MINUTES OF 63rd MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD DURING 19th MARCH, 2021.

VENUE: Through Video Conferencing

DATE: 19th March, 2021

PROCEEDINGS

63.1 Opening Remarks of the Chairman: The Chairman and Members extended warm welcome with each other and other participants of the meeting. Thereafter, the meeting was opened to start proceeding as per the agenda adopted for this meeting.

63.2 Confirmation of Minutes of 62nd Meeting of Expert Appraisal Committee (Infrastructure-2) held on 1st March, 2021.

The Expert Appraisal Committee (Infrastructure-2), hereinafter called the EAC, was informed regarding the representation received by the Secretariat in the Ministry from Pro Vice Chancellor, Delhi University, regarding the project proposal by M/s. Young Builders Pvt. Ltd. considered in 62nd meeting, which has been thereafter shared with the Committee members and the project proponent. The EAC decided to take point wise reply on the representation from the project proponent before considering the proposal again in its forthcoming meeting. The EAC was informed that no other representation has been received regarding projects considered in 62nd meeting. Minutes of 62nd Meeting of EAC were confirmed. The typo errors, if any noticed during processing of these case may be corrected in the light of facts and figures provided by the respective Project Proponent.

63.3 Consideration of Proposals: The EAC considered proposals as per the agenda adopted for 63rd meeting. The details of deliberations held and decisions taken in the meeting are as under:

AGENDA ITEM NO. 63.3.1

Construction of New Campus of Dr. B.R. Ambedkar University Delhi with built area of 2,83,690 sqm at Dheerpur Campus, New Delhi developed by M/s. Dr.B.R. Ambedkar University Delhi - Environmental Clearance

(IA/DL/MIS/193020/2020; F.No. 21-47/2020-IA-III)

1. The Project Proponent (M/s. Dr. B. R. Ambedkar University Delhi) along with his consultant 'M/s. Atmos Sustainable Solutions Pvt. Ltd.', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The EAC took note of following key parameters and salient features of the project, as presented during the meeting; provided in the brief and application for this project:

- i. The project is located at Dheerpur Campus, New Delhi, with co-ordinates 28°43'17.80"N Latitude and 77°12'30.92"E Longitude.
- ii. The project is new. The Terms of Reference for preparation of Environment Impact Assessment (EIA) Report and Environment Management Plan (EMP) was finalised and issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC) vide letter No. 21-47/2020 dated 29th October, 2020.
- iii. This is a Proposed New Campus of Dr. B.R. Ambedkar University Delhi. Ambedkar University Delhi (AUD) was established by Government of NCT of Delhi in 2008 for providing higher education in Social Sciences, Liberal Arts and Humanities. The total plot area is 2,00,000.00 sqm; FSI area is 1,76,987.00 sqm; and total proposed construction (Built-up) area is 2,83,690.00 sqm. Maximum height of the building is 108.00 metre. Details are as follow:

Plot Area	2,00,000.00 sqm
FSI/FAR area	1,76,987.00 sqm
Built Up Area	2,83,690.00sqm

s.No	Particulars	Built-up Area (sqm)
1.	Net Plot Area (A)	2,00,000.00
2.	Area for Academic INCL Administration (@45 % of Net Plot Area)	90,000
3.	Area for Residential Building (@ 25% of Net Plot area)	50,000
4.	Area for Sports & Cultural Zone (@15% of Net Plot area)	30,000
5.	Area for Parks and Landscape Green Area (@15% of Net Plot area)	30,000
6.	Proposed Ground Coverage For Academic @23.60% of Land for Academic INCL Administration	30,140.00 21,240.00
	For Residential @11.46% of Land for Residential Building •	7268.00 1,632.00
	For SC area @ 10% of Land for Sports & Cultural Zone ,	1,002.00
7.	Proposed FAR For Academic (@ 1.24 of Land for Academic INCL Administration)	1,76,987.00 1,11,229.00
	For Residential (@ 1.27 of Land for Residential Building)	63,388.00 2,370.00

	D 0 1 0 0 1 17 (0 0 00 CT 1	
	For Sports & Cultural Zone @ 0.08 of Land	
	for Sports & Cultural Zone)	
	-	
8.	Proposed Non-FAR	1,06,703.00
0.	<u> </u>	1 * *
	For Academic (@ 0.53 of Land for Academic	57,103.00
	INCL Administration)	
	For Residential @ 0.46 of Land for	49,235.00
	Residential Building)	365.00
	For Sports & Cultural Zone @ 0.003 of	
	Land for Sports & Cultural Zone)	
9.	Built up Area	2,83,690.00
9.	Built up Arca	2,83,090.00
10.	Net Open Area	1,69,860.00
1.1	T 1 A (C FO 000/ C N + C	00.000
11.	Landscape Area (@ 52.98% of Net Open	90,000
	Area)	
12.	Maximum Height	
	Academic INCL Administration	37 mtrs
	Residential Building – (Bock-1 Type – V	108 mtrs
	0 ,	100 11113
	&VI)	
	Sports and Cultural	9mtrs
	Building Details for Proposed P	HASE – I
13.	RESIDENTIAL ZONE	Floor Area/ Dwelling
		Unit/ Rooms
14	Hostel	-
	Single Bedded	252
	Double Bedded	252
1 [232
15.	R1 Tower (2BHK)	
	Type-2	22 Unit
	Type-3	22Unit
	Guest Room	26Unit
	Transit Faculty Rooms	42Unit
16	R2 Tower (2BHK)	
10.	Type - 2	38Unit
	Type - 3	38Unit
1 1		
17.	R3 Tower (2BHK) Type - 4	50Unit
18	R4 Tower (3BHK)	40Unit
	Type - 5	10Unit
	Type - 6	
10		O1 Unit
19.	Club Building	01 Unit
20.	V.C Bungalow, Type - 7	01 Unit
2.1	VVIP Guest House	
	Guest House rooms	7Unit
		5Unit
22	Transit Faculty rooms	
22	ACADEMIC BUILDING	Floor Area/ Dwelling
1		. TT
		Unit/ Seats

23.	Academic Block	4,785sqm
24.	Library Block	16,810sqm
25.	Cafeteria	500 Seats
26.	Exhibition/Convention Hall	7,000sqm
27.	Auditorium	1000 Seats
28.	Sports Block & Health Centre	2500 sqm
29.	Shopping Cum Utilities Complex	750 sqm

- iv. During construction phase, total water requirement is expected to be 7,830.97ML which will be met by procuring pre-treated water from existing 318 MLD capacity CSTP located at Model Town, located approx. 1 km away from the proposed project site. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- v. During operational phase, total water demand of the project is expected to be approx. 1,292KLD and the same will be met by 732KLD fresh water from Delhi Jal Board (DJB). Recycled water demand will be 560KLD. The domestic wastewater generation will be 700KLD which will be treated through sewage treatment plant (STP) of capacity 850KLD. The treated domestic wastewater shall be recycled and re-used within the premises. The treated sewage will be reused for flushing (384KLD), greenbelt development (139KLD) and makeup fresh water would be needed for greenbelt development (131KLD), DG cooling (27KLD) and For Filter back wash (10KLD). Surplus treated water generated at site shall be reused within the premises.
- vi. About 3.38TPD solid wastes will be generated in the project. The biodegradable waste (2.029TPD) will be processed in Organic Waste Converter (OWC) and the non-biodegradable waste generated (1.014TPD) will be handed over to authorized local vendor.
- vii. Total power requirement during operation phase is 2.976 MW and will be met from TATA Power. In case of power failure, For the Energy Storage System (ESS)-1 max. demand load 1,854KW is DG sets of -2*1250kVA & For the ESS-2 max. demand load 1,899KW is DG sets of -2*1250kVA capacities for each will be provided as power back-up for building.
- viii. Roof top rainwater of buildings will be collected in 34 Rainwater harvesting storage pits after filtration.
- ix. Parking facility for 2,782 ECS is proposed to be provided against requirement of 2,779 ECS.
- x. Proposed energy saving measures would save about 10% of power.
- xi. Total green area proposed for project is 90,000 sqm (52.98% of Open Area). 424 trees are existing on site of which 84 trees are to be cut / transplanted and 340 trees shall be retained. Compensatory plantation of 840 trees shall be done. A combination of evergreen and ornamental, palms, shrubs

- and ground covers planted along the sides of the road and in open space and set back area within the complex layout.
- xii. The project is not located within 10 km of Eco Sensitive areas. Asola Bhatti Wildlife Sanctuary is located at 25.88km; Okhla bird sanctuary is located at 21.71km.
- xiii. NBWL Clearance is not required.
- xiv. Forest Clearance is not required.
- xv. No court case is pending against the project.
- xvi. Investment/Cost of the project is Rs.1,200 Crores.
- xvii. Employment potential- During construction phase, approx. 300-350 persons shall get employment.
- xviii. Benefits of the project –Educational Institution, Wastewater treatment, Landscape enhancement, energy conservation, parking management, rainwater harvesting
 - **2.** The EAC also noted that the project/activity is covered under category 'B' of item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Delhi, the proposal required appraisal at Central level by sectoral EAC.
 - **3.** The EAC expressed concern at the fact that only project engineer was present on behalf of the PP. The EAC was of the opinion that some senior person should be present to represent the PP who may be in a position to provide the necessary commitment in response to the concerns raised by the EAC.
 - **4.** The EAC noted the EIA Report incorrectly states that owing to existing moderate levels of particulate matter, the study area is not much affected by air pollution problems, when the baseline data clearly shows that the level of particulate matter is well above the permissible limits. Also, no analysis /modelling has been done to study the incremental impact on air pollution due to the proposed project. The committee expressed displeasure with the consultant for repeated inconsistencies and recommended to issue show cause notice to consultant.
 - **5.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions, recommended to defer decision on the project and asked the PP to submit the following:
 - (i) To revise the EIA report w.r.t errors/inconsistencies and also in terms of proper assessment of air pollution modelling w.r.t incremental impact.
 - (ii) To prepare the site-specific action plan for air pollution control synchronized with graded action plan of air pollution in NCR.
 - (iii) To prepare water management plan to follow the best conservation practices during construction and post construction stages

AGENDA ITEM NO. 63.3.2

Expansion of Piccadily Hotel with increase in built up area from 34067.31 Sqm to 41140.57 Sqm at District Center Janakpuri Delhi by M/s. Piccadily Hotels Private Limited - Environmental Clearance

(IA/DL/MIS/191204/2006; F.No. 21-18/2021-IA-III)

- **1.** The PP (M/s. Piccadily Hotels Private Limited) along with his consultant M/s. Ind Tech House Consult made a presentation on the key parameters and salient features of the project to the EAC (Infra-2).
- **2.** The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:
 - i. The project is located at District Center, Janakpuri, Delhi with coordinates 28°37'44.13" N Latitude and 77°04'42.76" E Longitude.
 - ii. The proposal is for 'Expansion'.
- iii. Earlier, Environment Clearance was obtained from MoEFCC vide letter No. J-12011/19/2006-IA(CIE) dated 21.05.2007. The project is an existing 5-Star Hotel.
- iv. Site is earmarked for commercial development as per Delhi Master Plan 2021.
- v. The total plot area is 11462.5 sqm. For the proposed expansion, FSI area is 3341.63 sqm and total construction (Built-up) area of 7073.27 sqm. After expansion, total built-up area of the project will increase from 34067.31 sqm to 41140.57 sqm.
- vi. The project presently comprises of one Building/block. The proposed expansion will involve addition of two floors to existing building/blocks. After expansion, total no. of floors will be 2B+G+13.
- vii. Total 85 Rooms will be added to existing 235 rooms. In addition to that, existing lobby & shopping area at Ground floor will be converted to two banquet Halls. Maximum height of the building will be 54.25 m.
- viii. The details of the building are given below:

Description	As per EC	Existing FAR	Non-FAR	Proposed FAR	Proposed Non-FAR
Ground Floor	3334.26	2864.91	469.35	0	
First Floor	3259.51	2341.3	918.21	0	
Second Floor	2504.83	1973.37	531.46	0	
Third Floor	1862.37	1661.97	200.4	0	
Fourth Floor	1642.47	1393.87	248.6	0	
Fifth Floor	1536.17	1277.15	259.02	0	
Sixth Floor	1536.17	1277.15	259.02	0	
Seventh Floor	1536.17	1277.15	259.02	0	

Eighth Floor	1536.17	1277.15	259.02	0			
Ninth Floor	1536.17	1372.67	163.5	0			
Tenth Floor	1536.17	1372.67	163.5	0			
Eleventh Floor	868.85	776.38	92.47	596.29	71.02		
Twelfth Floor				1372.67	163.5		
Thirteenth Floor				1372.67	163.5		
Basement 1 (sqm)			5641.96				
Basement 2 (sqm)			5736.39				
Service area (sqm)					3333.26		
Total	22689.31 + Basements (5641.96+ 5736.39) 34067.31 sqm	18865.74	15201.92	3341.63	3731.28		
Total Built-up area (sqm)	1 1 1 1 1 1						

S. No.	Particulars	Existing	As per proposed Expansion	Total after expansion
1	Plot area	11400 Sqm	Nil	11400 Sqm
2	Built-up area	34067.31 Sqm	7073.27 Sqm	41140.57 Sqm
3	Rooms	235 Nos.	85 Nos.	320 Nos.
4	Floors	2B+G+11	2 Nos.	2B+G+13
5	Parking	385 ECS	75 ECS	460 ECS
6	Project Cost	88 Cr.	10 Cr.	98 Cr.
7	STP	200 KLD	NIL	200 KLD
8	ETP	40 KLD	NIL	40 KLD
9	Power Requirement	3125 KW	NIL	3125 KW
10	DG sets	1500 KVA	NIL	1500 KVA
11	RWH	4 Nos.	NIL	4 Nos.

ix. During construction phase, total water requirement is expected to be approx. 15 KLD which will be met from tanker supply. During the construction phase, soak pits and septic tanks will be provided for

- disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.
- x. During operational phase, total water demand for after expansion of the project is expected to be 359.75 KLD. Total fresh water demand will be 185.26 KLD which will be met from municipal supply and balance 174.49 KLD recycled water demand will be met by treated water from on-site STP. The sewage generated from the project during the operation phase will be 165 KLD which will be treated in existing onsite STP of 200 KLD. There is also an existing ETP of 40 KLD capacity for the treatment of wastewater generated in the laundry (28.8 KLD). The treated water from both ETP and STP shall be used to meet the recycled water demand for flushing (approx.41.45 KLD), HVAC (approx.129.6 KLD) and for gardening (approx. 3.44 KLD) purposes. Zero liquid discharge (ZLD) is proposed.
- xi. About 0.30 TPD solid waste will be generated in the project. The biodegradable waste (0.15 TPD) will be processed in onsite Organic Waste Converter (OWC) of 60 kg/day capacity already installed at site and the non-biodegradable waste generated (0.15 TPD) will be handed over to authorized local vendor. The sludge generated from STP will be dewatered/dried and used as manure.
- xii. The total power requirement during construction phase is 02X100 kVA and will be met from DG set and total power requirement during operation phase is 3125 kW and will be met from BSES Rajdhani Power Ltd. One DG Set of 1500 kVA has been provided as backup power supply. No additional power load is required for expansion part.
- xiii. Four (04) Rain water harvesting pits already constructed & well functional at site for ground water recharge.
- xiv. Parking facility for 460 ECS (385 ECS existing + 75 ECS proposed) is proposed to be provided against the requirement of 458 ECS (according to local norms).
- xv. 30 KWp capacity SPV & 10 KLD solar water heating system is provided for energy conservation. Proposed energy saving measures would save about approx. 6.8% of power.
- xvi. The project is not located in Critically Polluted area.
- xvii. The project is not located within 10 km of Eco Sensitive areas. NBWL Clearance is not required.
- xviii. No court case is pending against the project.
- xix. Tree cutting is not involved in this project. About 3439 sqm (30% of total plot area) is earmarked for green belt development. Total 1192 trees are existing at site. In addition to this green area, project proponent shall also maintain the nearby DDA/ Metro park at Janakpuri.
- xx. Certified compliance report has been obtained from Integrated Regional Office, Jaipur of MoEF&CC vide File No. 4/296/07/SPL-19 dated 25.02.2021.
- xxi. Expected timeline for completion of the project: 31.03.2026
- xxii. Investment/Cost of the expansion project is Rs. 10 Crores.
- xxiii. Employment potential: Approx. 60 labourers during construction phase and 83 staff during operation phase.

- xxiv. Benefits of the project: The project is leading to development of the area by providing employment of the local people during construction and operation phase
 - **3.** The EAC (Infra-2) also noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Delhi, the proposal is appraised at Central level by sectoral EAC.
 - **4.** The EAC also noted that the PP has obtained certified compliance report from MOEFCC Integrated Regional Office, Jaipur vide File No. 4/296/07/SPL-19 dated 25.02.2021. Most of conditions are complied, however, authorization under the Hazardous Waste Rules, 2016 has not been obtained from Delhi Pollution Control Committee (DPCC) for disposal of D.G. Set waste oil. The PP stated that authorisation is not required for the concerned activity as per DPCC.
 - **5.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity while considering for accord of environmental clearance:
 - i. Compliance report /reply to observations of IRO shall be submitted within three months and closure report shall be obtained from concerned regulatory authority.
 - ii. Fresh water requirement from local authority shall not exceed 185.26 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
 - iii. As proposed, waste water shall be treated in an onsite STP of total 200 KLD capacity and ETP of 40 KLD capacity. Atleast 174.49 KLD treated water from the STP and ETP shall be recycled and re-used for flushing (approx.41.45 KLD), HVAC (approx.129.6 KLD) and for gardening (approx. 3.44 KLD).
 - iv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 3439 sqm. As proposed, at least 1192 trees to be maintained during the operation phase of the project. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Plantations to be ensured species (cut) to species (planted). The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
 - v. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of

- treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- vi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, four RWH pits shall be maintained for rain water harvesting after filtration.
- vii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.
- viii. PP should explore enhancing energy conservation up to at least 10%.
- ix. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- x. Smog gun (2 nos) shall be provided to curb air pollution at site during construction phase as committed and installing one air pollution monitoring station at site.
- xi. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM No. 63.3.3

Expansion of "Aakash Healthcare" Hospital with increase in built up area from 26,120.81 sqm to 35,133.00 sqm located at Road No. 201, Dwarka, Sec-3, New Delhi by M/s Aakash Healthcare Pvt. Ltd. - Environmental Clearance

(IA/DL/MIS/184228/2015; F.No. 21-19/2021-IA-III)

- 1. The PP (M/s. Aakash Healthcare Pvt. Ltd.) along with his consultant M/s. Perfact Enviro Solutions Pvt. Ltd made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:
 - i. The project is located at Road No. 201, Dwarka, Sec-3, New Delhi with coordinates Latitude 28°36'19.09"N& Longitude 77°3'13.02"E
 - ii. The proposal is for Expansion
- iii. The project has been granted Environment Clearance vide file no. F.No.21-204/2014-IA.III dated 13.08.2015 and amendment in Environment Clearance vide letter no. SEIAA-D/C-358/EC-353/2016 dated 23.03.2018. Now, due to amendment in Delhi Unified Building Bye laws (UBBL), vertical expansion has been proposed.

iv. The total plot area of the project is 6000 sqm out of which 2255.736 sqm will be utilized as Ground Coverage. After the proposed expansion, the total proposed FAR Area will be 12,412.89 sqm and the Non-FAR Area will be 13,062.21 sqm. The total basement area of the project will be 9657.90 sqm. Hence the total built-up area of the project after expansion will be 35,133.00 sqm. The maximum no. of floors after expansion will be 3B + G + 8 with a maximum height of 38.2 m. No construction has been commenced at the site for the proposed expansion. The details of the building are as follows:

Particulars	Unit	Existing details (as per EC dt. 13-08-2015 & amendment dt. 23.03.2018)	New proposed	Total after expansion
Cost of the Project	Crores	187.53	43	230.53
	1	REA DETAILS		<u> </u>
Total Plot Area	sqm	6000	-	6000
G.C (Permissible)	sqm	1800	600.00	2400
G.C (Achieved)	sqm	1799.960	455.776	2255.736
FAR Permissible	sqm	12000	10500.000	22500
FAR Achieved (A)	sqm	11566.56	*4579.81	12412.89
Other non-FAR area (service floor)	sqm	4896.35	5510.81	10407.16
Service floor area	sqm	-	2655.05	2655.05
Total Non-FAR area (B)	sqm	4896.35		13062.21
Basement -1	sqm	3219.30	-	3219.30
Basement -2	sqm	3219.30	_	3219.30
Basement -3	sqm	3219.30	ı	3219.30
Total basement Area (C)	sqm	9657.90	1	9657.90
Built-up Area (A+B+C)	sqm	26120.81		35133.00
Total Green Area	sqm	631.10	-	631.00
Total Open & Road Area	sqm	3217.94	_	2731.264
Surface parking area	sqm	351.00	-	382.00

NT 1 C	T			
Number of Basements	No.	3	-	3
Maximum No. of Floors	No.	3B+G+7	1	3B+G+8
Max. height of building (upto terrace level)	m	35.8	2.4	38.2
Particulars	Unit	Existing details (as per EC dt. 13-08-2015 & amendment dt. 23.03.2018)	(as per EC dt. 13-08-2015 & New amendment proposed dt.	
	P	OPULATION		
Total no. of beds	No.	200	60	260
No. of OPD patients, Floating Patients	No.	900	270	1170
Staff	No.	675	120	795
Administrative staff	No	-	70	70
Multipurpose hall / gym (450 Sq.m)	No	-	321	321
Dining Area (100 Sq.m)	No	-	56	56
Visitors	No	200	-	200
Total Population	No	1975	897	2872
	SER	PVICE DETAILS		
Total Power load	kVA	2295.21	670	2965.21
No. of DG sets	No. (in kVA)	2 X1250 KVA	1 x 1000 kVA	2x 1250 KVA and 1x 1000 KVA
No. of Rain water Harvesting pits	No.	2	-	2
Total water requirement	KLD	266	86	352
Fresh water requirement	KLD	160	39	199
Wastewater Generation	KLD	118+19Lab	52+3Lab	170+22 Lab
Treated Wastewater reuse	KLD	106	47	153
STP capacity	KLD	125	55	180

ETP Capacity	KLD	20	5	25	
STP Technology	-	FBR			
Total Solid Waste	kg/day	356	153	509	
Biodegradable Waste	kg/day	213	92	305	
Non-Biodegradable Waste	kg/day	143	61	204	
Bio Medical waste	kg/day	75	22	97	
Parking Required (FAR/80)	ECS	240	10	250	
Parking Provision	ECS & nos.	164 ECS & 293 no. of scooters	9 ECS & 15 no. of scooters	173 ECS & 308 no. of scooters	

*Note- As per UBBL Bye laws, area free from FAR is 3733.48 sqm,

Balance area = FAR Achieved - Area free from FAR

= 11566.56 - 3733.48 sqm

= 7833.08 sqm

New proposed = 4579.81 sqm

Total after expansion = Balance area + new proposed

= 7833.08 sgm + 4579.81 sgm

= 12412.89 sqm

- v. During Construction Phase, total 9 KLD water will be required out of which 3 KLD of water will be required by labourers for domestic & flushing purposes which will be sourced from tanker supply and 6 KLD for construction purpose which will be sourced from nearby STP treated water. Temporary Toilets will be provided for labourers during the construction period which will be cleaned regularly and hygienic conditions will be maintained. 2 KLD of wastewater will be generated that will be discharged to septic tanks with soak pits to be cleaned regularly.
- vi. During Operational Phase, the total water requirement of the hospital building will be 352 KLD. Out of which, 199 KLD will be fresh water which will be met by Municipal Supply from Delhi Jal Board (DJB). Rest will be sourced through STP treated water. Total waste water generation from the project will be 170KLD+22 KLD from lab. The domestic waste water of 170 KLD will be treated in an in-house Sewage Treatment Plant of capacity 180 KLD (Existing: 125 KLD & Proposed: 55 KLD) based on FBR technology. Total 153 KLD of treated water will be generated from STP and will be reused for flushing (54 KLD), gardening (14 KLD) cooling purposes (79 KLD) and Misc. (6 KLD). 22 KLD waste water generated from the lab will be treated in ETP of 25 KLD (Existing: 20 KLD & Proposed: 5 KLD) capacity. Excess treated water of 16.7 KLD generated from ETP is being discharged to the sewer line.
- vii. After expansion approximately 509 kg/day of total waste will be generated from the project. Out of which 305 kg/day of biodegradable waste will be treated in organic waste converter and converted to manure. 204 kg/day of non-biodegradable waste will be sent to approved recyclers and 97

kg/day of Bio-Medical waste will be duly segregated and disinfected and will be handed over to state approved Biomedical Waste Service Provider for final disposal. The used oil generation from the project will be 30 lit. /month and will be given to CPCB approved vendor. E-waste of 5 kg/month will be disposed as per E-Waste (Management & Handling) Rules, 2016.

- viii. The total power connected load will be 2965.21 KVA, which will be met by BSES Rajdhani Power Limited. In case of power failure, power backup will be provided through DG sets of capacities 2 X 1250 KVA (Existing), 1 x 1000 KVA (Proposed) that will be installed in accordance with CPCB norms.
 - ix. Rooftop rainwater of buildings will be collected in 2 nos. of RWH pits of total 42 KL capacity for rainwater harvesting after filtration.
 - x. The parking requirement will be 250 ECS & parking provision will be 173 ECS & 308 No. of scooters.
 - xi. 11 KW (2% of the proposed load) of solar panels will be installed on the roof. The layouts of buildings are designed to maximize the potential for use of solar lighting per day devices.
- xii. The project does not fall in a critically polluted area.
- xiii. It is not located within 10 km of the Eco Sensitive Zone.
- xiv. NBWL clearance is not required.
- xv. No forest clearance required
- xvi. No court case is pending against the project.
- xvii. Total capital cost towards EMP will be Rs. 138 lakhs and recurring cost will be Rs. 17.5 lakhs per year.
- xviii. Total green area of 960 sqm will be developed at the site. Out of which, the green area on ground is 631.10 sqm (10 % of the total plot area) and green on terrace is 328.90 sqm. There is no tree cutting involved.
 - xix. Expected timeline for completion of the project: 2 years
 - xx. Investment/Cost of the project: Total cost of the project after expansion is estimated to be Rs. 230.53 crores. Cost of expansion will be Rs. 43 crores.
 - xxi. Employment potential: Approx.75 labourers will be hired during the construction phase and during the operation phase about 865 employment opportunities will be generated out of which 70 will be available for local people.
- xxii. Benefits of the project: Hospital will provide multi-speciality healthcare services within short distances for the nearby residential area. The hospital will provide world class medical facilities to patients along with 24x7 Ambulance facility. Employment will be generated for laborers during the construction phase and for personnel working in the hospital during the operation phase.
 - **2.**The EAC (Infra-2) also noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Delhi, the proposal is appraised at Central level by sectoral EAC.

- **3.** The EAC also noted that the PP has obtained certified compliance report from MOEFCC Integrated Regional Office, Jaipur vide File No. IV/ENV/DLI/01/2021/SPL-25to26 dated 25.02.2021. the committee found satisfactory compliances in report.
- **4.** The EAC observed considerable variation in the data provided by the PP on green area development; While 960 sqm of green area is proposed as per the conceptual plan, green area of 1500 sqm has been specified as per the presentation made to the EAC. The EAC also expressed concern at the proposed discharge of treated laboratory waste water from the ETP into the sewer line and requested additional information on the treatment efficacy and possible reuse of the treated water within the site. Also, the PP was asked to provide the water balance diagram w.r.t to the total water consumption after the proposed expansion.
- **5.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent held that that the submissions made by the PP require certain revisions as mentioned above. In view of the foregoing, the EAC recommended to defer the decision on the project and asked the PP to provide the following information:
 - i. Clarify and revise the data on green area development along with details of tree plantation.
- ii. Explore the possibility of reuse of treated water from ETP based on the effluent characteristics of the treated water.
- iii. Provide water balance diagram for the total water consumption after proposed expansion.

AGENDA ITEM NO. 63.3.4

Expansion of Commercial Complex "City Centre" with increase in builtup area from 32,300.465 sqm to 40,409.887 sqm at plot No-1B3 at Twin District Centre, Sector-10 Rohini, New Delhi by M/s Jaksons Developers Pvt. Ltd. - Environmental Clearance

(IA/DL/MIS/187881/2007; F.No. 21-20/2021-IA-III)

- 1. The PP (M/s. Jaksons Developers Pvt. Ltd.) along with his consultant Perfact Enviro Solutions Pvt. Ltd.' made a presentation before EAC (Infra-2) on the key parameters and salient features of the project. The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:
 - i. The project is located at plot No-1B3 at Twin District Centre, Sector-10 Rohini, New Delhi with coordinates 28°43'4.05"N Latitude and 77°6'54.56"E Longitude.
 - ii. The proposal is for 'Expansion'.

- iii. The project has already been granted Environmental Clearance by MoEF&CC vide letter No. 21-634/2007-IA-III dated 16.04.2008. EC was granted for plot area of 6,762 sqm and built-up area of 35,546.0 sqm. The project is now operational with built-up area 32,300.465 sqm. As per the amendment in UBBL Bye Laws, additional FAR is available hence vertical expansion in existing building is proposed.
- iv. The existing complex comprises of showrooms, commercial centre, and departmental store. The only additional activity in the proposed expansion of the commercial complex will be a cineplex with 5 screens with 820 seats.
- v. The total plot area of the project will remain the same 6,762 sqm. Total ground coverage area will increase from 3,551.67 sqm to 3,766.43 sqm. Total FAR area will change from 18,455.06 sqm to 18,373.404 sqm. Total Non-FAR area will change from 477 sqm to 8668.078 sqm. The total built-up area will increase from 32,300.465 sqm to 40,409.887 sqm. The total number of floors will be 3B+G+6. Maximum height of the building will be 29.9 m. The details of the building are as follows-

		Area Details					
Particulars	Unit	As per Earlier EC dated 16.04.2008	Existing	Area free from FAR	Balance	Proposed	Total After Expansio n
Cost of the project	Rs in Cr.	170	187	-	-	12	199
Total Plot Area	sqm			6762			
GROUND COVERAGE							
Ground coverage (Permissibl e)	sqm	3766.43					
Ground Coverage (Achieved/Pr oposed)	sqm	-	3551.67	-	-	214.637	3766.30 7
FAR Permissible	sqm			18460			
Proposed FAR- A	sqm	18455.06	18455.06	3066.76	15388. 29	2985.108	18373.4 04
First Basement Area	sqm	- 2353.839					
Second Basement Area	sqm	-			5319.108	3	

Third Basement Area	sqm	-	5695.458					
Total Basement Area- B	sqm	-	13368.405					
Non-FAR Area-C	sqm	-	477	ı	ı	8191.07 8	8668.0 78	
Built-up Area including (A+B+C)	sqm	35546	32300. 465	-	-	-	40409. 887	
*Total Green Area (outside the plot area)		-	-	-	ı	-	1025.7	
Road & open area	sqm	-	3210.33	-	-	-	2995.6 93	
Maximum No. of Floors	Nos	3B+G+4	-	-	-	2	3B+G+ 6	
Max. height of building (upto terrace level)	m	23	23	-	-	6.9	29.9	
No. of Basement		3	3	-	-	0	3	
Total population	No.	-	4565	-	-	1982	6547	
Total solid waste generation	kg/day	359	359	-	-	623	982	
Total Power Load	KVA	1500	1600	-	-	775 (620 KW)	2375 (2137.5 KW)	
DG Sets	KVA	-	1x1500, 1x1250 &1x500	-	-	1 x 500	1x1500 , 1x1250 & 2x500	
No. of Rain Water Harvesting pits		-		-	-		1	
Total Water demand	KLD	127	127	-	-	38	165	

Waste water discharge	KLD	-	76	1	ı	41	117
STP capacity	KLD	81	80	-	-	50	130
Parking requirement	ECS	-	-	-	-		328
Parking provision	ECS	370 ECS & 30 No's of two wheelers	ı	-	-		332

- v. Total 7 KLD of water is required during the construction phase out of which 5 KLD water will be sourced through treated water from nearby STP for construction activities. For domestic use, 2 KLD water will be sourced through tankers.
- vi. The total water requirement of the commercial complex after expansion will be 165 KLD. Out of which, 52 KLD will be fresh water which will be met by Municipal Supply. Rest will be sourced through STP treated water. Total waste water generation from the project will be 117 KLD which will be treated in an in-house Sewage Treatment Plant (STP) of capacity 130 KLD (Existing 80 KLD & Proposed 50 KLD) based on SAFF technology. Total 113 KLD of treated water will be generated and will be reused for flushing (76 KLD), gardening (3 KLD) and cooling purposes (34 KLD). No excess treated water will be available.
- vii. After expansion approximately 982 kg/day of total waste will be generated from the project. Out of which 393 kg/day of biodegradable waste will be treated in organic waste converter and converted to manure. 295 kg/day non-biodegradable waste will be sent to approved recyclers and 294 kg/day of Plastic waste will be sent to approved recyclers. The used oil generation from the project will be 36 lit. /month and will be given to the CPCB approved vendor. E-waste of 2-3 kg/month will be disposed of by individual shop owners as per E-Waste (Management & Handling) Rules, 2016.
- viii. The total power connected load will be 2375 KVA, which will be met by Tata Power Delhi Distribution limited (TATA Power-DDL). In case of power failure, power backup will be provided through DG sets of capacities 1 x 1500 KVA, 1 x 1250 KVA & 1x 500 KVA (Already existing) & 1 x 500 KVA (Proposed) that will be installed in accordance with CPCB norms.
 - ix. Rooftop rainwater of buildings will be collected in 1 nos. of RWH pits of total 50 KL capacity for rainwater harvesting after filtration.
 - x. The parking requirement will be 328 ECS and parking provision will be 332 ECS.
 - xi. Proposed solar photovoltaic system of 40 KW will be installed which will meet 6.4% of the proposed power load i.e., 620KW.
- xii. The project falls in a critically polluted area.
- xiii. It is not located within 10 km of the Eco Sensitive Zone. NBWL clearance is not required.
- xiv. Forest clearance is not required.

- xv. No court case is pending against the project.
- xvi. Total capital cost towards EMP will be Rs 136 lakhs and recurring cost will be Rs 12.7 lakhs per year.
- xvii. A total green area of 1025.7 sqm will be developed outside the plot area of the project after taking permission from planning authority (i.e., area near the Bhagwan Mahavir Marg). Plantation of native plants will be done.
- xviii. Expected timeline for completion of the project: 2 years from the date of EC
 - xix. Investment/Cost of the project: Total Cost of the project is estimated to be Rs. 199 Crores out of which cost of expansion will be Rs 12 Crores.
 - xx. Employment potential: Approx. 50 laborers will be hired during the construction phase and during the operation phase the total population of the project will be 6547 persons (Staff -946, & Visitor 5601).
 - xxi. Benefits of the project: The project will provide good quality, eco-friendly, safe and secured working space. It will lead to an increase in the infrastructure of the area. Energy efficient measures to reduce the requirement during the operation stage shall be maintained which ultimately leads to lesser demands and reducing carbon footprints of the project making it eco-friendlier. There will be generation of employment to approximately 50 no. of labour during the construction phase. About 946 employment opportunities will be generated out of which 200 will be available for local people.
 - **2.** The EAC also noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Delhi, the proposal required appraisal at Central level by sectoral EAC.
 - **3.** The EAC noted that the PP has obtained certified compliance report from MOEFCC Integrated Regional Office, Jaipur vide File No. 4/576/08/SPL-22to23 dated 25.02.2021. As per the report, no major non-compliances were observed during the site visit dated 02.02.2021. Also, the PP has submitted his reply to the observations in the aforesaid report vide letter dated 03.03.2021.
 - **4.** The EAC expressed concern on the adequacy of the proposed parking of 332 ECS as the proposed expansion involves the development of a Cineplex with 820 seats. The PP responded that due to proximity of Rithala metro station from the commercial complex, about 50 60% of visitors are expected to come by metro only, and there is also cheaper and adequate public parking facility available at the district centre. The PP also stated that as per the study conducted at other commercial spaces with Cineplex at West Delhi and North Delhi, the number of car parks occupied v/s provided is sufficient. However, the PP committed to operate the cineplex on staggered start/end timing of shows, to reduce peak traffic at entry/exit.
 - **5.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the

issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:

- i. A detailed traffic management and traffic decongestion plan shall be drawn and implemented to ensure that the service of the roads near project site may not get adversely impacted after the implementation of the project. The plan should stipulate, inter-alia, the path and appropriate time for the movement of vehicles to and from site. The Plan shall be vetted by concerned agency in the State Govt.
- ii. Fresh water requirement from local authority shall not exceed 52 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
- iii. As proposed, waste water shall be treated in an onsite STP of total 130 KLD capacity. Atleast 113 KLD treated water from the STP shall be recycled and re-used for flushing (approx. 76 KLD), cooling (approx. 34 KLD) and for gardening (approx. 3 KLD). There shall be no discharge of treated water from the project as proposed.
- iv. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- v. Area for greenery shall be provided as per the details provided in the project document i.e., atleast 1025.7 sqm green area shall be developed outside the plot area of the project (i.e., area near the Bhagwan Mahavir Marg) with permission from concerned authority. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Plantations to be ensured species (cut) to species (planted). The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- vi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 1 nos. of RWH pits of total 50 KL capacity shall be maintained for rainwater harvesting after filtration.
- vii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of Composter. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.

- viii. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
 - ix. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM 63.3.5

Construction of Passenger Ropeway Facility from Har-Ki-Pauri to Chandi Devi with a length 2,305 m long ropeway at Laljiwala Pargana, Jwalapur, Haridwar by M/s Uttarakhand Forest Development Corporation, Dehradun- Terms of Reference

(IA/UK/MIS/202543/2021; F.No. 21-17/2021-IA-III)

The project proponent requested to withdraw the application vide letter dated 10.03.2021 and therefore did not attend the meeting. Accordingly, the EAC decided to return the proposal in original.

AGENDA ITEM NO. 63.3.6

Expansion of Group housing project namely "Green Lotus Saksham" with built up area of 1,24,724.142 sqm located at village Nabha & Chatt, Zirakpur, Distt. S.A.S Nagar, Punjab by M/s. Maya Builders – Reconsideration for Environmental Clearance

(IA/PB/MIS/189685/2020; F. No.21-111/2020-IA-III)

- **1.** The EAC noted that the proposal was earlier examined in its 59th Meeting held on 8th January, 2021 wherein the EAC had recommended the proposal for grant of EC. However, on examination of submissions made by the PP, a case of violation was found w.r.t the construction of club house. Accordingly, show cause notice was issued to the PP vide letter dated 18.02.2021 for constructing the club house on the proposed additional land for expansion. The PP submitted his reply to the aforesaid show cause notice vide letter dated 22.02.2021. Now, as per the instruction of the Regulatory Authority, the proposal has been considered again to provide clarification on future course of action regarding the grant of EC.
- **2.** The PP (M/s Maya Builders) along with his consultant 'Eco Laboratories and Consultants Pvt. Ltd.' made a presentation and provided the following information:

- i. The project has been earlier granted EC from SEIAA, Punjab vide letter no. SEIAA/2017/450 dated 03.05.2017 for 386 flats, 16 SCOs, a Club house and temple in plot area of 7.213 acres and built-up area of 73,248 sqm. Accordingly, construction of project was started on 7.213 acres of land.
- ii. In the meantime, additional adjoining land of 1.766 acres was purchased and change in land use (CLU) was obtained for overall land of 8.979 acres (i.e., 7.213 + 1.766 acres). Post obtaining the CLU as well as after consultation with Green Building Consultant, it was decided only to shift the location of already approved club house in the adjoining owned land.
- iii. Purpose of shifting Location of Club are as follows:
 - i. Front easy approach to all the society members as well as other visitors.
 - ii. As per solar orientation study, there will be good ventilation in club which will help in better health of society persons.
- iv. Later in October, 2020, planning for additional land was done and layout plan was approved for overall land of 8.979 acres comprising of 614 flats, 24 SCOs, a Club House and a Temple with overall built-up area of 1,24,724.142 sqm.
- v. The construction of project in terms of existing EC is still under implementation including that of the club house achieving only around 50% construction. Thus, the overall built-up area constructed at site has not exceeded the limit of earlier granted EC.
- vi. There is also no discharge of pollution load to the environment in terms of wastewater load, solid waste generation, etc.
- **3.** The EAC also noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Punjab, the proposal required appraisal at Central level by sectoral EAC.
- **4.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, reaffirmed its recommendation to grant environmental clearance to the project as specified in its 59th Meeting held on 8th January, 2021; subject to the resubmission of Form 1 and Conceptual Plan by PP with the necessary changes clarifying the above discussed details. The EAC also recommended that Ministry may take appropriate action regarding the violation.

AGENDA ITEM NO. 63.3.7

Expansion of "Group Housing Colony" with increase in built-up area from 134834.03 sqm to 142876.04 sqm at Plot No: B-319, Okhla Industrial Area Phase - I, New Delhi by M/s Southend Infrastructure Pvt. Ltd. - Reconsideration for Environmental Clearance

(IA/DL/MIS/170702/2018; F. No. IA3-21/10/2021-IA.III)

- **1.** The EAC noted that the proposal was earlier examined in its 61st Meeting held on 8th February, 2021. The PP was asked for following additional information:
 - i. PP to submit explanation regarding the current ownership of the project w.r.t observation (Point No.15 in letter no. IV/ENV/DEL/1431/2020/1202) raised by IRO, Jaipur and apply for transfer of EC.
 - ii. Submit action plan for compliance to the observations raised in certified compliance report issued by MOEFCC Integrated Regional Office, Jaipur vide file no. IV/ENV/DEL/1431/2020/1202 dated 01.02.2021.
- **2.** The EAC asked PP to provide the aforesaid information. The PP (M/s. Southend Infrastructure Pvt. Ltd.) along with his consultant 'M/s Perfact Enviro Solutions Pvt. Ltd.' made a presentation and provided the following information:
 - i. Details of the information sought by the EAC and corresponding reply are given in table below:

S. No.	Query Raised by EAC	Reply by PP
1.	PP to submit explanation regarding the current ownership of the project w.r.t observation (Point No.15 in letter no. IV/ENV/DEL/1431/2020/1202) raised by IRO, Jaipur and apply for transfer of EC.	Point No-15 of RO report is as follows: "During the Site visit it was noticed that the builder name of Godrej South Estate was displayed on the entry gate instead of M/s Southend Infrastructure Pvt. Ltd which is mentioned in the approved EC. M/s Godrej South Estates have been asked to approach MoEF &CC, New Delhi for proper transfer of EC in their favour as it has been accorded to M/s Southend Infrastructure Pvt. Ltd. In this regard PP has submitted that they have not changed name without intimation. The name displayed on the Board is the name of the Project i.e., Godrej South Estate and DDA letter is in the name of Southend Infrastructure Pvt Ltd and the EC obtained is in same name.
2.	Submit action plan for compliance to the observations raised in certified compliance report issued by MOEFCC Integrated Regional Office, Jaipur vide file no.	Action plan for compliance to observation raised in certified compliance Report issued by MoEFCC Integrated Regional Office, Jaipur has been submitted on 8th February 2021 and 24th February, 2021.

IV/ENV/DEL/1431/2020 /1202 dated 01.02.2021.

- **3.** The EAC also noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Delhi, the proposal required appraisal at Central level by sectoral EAC.
- **4.** The EAC found the responses given by PP as satisfactory. The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:
 - i. Fresh water requirement from local authority shall not exceed 283 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
 - ii. As proposed, waste water shall be treated in an onsite STP of total 425 KLD capacity. Atleast 216 KLD treated water from the STP shall be recycled and re-used for flushing, cooling, gardening and filter backwash purposes. Excess treated water (125 KLD) shall be used for construction purpose or for irrigation purpose in the nearby areas as proposed.
- iii. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- iv. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of OWC. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.
- v. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted). Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e., planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted).

- Area for green belt development shall be provided as per the details provided in the project document.
- vi. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 6263.72 sqm (30 % of the total plot area). As proposed, at least 261 trees to be maintained during the operation phase of the project. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Plantations to be ensured species (cut) to species (planted). The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- vii. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 4 nos. of RWH pits shall be maintained for rainwater harvesting after filtration.
- viii. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- ix. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/Regulations or Statutes as applicable to the project.

AGENDA ITEM NO. 63.3.8

"Development of Passenger Ropeway" at Mundeshwari Hills to length of 98.5 m long covering an area of 5298.50 sqm by M/s. Bihar State Tourism Development Corporation (BSTDC) Ltd. – Reconsideration for Terms of Reference (Absent Case)

(IA/BR/MIS/175006/2020; F. No. 10-59/2020-IA-III)

- **1.** The EAC noted that the proposal was earlier deferred during its 62^{nd} Meeting held on 1^{st} March, 2021 as the PP did not attend the meeting.
- **2.** The PP (M/s Bihar State Tourism Development Corporation (BSTDC) Ltd.) along with his consultant 'M/s. RITES Limited' made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The Committee took note of the following key parameters and Salient features of the project presented during the meeting and as provided in the brief and application for this project:
 - i. The project is located at Mundeshwari Hill in District Kaimur, Bihar with coordinates as follows:
 - a. Lower Terminal Point (LTP): 24°58′58.95″N Latitude; 83°34′11.01″E Longitude

- b. Upper Terminal Point (UTP): 24°59′00″N Latitude; 83°33′57″E Longitude
- ii. The proposal is to develop a passenger ropeway system at Mundeshwari Hills in Kaimur District of Bihar to facilitate the devotees of Mundeshwari Devi temple. The pilgrims to Mundeshwari Dham arrive at base of Mundeshwari Hill from Bhabhua, Mohania, Rohtas and other nearby districts of Bihar. The temple is situated at Mundeshwari Hill top at a height of 258 m above sea level. The old path for Mundeshwari Devi Temple is of about 1 km distance with 551 steps which starts right at the foothills, and goes all the way to top of Mundeshwari Hill. A motorable road has been built, which goes up to an altitude of 229 meters. From this place one has to climb around 78 steps to reach the shrine, which takes about ten minutes. The proposed ropeway will further reduce the travel time.
- iii. Project site is earmarked as forest land and lies within the Kaimur Wildlife Sanctuary. Approval for diversion of 0.53 ha. forest land for use of non-forest purposes is under process. Approval for Wildlife Clearance is also under process.
- iv. Land use around the site up to 10 km radius consists of predominately settlement and agriculture followed by forest.
- v. Based on the requirement of the project, detailed reconnaissance has been carried out of the area between foothills of Mundeshwari Hills to Mundeshwari Devi Temple situated at top of Mundeshwari Hill. While selecting the appropriate alignment, following approach & methodology was adopted:
 - a. Availability of adequate space for terminals i.e., Lower Terminal, Intermediate Terminal, if any and Upper Terminal.
 - b. Easy land acquisition.
 - c. Ropeway system matching with traffic and construction point of view.
 - d. Easy connectivity to terminals from adjacent area.
 - e. Minimum rehabilitation and tree cutting.
 - f. Easy traffic handling at terminal stations.
 - g. Minimum infringement with Archaeological sites.
- vi. The project details are given in table as follows:

Sr. No.	Parameter	Description
1.	System	Mono Cable Pulsated System
2.	Lower Terminal Point (LTP)	A place opposite Rest House
		of Tourism at base of
		Mundeshwari
3.	Upper Terminal Point	A place near North Western
	(UTP)	side of Mundeshwari Temple
4.	Alignment	Straight
5.	Horizontal length	398.5 m
6.	Elevation Difference, m	147 m
7.	Slope length	425 m
8.	Ropeway Capacity, PPH	500 PPH
9.	Line speed, m/sec	0 to 3.0 m/sec
10.	Cabin capacity, passenger	4 passengers

11.	Type of Cabin	Fully enclosed type with
		ventilation, manual operated door
12.	Nos. of cabin	16 Nos.
13.	Journey Time, sec	224 sec. (approx. 4 Minutes)
14.	Haulage rope	34 mm dia, 6X19 (s),
		Construction, PP core, Tensile
		Designation
15.	Location of Drive gears	UTP
16.	Main drive motor	50 KW. AC. Variable speed, (0 – 1500 r.p.m.)
17.	Location of Tension gears	LTP
18.	Stand by D.G. set	100 KVA and 25 KVA.
19.	Prime Mover for Rescue drive	10 KW, Diesel engine
20.	Rescue operation speed (max.) with Diesel Engine, m/sec	1.0 m/sec
21.	Water Requirement	2 KLD, 12.95 KLD
22.	Power Requirement	70 KW
23.	Power Supply	415 V, 3 phase, 50 Hz
24.	Backup Power	2 DG Set (100 kVA & 25 kVA)
25.	Solid Waste Generated	5 kg/day (construction
		phase), 85 kg/day(operation
		phase)
26.	Land Requirement at LTP (RoU)	280.5 sqm
28.	Land Requirement at UTP (RoU)	218 sqm
29.	Land Requirement for Line towers 4 No.s (RoU)	144 sqm
30.	Land requirement for	4656 sqm
50.	corridor of 12 m all along	
	the alignment (RoW)	
31.	Total Land Requirement (RoU + RoW)	5298 sqm

- vii. The construction in the project involves the construction of the Ropeway station (Lower Terminal and Upper Terminal), trestle structural, 4 nos. of tower and station foundation.
- viii. Lower Terminal Point (LTP) shall be constructed at a place near Rest House of Tourism Department, Government of Bihar on opposite side of road to Mundeshwari temple at an altitude of 82 m above MSL. This would provide adequate space and will accommodate the following:
 - a) Area for boarding/de-boarding.
 - b) Tensioning arrangement.
 - c) Parking of cabins.
 - d) Two separate kiosks for Ticket counter and security room at the gate to station area.

- e) First Aid area.
- f) Maintenance & Store area.
- g) Approach with nearest road.
- ix. Upper Terminal Point (UTP) shall be located on South Western side to Mundeshwari Temple situated at top of Mundeshwari Hill at an altitude of 229 m above MSL. This would provide adequate space and will accommodate the following:
 - a) Area for boarding/de-boarding.
 - b) Drive arrangement.
 - c) Two separate kiosks for Ticket counter and security room at the gate to station area.
 - d) First Aid room.
 - e) Public convenience.
 - f) Approach with nearest road.
- x. The capacity of ropeway has been proposed at 500 PPH based on the arrival of devotees for Mundeshwari Temple as under:

Month	Details	Approximate	Total
		number of daily	Number of
		pilgrims	pilgrims
			during the
			period
April	Navratri (Chaitrotsav) 9 days	40000 to 70000	4,95,000
	Remaining 21 days	5,000	105,000
May	Mundeshwari Mahotsav (on	20,000	40,000
	7th & 8th May)		
	Govt. holidays (other 28 days)	7000	1,96,000
June		5,000	1,50,000
July	For Jalabhishek at	20,000	6,00,000
	Shivalingam in Shravan		
	Month		
August		5,000	1,50,000
September		5,000	1,50,000
October	Navratri (10 Days)	40000 to 70000	5,50,000
	Remaining 20 days	5,000	1,00,000
November	Diwali Holidays	7,000	2,10,000
December	Winter Holidays	7,000	2,10,000
January	-do-	5,000	1,50,000
February	On Magh Panchami (15 days)	10,000	1,50,000
	Remaining 13 days	5,000	65,000
March		5,000	1,50,000
		Total Pilgrims	34,71,000

- xi. During construction, 2 KLD water will be required and during operation, 12.95 KLD water will be required, which shall be sourced from PHED, Bhagwanpur or Bhagwanpur Nagar Panchayat.
- xii. The waste water generated during construction and operation phase will be 1.2 KLD and 10.36 KLD respectively. This waste water will be managed through septic tank cum soak pit.

- xiii. Municipal waste (domestic and or commercial wastes) generated during construction will be 5 kg/day and during operation will be 85 Kg/day.
- xiv. Total power requirement for the project will be 70 KW. The power shall be supplied from main 415V + 10% with frequency of 50 cycles + 3% by South Bihar State Power Distribution Company Limited (SBSPDCL). The commercial power at 230V shall be made available for station lighting etc. in the terminals. During power failure Two DG sets of 100KVA and 25 KVA will be require. Standby DG set will require diesel fuel which will be procured locally.
- xv. Energy consumption during construction and operation of ropeways shall be optimised by adopting the techniques used to develop efficient lighting and proper operation and maintenance of equipment and machinery as well as the ropeway system. Use of high-efficiency spectacular reflectors or high-efficiency luminaries, automatic control systems, localized switching, lighting design, maintenance schedule, awareness etc.
- xvi. The project has been issued Standard ToR through Parivesh Portal vide F.No. 10-59/2020-IA-III dated 19.02.2021. The baseline data is proposed to be collected before monsoon in the months of April, May and June 2021.
- xvii. No court case is pending against the project.
- xviii. The project is not located in Critically Polluted area.
 - xix. 60 nos. of trees need to be felled for the project.
 - xx. Investment/Cost of the project is Rs 7.46 crores.
 - xxi. Employment potential: Local labourer will be deployed during construction. 25 nos. personnel during construction and 21 nos. during operation. Material will be procured locally from Bhabhua and Patna.
- xxii. Benefits of the project: The proposed ropeway will facilitate the pilgrims by reducing the travel time to Mundeshwari Devi Temple.
 - **3.** The EAC also noted that the project/activity is covered under category 'A' of item 7(g) 'Aerial ropeways' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.
- **4.** The EAC deliberated upon the information provided by the project proponent. After detailed deliberation, EAC recommended granting following additional Terms of Reference over and above the Standard ToR issued automatically over the Parivesh Portal on 19th February, 2021, for preparation of EIA-EMP report for this project/activity:
 - i. The PP shall prepare a video through drone about the site location capturing the terrain along the proposed alignment.
 - ii. Application for Stage I Forest Clearance and NBWL Clearance to be submitted.
- iii. Permission if any required in case project site fall under ESZ area of Kaimur Wildlife Sanctuary.
- iv. Solid waste Management Plan on the route and halt points.
- v. Provision of dedicated power line to avoid the use of DG set.
- vi. Management of Noise due to DG set

- vii. Assessment of the ideal tourist / pilgrims bearing capacity of the regions where the Ropeway is proposed.
- viii. The impact of the Ropeway construction on the ecology should be assessed.
- ix. A note on appropriate process and materials to be used to encourage reduction in carbon foot print.
- x. Optimize use of energy systems by following mandatory compliance measures as recommended in the Energy conservation building code (ECBC) of the Bureau of Energy Efficiency, Government of India. The energy system shall include air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.
- xi. Details of Emission, effluents, solid waste and hazardous waste generation and their management.
- xii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- xiii. Cost of project and time of completion.

AGENDA ITEM NO. 63.3.9

Expansion of Common Hazardous Waste Incineration Facility at Plot No. 3-B-2, First Phase, KIADB Industrial Area, Kumbalgodu, Mysore Road, Bengaluru by M/s. Gomti Incinco - Terms of Reference

(IA/KA/MIS/201018/2021; F.No. 21-21/2021-IA-III)

- 1. The PP (M/s Gomti Incinco) along with his consultant 'M/s. Environ India' made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:
 - i. The project is located at No.3 B 2, 1st Phase, KIADB Industrial Area, Kumbalgodu, Mysore Road, Bangalore, Karnataka with coordinates 12°52'24.2"N Latitude and 77°26'37.6"E Longitude.
 - ii. The project is an existing unit and has been operating since 2006, well before the EIA notification, 2006, with valid consents from regional Pollution Control Board. Now the unit proposes to expand its activity to further the needs of Hazardous waste disposal and has applied for Environmental Clearance.
- iii. The details of the project are given in table as follows:

Proposed	Incineration capacity of hazardous waste increasing from				
Products	900 MTA to 3600 MTA	(500 kg/hr) and AFR Pre-			
	processing – 3000 MTA.	processing – 3000 MTA.			
	Existing Details Proposed expansion				
	(Final Configuration)				
	Consented – 900 MTA	TA 3600 MTA (Existing (250			
	(250 kg/hr) Incinerator	kg/hr) Incinerator +			

		Proposed (500 kg/hr) Rotary Kiln)) 3000 MTA Pre-processing of HW for AFR
Land Area	2698 sqm (0.67 Acre)	
Green Belt	890 sqm (33%)	
Development		

- iv. Total water requirement is 4.0 KLD which shall be sourced from KIADB. The domestic water consumption is 2.70 KLD and the industrial requirement is 1.3 KLD. Domestic waste water generation is 2.16 KLD which shall be disposed to septic tank and soak pit. No wastewater is produced from the industrial process.
- v. The details of air pollution sources and control equipment are given as follows:

S.No.	Chimney attached to	Fuel Used	Chimney	Air Pollution
			Height	control equipment
1	Incinerator:	Electricity	30 m ARL	Chimney height of
	250kg/hr (Existing)			30 mtr ARL
2	Incinerator:	Electricity	30 m ARL	Chimney height of
	500kg/hr (Proposed)			30 mtr ARL
	Rotary Kiln			
3	DG Set Existing –	HSD	3 m ARL	Acoustic
	62.5 kVA			Enclosures
4	DG Set Proposed –	HSD	3 m ARL	Acoustic
	180 kVA			Enclosures

vi. The details of solid waste management are given as follows:

S.No.	Type of waste	Quantity	(MTA)	Method of handling/disposal
1	General	0.5		Shall be store in accordance
	office waste			to KSPCB Guidelines and
				disposed to authorized scrap
				dealers
		Hazard	ous waste I	Details
S.No.	Type	Category	Quantity	Method of Disposal
1	Oil Filters	3.3	4 No's /A	Shall be store in a secured
				manner & handed over to
				KSPCB authorized
				incinerators /co-processing in
				cement kiln
2	Used Oil	5.1	0.5 KLA	Shall be collected in a leak
				proof containers & disposed
				only to KSPCB registered
				authorized re-processors
				provided the oil meets the
				standards as per schedule-5-
				part A of the rules

3	Incineration	37.2	250 MTA	Incineration ash is disposed to
	ash			SPCB authorized secured
				landfill cell in Bangalore
4	Oil-soaked	33.2	2 Kg/A	Shall be store in a secured
	cotton waste			manner & handed over to
				KSPCB authorized
				incinerators / co-processing
				in cement kiln

- vii. Employment potential: 60 people will be employed in the project
- viii. The project cost is INR 2 Crores.
- ix. Benefits of the project: The facility is located strategically at No.3 B 2, 1st Phase, KIADB Industrial Area, Kumbalgodu, which is a major industrialized zone and it will help in the disposal of hazardous waste generated from various industrial premises in and around. The unit is a common integrated incineration facility, which will cater to environmentally and economically sound disposal of waste generated in the region, minimizing long distance haulage of waste.
- **2.** The EAC noted that the project/activity is covered under category 'A' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.
- **3.** The EAC also noted that the project has been issued Standard ToR through Parivesh Portal vide F. No. 21-21/2021-IA-III dated 16.03.2021.
- **4.** The EAC observed that the project has obtained its Consent for Establishment (CFE) vide order no. CFE-EIA/GIC/NEIA-1173/2006-2007/296 dated 05.01.2007 which is contrary to the statement of the PP that the unit has been operating since 2006. This indicates that facility of TSDF has been set up without obtaining prior EC under the provision of EIA, Notification, 2006.
- **5.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions found that the project is a case of violation by not taking EC under the provision of the EIA Notification, 2006 and its subsequent amendments. In view of the foregoing, the EAC recommended that Ministry may take action under violation category.

AGENDA ITEM NO. 63.3.10

Construction of K.K. Birla Academy with built-up area 72,610.898 sqm at Plot No. 2, Vasant Kunj Phase II, Institutional Area, New Delhi by M/s. K.K. Birla Academy - Environmental Clearance

(IA/DL/MIS/203403/2021; F.No. 21-22/2021-IA-III)

- **1.** The PP (M/s K.K. Birla Academy) along with his consultant 'M/s. Grass Roots Research & Creation India (P) Ltd.' made a presentation on the key parameters and salient features of the project to the EAC (Infra-2). The Committee took note of the following key parameters and salient features of the project presented during the meeting and as provided in the brief and application for this project:
 - i. The project is located at Plot No. 2, Vasant Kunj Phase II, Institutional Area, New Delhi with coordinates 28°32'35.77"N Latitude and 77°8'57.95" E Longitude.
 - ii. It is a new project. The proposal is for 'Fresh EC'.
- iii. Earlier, Clearance was granted by MoEFCC Vide File No-21-114/2007-IA.III dated 02.04.2007 and 30% of construction had been completed at project site. Thereafter, it was directed to stop construction work at site vide letter no. F.52 WFD/TCOFF/07/1665-67 dated 22.12.2008 received from Office of Deputy Conservator of Forests. The matter got resolved vide File No. 9(12)/DPTA/THL/Compounding/2012-13/3179-84 dated 22.09.2014 issued by Office of Deputy Conservator of Forests and it was allowed to start construction at the site. Meanwhile, validity of the earlier granted Environmental Clearance got expired and byelaws were also revised. Therefore, planning has been revised as per the latest bye-laws and a fresh application for environmental clearance has been submitted.
- iv. Demolition of the earlier construction will be done as per the Construction and Demolition Waste Management Rules, 2016.
- v. The total plot area is 30,600 sqm; FSI area is 33,875.175 sqm and total construction (Built-up) area of 72,610.898 sqm. The project will comprise of Basement (03 No.s), Habitable Area and Office Building. Maximum height of the building is 13.075 m. The details of building are as follows:

S.No.	Particulars	Total Area (sqm)
1.	Total Plot Area	30,600
2.	Permissible Ground Coverage (@35% plot area)	10,710
3.	Proposed Ground Coverage (@24.95% plot area)	7,636.074
4.	Permissible FAR (@1.2 plot area)	36,720
5.	Proposed FAR	33,875.175
	Basement 1	16,589.835
	• Block 1 & 2	
	Ground Floor	3,956.018
	First Floor	3,086.218
	• Block 3	
	Ground Floor	2,560.776
	First Floor	2,560.776
	Second Floor	2,560.776
	Third Floor	2,560.776
6.	Non-FAR Area	38,735.723
	Basement 1	670.36
	Basement 2	17,730.295
		17,730.295

	,	
	• Basement 3	
	• Block 1 & 2	330.08
	Ground Floor	312.637
	First Floor	400
	Terrace	
	Block 3	289.514
	➢ Ground Floor	289.514
	First Floor	289.514
	Second Floor	289.514
	Third Floor	404
	Terrace	
7.	Total Built Up Area (5 + 6)	72,610.898
8.	Green Area Proposed (@40.71 % plot area)	12,459.92
9.	Maximum height of the building up to terrace	13.075
	level (meter)	

- vi. During construction phase, total water requirement is expected to be 100ML, which will be met by private water tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.
- vii. During operational phase, total water requirement of the project is expected to be 119 KLD of which total fresh water requirement will be 39 KLD and the same will be met by Delhi Jal Board. Remaining 80 KLD recycled water will be sourced through treated water from STP. Wastewater generated is 74 KLD which will be treated in STP of total 90 KLD capacity. 67 KLD of treated wastewater will be recycled and reused for flushing (43 KLD), for gardening (approx. 6 KLD during rainy season) etc. About 18 KLD excess treated water (during rainy season) will be supplied to the nearby construction site for the purpose of water sprinkling & washing of the commercial vehicle tyres of the vehicles used in transportation of raw material.
- viii. About 593 Kg/day solid wastes will be generated in the project. The biodegradable waste 178 kg/day will be processed in OWC and the non-biodegradable waste generated 356 kg/day will be handed over to authorized local vendor.
 - ix. The total power requirement during construction phase is 6,629.65 KW and will be met from BSES Rajdhani Power Ltd. 6 DG Sets of total capacity 7,700 kVA (5 x 1,500 kVA + 1 x 200 kVA) will be provided for Power Backup.
 - x. Rooftop rainwater of buildings will be collected in 03 RWH pits of 78.5 cu.m capacity each.
 - xi. Parking facility for 740 ECS is provided against the requirement of 735 ECS (According to local norms).
- xii. Proposed energy saving measures would save about 15-18% of power. 5 % of electrical load will be met through solar power.
- xiii. To ensure no major impact on Air, Water, Noise, Ecology from proposed project/activity, water sprinkling will be carried out for dust suppression, waste water will be treated in-house STP, rainwater harvesting system is proposed to augment ground water resources and

- site will be enclosed with 10 m high barricade around the project boundary which will act as a wind breaker.
- xiv. The project is not located in Critically Polluted area.
- xv. Asola Bhatti Wildlife Sanctuary is about 6.7 km (S-E) direction from project site. However, the project is situated outside the notified Eco Sensitive Zone of Asola Bhatti Wildlife Sanctuary. NBWL Clearance is not required.
- xvi. Forest Clearance is not required.
- xvii. No Court case is pending against the project.
- xviii. Total green area provided is 12,459.92 sqm and 910 No.s trees will be planted. No tree felling/transplantation is involved.
- xix. The construction of project requires demolition of already constructed parts of the building and waste will be handled as Construction and Demolition Waste Management Rules, 2016.
- xx. Expected timeline for completion of the project is 24-36 months from the date of grant of EC.
- xxi. Investment/Cost of the project is Rs.258.58 Cr.
- xxii. Employment potential is 1182 persons during operation phase.
- xxiii. Benefits of the project: The project is leading to development of the area by providing employment of the local people and better infrastructure.
 - **2.** The EAC noted that the project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Delhi, the proposal required appraisal at Central level by sectoral EAC.
 - **3.** The EAC (Infra-2), based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance:
 - i. Construction And Demolition Waste Management Plan shall be implemented in adherence to the Construction and Demolition Waste Management Rules, 2016. As committed, at least 80 percent construction and demolition waste shall be used within the project.
 - ii. Fresh water requirement from local authority shall not exceed 39 KLD during operational phase. As committed, no groundwater abstraction shall be done during construction as well as operation phase of the project.
 - iii. As proposed, waste water shall be treated in an onsite STP of total 90 KLD capacity. Atleast 67 KLD treated water from the STP shall be recycled and re-used for flushing, and gardening purposes. Excess treated water (approx. 18 KLD during rainy season) shall be used for construction purpose, wheel washing or for horticultural purpose in the nearby areas as proposed.

- iv. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- v. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste. As committed, biodegradable waste shall be composted by use of OWC. Inert waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.
- vi. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 12,459.92 sqm. As proposed, at least 910 trees to be maintained during the operation phase of the project. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Plantations to be ensured species (cut) to species (planted). The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- vii. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 3 nos. of RWH pits shall be maintained for rainwater harvesting after filtration.
- viii. The PP shall also provide electric charging points in the parking areas for e-vehicles as committed.
- ix. Atleast 5% of electrical load shall be met through solar power as committed.
- x. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/Regulations or Statutes as applicable to the project.

LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 63rd MEETING OF EAC (INFRA-2) HELD ON 19th March, 2021 THROUGH VIDEO CONFERENCING

S.	Name	Designation	Attendance	Sign
No.			19.03.2021	Thro VC
1.	Prof. T. Haque	Chairman	P	-
2.	Dr. N. P. Shukla	Member	P	-
3.	Dr. H. C. Sharatchandra	Member	P	-
4.	Shri V. Suresh	Member	P	-
5.	Dr. V. S. Naidu	Member	P	-
6.	Shri B. C. Nigam	Member	P	-
7.	Dr. ManoranjanHota	Member	P	-
8.	Dr. Dipankar Saha	Member	P	-
9.	Dr. Jayesh Ruparelia	Member	P	-
10.	Dr. (Mrs.) Mayuri H.	Member	P	-
	Pandya			
11.	Dr. M. V. Ramana	Member	A	-
	Murthy			
12.	Prof. Dr. P.S.N. Rao	Member	A	
13.	Shri Lalit Bokolia	Scientist F &	P	
		Member		
		Secretary		

Standard EC Conditions for Project/Activity 7(a): Airport

I. Statutory compliance:

- (i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- (ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- (iii) The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).
- (iv) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.
- (v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- (vi) Clearance from Directorate General of Civil Aviation (DGCA) and Airports Authority of India (AAI) for safety and project facilities shall be obtained.
- (vii) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- (viii) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

- (i) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NOx in reference to SO₂ and NOx emissions) within and outside the airport area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
- (ii) Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- (iii) A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- (iv) Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet
- (v) The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.
- (vi) Excavated materials shall be handled and transported in a manner that they do not cause any problems of air pollution.
- (vii) The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.

III. Water quality monitoring and preservation:

- (i) Run off from chemicals and other contaminants from aircraft maintenance and other areas within the airport shall be suitably contained and treated before disposal. A spillage and contaminant containment plan shall be drawn up and implemented to the satisfaction of the State Pollution Control Board.
- (ii) Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc. shall be provided.
- (iii) The runoff from paved structures like Runways, Taxiways, can be routed through drains to oil separation tanks and sedimentation basins before being discharged into rainwater harvesting structures.

- (iv) Storm water drains are to be built for discharging storm water from the air-field to avoid flooding/water logging in project area. Domestic and industrial waste water shall not be allowed to be discharged into storm water drains.
- (v) Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Rain water harvesting structures shall conform to CGWA designs. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.
- (vi) Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- (vii) Sewage Treatment Plant shall be provided to treat the wastewater generated from airport. Treated water shall be reused for horticulture, flushing, backwash, HVAC purposes and dust suppression
- (viii) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- (ix) A detailed drainage plan for rain water shall be drawn up and implemented.

IV. Noise monitoring and prevention:

- (i) Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- (ii) Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
- (iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- (iv) During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- (v) Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.

V. Energy Conservation measures:

(i) Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.

VI. Waste management:

- (i) Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimized. Ensure that soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical).
- (ii) The project activity shall conform to the Fly Ash notification issued under the E.P. Act of 1986.
- (iii) Solid inert waste found on construction sites consists of building rubble, demolition material, concrete; bricks, timber, plastic, glass, metals, bitumen etc shall be reused/recycled or disposed off as per Solid Waste Management Rules, 2016 and Construction and Demolition Waste Management Rules, 2016.
- (iv) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- (v) The project proponents shall implement a management plan duly approved by the State Pollution Control Board and obtain its permissions for the safe handling and disposal of:
 - a. Trash collected in flight and disposed at the airport including segregation, collection and disposed.
 - b. Toilet wastes and sewage collected from aircrafts and disposed at the Airport.
 - c. Wastes arising out of maintenance and workshops
 - d. Wastes arising out of eateries and shops situated inside the airport complex.
 - e. Hazardous and other wastes
- (vi) The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out. Solid wastes shall be disposed in accordance to the Solid Waste Management Rules, 2016 as amended.
- (vii) A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- (viii) Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Belt:

- (i) Green belt shall be developed in area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the Air Port.
- (ii) Top soil shall be separately stored and used in the development of green belt.

VIII. Public hearing and Human health issues:

- (i) Construction site should be adequately barricaded before the construction begins.
- (ii) Traffic congestion near the entry and exit points from the roads adjoining the airport shall be avoided. Parking should be fully internalized and no public space should be utilized.
- (iii) Provision of Electro-mechanical doors for toilets meant for disabled passengers. Children nursing/feeding room to be located conveniently near arrival and departure gates.
- (iv) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- (v) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (vi) Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility:

- (i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- (ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular languagewithin seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (vi) The criteria pollutant levels namely; PM₁₀, PM_{2.5}, SO₂, NOx (ambient levels) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- (vii) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

- (viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (x) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- (xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- (xii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- (xiii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- (xiv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.
- (xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- (xvi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(d): Common hazardous waste treatment, storage and disposal facilities (TSDFs)

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.
- v. The Project proponent should ensure that the TSDF fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.
- vi. The project proponents shall adhere to all conditions as prescribed in the Protocol for 'Performance Evaluation and Monitoring of the Common Hazardous waste treatment, storage and disposal facilities' published by the CPCB in May, 2010.
- vii. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
- viii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- ix. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- x. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities

II. Air quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NOx in reference to SO₂ and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
- iv. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- vi. Appropriate Air Pollution Control (As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag filter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vii. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory
- viii. Gas generated in the Land fill should be properly collected, monitored and flared
- ix. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on

cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

III. Water quality monitoring and preservation:

- i. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with sixmonthly monitoring report.
- iv. No discharge in nearby river(s)/pond(s).
- v. The depth of the land fill site shall be decided based on the ground water table at the site.
- vi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- vii. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
- viii. The Company shall review the unit operations provided for the treatment of effluents, specially the sequencing of MEE after tertiary treatment, the source of permeate when no R.O. is recommended and the treatment of MEE condensate. The scheme for treatment of effluents shall be as permitted by the Pollution Control Board/Committee under the provisions of consent to establish.
- ix. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
- x. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- xi. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
- xii. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- xiii. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.

IV. Noise monitoring and prevention:

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures:

i. Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.

VI. Waste management:

- i. The TSDF should only handle the waste generated from the member units.
- ii. Periodical soil monitoring to check the contamination in and around the site shall be carried out.
- iii. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.
- iv. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.
- v. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.

- vi. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- vii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.

VII. Green Belt:

- i. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.
- ii. Top soil shall be separately stored and used in the development of green belt.

VIII. Public hearing and Human health issues:

- i. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.
- ii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular languagewithin seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(da): Bio-Medical Waste Treatment Facilities

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.
- v. Transportation and handling of Bio-medical Wastes shall be as per the Bio-Medical Waste Management Rules, 2016 including the section 129 to 137 of Central Motor Vehicle Rules 1989.
- vi. Project shall fulfill all the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 including collection and transportation design etc. and also guidelines for Common Hazardous Waste Incineration 2005, issued by CPCB Guidelines of CPCB/MPPCB for Bio-medical Waste Common Hazardous Wastes incinerators shall be followed.
- vii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- viii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- ix. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities

II. Air quality monitoring and preservation:

- i. The project proponent shall install emission monitoring system including Dioxin and furans to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Periodical air quality monitoring in and around the site including VOC, HC shall be carried out.
- iii. Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, so as to achieve Total Organic Carbon (TOC) content in the slag and bottom ashes less than 3%, or their loss on ignition is less than 5% of the dry weight of the material
- iv. Venturi scrubber (alkaline) should be provided with the incinerator with stack of adequate height (Minimum 30 meters) to control particulate emission within 50mg/Nm³.
- v. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards. All necessary air pollution control devises (quenching, Venturi scrubber, mist eliminator) should be provided for compliance of emission standards.
- vi. Masking agents should be used for odour control.

III. Water quality monitoring and preservation:

- i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Waste water generated from the facility shall be treated in the ETP and treated waste water shall be reused in the APCD connected to the incinerator. The water quality of treated effluent shall meet the norms prescribed by State Pollution Control Board. Zero discharge should be maintained.
- iii. Process effluent/any waste water should not be allowed to mix with storm water.
- iv. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- v. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project.

 Treated water shall be reused within the project.
- vi. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

- vii. The leachate from the facility shall be collected and treated to meet the prescribed standards before disposal.
- viii. Magnetic flow meters shall be provided at the inlet and outlet of the ETP & all ground water abstraction points and records for the same shall be maintained regularly.
- ix. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.

IV. Noise monitoring and prevention:

i. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures:

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- i. Provide LED lights in their offices and residential areas

VI. Waste management:

- i. Incinerated ash shall be disposed at approved TSDF and MoU made in this regard shall be submitted to the Ministry prior to the commencement.
- ii. The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016.
- iii. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- iv. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016
- v. No landfill site is allowed within the CBWTF site
- vi. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.

VII. Green Belt:

i. Green belt shall be developed in area as provided in project details, with native tree Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

VIII. Public hearing and Human health issues:

- i. Feeding of materials/Bio-medical waste should be mechanized and automatic no manual feeding is permitted.
- ii. Proper parking facility should be provided for employees & transport used for collection & disposal of waste materials.
- iii. Necessary provision shall be made for fire-fighting facilities within the complex.
- iv. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- v. Emergency plan shall be drawn in consultation with SPCB/CPCB and implemented in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or gradual release of hazardous waste or hazardous waste constituents to air, soil or surface water.
- vi. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- vii. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority.

The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular languagewithin seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(g): Aerial ropeways

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- III. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
- iV. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.
- V. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- Vi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM₁₀ and PM_{2.5} in reference to PM emission) covering upwind and downwind directions.
- ii. Appropriate Air Pollution Control (APC) system (both during the construction and operation) shall be provided for all the dust generating points *inter alia* including loading, unloading, transfer points, fugitive dust from all vulnerable sources, so as to comply prescribed standards.
- iii. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- iv. Adequate parking shall be constructed at upper terminal and lower terminal. PP shall ensure smooth traffic management.

III. Water quality monitoring and preservation:

- i. Storm water from the project area shall be passed through settling chamber.
- ii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- iv. Prior permission from competent authority shall be obtained for use of fresh water.
- v. No wastewater shall be discharged in open. Appropriate Water Pollution Control system shall be provided for treatment of waste water.
- vi. A certificate from the competent authority, in case of discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

IV. Noise monitoring and prevention:

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures:

- i. Energy conservation measures like installation of LED/CFLs/TFLs for lighting should be integral part of the project design and should be in place before project commissioning.
- ii. Solar energy shall be used in the project i.e., at upper terminal and lower terminal to reduce the carbon footprint.

VII. Waste management

- i. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- ii. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.

iii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

VIII. Public hearing and Human health/safety issues:

- i. Comply with the safety procedures, norms and guidelines (as applicable) as outlined in IS 5228, IS 5229 and IS 5230, code of practice for construction of aerial ropeways, Bureau of Indian Standards.
- ii. Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.
- iii. Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.
- iv. The project should conform to the norms prescribed by the Director General Mine safety. Necessary clearances in this regard shall be obtained.
- v. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.
- vi. Adequate first aid facility shall be provided during construction and operation phase of the project.
- vii. Regular safety inspection shall be carried out of the ropeway project and a copy of safety inspection report should be submitted to the Regional Office.
- viii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

IX Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act. 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(h): Common Effluent Treatment plants (CETPs)

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- vii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

- i. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Diesel generating sets shall be installed, in the downwind directions.
- ii. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards.

III. Water quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- iii. There shall be flow meters at inlet and outlet of CETP to monitor the flow. Suitable meters shall be provided to measure the quantity of effluent received, quantity of effluent recycled/reused and discharged.
- iv. The units and the CETP will maintain daily log book of the quantity and quality of discharge from the units, quantity of inflow into the CETP, details of the treatment at each stage of the CETP including the raw materials used, quantity of the treated water proposed to be recycled, reused within the Industrial park/units, quantity of the treated effluent discharged. All the above information shall be provided on-line of the web site exclusively prepared for the purpose by the CETP owner. The website shall be accessible by the public. The financial and energy details of the CETP will also be provided along with details of the workers of the CETP.
- v. The CETP operator will maintain an annual register of member units which will contain the details of products with installed capacities and quality and quantity of effluents accepted for discharge. This will form a part of the initial and renewal applications for consent to operate to be made before the State Pollution Control Board.
- vi. No changes in installed capacity, quality or quantity of effluents as agreed upon in the initial MOU between the operator and the member units, addition of any new member units shall be carried without prior approval of the ministry
- vii. The Unit shall inform the State Pollution Control Board at least a week prior to undertaking maintenance activities in the recycle system and store/dispose treated effluents under their advice in the matter.
- viii. The unit shall also immediately inform the Pollution Control Board of any breakdown in the recycling system, store the effluents in the interim period and dispose effluents only as advised by the Pollution Control Board.
- ix. The MoU between CETP and member units shall indicate the maximum quantity of effluent to be sent to the CETP along with the quality.
- x. The unit shall maintain a robust system of conveyance for primary treated effluents from the member units and constantly monitor the influent quality to the CETP. The Management of the CETP and the individual member shall be jointly and severally responsible for conveyance and

pre-treatment of effluents. Only those units will be authorized to send their effluents to the CETP which have a valid consent of the Pollution Control Board and which meet the primary treated standards as prescribed. The CETP operator shall with the consent of the State Pollution Control Board retain the powers to delink the defaulter unit from entering the conveyance system.

- xi. The effluent from member units shall be transported through pipeline. In case the effluent is transported thorough road, it shall be transported through CETP tankers only duly maintaining proper manifest system. The vehicles shall be fitted with proper GPS system.
- xii. Before accepting any effluent from member units, the same shall be as permitted by the SPCB in the consent order. No effluent from any unit shall be accepted without consent from SPCB under the Water Act, 1974 as amended.
- xiii. Treated water shall be disposed on land for irrigation. An irrigation management plan shall be drawn up in consultation with and to the satisfaction of the State Pollution Control Board.
- xiv. The Project proponents will build operate and maintain the collection and conveyance system to transport effluents from the industrial units in consultation with and to the satisfaction of the State Pollution Control Board and ensure that the industrial units meet the primary effluent standards prescribed by the State Pollution Control Board.
- xv. The State Pollution Control Board will also evaluate the treatment efficiency of the Effluent Treatment Plant (ETP) and its capability of meeting the prescribed standards. The final scheme of treatment would be such as is approved by the Pollution Control Board in the Consent to Establish
- xvi. The project proponents will create an institutional arrangement for the involvement of individual members in the management of the CETP.

IV. Noise monitoring and prevention:

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Waste management:

- i. ETP sludge generated from CETP facility shall be handled and disposed to nearby authorized TSDF site as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- ii. Non-Hazardous solid wastes and sludge arising out of the operation of the CETP shall be adequately disposed as per the Consent to be availed from the State Pollution Control Board. Non-Hazardous solid wastes and sludge shall not be mixed with Hazardous wastes.
- iii. The CETP shall have adequate power back up facility, to meet the energy requirement in case of power failure from the grid.
- iv. The site for aerobic composting shall be selected and developed in consultation with and to the satisfaction of the State Pollution Control Board. Odour and insect nuisance shall be adequately controlled.
- v. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- vi. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.

VI. Energy Conservation measures:

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- ii. Provide LED lights in their offices and residential areas

VII. Green Belt:

i. Green belt shall be developed in area as provided in project details, with native tree Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

VIII. Public hearing and Human health issues:

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with

- their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(i): Common Municipal Solid Waste Management Facility (CMSWMF)

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- vii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (for projects involving incineration).
- ii. As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag filter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator. Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO₂, NOx and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.
- Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
- iv. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator
- v. Gas generated in the Land fill should be properly collected, monitored and flared.
- vi. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NOx in reference to SO₂ and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

III. Water quality monitoring and preservation:

- i. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
- iii. The depth of the land fill site shall be decided based on the ground water table at the site.
- iv. Rain water runoff from the landfill area and other hazardous waste management area shall be collected and treated in the effluent treatment plant.
- v. Total fresh water use shall not exceed the proposed requirement as provided in the project

- details. Prior permission from competent authority shall be obtained for use of fresh water.
- vi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- vii. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
- viii. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
- ix. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project.

 Treated water shall be reused within the project.
- x. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

IV. Waste management:

- i. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.
- ii. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- iii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- iv. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.

V. Transportation:

- i. Project should ensure that the site is properly cordoned off from general movement and no unauthorized person or goods permitted to enter the premises. Necessary security provision should be made as a condition in the Authorization under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 to prevent unwanted access.
- ii. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.
- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

VI. Green belt:

- i. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.
- ii. Top soil shall be separately stored and used in the development of green belt.

VII. Public hearing and Human health/safety issues:

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iii. Occupational health surveillance of the workers shall be done on a regular basis.

VIII. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.

- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

IX. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. (for projects involving incineration)
- ii. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed (For projects involving only Landfill without incineration)
- iii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iv. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain (in case of incineration involved).
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- x. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- xi. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 8(a/b): Building and Construction projects / Townships and Area Development projects

I. Statutory compliance:

- i. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- ii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc as per National Building Code including protection measures from lightening etc.
- iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- iv. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.
- vi. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
- vii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- viii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- ix. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
- x. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

II. Air quality monitoring and preservation:

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM₁₀ and PM_{2.5}) covering upwind and downwind directions during the construction period.
- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- xii. For indoor air quality the ventilation provisions as per National Building Code of India.

III. Water quality monitoring and preservation:

- i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built-up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
- xiii. All recharge should be limited to shallow aquifer.
- xiv. No ground water shall be used during construction phase of the project.
- xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
- xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
- xviii. No sewage or untreated effluent water would be discharged through storm water drains.
- xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
- xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

IV. Noise monitoring and prevention:

- i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
- ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures:

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- ii. Outdoor and common area lighting shall be LED.
- iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- iv. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
- v. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
- vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

VI. Waste Management:

- i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
- ii. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- iv. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg/person/day must be installed.
- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Cover:

- i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
- ii. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e., planting of 10 trees for every 1 tree that is

cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.

iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

VIII. Transport

- i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
 - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - b. Traffic calming measures.
 - c. Proper design of entry and exit points.
 - d. Parking norms as per local regulation.
- ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

IX. Human health issues:

- i. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- ii. For indoor air quality the ventilation provisions as per National Building Code of India.
- iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- v. Occupational health surveillance of the workers shall be done on a regular basis.
- vi. A First Aid Room shall be provided in the project both during construction and operations of the project.

X. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

XI. Miscellaneous:

i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.

- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.