

MINUTES OF 91st MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD ON 30th JUNE, 2022.

VENUE: Indus Hall, Ground Floor, Jal Wing, Indira Paryavaran Bhawan, Jor Bagh, Delhi – 110 003.

DATE: 30th June, 2022

PROCEEDINGS

91.1 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.

91.2 Confirmation of Minutes of 90th Meeting of Expert Appraisal Committee (Infrastructure-2) held on 14th June, 2022.

The Expert Appraisal Committee (Infrastructure-2), hereinafter called the EAC (Infra-2), was informed that no representation has been received regarding projects considered in 90th meeting. Minutes of 90th meeting of EAC (Infra-2) were confirmed. The typo errors, if any noticed during processing of these cases may be corrected in the light of facts and figures provided by the respective Project Proponent.

91.3 Consideration of Proposals: The EAC (Infra-2) considered proposals as per the agenda adopted for the 91th meeting. The details of deliberations held and decisions taken in the meeting are as under:

AGENDA INTEM NO. 91.3.1

Environmental Clearance for Integrated Municipal Solid Waste Management Project at Plot No 565/Ansh, Village Sugnibas, Thana 344, Khata No 166, District East Singhbhum, Jharkhand by M/s Chaukulia Nagar Panchayat – Environmental Clearance

IA/JH/MIS/92384/2019; F. No. 10-11/2019-IA.III

1. The Project Proponent (M/s Chaukulia Nagar Panchayat) along with the EIA consultant (Wolkem India Limited) made a presentation on above said proposal and the EAC (Infra-2) took note of following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project:

- i. The proposed Integrated Municipal Solid Waste Management Project is situated at Plot No 565/Ansh, Village Sugnibas, Thana 344, Khata No 166, District East Singhbhum, Jharkhand.
- ii. The project is new.

- iii. Municipal waste generation was about 5.39 TPD in 2021 & it is estimated that about 7.39 TPD will be in 2041.
- iv. The proposed land area of the project is of 2.0 Acre
- v. Processing capacity of the proposed project is 15 TPD and consists of one Pre-segregation unit of 15 TPD capacity to segregate waste into two different stream i.e. compost and Refused Derived Fuel (RDF), Aerobic Compost Plant of 8.0 TPD and RDF Plant of 7.0 TPD. In addition, sanitary landfill facility will be developed for 20 years of operational life.
- vi. Earlier, the Ministry granted Terms of Reference (ToR) to this project for vide F. No.10-11/2019-IA-III dated 07.03.2019.
- vii. Public hearing was conducted on 01.11.2021.
- viii. Site selection criteria as per Solid Waste Management Rules, 2016 as follows:
- ix.

Criteria for landfill site	Required as per SWM Rule 2016	Actual Position
Design Life Period	20-25 years	More than 20 years
Distance from River	>100 m	No river flowing within 100 m from the project boundary.
Distance from Pond	>200 m	No any pond exists within 200 mt from project boundary.
Distance from Highway	>200 m	Distance of highway is more than 200 m from the project boundary
Distance from Habitation	>200 m	No habitation is settled within 200m from the project boundary
Distance from Public Parks	>200 m	No public park exist in 200m from the project boundary
Distance from Water supply wells	>200 m	No any water supply well was observed within 200m from the project boundary
Water table*	2m from bottom liner of landfill	Criteria complied
Earthquake zone*	500 m from fault line fracture	The project district comes under Seismic zone II
Airport/Airbase	>20 km	Ranchi Airport is 171 km in WNW direction from project site.
Flood plains (100 Yrs.)	Not Allowed	Not Applicable
Zone of Coastal Regulations	Not Allowed	
Wetland	Not Allowed	
Critical Habitat Area	Not Allowed	
Sensitive Eco Fragile Area	Not Allowed	
General Conditions: EIA Notification 2006; Project is category A if	EIA Notification 2006; Requirement	Yes, the project falls under interstate boundary of West Bengal which are at distance about 4.53 km in E direction from project site.

Protected Area under Wildlife	>10 km	Not Applicable
Critically Polluted Area under CPCB	>10 km	Not Applicable
Notified Eco Sensitive Area	>10 km	Not Applicable
Interstate boundaries or International Boundaries	>5 km	West Bengal state border is at distance of 4.53 km in E direction from proposed project boundary.

- x. Budget allocation for CER activities is Rs. 10 Lakhs/year.
- xi. Water Requirement- The water will be sourced from PHED water supply. During Construction phase, 1.5 KLD fresh water will be required & during Operational phase about 2.3 KLD water will be required.
- xii. The capital cost of project is Rs. 494.36/- Lakhs; Capital cost of EMP - Rs. 30.0/- Lakhs; recurring cost of EMP -Rs. 12.5/- lakhs per Annum.
- xiii. No tree cutting involved
- xiv. Forest Clearance is not required
- xv. Wildlife Clearance is not required
- xvi. The project is not located in Critically Polluted area
- xvii. No litigation pending against the project & project proponent.
- xviii. No environmental sensitive area like National park, Sanctuary, Biosphere reserve Wild life corridor, Tiger /Elephant reserve exists in the 10 Km radius.
- xix. Approx. -63 KVA power will be require which will be met from JVVNL.
- xx. Manpower requirement during construction phase is about 10 people and during operation phase manpower required is 100-150.

2. The project/activity is covered under category B of item 7(i) Common Municipal Solid Waste Management Facility (CMSWMF)' of the Schedule to the EIA Notification, 2006 and its amendments, and requires appraisal at State Level. However, General Condition is applicable, due the presence of inter-state boundary of Jarkhand and West Bengal falls within 4.53 km from the proposed site. Accordingly, the project comes under category 'A' and requires 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, **deferred** the proposal and asked the PP to submit the following additional information:

- i. Detailed segregation process of waste
- ii. Number of proposed windrows
- iii. Water table of the proposed site
- iv. Leachate management plan

4. Further, the EAC (Infra-2) strongly reprimanded the consultant for gaps in the submissions of information and improper presentation.

AGENDA INTEM NO. 91.3.2

Environmental Clearance for Installation of Liquefied Petroleum Gas (LPG) & Piped Natural Gas (PNG) system for all 4 levels of Terminal-2 building at Kempegowda International Airport at Devanhalli, Bengaluru, Karnataka by M/s Bangalore International Airport Limited – Amendment in Environmental Clearance

IA/KA/MIS/279116/2022; F. No. 10-24/2012-IA.III

1. The Project Proponent (M/s Bangalore International Airport Limited) along with the EIA consultant (Vimta Labs Limited) made a presentation on above said proposal. The EAC (Infra-2) took note of following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project:

- i. The proposal is for amendment in Environmental Clearance granted vide F. No: 10-24/2012-IA.III dated 22.08.2014 to M/s Bangalore International Airport Limited by the Ministry for installation of LPG (Liquefied Petroleum Gas) & Piped Natural Gas (PNG) system for all 4 levels of Terminal-2 building at Kempegowda International Airport (KIA) at Devanhalli, Bengaluru.
- ii. Earlier, the EC dated 22.08.2014 has been granted for second stage expansion of Bengaluru International Airport to enable passenger capacity of 55 MPPA and one million tonnes of cargo handling per annum. Thereafter, the said EC was amended for construction of Eastern Connectivity tunnel vide F. No. 10-24/2012-IA-III dated 21.12.2018 and corrigendum also issued on 23.02.2021 wrt to power requirement.
- iii. The proposed installation of gas bank is within the existing airport area near Terminal-2 building.
- iv. Gas system operation will be done in 2 phases. During phase-1, LPG (Liquefied Petroleum Gas) will be used as fuel for cooking. In phase-2 PNG (Piped Natural Gas) will be used as fuel for cooking. The reason being, M/s. Gail Gas Limited, natural gas suppliers in Bengaluru City, will take approx. 12-24 months to get there piping network laid out for BIAL, post agreement and contracts.
- v. The present water requirement (for the month of March 2022) is about 3.69 MLD which is sourced from BWSSB and Rainwater Harvesting. BIAL has provided STP of 5.5 MLD capacity about 1.6 MLD of Sewage is generated and same is treated and utilised for development of greenbelt, land scaping and HVAC make up water. No additional water requirement for the present proposal.
- vi. No additional waste generation due to the proposed installation of LPG gas bank and PNG.
- vii. Forest Clearance is not required
- viii. CRZ Clearance is not required

- ix. NBWL Clearance is not required
- x. No tree cutting is involved for the present proposal,
- xi. No additional land acquisition is involved
- xii. No diversion of water bodies involved.
- xiii. No litigations are involved
- xiv. The total power requirement for KIA by 2030 is projected to be 325 MVA. The power shall be supplied by Karnataka Power Transmission Corporation Limited (KPTCL). The total power required for Food & Beverage outlets for Terminal 2 is about 4.8 MW, by introducing gas i.e LPG/PNG it is expected to have a reduction electricity by about 20 to 30%.
- xv. The estimated cost of proposed installation in ₹ 3,30,04,309.
- xvi. Employment: Due to the installation of LPG/PNG there will be increase in man power by 6 persons for operation and maintenance.
- xvii. Benefits of the project: LPG & PNG both are the cleanest burning fuels that provides smoke-free indoor cooking and can held reduce outdoor and urban air pollution. Both gases produce less CO₂ than coal, heating oil or petrol, emits virtually no black carbon or other particulates.
- xviii. Certified Compliance Report (CCR) dated 15.05.2022 is submitted; wherein the implementation of environmental safeguards status in the plant is rated as satisfactory.
- xix. PP has submitted the addendum EIA/EMP Report and Pre-Feasibility Report for proposed installation of LPG (Liquefied Petroleum Gas) & Piped Natural Gas (PNG) system.

2. The EAC (Infra-2) noted the project/activity is covered under category 'A' of item 7(a) 'Airports' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires 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** amending the environmental clearance granted vide F. No: 10-24/2012-IA.III dated 22.08.2014 for installation of LPG (Liquefied Petroleum Gas) & Piped Natural Gas (PNG) system for all 4 levels of Terminal-2 building at Kempegowda International Airport (KIA) at Devanhalli, Bengaluru with following additional specific conditions. All other conditions, as specified in the aforesaid EC letter dated 22.08.2014 shall remain unchanged.

- PP shall take all safety precautions to prevent and fire incidence.
- PP shall also ensure adequate emergency exit points with proper signage for people to disperse in case of any fire incidence.

AGENDA INTEM NO. 91.3.2

Environmental Clearance for Expansion of Group Housing Project "Sikka Kimaya Greens" with increase in built-up area from 62079.82

sq. m to 71140.9 sq. m at IIE, Sahastradhara Road, Dehradun, Uttarakhand by M/s. G.R. Realcon Pvt. Ltd. – Reconsideration for Environmental Clearance

IA/UK/MIS/251664/2014; F. No. 21-5/2022-IA.III

1. The EAC (Infra-2) noted that earlier the proposal was deliberated by EAC (Infra-2) in its 81st, 83rd 86th meeting.

2. The proposal was deferred as absent case by EAC (Infra-2) in its 81st meeting. Thereafter, the proposal was reconsidered by EAC (Infra-2) in its 83rd meeting; wherein the Project Proponent (M/s. G.R. Realcon Pvt. Ltd.) along with his consultant 'M/s Earthvision India Associate Consultants', made a presentation on the key parameters and salient features of the project to the EAC (Infra-2) as mentioned below.

- i. The project is located at Plot No. 18 & 19, IIE, Sahastradhara Road, Dehradun Taluk and District, Uttarakhand.
- ii. The project is an Expansion.
- iii. Earlier, Environmental Clearance was issued by SEIAA, Uttarakhand vide letter No. 550-8(28)/2014 dated 30.08.2014 for plot area of 8,211 sqm. and total built-up area of 42,846.37 sqm. Later, Corrigendum was issued by SEIAA, Uttarakhand vide letter No.460/SEIAA dated 14.08.2020, for change in built-up area to 62,846.37 sqm and change in capacity of STP to 150 KLD. Now, expansion is proposed with increase in built-up area from 62,079.82 sqm to 71,140.9 sqm.
- iv. The project has obtained certified compliance report from Integrated Regional Office, Dehradun vide Letter File No. NC-RO/ENV/CON/24/2015/1433 dated 14.01.2022.
- v. The total area of project is estimated 18,211 sqm (or 4.50 acres). The built-up area of the Executive Apartment Project is 71,140.9 sqm. The details of the proposed expansion are given as follows:

S. No.	Particulars	Existing Capacity	Proposed Expansion	Total Capacity after Expansion
1	Total Site Area	18211.00sqm.		18211.00sqm.
2	Built up Area	62846.37 sqm.	8294.53 sqm.	71140.9 sqm.
3	Green Area	5463.3sqm.	-	5463.3sqm.
4	Ground Coverage	6363.72sqm.	-	6363.72sqm.
5	No of Towers	8 nos.	1nos.	9 nos.
6	Max Height of Building	27 m	3 m increase	30 m
7	Nos. of Basement	2 nos.	-	2 nos.
8	Road and Parking Area	25m/18655.11 sqm.	-	25m/18655.11 sqm.
9	Electricity	2150 KVA	-	2150 KVA
10	Water consumption during	10 KLD	-	10 KLD

S. No.	Particulars	Existing Capacity	Proposed Expansion	Total Capacity after Expansion
	construction (KLD)			
11	Water consumption during operation	270 KLD	-	270 KLD
12	WasteWater Generation during operation phase	216 KLD	-	216 KLD
13	Manpower (Operational)	200 nos	-	200 nos
14	Resident Population	2000 person	-	2000 person
15	Cost of Project	200 Crore	-	200 Crore
16	DG Set	1500 KVA	-	1500 KVA

vi. The project components are given as follows:

S.No	Particular	Area	No. of Units	Total Area
1.	Studio Luxury Apartment +1 BR+1 Living /Dining+ Kitchen	775	18	13950
2	2 Bhk +2T (A)	1150	1	1150
3	2 Bhk+2 Toilet	1159	93	10778.7
4	2 Bhk +2T (B)	1227	1	1227
5	3 Bhk+2 Toilet	1390	32	4448.0
6	3Bhk +2 Toilet (New)	1531	18	2755.8
7	3Bhk+2 Toilet+ Servant toilet	1535	72	11052.0
8	2 Bhk+Servant+2 Toilet	1820	18	3276.0
9	3 Bhk 3 Toilet	1820	9	1638.0
10	3 Bhk + Servant+ Study+ 3 Toilers	2275	42	9555.0
11	4 Bhk Premium + Servant + 3 Toilet +Bar Private Lift Lobby	2645	3	793.5
12	4 Bhk Premium + Servant+3 Toilet + Private Lift Lobby+ Bar	2775	64	17760
13	3 Bhk(Penthouse)	3620	7	2534.0
14	4 Bhk(Penthouse)	6083	1	608.3
15	4 Bhk(Penthouse)	6090.81	1	609.08
16	3 Bhk + Servant+Study+3 Toilet Double Basement	6940	1	694.0
17	4 Bhk(Penthouse)	7951	1	795.1
18	5 Bhk(Penthouse)	8710.04	1	871.0
19	Villas	1339.7	1	1339.7
Grand Total			383	71140.9

vii. During construction phase the water is being sourced through water tankers. Wastewater generated during the construction is being disposed off through soak pits.

- viii. The total water requirement during the operation phase will be approx. 282 KLD and will be procured from Uttarakhand Jal Sansthan/borewell. The wastewater generated in operation phase (216 KLD) will be treated in a STP of 250 KLD capacity and the treated sewage (172 KLD) will be reused for toilet flushing (70 KLD), horticulture (35 KLD) & D.G. cooling (1 KLD). The surplus treated water (66 KLD) will be sent to sewer line which is being constructed for this area which will be integrated in the main city sewer network
- ix. During the operation phase, the solid waste generated from project will be 1000 kg/day comprising of biodegradable wastes (about 600 kg/day), recyclable wastes (about 300 kg/day) and inert wastes (about 100 kg/day). The biodegradable organic wastes will be treated inside the premises by organic waste converter. Recyclable wastes and non - recyclable wastes will be disposed through Govt. approved agency. 40kg/day of Sludge generated from the STP plant will be dried and later will be used as manure for green belt development.
- x. The total demand load is estimated 2150 KVA. Power will be supplied by Uttarakhand Power Corporation Ltd. Power backup for the group housing project will be through 3 no. of DG sets of total capacity 1,500 KVA (1 x 250 + 1 x 500 + 1 x 750 KVA each) capacity.
- xi. All internal lighting shall be BEE star rated and solar lit, at least to an extent of 25%. Solar street light controllers will be used for automatic dusk to dawn operation of street lights. A minimum of 50% hot water requirement shall be met by solar water heating systems.
- xii. Total of 3 Rain Water Harvesting pits are being proposed for artificial rain water recharge within the project premises.
- xiii. Parking for 601ECS will be provided.
- xiv. The project is not located in Critically Polluted area.
- xv. NBWL Clearance is not required.
- xvi. The project falls in territorial limits of Doon Valley Notification, 1989.
- xvii. Forest Clearance is not required.
- xviii. No court case is pending against the project.
- xix. CRZ Clearance is not required.
- xx. Investment/Cost of the project is ₹200 Crores.
- xxi. Employment potential - About 200 persons.

3. The EAC (Infra-2) in its 83rd meeting noted that the project has obtained certified compliance report from Integrated Regional Office, Dehradun vide Letter File No. NCRO/ENV/CON/24/2015/1433 dated 14.01.2022. As per the aforesaid report based on site visit conducted on 07.01.2022, the project is in construction phase, and only 65% of work has been completed.

4. The EAC (Infra-2) in its 83rd meeting observed major discrepancies and gaps in the information submitted by the project proponent in Form 1, Form 1A, Presentation and EC issued by SEIAA, Uttarakhand vide letter No. 550-8(28)/2014 dated 30.08.2014. Accordingly, the EAC (Infra-2) decided to *defer* the proposal and asked the project proponent to provide the following additional information:

- i. The total plot area as per existing EC issued by SEIAA, Uttarakhand vide letter No. 550-8(28)/2014 dated 30.08.2014 is only 8,211 sqm., whereas the instant proposal mentions the existing plot area as 18,211.00 sqm. The Corrigendum issued by SEIAA, Uttarakhand vide letter No.460/SEIAA dated 14.08.2020 also does not mention any change in plot area. Hence, clarify the discrepancy with adequate supporting documents.
- ii. The previous EC issued by SEIAA, Uttarakhand vide letter No. 550-8(28)/2014 dated 30.08.2014 mentions that height of the building can't exceed 21m as laid down in the bylaws of MDDA (Housing Department, State Government Order No -2009/V2011-55/2006 T.C. dated 17th Nov, 2011). Submit NOC from Housing Department, State Government/Government Order permitting increase in height of the building beyond 21m as proposed for the expansion.
- iii. The total water requirement is mentioned as 323 KLD with fresh water requirement as 282 KLD in presentation whereas total water requirement is mentioned as 282 KLD in Form 1 and Form 1A. Water balance diagram mentions fresh water requirement as 270 KLD. Recycled water requirement adds up to 111 KLD in Form 1A and presentation, whereas it adds upto only 106 KLD in the water balance diagram. STP capacity is mentioned as 270 KLD in Form 1 and as 250 KLD in Form 1A and presentation. Accordingly, clarify the discrepancies in water requirement specifying total water requirement, fresh water requirement and recycled water requirement, and revise the water balance diagram.
- iv. Project requirements submitted in Form 1A comparing existing capacity with proposed expansion and total capacity after expansion needs to be clarified. Existing height of building is mentioned as 27 m while previous EC dated 30.08.2014 permits height only upto 21 m. Existing built-up area is mentioned as 62,846.37 sqm., however, application mentions expansion with increase in built up area from 62,079.82 sqm. Power requirement, water requirement, waste generation, STP capacity, manpower, population, cost etc. have not been updated with respect to the proposed expansion. Accordingly, the details submitted in comparison statement should be verified and resubmitted clearly mentioning the existing parameters, proposed expansion and total capacity after expansion.
- v. Submit copy of authorisation of competent authority for Mr. Vinay Singh who attended the meeting on behalf of PP.
- vi. Provide details of landscape development including tree cutting and plantation proposed.
- vii. Capital cost for waste management is specified as nil (How about the cost for OWC?). Also, the capital cost for Environment Management is given as 100 lakhs in Form 2 and as 160 lakhs in Form 1A and presentation. Accordingly, verify and resubmit the environmental costs.
- viii. Clarify the project benefits.

- ix. Status of construction activity completed as per existing EC as on date.
- x. Resubmit Form 1 and Form 1A with correct information.

5. Accordingly, PP submitted following replies to above queries and the same was deliberated by EAC (Infra-2) in its 86th meeting.

- i. Reply-ADS 1: The discrepancy in plot area is a typing mistake. Allotment letter from SIIDCUL dated 18.06.2013 has been submitted which specifies that the plot area is 4.5 acres (about 18,211.00 sqm.).
- ii. Reply-ADS 2: In 2017 urban department, Govt. of Uttarakhand has issued the notification for raising the height of multi-storey building from 24 m to 30 m. The project has been approved by SIDA which is the agency for development of Industrial Estate (since the project is in IT Park). A copy of the notification has been submitted.
- iii. Reply-ADS 3: The total water consumption in operation phase will be 366 KLD initial and 216 KLD after stabilization of STP in operation phase and waste water generation will be 262.65 KLD will be treated in a STP of 270 KLD capacity. 209 KLD treated water will be generated of which, 150 KLD treated water will be reused for toilet flushing (93 KLD), green belt development (35 KLD), road and parking (20 KLD) & D.G. cooling (2 KLD). The surplus treated water (approx. 59 KLD) will be given to SIDCUL for IT Park development
- iv. Reply-ADS 4: Details of proposed expansion updated in Form 1A is given as follows:

S. No.	Particulars	Existing Capacity	Proposed Expansion	Total Capacity after Expansion
1	Total Site Area	18211.00 sqm.		18211.00 sqm.
2	Built up Area	62846.37 sqm.	8294.53 sqm.	71140.9 sqm.
3	Green Area	5463.3 sqm.	-	5463.3 sqm.
4	Ground Coverage	6363.72 sqm.	-	6363.72 sqm.
5	No of Towers	8 nos.	1 nos.	9 nos.
6	Max Height of Building	21 m	6 m increase	27 m
7	Nos. of Basement	2 nos.	-	2 nos.
8	Road and Parking Area	25m/18655.11 sqm.	-	25m/18655.11 sqm.
9	Electricity	2150 KVA	-	2150 KVA
10	Water consumption during construction (KLD)	10 KLD	-	10 KLD
11	Water consumption during operation	309 KLD	57 KLD	366 KLD
12	Wastewater Generation during operation phase	114 KLD	-	216 KLD
13	Manpower (Operational)	123 nos.	77 nos.	200 nos.
14	Resident Population	1600 persons	627 persons	2227 persons
15	Cost of Project	200 Crore	27 Crore	227 Crore
16	DG Set	1500 KVA	-	1500 KVA

- v. Reply-ADS 5: Authorization letter for competent authority (Mr. Vinay Singh) has been submitted.
- vi. Reply-ADS 6: The total green area of the project is 5,463.3 sqm. i.e. 30.00% of net plot area. There is no tree cutting in the plot area, as the site is situated within the campus of IT Park. Evergreen tall and ornamental trees and ornamental shrubs have been proposed to be planted inside the premises. Plant species like Neem, Gulmohar, Silky Oak and Kadamba have been proposed to be planted inside the premises.
- vii. Reply-ADS 7: The Organic waste converter within the project site will be installed and the capital cost of high quality OWC is ₹5 Lacs which is being incorporated in the capital cost for Environment Management. The above figure of ₹ 100 Lakhs has been inserted in Form 2 by mistake, though it is ₹ 160 Lakh as mentioned in Form 1A. The revised break up of Environment Management costs including OWC has been submitted and provides for ₹165 lakhs Capital cost and ₹26 lakhs recurring cost.
- viii. Reply-ADS 8: Being a housing project, the project is very beneficial in many ways. The project will be great opportunities for those people who are looking to settle in Dehradun in a peaceful area as lots of people are migrating in Dehradun due to its renowned education and climatic conditions. All the amenities / facilities are near the housing project. This project will also generate employment for almost 200 people. The development of green belt and other landscaping after completion of construction will enhance the visual aesthetics of the area. The development of this project as per SIDA plan and complying with the norms of concern authority will also bring a partial check on unplanned development in the city. This project will comprise latest modular fitting that would use less power and electricity.
- ix. Reply-ADS 9: 65% of the construction work has been completed in which excavation & foundation work has been fully completed.
- x. Reply-ADS 10: Corrected Form-1 and Form 1A have been submitted.

6. The EAC (Infra-2) was not satisfied with the response to the queries raised. Accordingly, the EAC (Infra-2) decided to defer the proposal in its 86th meeting and asked the project proponent to provide the following additional information:

- i. Submit a copy of the complete notification issued by urban department, Govt. of Uttarakhand for raising the permissible height of multi-storey building from 24 m to 30 m.
- ii. Revised water balance diagram has not been submitted and should be provided.
- iii. Discrepancies and gaps were noted in the updated details of proposed expansion submitted by the PP. The comparison of the existing capacity and proposed expansion should also include the no. of floors in the towers, no. of dwelling units, width of the road and solid waste generation details. The expansion details of wastewater generation should be specified. The PP shall also submit the clarification for no

increment in electricity requirement for the proposed expansion specifying the details of energy conservation measures adopted.

7. The EAC (Infra-2) strongly reprimanded the consultant for repeated discrepancies and gaps in the submissions and presentation and was of the opinion to issue warning to the consultant. On examination, it was also noted that NABET Certification submitted by the consultant is not available in the online portal of NABET/QCI for Scheme of Accreditation of EIA Consultant Organization. The EAC asked the Consultant to provide clarification for the same.

8. Accordingly, PP submitted following replies to above queries on 04.06.2022 in PARIVESH portal and the same has deliberated by EAC (Infra-2) in its 91st meeting.

- i. Submitted the copy of Uttarakhand Building Bye-Laws and Regulation -2011 (Amendment 2016) and stated that maximum permissible height of the building in plain area is 30.0 m and total height of the building after expansion is 27m.
- ii. Submitted the revised water balance diagram and noted that total water requirement is 309 KLD. The wastewater generation will be 85%of water consumption i.e. $309 \times 0.85 = 262.65$ KLD. The wastewater after treatment will be available about 80% of the wastewater, which will be about 209 KLD. Out of 209 KLD the 150 KLD water be recycled in the project site and remaining approx. 59KLD will be made available to SIDCUL authority for development of IT Park.
- iii. Submitted the comparison of the existing capacity and proposed expansion in tabular form:

Sl. No.	Particulars	Existing Capacity	Proposed Expansion	Total capacity	Additional/ Justification remark
1.	Total Site Area	18211 sqm.		18211 sqm.	The area mentioned in the EC granted on 30.08.2014 was 8211 sqm was typographic mistake. It is actually 18211 sqm as per the allotment letter of SIDA
2.	Builtup Area	62846.37 sqm	8294.53 sq m.	71140.9 sqm	The EC granted on 20.08.2014

Sl. No.	Particulars	Existing Capacity	Proposed Expansion	Total capacity	Additional/ Justification remark
					by SEIAA reflect built-up area 42846.37 sqm which was corrected through corrigendum dated 14.08.2020 total buildup area 62846.37 sqm
3.	Green Area	5463.3 sqm	-	5463.3 sqm	
4.	Ground Coverage	6363.72 sqm	-	6363.72 sqm	
5.	Maximum height of Buildings	21m	6m increase	27m	SIDA and MDDA rules
6.	No of floors	G+5	3 floors	G+8	SIDA Rules PLAN APPROVED
7.	Nos. of Basement	2nos	-	2nos	
8.	Road and parking Area	25m/18655.11 sqm	-	25m/18655.11 sqm	
9.	Electricity	2150 KVA	400 KVA	2550 KVA	As the number of flat increased from 295 to 384
10	Water consumption during construction (KLD)	10 KLD	-	10 KLD	
11.	Water consumption during operation	122 KLD	187 KLD	309 KLD	
12.	Waste water Generation during operation phase	114 KLD	102 KLD	216 KLD	
13.	STP capacity	150 KLD	150 KLD	300 KLD	The EC granted on

Sl. No.	Particulars	Existing Capacity	Proposed Expansion	Total capacity	Additional/ Justification remark
					20.08.2014 by SEIAA reflect 100 KLD. The corrigendum issued by SEIAA dated 14.08.2020 on 150 KLD.
14.	Manpower Operational	123nos	77nos	200nos	
15.	Resident Population	1723 persons	554 persons	2227 persons	
16.	Cost of the Project	200 Crore	27 Crore	227 Crore	
17.	DG Set	1500 KVA	400 KVA	1900 KVA	
18.	Certified Compliance from Regional Office of MoEF&CC				Complied and Submitted
19.	Solid Waste generation	NA		2227×0.5 kg	1114 kg per day

9. The EAC (Infra-2) 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 Uttarakhand in its initial consideration, it required appraisal at Central level by sectoral EAC.

10. 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. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 216 KLD during operational phase.
- ii. As proposed, wastewater shall be treated in onsite STP of 300 KLD capacity. Out of the 209 KLD of treated water, at least 150 KLD of treated water from the STP shall be recycled and re-used in the project

- site for flushing (93 KLD), green belt development (35KLD), DG cooling (2KLD) and Road & Parking (20 KLD). Excess treated water (about 59 KLD) shall be given to SIDCUL for development of IT Park as committed. PP shall submit MoU for the disposal of excess treated water (outside the site) to the concerned Integrated Regional Office of MoEF&CC along with six-monthly compliance report.
- 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. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 5463.3 sq.m. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sq.m 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 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 Housing and Urban Affairs (erstwhile Ministry of Urban Development), Model Building Byelaws, 2016. As proposed, three RWH pits shall be provided by PP for rain water harvesting after filtration.
 - vi. 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 per SWM Rules, 2016. As committed biodegradable organic wastes will be treated inside the premises by organic waste converter. Recyclable wastes and non-recyclable wastes will be disposed through Govt. approved agency. 40kg/day of Sludge generated from the STP plant will be dried and later will be used as manure for green belt development. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
 - vii. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
 - viii. As committed, all internal lighting shall be BEE star rated and solar lit, at least to an extent of 25%. Solar street light controllers will be used for automatic dusk to dawn operation of streetlights. A minimum of 50% hot water requirement shall be met by solar water heating systems.
 - 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. 91.3.4

Terms of Reference for proposed Integrated Solid Waste Management (ISWM) facilities at Ward No.6, Rajwari, Plot No. 1865, Mihijam Nagar Parishad, Mihijam, Jamtara, Jharkhand by M/s Patheya Mihijam Waste Management LLP – Terms of Reference

IA/JH/MIS/251489/2022; F. No. 21-59/2022-IA.III

1. The Project Proponent (M/s Patheya Mihijam Waste Management LLP) made a presentation on above said proposal. The EAC (Infra-2) took note of following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project:

- i. The proposal Integrated Municipal Solid Waste Management Project is situated at Ward No.6, Khata No. 223, Plot No. 1865, Mihijam Nagar Parishad, Mehijam, Jamtara, Jharkhand.
- ii. The project is new
- iii. Total area of the proposed project is 4.58 Acre.
- iv. The proposed ISWM facilities include combined processing facility of 13.76 TPD and Sanitary Landfill Capacity of 1.5 TPD for 20 years.
- v. Combined processing facilities comprises Windrow Processing system, Pre-processing facility and other ancillary facility along with Door to Door Collection and Transportation of Solid Waste.
- vi. Water Requirement during construction phase is 8-10 KLD and during operation phase is 4-6 KLD. Water requirement will met by Tanker.
- vii. The domestic wastewater generated at the site shall be treated in septic tank followed by soak pits. However, provision of PHYTORID based system has been kept also. Sludge from soak pit shall be mixed with compost.
- viii. Leachate generated at site will be collected in leachate tanks and solar evaporation pond for its proper management.
- ix. Power requirement is about 85 kW, which will be met from DNHPDCL.
- x. The project site is about 0.5 Km from dense settlement area of Mehijam Nagar Parishad, Mehijam, Jamtara815354,Jharkhand.
- xi. Site selection criteria as per Solid Waste Management Rules, 2016 as follows:

Criteria for landfill site	Required as per SWM Rule 2016	Actual Position
Design Life Period	20 years	20 years
Distance from River	>100m	No river within 100 m from the project site
Distance from Highway	>200m	Distance of highway is more than 200 m from the project
Distance from Habitation	>400m	No habitation is settled within

		400m from the project site
Distance from Water supply wells	>1km	No any water supply well is observed within 1 Km from the project site
Water table	100 m from bottom liner of landfill	Criteria complied
Airport/Airbase	>20km	No any airport/airbase falls within 20 Km from project boundary.(Birsa Munda Airport, Ranchi 220 KM from Project site)
Flood Plains (100 Yrs.)	Not Allowed	Not Applicable
Zone of Coastal Regulations	Not Allowed	
Wetland	Not Allowed	
Critical Habitat Area	Not Allowed	
Sensitive Eco-Fragile Area	Not Allowed	
General Conditions: EIA Notification, 2006: Project is Category A if	EIA Notification 2006: Requirement	Interstate boundary 0.20km (West Bengal)
Protect Area under Wildlife Act	>10 kms	
Critically Polluted Area under CPCB	>10 kms	
Notified Eco-sensitive area	>10 kms	
Interstate Boundaries or International Boundaries	>10 kms	Interstate boundary -0.20km (West Bengal)

- xii. Total cost of the project is 8.86 crore
- xiii. Forest Clearance is not required
- xiv. No litigation pending against the project & project proponent
- xv. No environmental sensitive area like National park, Sanctuary, Biosphere reserve Wild life corridor, Tiger /Elephant reserve exists in the 10 Km radius.
- xvi. A green belt of densely planted, tall growing trees is to be developed along the periphery of the project boundary and inside the buffer area. Also open land of internal premise shall be use for the landscaping for covering at least 33% of facility area. Within project site, about 45 % of total area is planned to be maintained with green plantation in which local herbs and shrubs has been proposed for plantation to enhance the landscaping of facility
- xvii. During construction phase, local people will be employed. During operational phase, technical and semiskilled personnel will be employed from local as well as outside sources.

2. The project/activity is covered under category B of item 7(i) Common Municipal Solid Waste Management Facility (CMSWMF)' of the Schedule to

the EIA Notification, 2006 and its amendments, and requires appraisal at State Level. However, General Condition is applicable, due the presence of inter-state boundary of Jarkhand and West Bengal falls within 0.20 km from the proposed site. Accordingly, the project comes under category 'A' and requires 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** the grant of Terms of Reference as specified by the Ministry as Standard ToR for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report.

- i. Importance and benefits of the project.
- ii. Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided.
- iii. Specify the land area and space allotted for each activity proposed within the integrated waste management facility. The area requirements for each activity shall be calculated as per the CPCB guidelines for the specified activity.
- iv. List of waste to be handled and their source along with mode of transportation.
- v. Characteristics and source of each type of waste to be handled.
- vi. Details of storage and disposal of pre-processing and post-processing rejects/inerts and products.
- vii. List of proposed end receivers for the rejects/inerts/products should be provided. MoUs to be submitted in this regard.
- viii. The EIA would address to the conformity of site to the stipulations as made in the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and will have a complete chapter indicating conformity to the said rules. NOC shall be obtained from State Pollution Control Board regarding site suitability for establishment of TSDF.
- ix. Project proponents would also submit a write up on how their project proposal conform to the stipulations made in the "Protocol for Performance evolution and monitoring of the Common Hazardous Waste Treatment Storage and Disposal facilities including common Hazardous Waste incinerators", published by the CPCB on May 24, 2010.
- x. Other chemicals and materials required with quantities and storage capacities.
- xi. Details of temporary storage facility for storage of hazardous waste at project site.
- xii. Details of pre-treatment facility of hazardous waste at TSDF.
- xiii. Details of air emissions, effluents, hazardous/solid waste generation and their management.

- xiv. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- xv. Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- xvi. Hazard identification and details of proposed safety systems.
- xvii. Details of Drainage of the project up to 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.
- xxviii. Ground water quality monitoring in and around the project site.
- xix. The Air Quality Index shall be calculated for base level air quality.
- xx. Status of the land purchases in terms of land acquisition Act. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xxi. Details of effluent treatment and recycling process.
- xxii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- xxiii. A detailed Plan for green belt development.
- xxiv. A certificate 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
- xxv. The project proponents shall satisfactorily address all the complaints/suggestions that have been received against the project till the date of submission of proposals for Appraisal.
- xxvi. Cost of project and time of completion.
- xxvii. A tabular chart with index for point wise compliance of above TORs.
- xxviii. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included.

AGENDA ITEM NO. 91.3.5

Terms of Reference for Expansion of Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility (TSDF + Incineration facility) at Survey No 283, Village Surai, Tehsil Chotila, District Surendranagar, Gujarat by M/s Varni Enviro Care Private Limited—Terms of Reference

IA/GJ/MIS/278978/2022; F. No. 21-58/2022-IA.III

1. The Project Proponent (M/s M/s Varni Enviro Care Private Limited) made a presentation on above said proposal. The EAC (Infra-2) took note of

following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project:

- i. The project site is located at Survey No 283, Village Surai, Tehsil Chotila, District Surendranagar, Gujarat.
- ii. The proposal is seeking Terms of Reference (ToR) for expansion of TSDF site facility (from Existing 3,30,750 MT waste handling capacity (i.e. 47,250 MTPA, considering 270 days of operation, 7 years of life period) increased upto 10,50,840 MT waste handling capacity (i.e. 1,50,120 MTPA, considering 270 days of operation, 7 years of life period) by virtue of increase in depth and area of landfill cell within an Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility (TSDF + Incineration facility).
- iii. There is no change in incineration plant and its capacity and also High TDS water acceptance from member industry or quenching in Incinerator in this project; which has been granted through existing EC dated 29th June, 2021.
- iv. The land area of the project is 64,750 sq.m. There is no change in land area after proposed expansion of TSDF handling capacity.
- v. Total 158 KLD of fresh water will be required for domestic purpose, use in Incineration Plant including TSDF Site. Fresh water will be sourced from bore-well for which ground water withdrawal approval has been obtained from CGWA.
- vi. The total wastewater generation (domestic sewage, scrubber, other washings without leachates) from the proposed project is 55 KLD, which will be treated in proposed ETP (design capacity of 200 KLD) followed by reuse of RO Rejects for quenching in incinerator.
- vii. Leachate generation from TSDF is estimated ~ 85 KLD which will also be treated in the same ETP followed by Recycling RO System. RO Rejects will be reused for quenching in incinerator. The wastewater treatment system is a Zero Liquid Discharge system and treated water will be completely reused back for plant purposes.
- viii. During the construction phase, around 100 people and during operational phase around 50 people including contractors will be required.
- ix. Total power requirement for project (existing + proposed expansion) is 1000 KVA and it will be supplied by PGVCL.
- x. As this is an expansion project by virtue of increase in depth and area of landfill cell within an Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility (TSDF + Incineration facility) for which EC was granted on 29th June, 2021, no alternative sites were examined and existing facility is fulfilling all the site selection criteria.

Particulars	CPCB Criteria	Project site
Area of Site (sq.m)	-	64750
Lake or Pond	200 m from pond / Lake	2.57 Km (Bhimora)
River	100 m from river	3.7 Km (Bhogava River)

Flood Plain	Within 100 years flood plain	No
Highway	500 m of the right of way of any	4.55 Km (SH-119)
Habitation (Village)	500 m from notified habituated area	1.97 km (Naniyani)
Public Park	500 m of Public Park	No
Critical Habitat Area (Reserved Forest)	-	7.54 km
Wet Lands	-	No
Airport	-	> 40 km
Water Supply	500 m	No
Coastal Regulation Zone	-	No
Ground Water Table Level	-	> 10 m
Total Villages in Study area of 10 Km	-	36

- xi. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- xii. Forest Clearance is not required.
- xiii. No court case is pending against the project.
- xiv. CRZ Clearance is not required.
- xv. Estimated cost of the project after expansion will be ₹75.0 Crores (i.e. Existing: ₹ 50.0 Crores + Proposed expansion: ₹ 25.0 Crores).
- xvi. Benefits of the project: The project will facilitate better management of hazardous wastes by Incineration; secured Landfill will minimize the impact of solid waste disposal on land.

2. The EAC (Infra-2) noted that the above-mentioned 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 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** the grant of Terms of Reference as specified by the Ministry as Standard ToR for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report.

- i. Importance and benefits of the project.
- ii. Certified Compliance Report should be obtained from MoEF&CC Integrated Regional Office.
- iii. Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided along with land area breakup.

- iv. List of waste to be handled and their source along with mode of transportation. Characteristics of each type of waste to be handled.
- v. List of proposed end receivers for the rejects/inerts should be provided. MoUs to be submitted in this regard.
- vi. The EIA would address to the conformity of site to the stipulations as made in the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and will have a complete chapter indicating conformity to the said rules.
- vii. Project proponents would also submit a write up on how their project proposal conform to the stipulations made in the "Protocol for Performance evolution and monitoring of the Common Hazardous Waste Treatment Storage and Disposal facilities including common Hazardous Waste incinerators", published by the CPCB on May 24, 2010.
- viii. Other chemicals and materials required with quantities and storage capacities.
- ix. Details of temporary storage facility for storage of hazardous waste at project site.
 - x. Details of pre-treatment facility of hazardous waste at TSDF.
 - xi. Details of air emissions, effluents, hazardous/solid 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. Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- xiv. Hazard identification and details of proposed safety systems.
- xv. Details of drainage of the project up to 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.
 - xvi. Ground water quality monitoring in and around the project site.
- xvii. The Air Quality Index shall be calculated for base level air quality.
- xviii. Status of the land purchases in terms of land acquisition Act.
- xix. Details of effluent treatment and recycling process.
- xx. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- xxi. A detailed plan for green belt development.
- xxii. A detailed layout of the project site indicating all the project components.
- xxiii. A certificate 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.

- xxiv. The project proponents shall satisfactorily address all the complaints/suggestions that have been received against the project till the date of submission of proposals for Appraisal.
- xxv. Cost of project and time of completion.
- xxvi. A tabular chart with index for point wise compliance of above TORs.
- xxvii. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included.

AGENDA ITEM No. 91.4.1

Consideration for provision of 10% increment in Built-up Area in EC for Building and Construction Projects

Earlier, the instant matter was deliberated by EAC (Infra-2) in its 87th meeting held on 29.04.2022 and its 88th meeting held on 19.05.2022.

2. The EAC (Infra-2) in its 87th meeting noted that EC is granted based on the proposed BUA of the project whereas the pollution load is mainly calculated based on the population load in the case of building and construction projects. Since, the approved built-up area of the project itself may vary from 20,000 sqm. to 1,50,000 sqm. or more, increment of 10% would vary from 2,000 sqm. to 15,000 sqm. or more. However, the increment in population load may not be directly proportional to the increment in BUA of the project and depends on various factors such as nature of the project, type of dwelling units and other estimates, which need to be taken into consideration. Accordingly, the EAC (Infra-2) was of the opinion that proposals involving increase in BUA should continue to require appraisal as per the existing provisions under EIA Notification, 2006 and its subsequent amendments.

3. The EAC (Infra-2) in its 88th meeting was of the opinion that further deliberation is required before coming to any conclusion since minor changes in project planning are common in building and construction projects. However, the percentage increment needs to be considered with caution since it may vary from 2,000 sqm. to 15,000 sqm. or more. as the built-up area varies from 20,000 sqm. to 1,50,000 sqm. or more. Accordingly, the Committee is of the view that they need to develop a framework based on existing knowledge base and inputs received from various sources. Shri. V. Suresh was requested to lead the same.

4. Accordingly, the matter was deliberated in detail by EAC (Infra-2) in its 91st and the EAC (Infra-2) recommended exemption of amendment in EC if the change in built-up area is less than 10% of total built-up area or up to 2500 sqm whichever is lower.

AGENDA ITEM No. 91.4.2

Partial Transfer and Amendment of Environmental Clearance for Common Hazardous Waste Treatment Storage & Disposal Facility at Village Juna Katariya, Lakadiya, District Kutch, Gujarat

(IA/GJ/MIS/262295/2022; F. No. 21-47/2022- IA.III; M/s Saurashtra Enviro Projects Private Limited)

(IA/GJ/MIS/262113/2022; F. No. 21-46/2022-IA-III; M/s Detox India Private Limited (DIPL))

The EAC (Infra-2), based on the detailed discussions held, was of the opinion that further deliberation is required before coming to any conclusion. Accordingly, the EAC (Infra-2) decided to deliberate further on the matter in its forthcoming meeting.

AGENDA ITEM NO. 91.4.3

Site inspection report on proposal Terms of Reference for Solid Waste Management and Disposal Facility at Kotdwar, District Pauri Garhwal, Uttarakhand by Nagar Palika Parishad, Kotdwar.

(IA/UK/MIS/260357/2022; F. No. 21-35/2022-IA-III)

The Member Secretary, EAC (Infra 2) circulated the site inspection report by the sub-committee of EAC (Infra-2) on **proposal Terms of Reference for Solid Waste Management and Disposal Facility at Kotdwar, District Pauri Garhwal, Uttarakhand by Nagar Palika Parishad, Kotdwar** to other members of EAC (Infra-2) for further comments. It was decided that all members will go through the report and deliberate in the next meeting to be held on 04.07.2022, the last day of the tenure of the present committee.

LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 90th MEETING OF EAC (INFRA-2) HELD ON 30th JUNE, 2022

S. No.	Name	Designation	Attendance	Remarks
			30.06.2022	
1.	Dr. N. P. Shukla	Chairman	Present	Physical
2.	Dr. H. C. Sharatchandra	Member	Present	Physical
3.	Shri V. Suresh	Member	Present	Physical
4.	Dr. V. S. Naidu	Member	Present	Physical
5.	Shri B. C. Nigam	Member	Present	Physical
6.	Dr. Manoranjan Hota	Member	Present	Virtual
7.	Dr. Dipankar Saha	Member	Present	Virtual
8.	Dr. Jayesh Ruparelia	Member	Present	Physical
9.	Dr. (Mrs.) Mayuri H. Pandya	Member	Present	Virtual
10.	Dr. M. V. Ramana Murthy	Member	Absent	-
11.	Prof. Dr. P.S.N. Rao	Member	Absent	-
12.	Dr. Ragavan P	Special Invitee	Present	Physical
14.	Dr. Ashish Kumar	Additional Director & Member Secretary	Present	Physical

ANNEXURE-1

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 NO_x in reference to SO₂ and NO_x 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 equipment's.
- 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. 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.
- 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 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 shareholder's / 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.
- vi. 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.
- vii. 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.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. 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.

- x. The criteria pollutant levels namely; PM₁₀, PM_{2.5}, SO₂, NO_x (ambient levels) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xi. 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.
- xii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xiii. 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.
- xiv. 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).
- xv. 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.
- xvi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xvii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xviii. 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.
- xix. 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.
- xx. 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.

ANNEXURE-2

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 NO_x in reference to SO₂ and NO_x 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 six-monthly 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. 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.
- 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 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 shareholder's/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.
- vi. 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.
- vii. 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.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

- ix. 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.
- x. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (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.
- xi. 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.
- xii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xiii. 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.
- xiv. 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).
- xv. 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.
- xvi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xvii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xviii. 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.
- xix. 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.
- xx. 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.

ANNEXURE-3

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 devices (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;
- ii. 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. 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 MoEF&CC/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 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 shareholder's/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.
- vi. 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.
- vii. 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.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

- ix. 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.
- x. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (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.
- xi. 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.
- xii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xiii. 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.
- xiv. 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).
- xv. 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.
- xvi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xvii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xviii. 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.
- xix. 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.
- xx. 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.

ANNEXURE-4

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 equipment's.
- 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. 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 MoEF&CC/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 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 shareholder's/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.

- vi. 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.
- vii. 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.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. 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.
- x. 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.
- xi. 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.

ANNEXURE-5

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, NO_x and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.

- iii. 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 NO_x in reference to SO₂ and NO_x 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.

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 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 shareholder's/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.
- vi. 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.

- vii. 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.
- viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- ix. 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.
- x. 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.
- xi. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (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).
- xii. 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.
- xiii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xiv. 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.
- xv. 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).
- xvi. 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.
- xvii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xviii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xix. 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.

- xx. 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.
- xxi. 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.

ANNEXURE-6

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 firefighting 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, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
 - vi. Sand, murrum, 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. 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 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.
- vi. 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.
- vii. 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
- viii. 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.
- ix. 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.
- x. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xi. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the Expert Appraisal Committee.
- xii. 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).
- xiii. 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.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. 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.

- xvii. 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.
- xviii. 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.
