area must be free from such store.
2	Aqua Guard Point is found near Electrical Area 	Water point must be removed from Electrical Area.
3	Cycles are kept in front of Electrical Area. 	Electrical Area must be kept clear
4	Proper Rubber Mat is not found at Electrical Area 	HV rating mat must be used.
5	Proper rubber mat is not found in Electrical Area 	HV rating mat must be used.

6	Electrical point is found open condition 	All Electrical points must be properly closed.
7	Sand Bucket is found almost empty. 	Sand Bucket must be kept properly
8	FE is blocked by Motor Byke 	FE must be free from any blockage.
9	Storage is found in Electrical Area 	Storage must be removed.
10	Loose termination is found 	Loose termination must be avoided.
11	Exit route is blocked by vehicles. 	Exit route must be free from any blockage.

Auditor

Reviewer

Signature& date of Inspecting and Reporting Authority With seal

SIGNOTRON TOWER (I) PVT. LTD.



EXECUTIVE SUMMARY

Part I & II

General Information

SIGNOTRON TOWER (I) Pvt. Ltd. is situated at EN,J1-6 Sector V, Salt Lake City, Pin 700091. The structure is G+6 & build up area is 4307.45 Sq. Mtr in total land area of 1087.387 Sq. Mtr. The Building is situated on Lease hold land..

The owner of this building is SIGNOTRON (I) Pvt. Ltd. One of the Directors is Mr. P.S. Biswas .

Signotron (I) Pvt. Ltd. carrying out assembly job of Indian railway order such as Head Light, Back-up Power supply unit. Company has valid trade Lic. bearing no. 001935 dated 29.06.2012

In the Ground floor, The assembly & manufacturing jobs are carried & other floors are used as office.

There is no central **AC system** in the building

OC (Occupation Certificate) Occupation Certificate is under process by NDITA vide memo no. 142/NDITA/w-5/06 dated 02.02.2012

Last NOC from WBF & ES (Ref No WBFES/DG/FP/622/11 dated 22/11/2011 Thereafter fresh NOC applied on .01.2013 for renewal but no reply yet came from WBF&ES

Occupancy Load was found as

	Existing -- 135
Floating -- 10	

Part III

PROVISION OF MEANS OF ESCAPE

Stairs , Lifts & refuse area are available as follows

There are two Staircases available . There are two nos Lifts available. There is refuse area at 4th floor

Evacuation Drill has been conducted periodically.

There is no illuminated Signage in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers & wet risers, Sprinklers & smoke detectors. MCP are working, Smoke detectors were found working.

Wet Riser

There is an underground tank of 100000 ltr capacity For Fire only. There are four pumps housed at ground floor One pump capacity is 60 HP & that of Jockey pump is of 15 HP along with one reserved main pump of 60hp. There is sprinkler system available & motor runs in auto mode. Line pressure found 7.1kg/cm²

Alternate source of water is the Water body approx 500 mtr away from the BLD.

PAS is available,.

Close circuit TV monitoring is not available

24 Nos Portable fire extinguishers are found deployed near the staircase & in the working area.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There is one 200 KVA DG supply is as alternate source of power. This is operated manually

PART VI

OTHER INFORMATION

At ground floor there series of battery charger where ventilation is very poor. During charging & discharging hydrogen gas evolve which is very explosive.

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EP,J1-6	
2.	Premises Name (if any):	SIGNOTRON Tower(I) Pvt.Ltd.	
3.	Name of the owner /occupier/lessee	Mr.MrS.P.Biswas	
4.	Permanent Address	EP,J1-6,Sector-V salt lake city, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Sub Lease Hold Land	
6.	Name of the Contact Person	Mr.SanjoyChatterjee	
7.	Phone No of Contact Person	9830891447	
8.	E-mail	Sanjoy_signotron.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
		Manufacturing of Transformer/Voltage regulator/Back-up power supply unit	Institutional
			Assembly ☐
			Business
			Mercantile
			Industrial ☐
			Storage
10.	Plot Area(as informed to the Auditor)	1087.387Sq.mtr	
11.	Build up area(as informed to the Auditor)	4307.45Sq.Mtr	
12.	No of Floors	G+6	
13.	Date of Sanction of Building Plan	☒ Yes ☒ 18.08.2007 NDITA	
14.	Whether P.O.C/OC received from local body?		OC Issuing Authority Applied & under process by NDITA Dated:02.02.12
15.	Incidence of assessment done	Doc .not found	
SECURITY SETUP DETAILS			
16.	Name of the SECURITY AGENCY engaged	24-Secured	
17.	No of Security Personnel engaged	7	
18.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
19.	Whether records of Visitors entering into the building are kept	Yes	
20.	Whether Metal detectors are used at the entry point	NO	
21.	Whether Monitoring System through Close circuit TV available	No	

VEHICLES VOLUME		
22.	No of Vehicles Engaged by the Organisation	4nos.
23.	No of Own Vehicles engaged by Employees	nil
24.	No of Vehicles for which parking space is available in the premises	10cars.
25.	Whether parking space available for visitors within the premises	Yes
26.	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
27.	Garbage Clearing	NDITA Garbage clearing system
28.	Drainage System	Connected to NDITA Drainage system
29.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
30.	No of Towers	NIL
31.	Statutory Clearance from AAI	Not applicable
32.	Any Other Clearance	Not applicable

PART - II

33.	Occupancy loadHotel:HiNG	(Attach floor wise details separately if required)									
	Existing	G	1	2	3	4	5	6			
	a)Regular5	5	50	25	30	nil	20	35			
	b)Floating 10	6									
34.	Electrical Load	10Kw									
35.	Basement	NIL									

Part- III

36.	Number of staircases --→2nos.			
	Stairs Number		#1	#2
	a)	Width of flight	1590mm	1590mm
	b)	Tread width	260mm	260mm
	c)	Riser Height	180mm	180mm
	d)	Finish	marbel	marbel
	e)	Width of stair door (FCD)	1090mm	1090mm
	f)	Height of stair head room	15ft	15ft
	g)	Height of stair handrail	840mm	840mm
	h)	Area & location & profile of Fire Refuge Area	2nos 10ft.x3ft.at 4 th floor	
	i)	Width and type of door leading to Fire refuge area	No FCD ,1090mm	
	j)	Pressurization of staircase	No	
	k)	Segregation of staircase	yes	

37.	Number of Lifts installed→2 nos			
	Lift-Numbers	@Nos	#1	#2
	a)	Type of door	Metalick	Metalick
	b)	Fire resistance rating	2hrs	2hrs.
	c)	Area of lift car	1290x1300mm	1290x1300mm
	d)	Capacity (no of persons)	10persons	10persons
	e)	Capacity(in kg)	680kg	680kg
	f)	Company	KONE	KONE
	g)	Is communication system, installed in the lift car?	Yes	
	h)	Is a fireman's switch being installed in the car?	Yes	
	i)	Pressurization of lift	NO	
	j)	Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	No Both valid up to 22.12.2012	
38.	Presence of proper signage in all the exit route		Yes	
39.	Is it posted with illuminated signage ?		No	
40.	Whether it is landing to fire assembly point?		Fire assembling point is not identified	
41.	Any form of Public address system available ?		Yes	
42.				
43.	Width form of internal road within the Premises ?		3600mm	
44.	Width of the Entry / exit of Gate		3200mm	
45.	Height of the Entry / exit of Gate		Open to sky	

Provisions of means of escape

46.	Is any water reservoir for firefighting available ? (at ground level / overhead)		Yes	U/G 100000Ltrs. O/H 20000 ltrs
	a)	If yes, specify the distance from the building	1.5mtr	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	yes	
	c)	Specify the condition of the reservoir	Good	
47.	Is any public or other water storage facility available nearby ?		Yes	■specify the distance from the building --500 Mtr
	a)	Is it readily accessible?	Yes	■condition and type of the reservoir—Water body
48.	Are internal hydrants being provided ?		yes	single or twin outlets
	If so, please indicate no of hydrants in each floor		single	
49.	Are first aid hose reels being provided ? If so please indicate		yes	■No of hose reels on each floor 2Nos. at each floor
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Yes Yes, Conne	■Bore and length of hose reel tubing on each reel 25mm,33Mtr.

			cted to riser	
	b)	Size (bore) and type of nozzle fitted to each hose reel	5mm, Jet Type	
50.	Are fire hoses being provided near each hydrant? If so, please indicate		Yes	■Type of hose Canvas ■Size of hose 63mm ■Length of hose 15 Mtr/7Mtr
	a)	Total no of hoses provided near each hydrant	2Nos.	

PART IV

Provision of Fire Safety Arrangement

51.	Have wet risers/dry risers been provided?		Yes ,Wet riser	
52.	If yes, please indicate the number of risers and internal diameter of each		2Nos. at each stair case,150mm	
53.	Has any down comer been provided? If so, please give details		No	
54.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		yes ☐ one jockey pump of 17.4M3/hr with pressure head of 70M	
	a)	Number of pumps	2Nos.Main pumps/1nos.reserve pump/1no.jocky pump.	
	b)	Size of suction and delivery connection to each pump/Output/Head	■Suction150mm ■Delivery: 150mm ■Output of each pump:17.4m3/Hr ■Max head against which the pump can operate at the output mentioned in70Mtr.head.	
	e)	Is the pump automatic in action?	Yes	
	f)	Is the water pressure sufficient at max distance from the pump?	Could not be assessed as top most point there is no pressure guage	
55.	Sprinkler system		Yes	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		YES ☐ Smoke detector with intelligent Panel & hooter installe/ Heat detector.	
	a)	Type of detectors used	Smoke detector	
56.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes. Manual call box installed to each floor stair case.	
	a)	Alarm receiving system	Hooter	
57.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		■Yes ■Yes 8.3.13	Number of FE Type/ Capacity DCP(5 Kg)----- Co2(4.5Kg)----- Foam(9Ltrs)----- 1nos. 3nos. 18Nos.
	Location		At office & production floor	

58.	Are Emergency Fire Alarm being provided in each floor ?	☒ Yes ☐ No	☒ No. of Fire Alarm 3nos. ☒ Location of Fire Alarm At each floor
59.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	☒ Yes ☐ Training to Securities is being conducted.	
60.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	☒ yes	

61.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available
62.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available
63.	Status of NOC from WBF&ES	Applied for NOC on 14.01.2013 for renewal. At present valid up to 21/11/2012

Part-V

Electrical, Cables and Ventilation

64.	If the building is Centrally air -conditioned, please indicate,	No Central A.C		
	a) Material used for construction of ducts and its fittings	Not applicable		
	b) Type of tinning used for ducts	Not applicable		
	c) Type of lagging used, if any for insulating any portion of the duct	Not applicable		
	d) How the lagging is secured?	Not applicable		
	e) If false ceiling is there?	Not applicable		
	f) Material used for false ceiling	Not applicable		
	g) Is a separate AHU being provided in each floor	Not applicable		
	H) Whether automatic shutdown of AHU is coupled with detection system?	Not applicable		
	i) Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable		
	j) Will fire dampers be provided in AC duct?	Not applicable		
65.	Is there any standby source of electric supply being provided?	Yes	DG Capacity 200kva	UPS
	Is the back supply automatic?	No	Specify the functions that can be maintained simultaneously by such back ups ☒ Fire Pump ☐ ☒ Emergency Light ☐ ☒ Lift	

66.	Location of switch- gears and transformers	In side the BLD,Ground floor
67.	a) Transformer capacity	750Kva
	b) If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Front side of transformer kept always open.Hence room is not 4hr. fire resistance.
	c) If outside, how far is it from the building?	NA
68.	What precautions is taken to prevent a possible fire in the transformers from spreading?	Only by use of portable Fire extinguisher(Co2)
69.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Yes
70.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	No
71.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
72.	Whether natural ventilation is relied upon? If so, give details.	Yes
73.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO
74.	Whether mechanical ventilation is being coupled with automatic detection system?	NA
75.	Whether the refuge area is being provided?	Yes
76.	Storage of combustibles materials near electrical equipment/fuse units.	
77.	RCCBs available??	No
78.	Master switch in warehouses	NA
79.	Proper cable joint procedures as per manufacturer	Yes
80.	Earthing Pit Tested??	Records are not available
81.	Use of MCB??	Yes
82.	Bypassing of protection devices	NO
83.	Deteriorated insulation	NO
84.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
85.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Yes
86.	Tracking possibility	Yes
87.	Unused opening in the panels, etc.	No
88.	Possibility of ground fault/short circuit	No
89.	Mechanical protection to cables	Yes ,Cables are shaddled.
90.	Loose terminations due to improper supports, crimping	NO
91.	Improper gland installation, wrong lug size	NO.
92.	Over-rated uses, wrongly set protection relays, etc.	NO
93.	Earthing layout & it's effectiveness	Not available

94.	Switch yard and sub station	Housing keeping is very poor/Lot of materials stored in side the room.This resulted nonavalibility of free access in front of Electrical panel.
95.	DG operation and maintenance	Done by own people.
96.	Reliability of the fire hydrant system	Yes
97.	Emergency preparedness and response	Yes. Doc.are attached.
98.	Availibilty of Evacuation plan	Yes.Doc.are attached
99.	Mock drill conducted??	Yes
100.	Awareness of the people??	WEAK
101.	Sample basis validation of smoke detection system??	NA
102.	Storage if hazardous material, chemicals??	NO
103.	Use of signage??	Not sufficient/No illuminated signage
104.	Hydrants clear, access to public thorough fare open	Yes
105.	Flame & work permits (as applicable)	NO
106.	Effective internal communication and public address system	public address systemexist
107.	Colour coding system of hazardous chemical gas lines etc.	NA
108.	Management structure, role of safety officer, fire department etc.	Yes. Doc.Attached
109.	Procedure for incident investigation and control	NO

PART- VI

Other Information

110.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	No	■Deviation from WBF&ES NOC
111.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO	
112.	Is Trade License available??	YES. Enlistment for 2012-2013 no 001935 dt 29.6.12	
113.	Name of the Insurance Company	United India	

114.	Remark(If any) There is no rubbermat in LT supply point(Main) - Housekeeping is extremely poor at Sub-station Firefighting facility at transformer room/HT & LT room are inadequate - More over there is no auto fire extinguishing facility. Records of periodic flashing of hydrant & sprinkler system were notfound. - Test report of protégé relays of transformer/HT&LT sub-station were not available. - Earth test report was not found. - No report on safety tour. - At ground floor there is Hotel HING where Lpg is used with LIC.of6cylinders each of 19.1kg.But in kitchen there is nithergass detector nor heat detector.More over nos. of portable extinguishers are inadequate. - BLD has got C-form for lift valid up to 23.12.2012 .Poor ventilation at ground floor where batteries are charged.

NDITA

Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	Auto fire extinguisher at Electrical sub-station not installed.	To be done on priority basis.
2	Housekeeping at Sub-station is very poor	To be improved.
3	Records of periodic flashing of hydrant/Sprinkler system are not maintained.	To be maintained with signature of designated person.
4	Earth pit test report not found.	To be tested every alternate year.
5	No report on Bld safety Tour was found.	Qrtly.Bld safety tour to be conducted by Bld. Safety commettee
6	Hote l HINGat ground floor has no LPG detector/heat detector at kitchen.	To be installed on top priority basis.
7	Test report of Protective relays at Transformer/HT&LT gear were not found.	To be tested once in a year.
8	At ground floor battery charging area ventilation is very poor.	Mechanical ventilation is to be provided.

Auditor

Reviewer

Signature & date Inspecting and Reporting Authority With seal

**THE INSTITUTE OF ELECTRONICS
&
TELECOMMUNICATION ENGINEERS**



EXECUTIVE SUMMARY

Part I & II

General Information

The Institute of Electronics & Telecommunication Engineers is situated at J 1/7, Block EP, Sector V, Salt Lake, Kolkata 700091, The structure is G + 2 & built up area is approx. 1083.55 sq mtr, in total 0.2687 acres of land. In the ground floor there is an auditorium, class rooms and office, the 1st floor has laboratory and computer room and office and the 2nd floor has class rooms and laboratory.

There is no central AC system in the building.

The Clearance Certificate, the date of sanction of building plan, and the NOC from WBF&ES is not available

Occupancy Load was found as

Existing -- 16 persons
Floating -- 15 persons

In general the occupancy is extremely low but during classes and exams which takes place twice a year and has duration of about one month the occupancy can increase upto 200 persons.

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There is only one Staircase available. **There are no Lifts available. There is no refuse area and** the building height is less than 25 mtr

No Evacuation Drill has been conducted so far.

There is no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises are portable fire extinguishers only. There are no Wet risers, no dry risers or downcomers and also no Smoke Detectors or Sprinklers provided in the building MCPs or any other fire alarms are also not present.

Wet Riser

There is an underground tank of 17500 ltr capacity (approx. as measured from outside) and three overhead tanks of 2750 ltrs capacity. One pump of 2 HP capacities is provided for domestic purpose.

Alternate source of water is the Water body approx 500 mtr away

No PAS is available except in the auditorium

No Close circuit TV monitoring is available

16 Nos Portable fire extinguishers are found deployed in the ground, 1st floor and 2nd floor

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB in the distribution board found but three RCCBs (300 mA) are found in the distribution board of the 2nd floor only.

Generally no combustible material is stored in the premises, near the Electrical installation

There is one 5 KVA DG supply is as alternate source of power. This is operated manually

PART VI

OTHER INFORMATION

NIL

NDIAT- FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	J 1/7, Block EP	
2.	Premises Name (if any):	The Institute of Electronics and Telecommunication Engineers	
3.	Name of the owner /occupier/lessee	The Institute of Electronics and Telecommunication Engineers	
4.	Permanent Address	J 1/7, Black EP,Sector V, Salt Lake, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	Mr.S.C.Rudra(chairman)& Mr Samar Kr Deb	
7.	Phone No of Contact Person	23577054, 23574290 9433786752	
8.	E-mail	ietekol@vsnl.net Web site: www.ietekolkata.org	
9.	Purpose of the Land Use (A non profit organization)	Principal Use ☐	Residential
		Mixed Use	Educational
			Institutional ☐
			Assembly
			Business
			Mercantile
			Industrial
			Storage
		IT/ITES ☐	
10.	Plot Area(as informed to the Auditor)	0.2687 acres	
11.	Build up area(as informed to the Auditor)	1083.55 sq mtr	
12.	No of Floors	G + 2	
13.	Date of Sanction of Building Plan	☒ Yes ☐ Date Not available Bidhan Nagar Municipality	
14.	Whether P.O.C/OC received from local body?	Yes NotAvailable	OC Issuing Authority Bidhan Nagar Municipality/ NDITA
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Wolf Security Services	
16.	No of Security Personnel engaged	2 + 2(day & night)	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	YES	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	No	

VEHICLES VOLUME		
21	No of Vehicles Engaged by the Organisation	Nil
22	No of Vehicles for which parking space is available in the premises	5
23	Whether parking space available for visitors within the premises	Yes
24	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
25	Garbage Clearing	NDITA Garbage clearing system
26	Drainage System	Connected to NDITA Drainage system
27	Maintenance of Road	Internal road maintained by owner, and the condition was found satisfactory
TELEPHONE TOWER		
28	No of Towers	No of towers: NIL
29	Statutory Clearance from AAI	Not applicable
30	Any Other Clearance	Not applicable

PART - II

31	Occupancy load	(Based on estimates)			
	Existing	G	1	2	Total
	a)Regular	5	6	5	16
	b)Floating				15
32	Basement	NIL			

Part- III

Provisions of means of escape

33	Number of staircases --→One No				
	Stairs Number		#1		
	a)	Width of flight	1690 mm		
	b)	Tread width	250 mm		
	c)	Riser Height	150 mm		
	d)	Finish	Cement		
	e)	Width of stair door (FCD)	No doors		
	f)	Height of stair head room	5486.4 mm		
	g)	Height of stair handrail	900 mm		
	h)	Area & location & profile of Fire Refuge Area	NO Refuse Area		
	i)	Width and type of door leading to Fire refugee area	Not applicable		
	j)	Pressurization of staircase	No		
	k)	Segregation of staircase	No		

34	Number of Lifts installed - Nil			
	Lift-Numbers		#1	#2
	a)	Type of door		
	b)	Fire resistance rating		
	c)	Area of lift car		
	d)	Capacity (no of persons)		
	e)	Capacity(in kg)		
	f)	Company		
	g)	Is communication system, installed in the lift car?	Not applicable	
	h)	Is a fireman's switch being installed in the car?	Not applicable	
	i)	Pressurization of lift	Not applicable	
	j)	Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Not applicable	
35	Presence of proper signage in all the exit route		No	
36	Is it posted with illuminated signage ?		No	
37	Whether it is landing to fire assembly point?		No	
38	Any form of Public address system available ?		No, except in the auditorium	
39	Width form of internal road within the Premises ?		2300 mm	
40	Width of the Entry / exit of Gate		4000 mm	3500 mm
41	Height of the Entry / exit of Gate		Open to sky	

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G 17,500 ltr(approx as measured from outside) O/H 1000 ltr X 2; 750 ltrs x 1
	a)	If yes, specify the distance from the building	Less than 10 metres	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	Not available	
	c)	Specify the condition of the reservoir	Satisfactory	
43	Is any public or other water storage facility available nearby?		Yes	■specify the distance from the building ----500Mtr
	a)	Is it readily accessible?	Yes	■condition and type of the reservoir—Water body
44	Are internal hydrants being provided ?		No	■single or twin outlets.----- Not applicable
	If so, please indicate no of hydrants in each floor		Not applicable	

45	Are first aid hose reels being provided ? If so please indicate		■No	■No of hose reels on each floor-----Not applicable	
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	Not applicable	■Bore and length of hose reel tubing on each reel----- 2	
	b)	Size (bore) and type of nozzle fitted to each hose reel	Not applicable		
46	Are fire hoses being provided near each hydrant? If so, please indicate		■No	■Type of hose—Not applicable ■Size of hose— “ ■Length of hose— “	
	a)	Total no of hoses provided near each hydrant	Not applicable		
47	Have wet risers/dry risers been provided?		No		
48	If yes, please indicate the number of risers and internal diameter of each		Not applicable		
49	Has any down comer been provided? If so, please give details		No		
50	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		No		
	a)	Number of pumps	Not applicable		
	b)	Size of suction and delivery connection to each pump/Output/Head	■Suction: Not applicable ■Delivery: Not applicable ■Output of each pump: Not applicable ■Max head against which the pump can operate at the output mentioned in— Not applicable		
	e)	Is the pump automatic in action?	Not applicable		
	f)	Is the water pressure sufficient at max distance from the pump?	Not applicable		
51	Sprinkler system		No		
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		No		
	a)	Type of detectors used	Not applicable		
52	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		No		
	a)	Alarm receiving system	No		
53	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity 21.2.13 and 13.2.13		■Yes ■No	Number of FE Type/ Capacity CO2- 2 kgs – 4 nos ABC-5 kgs – 8 nos Water 9 ltrs -3 nos	15
54	Location and population of FEs adequate		Yes Ground floor, 1 st floor and 2 nd floor.		

55	Are Emergency Fire Alarm being provided in each floor ?	■No✓	■No. of Fire Alarm – Not applicable ■Location of Fire Alarm—Not applicable
56	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No	
57	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No	
58	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available	
59	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available	
60	Status of NOC from WBF&ES	Not available	

Part-V

Electrical, Cables and Ventilation

61	If the building is Centrally air -conditioned, please indicate,		No	
	a)	Material used for construction of ducts and its fittings	Not applicable	
	b)	Type of tinning used for ducts	Not applicable	
	c)	Type of lagging used, if any for insulating any portion of the duct	Nor applicable	
	d)	How the lagging is secured?	Not applicable	
	e)	If false ceiling is there?	Not applicable	
	f)	Material used for false ceiling	Not applicable	
	g)	Is a separate AHU being provided in each floor	Not applicable	
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable	
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable	
	j)	Will fire dampers be provided in AC duct?	Not applicable	
62	Is there any standby source of electric supply being provided?		Yes	DG 5 KVA Capacity UPS
	Is the back supply automatic?		No	Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump ■Emergency Light✓ ■Lift ■Offices✓

63	Location of switch- gears and transformers		Nil
64	a)	Transformer capacity	Not applicable
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable
	c)	If outside, how far is it from the building?	Not applicable
65	What precautions is taken to prevent a possible fire in the transformers from spreading?		Not applicable
66	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		No electrical shafts present, wirings are concealed
67	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		NO
68	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable
69	Whether natural ventilation is relied upon? If so, give details.		Yes
70	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No
71	Whether mechanical ventilation is being coupled with automatic detection system?		NO
72	Whether the refuge area is being provided?		No refuse area found ,building height is below 25 mtr
73	Storage of combustibles materials near electrical equipment/fuse units.		No
74	RCCBs available??		Yes only in 2 nd floor 300 mA
75	Master switch in warehouses		NO
76	Proper cable joint procedures as per manufacturer		Yes
77	Earthing Pit Tested??		No
78	Use of MCB??		Yes
79	Bypassing of protection devices		NO
80	Deteriorated insulation		NO
81	Selection, deployment of PFFs (Portable Fire Extinguishers)		YES
82	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)		NO Cable shaft present, concealed wiring found
83	Tracking possibility		No
84	Unused opening in the panels, etc.		No
85	Possibility of ground fault/short circuit		No
86	Mechanical protection to cables		Yes
87	Loose terminations due to improper supports, crimping		NO
88	Improper gland installation, wrong lug size		NO
89	Over-rated uses, wrongly set protection relays, etc.		NO
90	Condition of Lightning arrestor		No lightning arrestor found
91	Periodic testing of UPS system (as applicable)		Not applicable

92	Earthing layout & it's effectiveness	No
93	Switch yard and sub station	No
94	DG operation and maintenance	Yes
95	Reliability of the fire hydrant system	NO
96	Emergency preparedness and response	NO
97	Availabilty of Evacuation plan	NO
98	Mock drill conducted??	NO
99	Awareness of the people??	NIL
100	Sample basis validation of smoke detection system??	Not applicable
101	Approval of receiving station, substation and DG	No
102	Storage if hazardous material, chemicals??	No
103	Use of signage??	NO
104	Hydrants clear, access to public thorough fare open	Not applicable
105	Flame & work permits (as applicable)	NO
106	Effective internal communication and public address system	No, only in auditorium
107	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
108	Management structure, role of safety officer, fire department etc.	NO
109	Procedure for incident investigation and control	NO

PART- VI

Other Information

110	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	☒ Yes ☒ No ☐ Yes ☐ No	☐ Deviation from WBF&ES NOC
111	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO	
	Is Trade License available??	No	
112	Name of the Insurance Company	NO	
113	Remarks (if any) 87. No Fire mock drill has been conducted 88. No Evacuation drill has been conducted 89. No MCPs or any other fire alarms are present. 90. NOC from WBF&ES is not available 91. CC and date of sanction of building plan is not available 92. Only one stair case is found , no alternate staircase is found in case of emergency 93. No lightning arrestor found		

Reviewer

Auditor

Signature& date of Inspecting and Reporting Authority With seal

NDITA
Nonconformity tracking report

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	No Fire mock drill has been conducted	Fire Mock drill is to be conducted periodically. Record is to be maintained
2	No Evacuation drill has been conducted	Evacuation drill is to be conducted periodically with all occupants. Record is to be maintained
3	NOC from WBF&ES is not available	Same to be made available and renewed every year
4	CC and date of sanction of building plan not available	Same to be made available
5	No lightning arrestor found	Same to be provided
6	No MCPs or any other fire alarms are found	Same are to be installed on every floor
7	No smoke detectors are found	Smoke detectors to be installed on every floor
8	One Electrical main box found open	To be rectified and closed

Reviewer

Auditor

Signature & date Inspecting and Reporting Authority With seal

INDO JAPAN BUILDING



EXECUTIVE SUMMARY

Part I & II

General Information

INDO JAPAN BUILDING is situated at J-1/12, Block EP, Sector V, Salt Lake, Kolkata 700091, The structure is G + 4 & built up area is approximately approx. 30000 Sq. ft. in total 0.26 acres of land.

In the Ground floor .there are two generators, one transformer, meter room,Corporation Bank's ATM, Gmitts Infotech Pvt Ltd. and few rooms for utility. The entire building is rented except the 4th floor west side which is the guest house of Indo Japan Horologicals Pvt. Ltd.. The tenants are as follows:-

- 1.Corporation Bank on the 1st floor west side
2. Gmitts Infotech Pvt. Ltd. on the ground floor east side
- 3.Reliance Nextlink Pvt Ltd. 1st floor east side
4. Corporation Bank 1st floor west side
5. IKF Technologies Pvt Ltd. 2nd floor east side
6. WRC Technologies Pvt Ltd.2nd floor west side
7. Reliance Telecom Ltd. 3rd floor east side
8. Indian Cable Net Co Ltd. (SITI TV) 3rd floor west side and 4th floor east side.

The date of sanction of Building Plan was not available

There are three stair cases & two Lifts each of 5 Person carrying capacity. Forms Cs for both the lifts have expired.

There was a provisional NOC from the WBF&ES which has expired on 27.4.05 and renewal has not been applied for.

There is no central AC system in the building

No CC TV and Public Address System is available in the building

Estimated Occupancy Load as on audit date was found as

Existing -- 447 persons

Floating -- 147 persons

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are three nos Staircases available. There are two Lifts available.

No Evacuation Drill has been conducted so far.

There are no Signage available in the EXIT Route

The staircases on the two sided of the building were found to have no hand rails. The fire extinguishers found in the main stair case were found expired. No public address system was found

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises are portable fire extinguishers and some smoke detectors on some floors only. Wet risers, sprinklers and smoke detectors are being installed.

Wet riser

There is an Under- ground fire tank of approx. 1, 00,000 ltr capacity. There are no pumps provided as risers are being installed.

The wet risers were found installed few years back but the work was not complete. Work has now again started and will take some time to complete, Sprinklers and smoke detectors are also found being installed. No pump room or any pumps were found in the building. The hose boxes were found empty and the hose reels were also absent

Smoke detectors are installed in some of the floors while in other floors it is being installed.

Alternate source of water is the Water body approx 500 mtr away

Buildings is equipped with Fire detection system like smoke detectors on some floors and sprinklers and smoke detectors for other floors are being installed.

Total 39 Nos Portable fire extinguishers are found deployed throughout the building.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises, near the Electrical installation

There are two DG sets each of 200 KVA at the ground floor belonging to the tenants as an alternate source of supply to their occupied floors only. There was no alternate electricity connection was provided and the lifts and emergency lights were not connected with the DG sets

PART VI

OTHER INFORMATION

Nil

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

PART – I

General Information

1.	Plot No/Premises No:	J-1/12, Block EP	
2.	Premises Name (if any):	Indo Japan Building	
3.	Name of the owner /occupier/lessee	Indo Japan Horologicals Pvt. Ltd.,	
4.	Permanent Address	J-1/12, Block EP, Sector V, Salt Lake, Kolkata – 700091.	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold	
6.	Name of the Contact Person	Mr. .P.R.Bothra	Mr. J.K.Ghosh
7.	Phone No of Contact Person	93310 36870 93395 22153	
8.	E-mail	mayurbothra@live.com	
9.	Purpose of the Land Use (The entire building is rented to different organizations)	Principal Use ☐	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	0.26 acres	
11.	Build up area(as informed to the Auditor)	Approx 30,000 sq ft (exact figure is not available)	
12.	No of Floors	G + 4	
13.	Date of Sanction of Building Plan	Date: 27.11.04 vide sanctioned drawing no V/BM/323 dated 27.11.04	
14.	Whether P.O.C/OC received from local body?	NDITA Applied to NDITA but not yet received	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	S.R. Services	
16.	No of Security Personnel engaged	One from SR Services and one own	
17.	Whether Records of Vehicles (No & type entering into the building are kept	No	
18.	Whether records of Visitors entering into the building are kept	No	
19.	Whether Metal detectors are used at the entry point	No	
20.	Whether Monitoring System through Close circuit TV available	No	

VEHICLES VOLUME		
21	No of Vehicles Engaged by the Organization	No
22	No of Vehicles for which parking space is available in the premises	7 nos
23	Whether parking space available for visitors within the premises	No
24	Place where excess vehicles (if any) are parked	Outside road
GENERAL MAINTENANCE		
25	Garbage Clearing	Cleared through NDITA garbage cleared system
26	Drainage System	Connected to NDITA drainage system
27	Maintenance of Road	Internal road is maintained by the owner and is found satisfactory
TELEPHONE TOWER		
28	No of Towers	Nil
29	Statutory Clearance from AAI	No
30	Any Other Clearance	Not applicable

PART – II

31	Occupancy load		(Based on Estimates)					
	Existing		G	1	2	3	4	Total
	a)Regular		55	29	76	237	50	447
	b)Floating		20	53	11	3	60	147
32	Basement		Nil					
	a)	If basement extends beyond building profile	Not applicable					
	b)	Use of the basement	Not applicable					
	c)	Is it being sprinkle red?	Not applicable					
	d)	Whether any cubicles present in the basement?	Not applicable					
		If yes, their use to be specified	Not applicable					
	f)	Whether fire zones are defined?	Not applicable					
		If yes, please provide details	Not applicable					

Part- III

Provisions of means of escape

33	Number of staircases --→ Three nos				
	Stairs Number		#1	#2	#3
	a)	Width of flight	1450 mm	1500 mm	1500 mm
	b)	Tread width	260 mm	270 mm	250 mm
	c)	Riser Height	130 mm	150 mm	160 mm
	d)	Finish	Marble	Marble	Cement
	e)	Width of stair door (FCD)(No FCD but wooden door or glass doors found)	1100 mm	1100 mm	970 mm
	f)	Height of stair head room	3048 mm	3048 mm	3048 mm
	g)	Height of stair handrail	970 mm	No hand rail found	No hand rail found
	h)	Area & location & profile of Fire Refuge Area	No refuge area found		
	i)	Width and type of door leading to Fire refugee area	Not applicable		
j)	Pressurization of staircase	No			
k)	Segregation of staircase	Yes			
34	Number of Lifts installed→ Two				
	Lift-Numbers		#1	#2	
	a)	Type of door	Metallic sliding		Metallic sliding
	b)	Fire resistance rating	2 hours		2 hours
	c)	Area of lift car	960 x 960 sq mm		960 x 960 sq mm
	d)	Capacity (no of persons)	5		5
	e)	Capacity(in kg)	340		340
	f)	Company	Schindler		Schindler
	g)	Is communication system, installed in the lift car?	Yes		Yes
	h)	Is a fireman’s switch being installed in the car?	Yes		Yes
	i)	Pressurization of lift	No		No
	j)	Whether validity of “Form-C” from appropriate authority obtained?(If yes, attach a photocopy) (Copy attached)	No	Reference No:20110207117(17871) & 20110207118(17872) Valid upto:24.2.12	
35	Presence of proper signage in all the exit route		No		
36	Is it posted with illuminated signage?		No		
37	Whether it is landing to fire assembly point?		No		
38	Any form of Public address system available?		No		
39	Width form of internal road within the Premises?		3500 mm		
40	Width of the Entry / exit of Gate		3500 mm		
41	Height of the Entry / exit of Gate		Open to sky		

PART IV

Provision of Fire Safety Arrangement

Provision of Fire Safety Arrangements				
42	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes	U/G 1,00,000 ltrs O/H Concrete- 2 x 15000 ltrs (approx); 2 x 2000 ltrs
	a)	If yes, specify the distance from the building	Approx. 1 meter	
	b)	If yes, specify the capacity (in litres)as approved by WBF & ES.	1.00.000 ltrs	
	c)	Specify the condition of the reservoir	Satisfactory	
43	Is any public or other water storage facility available nearby ?		Yes	Specify the distance from the building approx 500 meters
	a)	Is it readily accessible?	Yes	Condition and type of the reservoir Waterbody
44	Are internal hydrants being provided ?		No	Being installed
	If so, please indicate no of hydrants in each floor		Not applicable	
45	Are first aid hose reels being provided? If so please indicate		No	No of hose reels on each floor :Not applicable
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	No	Bore and length of hose reel tubing on each reel: Not applicable
	b)	Size (bore) and type of nozzle fitted to each hose reel	Not applicable	
45	Are fire hoses being provided near each hydrant? If so, please indicate		Not applicable	
	a)	Total no of hoses provided near each hydrant	Not applicable	
46	Have wet risers/dry risers been provided?		No	
	If yes, please indicate the number of risers and internal diameter of each		Not applicable	
47	Has any down comer been provided? If so, please give details		No	
	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		No	
	a)	Number of pumps	Not applicable	
	b)	Size of suction and delivery connection to each pump/Output/Head	Not applicable	
	e)	Is the pump automatic in action?	Not applicable	
	f)	Is the water pressure sufficient at max distance from the pump?	Not applicable	
48.	Sprinkler system			
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		No	
	a)	Type of detectors used	None	
49	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Yes, A few are found on some offices, and on the main staircase which was found switched off	

	f)	Material used for false ceiling	Not applicable		
	g)	Is a separate AHU being provided in each floor	Not applicable		
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable		
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable		
	j)	Will fire dampers be provided in AC duct?	Not applicable		
60	Is there any standby source of electric supply being provided?		Yes	DG2 x 200 KVA Capacity	UPS Capacity
	Is the back supply automatic? (The generators belong to Reliance Telecom Ltd and Indian Cable Net Pvt .Ltd and are connected to them only. The lift also do not work in case of power failure)		Yes	Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump ■Emergency Light ■Lift ■Partly to Office ■ Others	
61	Location of switch- gears and transformers		One transformer for Reliance Telecom Inside the building		
62	a)	Transformer capacity	350 KVA		
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	6 inches brick wall, properly plastered		
	c)	If outside, how far is it from the building?	Not applicable		
63	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Fire extinguishers and sand buckets		
64	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		No passes are found, wiring is done by conduit pipes outside the building		
65	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		No		
66	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable		
67	Whether natural ventilation is relied upon? If so, give details.		Yes, windows are provided with cross ventilation		
68	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No		
69	Whether mechanical ventilation is being coupled with automatic detection system?		Not applicable		
70	Whether the refuge area is being provided?		No	On which floor Not applicable Area of Fire Refuge Area: Width of Fire Refuge Area:	

71	Storage of combustibles materials near electrical equipment/fuse units.	No
72	RCCBs available??	No
73	Master switch in warehouses	Not applicable
74	Proper cable joint procedures as per manufacturer	Yes
75	Earthing Pit Tested??	No
76	Use of MCB??	Yes
77	Bypassing of protection devices	No
78	Deteriorated insulation	Not found
79	Selection, deployment of PFFs (Portable Fire Extinguishers)	Yes
80	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	No passes found
81	Tracking possibility	No
82	Unused opening in the panels, etc.	No
83	Possibility of ground fault/short circuit	No
84	Mechanical protection to cables	Yes
85	Loose terminations due to improper supports, crimping	Not found
86	Improper gland installation, wrong lug size	Not found
87	Over-rated uses, wrongly set protection relays, etc.	Not found
88	Switch yard and sub station	Satisfactory
89	DG operation and maintenance	Done by their owners
90	Reliability of the fire hydrant system	Not applicable
91	Emergency preparedness and response	No
92	Availability of Evacuation plan	No plan found
93	Mock drill conducted??	No
94	Awareness of the people??	No
95	Sample basis validation of smoke detection system??	Not applicable
96	Condition of Lightning Arrestor	Extremely poor
97	Periodic test of UPS system (as applicable)	Not applicable
98	Handling of electrical work by competent electrician	Done by outsourced electrician
99	Approval of receiving station, substation and DG	Not available
100	Storage if hazardous material, chemicals?	Not found
101	Use of signage?	No signage's are found
102	Hydrants clear, access to public thorough fare open	Not applicable
103	Flame & work permits (as applicable)	No
104	Effective internal communication and public address system	No
105	Colour coding system of hazardous chemical gas lines etc.	Not applicable
106	Management structure, role of safety officer, fire department etc.	None found
107	Procedure for incident investigation and control	None found

PART- VI

Other Information

108.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes	■ Deviation : Given in observation column
109.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	Nil	
	Is Trade License available??	No	
110	Name of the Insurance Company	United India Insurance	
111	Remarks (if any) 1. No mock drill has been conducted 2. No evacuation drill has been conducted 3. Fire pumps are not installed 4. MCPs are not working and glass breakers are missing 5. Control panel if found switched off 6. No hand rail found in two staircases of the building 7. CC or OC is not available 8. Trade license is not available 9. We t riser , smoke detectors and sprinklers are being installed 10. No signage's are found in the entire building		

Reviewer

Auditor

Signature & date of Inspecting and Reporting Authority with seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	No mock drill has been conducted	Periodical mock drill to be conducted by every offices of the building
2	No evacuation drill has been conducted	Periodical evacuation drill to be conducted with a suitable evacuation plan which should be displayed on every floor
3	No signages are found in any part if the building	Signages demarking the exit routes and instructions for operating lifts in case of fire to be displayed everywhere and on all floors
4	MCPs and control panel are found not working 	To be repaired and kept OK on all floors of all the staircases
5	No hand rails are found in two staircases	Hand rails must be provided immediately
6	Fire pumps are not found installed	To be installed immediately
7	Wet riser, Smoke detector and sprinklers are in the process of being installed	Work to be completed immediately and the hose boxes and hose reel are to be provided
8	The condition of lightning arrestor was found poor and the conducting metal strips were not found connected	To be immediately repaired and continuity test to be done as required
9	Earth Pit was not found tested	To be tested and maintained as required
10	CC from NDITA, Trade License is not available	To be made available
11	NOC from WBF&ES found expired	To be repaired immediately
12	The staircase no 3 was found blocked and also Locked.	Fire escape routes must be free of any obstacles and open at all times
13	The width of the road was found 3.5 meters	As per the recommendation of WBF&ES it should be 4.5 m

Reviewer

Auditor

Signature & date of Inspecting and Reporting Authority with seal

KHERIA INDUSTRIES PVT. LTD.



EXECUTIVE SUMMARY

Part I & II

General Information

Kheria Industries Pvt. Ltd. is situated at EP, JI -15 Sector V, Salt Lake, Kolkata 700091, The structure is G + 4 .Built up area & plot area are not available.

This property is taken as sublease from WEBEL .KheriaIndustriesPvt Ltd is doing business of manufacturing cooling Tower spare .parts of plastic material by injection moulding M/C. This plant is situated at ground floor.At 1st,2nd& 3rd floor there is office of Power Grid Corporation & 4th floor there is office of SITI CABLE.Kheria Industries Pvt Ltd given rent to Power Gride Corporation & SITI CABLE . The name of the occupier is Mr.T.C.Kheria& contact person is Mr.Swapan Shoo whose mobile no.is 9831502

There is no central **AC system** in the building

OC(Occupation Certificate) obtained directly from Bidhan Nagar Municipality& current Tax bill has been paid of Rs 56108/-by the Anderson group for their share of floors. **Others Tax payment is not available**

Last NOCfrom WBF & ES (Ref No WBFES/3093/07/Bidhan/RB/139/04(155/04) dated 17.05.07 is valid up to 16,5,08.There after No Valid NOC is available

Occupancy Load was found as

Existing -- 105
Floating -- 30

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two Staircasesavailable . There is one Lifts available.

No Evacuation Drill has been conducted so far except 1st, 2nd, & 3rd floor

There is no Signage available in the EXIT Route.

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishers Smoke detector & heat detector,MCP at 1st,2nd& 3rd floor..

Wet Riser

There is no wet riser as well as down comer in the BLD.

Alternate source of water is the Water body approx 800 mtr away

PAS is available at 1st, 2nd & 3rd Floor

Close circuit TV monitoring is available

7 Nos Portable fire extinguishers are found deployed near the staircase & in the working area.

PART V**ELECTRICAL FIRE HAZARDS**

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises ,near the Electrical installation

There is no alternate power supply source in the building

PART VI**OTHER INFORMATION**

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EP,JI-15	
2.	Premises Name (if any):	Kheria Industries Pvt.Ltd	
3.	Name of the owner /occupier/lessee	MrT.C.Kheria	
4.	Permanent Address	EP,JI-15,Sector-V salt lake city, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Sub Lease Hold from WEBEL	
6.	Name of the Contact Person	Mr.Swapan Shoo	
7.	Phone No of Contact Person	9831502998	
8.	E-mail	Kheria.industries@gmail.com	
9.	Purpose of the Land Use	Principal Use	Residential
		Mixed Use	Educational
		Manufacturing of Cooling Tower Spare Parts	Institutional
			Assembly
			Business
			Mercantile
			Industrial ☐
			Storage
			IT/ITES
10.	Plot Area(as informed to the Auditor)	not available	
11.	Build up area(as informed to the Auditor)	not available	
12.	No of Floors	G+4	
13.	Date of Sanction of Building Plan	■ Available with WEBEL	
14.	Whether P.O.C/OC received from local body?	YES	OC Issuing Authority Available with WEBEL Dated:
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Jupiter agency	
16.	No of Security Personnel engaged	4 persons	
17.	Whether Records of Vehicles (No & type entering into the building are kept	NO	
18.	Whether records of Visitors entering into the building are kept	No	
19.	Whether Metal detectors are used at the entry point	NO	
20.	Whether Monitoring System through Close circuit TV available	No	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	Nil	
22.	No of Own Vehicles engaged by Employees		
23.	No of Vehicles for which parking space is available in the premises	7cars.	

24.	Whether parking space available for visitors within the premises	No
25.	Place where excess vehicles (if any) are parked	Outside Road
GENERAL MAINTENANCE		
26.	Garbage Clearing	NDITA Garbage clearing system
27.	Drainage System	Connected to NDITA Drainage system
28.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
29.	No of Towers	NIL
30.	Statutory Clearance from AAI	Not applicable
31.	Any Other Clearance	Not applicable

PART - II

32.	Occupancy load	(Biased on Estimate)					
	Existing	G	1	2	3	4	Total
	a)Regular	20	10	20	20	35	105
	b)Floating						30
33.	Basement	NIL					

Part- III

Provisions of means of escape

34.	Number of staircases --→2Nos.			
	Stairs Number		#1	#2
	a)	Width of flight	1230mm	1380mm
	b)	Tread width	240mm	260mm
	c)	Riser Height	160mm	160mm
	d)	Finish	Kota cement	Kota cement
	e)	Width of stair door (FCD)	No FCD	No FCD
	f)	Height of stair head room	10Ft	10Ft
	g)	Height of stair handrail	1130mm	930mm
	h)	Area & location & profile of Fire Refuge Area	NO t applicable	
	i)	Width and type of door leading to Fire refugee area	Not applicable	
	J)	Pressurization of staircase	Not applicable	
	k)	Segregation of staircase	Not applicable	
35.	Number of Lifts installed→1Nos.			
	Lift-Numbers		#1	
	a)	Type of door	Metallick	
	b)	Fire resistance rating	2Hrs.	
	c)	Area of lift car	1050mmx1450mm	
	d)	Capacity (no of persons)	8 Persons	
	e)	Capacity(in kg)	544Kg	
	f)	Company	Olympas	

	g)	Is communication system, installed in the lift car?	■No
	h)	Is a fireman's switch being installed in the car?	■No
	i)	Pressurization of lift	No
	j)	Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Doc. Is not available
36.		Presence of proper signage in all the exit route	No
37.		Is it posted with illuminated signage ?	No
38.		Whether it is landing to fire assembly point?	Fire assembling point is not identified
39.		Any form of Public address system available ?	NO
40.		Width form of internal road within the Premises ?	3.5mtr.
41.		Width of the Entry / exit of Gate	3.2mtr.
42.		Height of the Entry / exit of Gate	Open to sky

PART IV

Provision of Fire Safety Arrangement

43.	Is any water reservoir for firefighting available ? (at ground level / overhead)	Yes	U/G NIL O/H6000 ltr
	a) If yes, specify the distance from the building		NA
	b) If yes, specify the capacity (in litres)as approved by WBF & ES.		None
	c) Specify the condition of the reservoir		Not Applicable
44.	Is any public or other water storage facility available nearby ?	Yes	■specify the distance from the building ----800Mtr
	a) Is it readily accessible ?	Yes	■condition and type of the reservoir—Water body
45.	Are internal hydrants being provided ?		single or twin outlets
	If so, please indicate no of hydrants in each floor		single
46.	Are first aid hose reels being provided ? If so please indicate	NO	No of hose reels on each floor
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?		Not applicable
	b) Size (bore) and type of nozzle fitted to each hose reel		Not applicable
47.	Are fire hoses being provided near each hydrant? If so, please indicate	No	■Type of hose ■Size of hose ■Length of hose
	a) Total no of hoses provided near each hydrant		ZERO
48.	Have wet risers/dry risers been provided?		NO
49.	If yes, please indicate the number of risers and internal diameter of each		ZERO
50.	Has any down comer been provided? If so, please give details		No

51.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		NO	
	a)	Number of pumps	ZERO	
	b)	Size of suction and delivery connection to each pump/Output/Head	■Suction■Delivery: ■Output of each pump: ■Max head against which the pump can operate at the output mentioned in	
	c)	Is the pump automatic in action?	NA	
	d)	Is the water pressure sufficient at max distance from the pump?	NA	
52.	Sprinkler system		NO	
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		Only at 1 st ,2 nd & 3 rd floor automatic fire detection & alarm installed.	
	a)	Type of detectors used	No Fire detector at office & G-floor Factory&4 th floor/1 st ,2 nd ,3 rd floor there is smoke, heat detector	
53.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		Only at 1 st ,2 nd ,&3 rd floor Manual call boxes are installed.	
	a)	Alarm receiving system	Hooter	
54.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity		■Yes ☐ ■Yes ☐ 8.3.13	Number of FE Type/ Capacity DCP()— 2kg(4nos). DCP()----- Mechanical Foam(9Ltrs)----- 1nos. CO2 -- 2Nos.(4.5Kg)
	Location		At office & production floor	
55.	Are Emergency Fire Alarm being provided in each floor ?		■Yes ☐ ■No ☐	■No. of Fire Alarm:3nos. ■Location of Fire Alarm Inside office of 1 st ,2 nd ,&3 rd floor
56.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?		NO	
57.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?		NO	
58.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES		Not available	
59.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES		Not available	
60.	Status of NOC from WBF&ES		Not available	

Part-V

Electrical, Cables and Ventilation

61.	If the building is Centrally air –conditioned, please indicate,		■No Central AC		
	a)	Material used for construction of ducts and its fittings	Not applicable		
	b)	Type of tinning used for ducts	Not applicable		
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable		
	d)	How the lagging is secured?	Not applicable		
	e)	If false ceiling is there?	Not applicable		
	f)	Material used for false ceiling	Not applicable		
	g)	Is a separate AHU being provided in each floor	Not applicable		
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable		
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable		
	j)	Will fire dampers be provided in AC duct?	Not applicable		
62.	Is there any standby source of electric supply being provided?		No	DGCapacity	UPS
	Is the back supply automatic?		■No	Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump ■Emergency Light ■Lift	
63.	Location of switch- gears and transformers		Out Door Transformer ,open to sky& switch located inside the BLD		
64.	a)	Transformer capacity	350Kva		
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	NA		
	c)	If outside, how far is it from the building?	Adjacent to BLD		
65.	What precautions is taken to prevent a possible fire in the transformers from spreading?		Manual CO2 charging		
66.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		NA		
67.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		NO		
68.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable		
69.	Whether natural ventilation is relied upon? If so, give details.		Yes		

70.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO
71.	Whether mechanical ventilation is being coupled with automatic detection system?	NA
72.	Whether the refuge area is being provided?	NA
73.	Storage of combustibles materials near electrical equipment/fuse units.	
74.	RCCBs available??	No
75.	Master switch in warehouses	NO
76.	Proper cable joint procedures as per manufacturer	Not at all
77.	Earthing Pit Tested??	Tested five years back. But record was not found.
78.	Use of MCB??	Yes
79.	Bypassing of protection devices	NO
80.	Deteriorated insulation	NO
81.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
82.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	NO Cable shaft
83.	Tracking possibility	Yes
84.	Unused opening in the panels, etc.	Tes,at G-floor production area.
85.	Possibility of ground fault/short circuit	No
86.	Mechanical protection to cables	YesCables are shaddled.
87.	Loose terminations due to improper supports, crimping	Lot of loose wiringsfound at ground floor factory.
88.	Improper gland installation, wrong lug size	Most of the cables do not have gland at ground floor factory.
89.	Over-rated uses, wrongly set protection relays, etc.	Could not be seen.
90.	Earthing layout & it's effectiveness	Not available
91.	Switch yard and sub station	Yes
92.	DG operation and maintenance	NA
93.	Reliability of the fire hydrant system	NA
94.	Emergency preparedness and response	Available at 1 st ,2 nd ,& 3 rd floor
95.	Availibilty of Evacuation plan	Available at 1 st ,2 nd ,& 3 rd floor
96.	Mock drill conducted??	NO
97.	Awareness of the people??	WEAK
98.	Sample basis validation of smoke detection system??	Available at 1 st ,2 nd ,& 3 rd floor
99.	Storage if hazardous material, chemicals??	NO
100.	Use of signage??	Available at only 1 st ,2 nd ,& 3 rd floor
101.	Hydrants clear, access to public thorough fare open	Yes
102.	Flame & work permits (as applicable)	NO

103.	Effective internal communication and public address system	Available at only 1 st , 2 nd & 3 rd floor
104.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
105.	Management structure, role of safety officer, fire department etc.	NO
106.	Procedure for incident investigation and control	NO

PART- VI

Other Information

107.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	■Yes□ ■No	■Deviation from WBF&ES NOC
108.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO	
109.	Is Trade License available??	Applied for renewal	
110.	Name of the Insurance Company	Reliance	
	Remarks (if any) 94. No Fire mock drill has been conducted ground & 4 th floor 95. No Evacuation drill has been conducted for ground & 4 th floor 96. No smoke detector at g-floor & 4 th floor 97. Housekeeping is extremely poor at production floor 98. Lot of loose wiring at production floor. 99. Wirings are very old 100. No exit signage.		

Auditor

Reviewer

Signature & date Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	No Fire mock drill has been conducted	Fire Mock drill is to be conducted periodically. Record is to be maintained
2	No Evacuation drill has been conducted	Evacuation drill is to be conducted periodically with all employee
3	No smoke detector at production floor	Smoke detector to be provided
4	Housekeeping is extreamly poor.	Housekeeping to be up-graded
5	Lot of loose wiring at production f;oor	To be dressed properly.
6	Wirings are very old	Replace old wiring by new wiring.
7	No exit signage	To be displayed.

Auditor

Reviewer

Signature & date Inspecting and Reporting Authority With seal

EXIDE INDUSTRIES LIMITED



EXECUTIVE SUMMARY

Part I & II

General Information

EXIDE INDUSTRIES LIMITED is situated at X-1, Block EP, Sector V, Salt Lake, Kolkata 700091, The structure is G + 1 & built up area is 495.42 sq meters, in total 0.4926 acres of land.

In the Ground floor there is electric meter room, server room cum UPS room, a pantry room, a reception area and office. The 1st floor has offices and conference room.

Building Plan was sanctioned in 1999.

There are two stair cases & no Lifts.

There is no central AC system in the building.

NOC from WBF&Es is not available and was applied on 1998

Occupancy Load as on audit date was found as

Existing -- 39 persons
Floating -- 02 persons

Part III

PROVISION OF MEANS OF ESCAPE

Stairs, Lifts & refuse area are available as follows

There are two nos Staircases available. There are no Lifts available.

No Evacuation Drill has been conducted so far.

There are no Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is only portable fire extinguishers.

Wet riser

No wet riser or downcomer or dry riser was found installed in the building. There is an open underground tank of approx 50,000 ltrs capacity in the backside of the building for fire only.

No Sprinkler system or Smoke detectors are installed in the building.

Alternate source of water is the Water body approx 100 mtr away

Total 8Nos Portable fire extinguishers are found deployed throughout the building.

PART V

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises ,near the Electrical installation

There is DG of 62.5 KVA at the ground floor outside the building as an alternate source of supply

PART VI

OTHER INFORMATION

NIL

NDITA- FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	X-1, Block EP	
2.	Premises Name (if any):	Exide Industries Limited,	
3.	Name of the owner /occupier/lessee	Exide Industries Limited	
4.	Permanent Address	X-1, Block EP, Sector V, Salt Lake, Kolkata - 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Leasehold from WBEIDC Ltd.,	
6.	Name of the Contact Person	Mr. S. K. Nag, Mr. Debraj Chatterjee (Chief of Projects)	
7.	Phone No of Contact Person	03323574988 94326 72638	
8.	E-mail	snag@exide.co.in	
9.	Purpose of the Land Use	Principal Use ☐	Residential
		Mixed Use	Educational
			Institutional
			Assembly
			Business
			Mercantile
			Industrial
			Storage
			IT/ITES ☐
10.	Plot Area(as informed to the Auditor)	0.4926 acres 1993.875 sqmtrs	
11.	Build up area(as informed to the Auditor)	495.42 sq meters	
12.	No of Floors	G + 1	
13.	Date of Sanction of Building Plan	Date: 18.6.99 vide sanctioned plan no V/BM/176	
14.	Whether P.O.C/OC received from local body?	No ☐	OC Issuing Authority Bidhan Nagar Municipality/ NDITA Dated: Not applicable
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	Top security	
16.	No of Security Personnel engaged	6 persons round the clock	
17.	Whether Records of Vehicles (No & type entering into the building are kept	Yes	
18.	Whether records of Visitors entering into the building are kept	Yes	
19.	Whether Metal detectors are used at the entry point	No	
20.	Whether Monitoring System through Close circuit TV available	No	

VEHICLES VOLUME		
21	No of Vehicles Engaged by the Organization	One
22	No of Vehicles for which parking space is available in the premises	Four
23	Whether parking space available for visitors within the premises	Yes, for one or two cars if space is vacant
24	Place where excess vehicles (if any) are parked	Outside road
GENERAL MAINTENANCE		
25	Garbage Clearing	Disposed to NDITA clearing system
26	Drainage System	Connected with NDITA drainage system
27	Maintenance of Road	Own, cemented road found satisfactory
TELEPHONE TOWER		
28	No of Towers	Nil
29	Statutory Clearance from AAI	Not applicable
30	Any Other Clearance	Not applicable

PART - II

31	Occupancy load	(Attach floor wise details separately if required)		
	Existing	G	1	Total
	a)Regular	25	14	39
	b)Floating	2		
32	Basement	Nil		

Part- III

Provisions of means of escape

33	Number of staircases --> Two			
	Stairs Number		#1	#2
	a)	Width of flight	1100 mm	660 mm
	b)	Tread width	275 mm	250 mm
	c)	Riser Height	140 mm	300 mm
	d)	Finish	Tiles	MS flats
	e)	Width of stair door (FCD)(glass door not FCD)	1200 mm	Nil
	f)	Height of stair head room	3657.6 mm	Open to sky
	g)	Height of stair handrail	900 mm	900 mm
	h)	Area & location & profile of Fire Refuge Area	Nil	Nil
	i)	Width and type of door leading to Fire refugee area	Not applicable	Not applicable
	j)	Pressurization of staircase	No	
	k)	Segregation of staircase	Yes	

34	Number of Lifts installed→ Nil		
	Lift-Numbers		
		#1	#2
	a)	Type of door	Not applicable
	b)	Fire resistance rating	Not applicable
	c)	Area of lift car	Not applicable
	d)	Capacity (no of persons)	Not applicable
	e)	Capacity(in kg)	Not applicable
	f)	Company	Not applicable
	g)	Is communication system, installed in the lift car?	Not applicable
	h)	Is a fireman's switch being installed in the car?	Not applicable
	i)	Pressurization of lift	Not applicable
	j)	Whether validity of "Form-C" from appropriate authority obtained?(If yes, attach a photocopy)	Not applicable
35	Presence of proper signage in all the exit route		No
36	Is it posted with illuminated signage?		No
37	Whether it is landing to fire assembly point?		No assembly point demarked
38	Any form of Public address system available?		No
39	Width form of internal road within the Premises?		No internal road is present but an open space approx 10 m x 20 m in front of the building
40	Width of the Entry / exit of Gate		5.8 meters, only one gate, the other gate is blocked by road side shop
41	Height of the Entry / exit of Gate		Open to sky

PART IV

Provision of Fire Safety Arrangement

42	Is any water reservoir for firefighting available? (at ground level / overhead)		Yes/No	U/G approx 50,000 ltrs O/H 2 x 2500 ltrs
	a)	If yes, specify the distance from the building	Approx. 20 meters	
	b)	If yes, specify the capacity (in litres) as approved by WBF & ES.	No NOC is available	
	c)	Specify the condition of the reservoir	Open underground tank covered with net, sides of the tank found not properly plastered	

43	Is any public or other water storage facility available nearby ?		Yes	Specify the distance from the building 100 meters
	a)	Is it readily accessible?	Yes	Condition and type of the reservoir Waterbody
44	Are internal hydrants being provided ?		No	Single or twin outlets.
	If so, please indicate no of hydrants in each floor		Not applicable	
45	Are first aid hose reels being provided? If so please indicate		No	No of hose reels on each floor : Not applicable
	a)	Is the hose reel connected directly to the riser or to the hydrant outlet?	No	Bore and length of hose reel tubing on each reel: Not applicable
	b)	Size (bore) and type of nozzle fitted to each hose reel	Not applicable	
45	Are fire hoses being provided near each hydrant? If so, please indicate		No	Type of hose: Not applicable Size of hose: Length of hose:
	a)	Total no of hoses provided near each hydrant	Not applicable	
46	Have wet risers/dry risers been provided?		No	
	If yes, please indicate the number of risers and internal diameter of each		Not applicable	
47	Has any down comer been provided? If so, please give details		No	
	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate		Not applicable	
	a)	Number of pumps		
	b)	Size of suction and delivery connection to each pump/Output/Head	Suction:	Delivery: Output of each pump: Max head against which the pump can operate at the output mentioned in:
	e)	Is the pump automatic in action?	Yes/No Not applicable	
	f)	Is the water pressure sufficient at max distance from the pump?	Yes/No Not applicable	
48.	Sprinkler system			
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.		No	
	a)	Type of detectors used	Nil	
49	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.		No	
50	Alarm receiving system		No	

51	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity Not indicated in the FEs but meter found in green	Yes	Number of FE Type/ Capacity ABC dry 2 kgs – 6 nos Clean Agent 2 kgs - 2 nos	8 nos
52	Location and population of the FEs adequate	No, some more FEs are required		
53	Are Emergency Fire Alarm being provided in each floor ?	No	No. of Fire Alarm: Not applicable Location of Fire Alarm:	
54	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	No		
55	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (min.twice a year)?	No, only the security personnel are doing mock test		
56	Verification of Floor –wise Architectural drawing of building in line with requirement of WBF&ES	Not applicable		
57	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not applicable		
58	Status of NOC from WBF&ES	No NOC is available. Application was done on 5.6.1998 but NOC was not obtained		

Part-V

Electrical, Cables and Ventilation

59	If the building is Centrally air –conditioned, please indicate,		No
	a)	Material used for construction of ducts and its fittings	Not applicable
	b)	Type of tinning used for ducts	Not applicable
	c)	Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d)	How the lagging is secured?	Not applicable
	e)	If false ceiling is there?	Not applicable
	f)	Material used for false ceiling	Not applicable
	g)	Is a separate AHU being provided in each floor	Not applicable
	H)	Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i)	Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j)	Will fire dampers be provided in AC duct?	Not applicable

60	Is there any standby source of electric supply being provided?		Yes	DG 62.5 KVA Capacity	UPS 20 KVA Capacity
	Is the back supply automatic?		No	Specify the functions that can be maintained simultaneously by such back ups ■Fire Pump ■Emergency Light ☐ ■Lift ■Partly to Office ☐ ■ Others ☐	
61	Location of switch- gears and transformers		NIL		
62	a)	Transformer capacity	Not applicable		
	b)	If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	Not applicable		
	c)	If outside, how far is it from the building?	Not applicable		
63	What precautions will be taken to prevent a possible fire in the transformers from spreading?		Not applicable		
64	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?		No passes are present , concealed wiring is done		
65	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?		No		
66	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?		Not applicable		
67	Whether natural ventilation is relied upon? If so, give details.		Yes, windows are provided with cross ventilation		
68	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?		No		
69	Whether mechanical ventilation is being coupled with automatic detection system?		Not applicable		
70	Whether the refuge area is being provided?		No_/_	On which floor: Not applicable Area of Fire Refuge Area: Width of Fire Refuge Area:	
71	Storage of combustibles materials near electrical equipment/fuse units.		No		
72	RCCBs available??		No		
73	Master switch in warehouses		Not applicable		

74	Proper cable joint procedures as per manufacturer	Yes
75	Earthing Pit Tested??	No
76	Use of MCB??	Yes
77	Bypassing of protection devices	Yes found in one place on ground floor
78	Deteriorated insulation	No
79	Selection, deployment of PFFs (Portable Fire Extinguishers)	Not adequate, no FE found near DG set, and server room
80	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	Not applicable as no passes are present
81	Tracking possibility	No
82	Unused opening in the panels, etc.	No
83	Possibility of ground fault/short circuit	No
84	Mechanical protection to cables	Yes
85	Loose terminations due to improper supports, crimping	No
86	Improper gland installation, wrong lug size	Not found
87	Over-rated uses, wrongly set protection relays, etc.	Not found
88	Switch yard and sub station	Not applicable
89	DG operation and maintenance	Yes AMC with Star Electric
90	Reliability of the fire hydrant system	Not applicable
91	Emergency preparedness and response	Nil
92	Availability of Evacuation plan	No
93	Mock drill conducted??	No
94	Awareness of the people??	Nil
95	Sample basis validation of smoke detection system??	Not applicable
96	Condition of Lightning Arrestor	Satisfactory, but continuity test not done
97	Periodic test of UPS system (as applicable)	Yes done by the manufacturer and AMC also with them – M/s.SwitchingAvo Electric Power Ltd.,
98	Handling of electrical work by competent electrician	Out sourced when required
99	Approval of receiving station, substation and DG	Not applicable
100	Storage if hazardous material, chemicals?	Not found
101	Use of signage?	Nil
102	Hydrants clear, access to public thorough fare open	Not applicable
103	Flame & work permits (as applicable)	Nil
104	Effective internal communication and public address system	No
105	Colour coding system of hazardous chemical gas lines etc.	Not applicable
106	Management structure, role of safety officer, fire department etc.	Not found
107	Procedure for incident investigation and control	No

PART- VI

Other Information

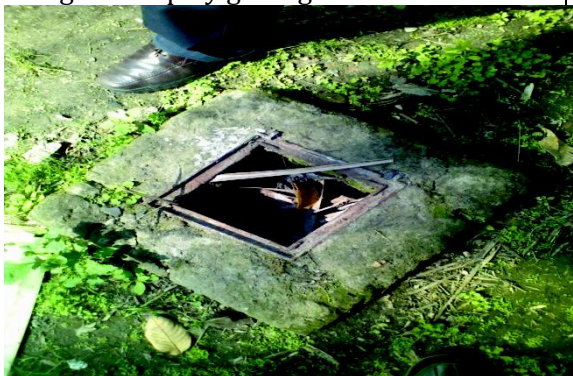
108.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	Yes/No	■ Deviation Not applicable
109.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	No	
	Is Trade License available??	Not available	
110	Name of the Insurance Company	Office with United India Insurance – Policy No. 100100/11/12/3100000234 upto 1.8.2013 DG set with National Insurance Corpn Policy No. 031100/44/12/51/30000021 upto 2.4.2013	
111	Remarks (if any) 1. No mock drill conducted 2. No evacuation drill conducted 3. No evacuation plan made and displayed 4. No signage are found 5. No assembly point demarked 6. No ELCBs or RCCBs are connected with the electrical circuits 7. No public address system is found 8. Earth pit and the lightning conductor is not tested for a long time 9. No MCPs or any other fire alarm system is found 10. No automatic fire detection system like smoke detectors are found 11. CC or OC is not available, NOC from WBF&ES is not available and Trade license is not available 12. The alternate fire exit staircase is found extremely small and risky		

Reviewer

Auditor

Signature & date of Inspecting and Reporting Authority With seal

NDITA
Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1	No mock drill is done	To be periodically conducted with all the employees
2	No evacuation drill is done	To be done periodically with all the employees with a proper evacuation plan which should be displayed on all the floors
3	No signage are found	Illuminated singage to be placed at all exit routes
4	No assembly point is demarked	Assembly point to be demarked and used in the evacuation drill
5	No ELCBs or RCCBs are found	To be connected in the distribution board of suitable ratings
6	MCPs or other fire alarms are not found	To be installed at all the floors
7	No automatic fire detection system is found	Smoke detectors to be installed at all the vulnerable points
8	CC, NOC and Trade license is not available	To be immediately applied for and obtained from the respective authorities
9	The alternate fire exit is found too small and extremely risky 	To be rectified accordingly to enable safe evacuation whenever necessary
10	Earth pit and lightning conductor is not tested	To be tested periodically and test reports to be kept
11	The number of fire extinguishers is not adequate and are not found in front of DG set and server room, also the date of expiry is not displayed	Some more FEs to be installed and the dates of expiry to be displayed on them
12	Some earth pits covers are missing and being filled up by garbage found 	All earth pit covers to be replaced and properly maintained

13	The underground storage tank for fire is not properly maintained 	To be maintained properly, side walls to be plastered and kept clean and free from weeds
14	Some loose connections and bypassing of electrical circuit found in server cum UPS room 	To be rectified immediately

Reviewer

Auditor

Signature & date of Inspecting and Reporting Authority With seal

DPSC LTD



EXECUTIVE SUMMARY

Part I & II

General Information

DPSC LTD. is situated at EPX1..2,3,Sector V Salt Lake City,Pin:700091.The ground floor has the Car parking space, Pump Room , Facility management room , office, Transformer room ., DG . 1st floor to 3rd floor are office of DPSC Ltd.

This building is situated in 2.1498 acres of land & built up area is approx.6350sqmtr

NOC of Fire Valid up to 04.09.2012, Ref WBFS/DG/FP/24/11/Bidhan-IT/203/05(223/05) dated 5.9.2011. Renewal application has been made

The date of OC(Occupation Certificate) is 12.9.08

Occupancy Load was found as

	Existing -- 290
Floating -- 20	

Part III

PROVISION OF MEANS OF ESCAPE

In the Building there are four stairs & Two Nos Liftsare available.

Evacuation Drill has not been conducted

There is Signage available in the EXIT Route

PART IV

PROVISION OF FIRE SAFETY ARRANGEMENT

Provision for Fire safety arrangement includes in the premises is portable fire extinguishersWet Riser, Sprinklers, MCPs, Smoke detectors along with CCTV surveillance.

There is a Fire tank of 220000Ltrcapacitiesavailable.

Alternate source of water is the Water body approx.800 mtr away from the building.

43 nos Portable fire extinguishers are found deploy at the Buildings at common areas& offices .

ELECTRICAL FIRE HAZARDS

There is no ELCB or RCCB in the distribution board found.

Generally no combustible material is stored in the premises ,near the Electrical installation.

The building has a DG-set of 380 KVA as an alternate source of power.

There are two nos transformers, one is oil cooled 500 KVA & other is 600 KVA dry type.

PART VI

OTHER INFORMATION

NIL

NDITA-FIRE SURVEY AND SAFETY AUDIT REPORT

General Information

PART – I

1.	Plot No/Premises No:	EPX ₁ - 2,3	
2.	Premises Name (if any):	DPSC LTD	
3.	Name of the owner /occupier/lessee	DPSC LTD	
4.	Permanent Address	EP X ₁ - 2,3,Sector-V salt lake city, Kolkata 700091	
5.	Ownership details : Freehold/Rental/Leasehold/Sublease/Any other	Lease hold	
6.	Name of the Contact Person	MrSanjoy Kumar Mukherjee	
7.	Phone No of Contact Person	98307 66627	
8.	E-mail	Sanjoy. mukherjee@dpscl.com	
9.	Purpose of the Land Use	Principal Use	Residential
Mixed Use ☐		Educational	
		Institutional	
		Assembly	
		Business ☐	
		Mercantile	
		Industrial	
		Storage	
		IT/ITES	
10.	Plot Area(as informed to the Auditor)	2.1498 Acres	
11.	Build up area(as informed to the Auditor)	6350sqMtr	
12.	No of Floors	G+3	
13.	Date of Sanction of Building Plan	Not Availabe	
14.	Whether P.O.C/OC received from local body?	12.9.2008 from Bidhan Nagar Municipality	
SECURITY SETUP DETAILS			
15.	Name of the SECURITY AGENCY engaged	DPSC + BCL	
16.	No of Security Personnel engaged	11 + 4 = 15nos	
17.	Whether Records of Vehicles (No & type entering into the building are kept	YES	
18.	Whether records of Visitors entering into the building are kept	YES	
19.	Whether Metal detectors are used at the entry point	YES	
20.	Whether Monitoring System through Close circuit TV available	NO	
VEHICLES VOLUME			
21.	No of Vehicles Engaged by the Organisation	15 nos	
22.	No of Vehicles for which parking space is available in the premises	25 Nos	
23.	Whether parking space available for visitors within the premises	NO	
24.	Place where excess vehicles (if any) are parked	Outside Road	

GENERAL MAINTENANCE		
25.	Garbage Clearing	NDITA Garbage clearing system
26.	Drainage System	Connected to NDITA Drainage system
27.	Maintenance of Road	Internal road maintained by owner
TELEPHONE TOWER		
28.	No of Towers	NIL
29.	Statutory Clearance from AAI	Not applicable
30.	Any Other Clearance	Not applicable

PART - II

V= Vacant

31.	Occupancy load	(Based on Estimates)				
	Existing	G	1	2	3	Total
	a)Regular	70	100	100	20	290
	b)Floating					20
32.	Basement	NO				

Part- III

Provisions of means of escape

33.	Number of staircases --→FOUR NOS					
	Stairs Number		#1	#2	#3	#4
	a)	Width of flight	1320 mm	1390 mm	1390 mm	1400 mm
	b)	Tread width	260 mm	260 mm	260 mm	260 mm
	c)	Riser Height	190 mm	150 mm	150 mm	140 mm
	d)	Finish	Marble	Kota stone	Kota stone	Kota stone
	e)	Width of stair door (FCD)-	990mm	870 mm	1050 mm	900mm
	f)	Height of stair head room	12 ft	12 ft	12 ft	12 ft
	g)	Height of stair handrail	700 mm	880 mm	880 mm	900 mm
	h)	Area & location & profile of Fire Refuge Area	NIL			
	i)	Width and type of door leading to Fire refugee area	Not applicable			
	j)	Pressurization of staircase	NO			
	k)	Segregation of staircase	YES			
34.	Number of Lifts installed→Two					
	Lift-Numbers		#1	#2		
	a)	Type of door	Metallic	Metallic		
	b)	Fire resistance rating	2 hrs	2 hrs		
	c)	Area of lift car	1000 mm X 1200 mm	1700 mm X 1400 mm		
	d)	Capacity (no of persons)	8	20		
	e)	Capacity(in kg)	544	1360		
	f)	Company	KONE	KONE		

	g)	Is communication system, installed in the lift car?	YES	YES
	h)	Is a fireman's switch being installed in the car?	YES	YES
	i)	Pressurization of lift	NO	
	j)	Whether validity of "Form-C" from appropriate authority obtained? (If yes, attach a photocopy of the same)	Yes valid upto 18.11.2013	
35.		Presence of proper signage in all the exit route	NO	
36.		Is it posted with illuminated signage?	NO	
37.		Whether it is landing to fire assembly point?	Fire assembling point is not identified	
38.		Any form of Public address system available ?	YES	
39.		Width form of internal road within the Premises?		
40.		Width of the Entry / exit of Gate		
41.		Height of the Entry / exit of Gate	Open to sky	

PART IV

Provision of Fire Safety Arrangement

42.	Is any water reservoir for firefighting available? (at ground level / overhead)	Yes	U/G220000ltr O/H 60000 ltr
	a) If yes, specify the distance from the building	Adjacent	
	b) If yes, specify the capacity (in litres)as approved by WBF & ES.	None	
	c) Specify the condition of the reservoir	Satisfactory	
43.	Is any public or other water storage facility available nearby ?	Yes	■specify the distance from the building ---- 800Mtr
	a) Is it readily accessible ?	Yes	■condition and type of the reservoir—Water body
44.	Are internal hydrants being provided ?	Yes	
	If so, please indicate no of hydrants in each floor	One in each floor	
45.	Are first aid hose reels being provided ? If so please indicate	Yes.	
	a) Is the hose reel connected directly to the riser or to the hydrant outlet?	YES, directly to the riser	
	b) Size (bore) and type of nozzle fitted to each hose reel	20 mm,30 mtr	

46.	Are fire hoses being provided near each hydrant? If so, please indicate	yes																																																			
	a) Total no of hoses provided near each hydrant	one																																																			
47.	Have wet risers/dry risers been provided?	Wet riser provided																																																			
48.	If yes, please indicate the number of risers and internal diameter of each	Main -2 nos + one Sprinkler riser																																																			
49.	Has any down comer been provided? If so, please give details	No																																																			
50.	Are stationary fire pumps being installed for pressurizing the wet riser? If so, please indicate	Main pump -60 HP Stand by pump -60 HP Jockey pump-15 HP																																																			
	a) Number of pumps	4nos																																																			
	b) Size of suction and delivery connection to each pump/Out put/Head	Suction 150 mm & Delivery is 150 mm Discharge 125 M ³ /Hr Head Height- 70Mtr																																																			
	e) Is the pump automatic in action?	YES																																																			
	f) Is the water pressure sufficient at max distance from the pump?	Could not be checked as there is no pressure gauge at the top																																																			
51.	Sprinkler system	YES																																																			
	Is the building being equipped with automatic fire detection and alarm system? If so, please indicate with details.	YES, Smoke detectors																																																			
	a) Type of detectors used	Addressable smoke detectors																																																			
52.	Are manual call boxes being installed in the building for raising an alarm in the event of outbreak of a fire? If so, please give details.	YES in each floor																																																			
	a) Alarm receiving system	Yes																																																			
53.	Are appropriate Fire Extinguishers (FE) available depending on materials being stored or installed at various locations? If yes, indicate Indicate whether the Fire extinguishers bear the ISI certification mark? Date of Validity	<table> <tr> <td>Yes</td><td>Number of FE</td><td>43nos</td></tr> <tr> <td>Yes</td><td>Type/ Capacity</td><td>7 nos.</td></tr> <tr> <td>Expired</td><td>DCP(5 Kg)-----</td><td>2No.</td></tr> <tr> <td></td><td>-----</td><td>5Nos</td></tr> <tr> <td></td><td>CO2(4.5Kg)---</td><td>1 no</td></tr> <tr> <td></td><td>-----</td><td>8 nos</td></tr> <tr> <td></td><td>Water (9 Ltr)</td><td>13 nos</td></tr> <tr> <td></td><td>-----</td><td>6 nos</td></tr> <tr> <td></td><td>DCP)30 Kg)---</td><td>1 no</td></tr> <tr> <td></td><td>----</td><td></td></tr> <tr> <td></td><td>CO2(2.0Kg)---</td><td></td></tr> <tr> <td></td><td>-----</td><td></td></tr> <tr> <td></td><td>ABC (1 Kg)----</td><td></td></tr> <tr> <td></td><td>-</td><td></td></tr> <tr> <td></td><td>ABC (2 Kg)---</td><td></td></tr> <tr> <td></td><td>--</td><td></td></tr> <tr> <td></td><td>Foam -----</td><td></td></tr> </table>	Yes	Number of FE	43nos	Yes	Type/ Capacity	7 nos.	Expired	DCP(5 Kg)-----	2No.		-----	5Nos		CO2(4.5Kg)---	1 no		-----	8 nos		Water (9 Ltr)	13 nos		-----	6 nos		DCP)30 Kg)---	1 no		----			CO2(2.0Kg)---			-----			ABC (1 Kg)----			-			ABC (2 Kg)---			--			Foam -----	
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	Foam -----																																																				
	Location	At common areas& Electrical Installations																																																			
54.	Are Emergency Fire Alarm being provided in each floor ?	YES																																																			

55.	Indicate whether appointment of skilled Fire Fighting Person within the round the clock?	Trained persons are there
56.	Conducting periodical Mock Test for Firefighting arrangements at an interval of 6 months (mintwice a year)?	YES but No record is available
57.	Verification of Floor -wise Architectural drawing of building in line with requirement of WBF&ES	Not available
58.	Verification of as installed Circuit diagram of Fire detection & Alarm system of building in line with the requirements of WBF&ES	Not available
59.	Status of NOC from WBF&ES	Valid up to 04.09.2012, Ref WBFS/DG/FP/24/11/Bidhan-IT/203/05(223/05) dated 5.9.2011. Renewal application has been made

Part-V

Electrical, Cables and Ventilation

60.	If the building is Centrally air -conditioned, please indicate,	■No Central AC
	a) Material used for construction of ducts and its fittings	Not applicable
	b) Type of tinning used for ducts	Not applicable
	c) Type of lagging used, if any for insulating any portion of the duct	Not applicable
	d) How the lagging is secured?	Not applicable
	e) If false ceiling is there?	Not applicable
	f) Material used for false ceiling	Not applicable
	g) Is a separate AHU being provided in each floor	Not applicable
	H) Whether automatic shutdown of AHU is coupled with detection system?	Not applicable
	i) Is the ducting for each floor effectively isolated or is it continuous on more than one floor?	Not applicable
	j) Will fire dampers be provided in AC duct?	Not applicable
61.	Is there any standby source of electric supply being provided?	YES. DG of 380 KVA
	Is the back supply automatic?	NO. Operates manually
62.	Location of switch- gears and transformers	IN side the building
63.	a) Transformer capacity	500 KVA + 600 KVA
	b) If inside, whether housed in separate compartments, effectively separated from each other and from other portions of the building by a 4-hr fire resistance wall?	YES
	c) If outside, how far is it from the building?	Not applicable

64.	What precautions is taken to prevent a possible fire in the transformers from spreading?	Fire Extinguishers
65.	Whether electrical cables, telephone cables, dry/wet risers /down-comers pass through a floor or a wall, will the spaces (apertures) around the cables/pipes be effectively sealed /plugged with non-combustible, fire resisting material?	Not applicable
66.	Is Earth Leakage Circuit Breaker (ELCB) in very distribution board?	NO
67.	Whether fire retardant cables are used for boiler, laundry equipment, kitchen/any other?	Not applicable
68.	Whether natural ventilation is relied upon? If so, give details.	Yes
69.	Whether mechanical ventilation is being proposed? If so, give details indicating number of air changes per floor?	NO
70.	Whether mechanical ventilation is being coupled with automatic detection system?	NO
71.	Whether the refuge area is being provided?	NIL
72.	Storage of combustibles materials near electrical equipment/fuse units.	NO
73.	RCCBs available??	None found
74.	Master switch in warehouses	NO
75.	Proper cable joint procedures as per manufacturer	YES
76.	Earthing Pit Tested??	Records are not available
77.	Use of MCB??	YES
78.	Bypassing of protection devices	None found
79.	Deteriorated insulation	None found
80.	Selection, deployment of PFFs (Portable Fire Extinguishers)	YES
81.	Sealing of cable passes, openings, baffle walls (Passive Fire Protection)	NO
82.	Tracking possibility	Yes
83.	Unused opening in the panels, etc.	None found
84.	Possibility of ground fault/short circuit	None found
85.	Mechanical protection to cables	Yes.
86.	Loose terminations due to improper supports, crimping	None found
87.	Improper gland installation, wrong lug size	None found.
88.	Over-rated uses, wrongly set protection relays, etc.	NO Protection relay
89.	Earthing layout & it's effectiveness	Not available
90.	Switch yard and sub station	No
91.	DG operation and maintenance	YES
92.	Reliability of the fire hydrant system	YES
93.	Emergency preparedness and response	None found
94.	Availability of Evacuation plan	None found
95.	Mock drill conducted??	No record is available
96.	Awareness of the people??	Average

97.	Sample basis validation of smoke detection system??	YES
98.	Storage if hazardous material, chemicals??	NO
99.	Use of signage??	NO
100.	Hydrants clear, access to public thorough fare open	YES
101.	Flame & work permits (as applicable)	None found
102.	Effective internal communication and public address system	YES
103.	Colour coding system of hazardous chemical gas lines etc.	NOT applicable
104.	Management structure, role of safety officer, fire department etc.	NO
105.	Procedure for incident investigation and control	NO

PART- VI

Other Information

106.	Is there any deviation from the existing recommendation, if any, already been provided by Fire & Emergency Services	■Yes. From NOC issued on 13.1.13
107.	Particulars of premises or part of premises used for storage, use, process of substances require Fire License	NO
108.	Is Trade License available??	Not available
109.	Name of the Insurance Company	With ICICI Lombard
110.	Remarks (if any) 101. No assembly point is identified 102. There is no pressure gauge at the top floor of the hydrant 103. No record of fire Mock drill & Evacuation is available 104. There is no signage is available for the Emergency Exit 105. Fire Extinguisher refilling date has expired 106. At places Fire hoses are missing in FHC	

NDITA

Observation tracking report (Summary Sheet)

Sl.No	OBSERVATIONS	RECOMMENDATIONS
1.	No assembly point is identified	Assembly point is to be identified
2.	There is no pressure gauge at the top floor of the hydrant	pressure gauge is to be installed at the top floor of the hydrant
3.	No record of fire Mock drill & Evacuation is available	Records are to be maintained
4.	There is no signage is available for the Emergency Exit	Proper Illuminated signage to be provided for the emergency route
5.	Fire Extinguisher refilling date has expired	To be refilled & tagged immediately
6	At places Fire hoses are missing in FHC	Fire Hoses are to be replaced

Auditor

Reviewer

Signature & date Inspecting and Reporting Authority With seal

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