MINUTES OF 94th MEETING OF EXPERT APPRAISAL COMMITTEE (INFRA-2) HELD ON 8th September, 2022.

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

DATE: **8th September, 2022**

PROCEEDINGS

94.1 Opening Remarks of the Chairman

The Chairman extended warm welcome to the Members and other participants in the meeting and broadly introduced the agenda for the meeting. The Chairman recalled the requirement of appointment of Vice Chairman of the EAC mentioned in the Ministry's order dated 11.07.2022 on the constitution of EAC and requested Members Shri Monish Mullick and Dr. S.C. Garkoti to kindly act as the 'Vice Chairman 1' and 'Vice Chairman 2' respectively. The Vice Chairman 1 shall automatically assume the functions of the Chairman in his absence and the Vice Chairman 2 shall perform the functions of the Chairman when both Chairman and the Vice Chairman 1 are not available.

Thereafter, the meeting was opened to start proceeding as per the agenda adopted for this meeting.

94.2 Confirmation of Minutes of 93rd Meeting of Expert Appraisal Committee (Infra-2) held on 5th August, 2022

The Expert Appraisal Committee (Infra-2), hereinafter called the EAC, confirmed the minutes of the 93rd meeting. 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.

94.3 Consideration of Proposals

The EAC then considered proposals as per the agenda adopted for the 94th meeting. The details of deliberations held and decisions taken in the meeting are as under:

AGENDA ITEM NO: 94.3.1

Establishment of Integrated Common Hazardous Waste Treatment Storage Disposal and Recycling Facility (ICHWTSDRF) at Village Polagam, District Karaikal, Pondicherry by M/s Karaikal Waste Management Project (a unit division of M/s Re Sustainability IWM Solution Ltd) – Terms of Reference
(IA/PY/MIS/286683/2022; F. No. 21-65/2022-IA.III)

1. The Project Proponent (M/s Re Sustainability IWM Solution) Ltd made a presentation on above said proposal. The EAC 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 Common Hazardous Waste Treatment, Storage Disposal and Recycling Facility (ICHWTSDF) by M/s. Re Sustainability IWM Solutions Ltd is located at Survey Nos. B-44 pt., B-38, B-29, B-33, B-26, B-30, A-195, E-3, C-20, B-62, A-10, A-14, A-21, B-48, A-173, A-162, B-2, A-179, A-171 pt., B-63, B-47 pt., A-178, B-9 pt., B-21 pt., B-1 pt., A-190 pt., B-14 pt., B-17 pt. & B-16 pt., within Industrial Growth Centre (IGC) under Pondicherry Industrial Promotion Development and Investment Corporation (PIPDIC) at Polagam (Village), Karaikal (District), Puducherry.

ii. It is a new project.

iii. As the project site is located within Industrial area notified prior to promulgation of EIA Notification, 2006, public hearing may be exempted wrt Ministry's OM dated 27.04.2018.

iv. Location details of project site is as follows:

ID	Latitude	Longitude
A	10°51'30.31"N	79°48'46.69"E
B	10°51'30.68"N	79°49'01.89"E
C	10°51'21.84"N	79°49'01.83"E
D	10°51'21.41"N	79°48'48.48"E

v. Total land area of the project is 27 acres (10.92 ha). The site is connected with Village & Industrial road and NH-32 is located 1.3 km E. The land use pattern of the site is industrial area\Scrub Land. Polagam Village is located 0.7 km North-East from the site. Major soil observed in the study area is alluvial & Coastal soil. Bay of Bengal is located 3.3 km E from the site.

vi. Land-use breakup of the proposed project activities are as follows:

Sr. No.	Features	Area (sq. m)	Area (ac.)	% of area
1	Secured Landfill	32771	8.10	30
2	Facilities	15286	3.78	14
3	Road	16779	4.15	15.4
4	Green Belt	15686	3.88	14.3
5	Parking	130	0.03	0.1
6	Future expansion	16365	4.04	15
7	Misc.	12252	3.03	11.2
Total		**109269**	**27.00**	**100**

vii. Details of the proposed project capacities as follows:

Sl. No.	Name of the facility	Proposed capacity
1.	Secured landfill (DLF)	200 TPD
2.	Treatment/Stabilization (LAT)	300 TPD
3.	Incineration (INC)- common for HW &BMW	55 TPD
4.	Incineration (INC)-common for HW &BMW (Back up)	55 TPD
5.	Biomedical waste	13 TPD
6.	Alternative Fuel and Raw Material (AFRF)	55 TPD
7.	E-waste	82 TPD
8.	Plastic Recycling	10 TPD
9.	Paper Recycling	10 TPD
10.	Drum Recycling	200 no/day
11.	Aluminium Dross Reprocessing	165 TPD
12.	Spent Pot Liner (SPL)(Refractory Portion) Processing & Disposal	165 TPD
13.	Spent Pot Liner (SPL)–(Carbon Portion) processing and disposal	165 TPD
14.	Used Oil/Spent Oil Recycling	54 KLD
15.	Solvent Recovery	27 KLD

viii. Site selection criteria as per the guidelines of CPCB as follows:

Sl. No.	Parameter	Criteria	Observation
1.	Lake or pond (Distance from SW body)	Should not be within 200 m	A lake located is located 700 m S from the site and one Canal is inside the site
2.	River	Should not be within 100 m	No river is located within 100 m from the site, Puravadaiyanar river 700 m S from the site. It is flowing towards east w.r.t site.
3.	Flood plain	Should not be within 100 year flood plain	No
4.	High way – State or National	Should not be within 500 m	NH-32 located at 1.3 km km E from the site. SH-67 located at 0.7 km SW from the site
5.	Habitation– Notified habituated area	Should not be within 500 m	Polagam Village is located 700 m NE from the site.
6.	Public Parks	Should not be within 500 m	There are no public parks within 500 m
7.	Critical habitat area– area in which one or more endangered species live	Not suitable	No

8.	Reserved Forest area	Not suitable	No
9.	Wetlands	Not suitable	No
10.	Airport	Should not be within zone around the airport(s)	The nearest airport is at Thanjavur. which is located 77 km SW from the site.
11.	Water supply	No Water supply well within 500 m	Few Bore wells are present within the industrial area
12.	Coastal Regulation Area	Not suitable	No
13.	Ground Water Table level	GW table should be >2m from the base of the landfill	Ground water levels in study area ranges from 2-5 m bgl
14.	Presence of monuments/ religious structures	Not suitable	No

ix. Estimated total water requirement of the project is 100KLD. Of which, freshwater requirement will be 79KLD and treated water requirement will be 21 KLD. Water requirement will be sourced through Bore well/ tankers/canals/ lake.

x. Around 29.5 KLD of wastewater is expected from various TSDF operations (27 KLD) and sewage (2.5 KLD) viz. domestic purposes. The leachate generated from the Landfill (2KLD) will be treated in LTP & reused for spraying on the landfill or disposed of through an incinerator (spray dryer). The wastewater generated from Incinerator, recycling facilities, SPL, etc (25 KLD) shall be sent to ETP for treatment and the treated water will be re-used as required. Domestic sewage (2.5KLD) will be sent to to soak pit/treated in STP.

xi. The solid waste generated as Ash from incinerator (40 TPD) Sludge from ETP (1.5 KLD) shall be sent to the secured Landfill. The municipal solid waste of approx. 15 kg/ day shall be sent to the nearest municipal bin/ facility. Sludge from waste/used oil and waste oil from DG set shall be sent to used-oil recovery facility.

xii. The site is covered by mostly scrub bushes. No major tree will be removed. The same will be retained and maintained under Greenbelt.

xiii. A manmade water supply canal is passing through the site and the buffer of 9 m on both sides of the canal will be used for green belt development.

xiv. Estimated power requirement is 375 kVA and same will be sourced through Pondicherry electricity board. DG sets (2×250 kVA) will be used as an emergency power backup.

xv. HSD fuel will be used for operation of DG set/Incinerator (106 liters/hr) and same will be sourced through local dealers.

xvi. NBWL Clearance is not required.

xvii. Forest Clearance is not required.

xviii. No court case is pending against the project.

xix. There is no notified eco-sensitive area falling within 10 km radius of the study area but there are few environmentally sensitive features are falling within the 10 km radius, as given in the below table:

Name	Distance(km)	Direction
Inter-State boundary	0.35	N
Puravadaiyanar river	0.7	S
Polagam village	0.7	NE
Tirumalarajanar river	3	N
Sea/ Coastal area	3.7	E
Vettar river	4.2	S
Arasalar river	5.1	N

xx. The project is not located in critically polluted area.

xxi. The project cost is around ₹35 crores. EMP capital cost is ₹3.5 Crores. Recurring cost is ₹0.35 Crores/annum.

xxii. Employment potential: Indirect employment at peak period during operation around 100 persons; during establishment period, around 200 persons.

xxiii. Benefits of the project: Wastes generated from existing industries will be addressed in a better and environmentally safe way. It provides a one-stop solution for the management of various types of wastes such as hazardous waste & domestic hazardous waste etc. Minimizes pollution load on the environment with an additional benefit of green and clean surroundings. Possibility for recovery of materials thereby conserving the natural resources. Management of wastes is relatively easier and economically viable at a common facility. Most viable option in the absence or availability of expertise. Reduced environmental liability due to captive storage of hazardous waste in the premises of industries. Prevention of natural resource contamination. Employment opportunity is envisioned for the nearby inhabitants thereby improving their lifestyle & economic conditions. New infrastructure and development of amenities in and around the project site is expected.

2. The EAC 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)' and Category 'B' of item 7(da) Common Biomedical Waste Treatment Facilities of the Schedule to the EIA Notification, 2006 and its subsequent amendments. Further, General Condition is applicable, as the state boundary of Tamil Nadu at a distance of 350 m N from the proposed project site. Accordingly, the project comes under category 'A' and requires appraisal at Central level by Sectoral EAC. Further, since the

project is located in the Industrial Growth Centre as notified by the PIPDIC ltd. in 2002, public consultation may be exempted.

3. Further, EAC has observed that in the application and related documents submitted to the Ministry, name of the proponent mentioned is different in different parts of the proposal and calculation of space (area) requirement for storage-cum-operation for various types of waste material is not mentioned. Further, there are certain activities that do not require the prior environmental clearance under EIA Notification, 2006 as amended. Those need to be removed from the proposal or be justified in respect of area required for processing units-cum-storage as per various notifications/guidelines issued by the Ministry and/or CPCB. In view of these shortcomings, EAC suggested to the Project Proponent to submit following:

(i) An undertaking mentioning the correct name and address of the project proponent.

(ii) Item wise calculation for space (area) requirement for handling various types of waste material, mentioned in the ToR application, along with the justification as per extant rules, regulations and guidelines issued by this Ministry and/or CPCB.

(iii) Also specify activities which attract the provisions of the EIA Notification, 2006 as amended and the reason for including other activities in the instant proposal.

(iv) The green belt of at least 33% of total area should be ensured while making adequate provisions for all other facilities besides operation-cum-storage area for various types of wastes.

(v) Revised layout plan showing storage-cum-operation areas of various types of facilities, green belt and other activities as proposed.

4. The EAC (Infra-2), based on the information and clarifications provided by the Project Proponent and detailed discussions held on all the issues, **recommends** for grant of Terms of Reference, subject to submission of documents mentioned in para 3 above, and the following specific ToR in addition to the Standard ToR for preparation of EIA-EMP report with exemption from Public Consultation:

i. Importance and benefits of the project.

ii. Details of various waste management units with capacities for the proposed project indicating size and capacity to be provided. Specify the land area and space allotted for each activity proposed within the integrated waste management facility which should be in accordance with the CPCB guidelines for the specified activity.

iii. Technological option and plan for each proposed activity.

iv. Feasibility of establishing 3.27 ha of secured landfill in the proximity of the coast.

v. Details of Disaster Risk Resilient Infrastructure (in addition to Disaster Management Plan) wrt to cyclonic storm protection.

vi. Details of floral and faunal diversity of project site.

vii. 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.

viii. Technological option and plan for each proposed activity.

ix. List of waste to be handled and their source along with mode of transportation.

x. Characteristics and source of each type of waste to be handled.

xi. Details of storage and disposal of pre-processing and post-processing rejects/inerts and products.

xii. List of proposed end receivers for the rejects/inerts/products should be provided. MoUs to be submitted in this regard.

xiii. 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.

xiv. The unit shall strictly comply with the CPCB guidelines for setting up the Common Biomedical Waste Treatment Facilities (CBWTF).

xv. Colour coding for handling waste shall be strictly followed as per BMW Rules, 2016.

xvi. Project proponent 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.

xvii. Other chemicals and materials required with quantities and storage capacities.

xviii. Details of temporary storage facility for storage of hazardous waste at project site.

xix. Details of pre-treatment facility of hazardous waste at TSDF.

xx. Details of air emissions, effluents, hazardous/solid waste generation and their management.

xxi. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).

xxii. Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.

xxiii. Hazard identification and details of proposed safety systems.

xxiv. 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.

xxv. Ground water quality monitoring in and around the project site.

xxvi. Incorporation of groundwater modelling studies in EIA report in order to prevent inadvertent mixing of effluents with ground water and adjacent coastal waters and water bodies.

xxvii. Detailed plan for ensuring zero effluent discharge.

xxviii. Precautionary actions for adverse effect of Aluminium Dross Re-processing.

xxix. The Air Quality Index shall be calculated for base level air quality.

xxx. 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.

xxxi. Details of effluent treatment and recycling process.

xxxii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.

xxxiii. A detailed plan for green belt development by shelter bed type plantation.

xxxiv. Advanced technological options for recycling of wastes (Ash from incinerator and sludge from ETP & waste/used oil) generated from the project activity.

xxxv. 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

xxxvi. The project proponent shall satisfactorily address all the complaints/suggestions that have been received against the project till the date of submission of proposals for Appraisal.

xxxvii. Cost of project and time of completion.

xxxviii. A tabular chart with index for point wise compliance of above TORs. 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: 94.3.2

Establishment of Common Bio-Medical Waste Treatment Facility (CBWTF) with incinerator capacity of 250 kg/hour at Khata No. 219, Khasra No. 724, Village Kunja (Bahadarpur), Tehsil Bagwanpur, District Haridwar, Uttarakhand by M/s ECON Waste Solution – Terms of Reference

(IA/UK/MIS/289131/2022; F. No. 21-66/2022-IA.III)

1. The Project Proponent (M/s ECON Waste Solution) made a presentation on above said proposal. The EAC 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 Bio-Medical Waste Treatment Facility (CBWTF) by M/s ECON Waste Solution is located at Khata No. 219, Khasra No. 724, Village Kunja (Bahadarpur), Tehsil Bhagwanpur, District Haridwar, Uttarakhand.

ii. Total land area of the project site is 1 acre.

iii. Location: Latitude: 290 52' 31.82" N; Longitude: 770 47' 3.60" E

iv. Proposed site is part of private agricultural land.

v. The facility will be for collection, transportation, treatment and disposal of biomedical waste. No hazardous material/chemical (as per MSIHC rules) shall be used.

vi. The proposed facility shall be for more than 10,000 beds/day and have a capacity 250 kg/hr wherein three shifts have been proposed to be scheduled.

vii. Details of the proposed project capacities as follows:

Sl. No	Particulars	Capacity
1.	Incinerator capacity	250 kg/hr
2.	Shredder capacity	250 kg/hr
3.	Autoclave capacity	250 kg/hr

viii. About 6 KLD of water will be required for domestic & industrial purpose. Total fresh water requirement is 2.50 KLD. Waste water generated (3 KLD) will be treated in 5 KLD Capacity ETP and 2 KLD treated water will be used in green area development.

ix. Total power requirement will be 65 KVA of power, which is being supplied through Grid (UPCL). In addition, D.G. set with a capacity of 65 KVA (01 No.) is proposed to serve as an alternative source of power supply (for essential services) to this unit during emergency in case of power failure with acoustic enclosure and suitable stack height.

x. Estimated solid waste generation is around 5 kg/day. Hazardous waste generated will include ETP sludge, Incineration Ash and used oil. ETP Sludge and Incineration Ash will be handed over to authorized treatment and disposal facility of Uttarakhand Pollution Control Board (UPCB). Used oil from D.G. Set will be carefully stored in HDPE drums in isolated covered facility and will be sold to vendors authorized by Uttarakhand Pollution Control Board (UPCB) for the treatment of the same. Suitable care will be taken so that spills/leaks of used oil from storage could be avoided.

xxiv. NBWL Clearance is not required.

xxv. Forest Clearance is not required.

xxvi. No court case is pending against the project.

xi. There is no notified eco-sensitive area falling within 10 km radius of the study area.

xii. The project is not located in critically polluted area.

xiii. The total cost of the project is estimated to be ₹ 2.00 crores.

xiv. Employment potential: During construction phase, there will be temporary influx of semi-skilled and unskilled labour from the nearby villages. Local people based on their skill will be employed.

xv. Benefits: Bio medical facility plays an important role to curb the infectious diseases that spreads from the hospital waste without proper treatment. The concern about disposal of infectious wastes generated by the hospitals is increasing rapidly due to the fear of the spread of viruses such as COVID-19, Acquired Immune Deficiency Syndrome (AIDS) and Hepatitis B. These wastes (bio-medical wastes generated from health care establishments) present a high risk of causing potential damage to the human health and the environment by way of spreading. To prevent the spread of such infectious wastes that finds its genesis in bio-medical wastes (from hospitals, clinics, laboratories, dispensaries etc.) a scientific approach is required. It is essential that professionally trained personnel should handle the wastes and that the wastes should be disposed scientifically.

2. The EAC noted that the above-mentioned project/activity is covered under Category 'B' of item 7(da) Common Biomedical Waste Treatment Facilities 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, the proposal required appraisal at Central level by sectoral EAC.

3. The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, has noted that project site is a private agricultural land, which is surrounded by agricultural fields. There are chances that contamination from the proposed project site may spill over the surrounding agricultural fields. The Committee also noted that land-use conversion has not been approved. In view of above, the EAC decides to **return** the proposal in its present form and opined that the project proponent may re-submit the proposal with adequate justification.

AGENDA ITEM NO: 94.3.3

Setting up Integrated Solid Waste Management (ISWM) project for Dineshpur Cluster, District Udam Singh Nagar, Uttarakhand by M/s Dineshpur Nagar Panchyat – Terms of Reference.

(IA/UK/MIS/290295/2022; F. No. 21-67/2022-IA.III)

1. The Project Proponent (M/s Dineshpur Nagar Panchayat) along with the consultant 'M/s. Ind Tech House Consult', made a presentation and submitted that the proposed project is an Integrated Solid Waste Management Facility without landfill and asked for clarification on exemption from the requirement of environmental clearance as per the Ministry's D.O. letter dated 03.07.2017 form the Secretary (EF&CC) to Secretary (UD).

2. The EAC noted that the para 4 of above said DO letter states that:

> *"The municipal solid waste management involves various steps like door to door collection, segregation, composting, refused derived fuel (RDF) making waste to energy generation through waste to energy plants and disposal in scientific landfill. The above activities, except landfill site, if proposed as standalone activities are not covered under item 7 (i) of EIA notification, 2006, hence do not require prior environmental clearance. In case, the activities of composting, RDF making and waste to energy plant (up to capacity of 15 MW) are proposed at an existing landfill site, they do not attract the provisions of the EIA Notification, 2006.*

3. The proposed Integrated Solid Waste Management Facility involves i) windrow composting of organic wastes collected from Dineshpur and Gularbhoj, ii) baling of dry wastes from Dineshpur and iii) temporary storage shed of inert waste for further weekly disposal at regional landfill facility at Rudrapur. Considering above, the EAC, in light of the Ministry's D.O. letter dated 03.07.2017 as referred above, has opined that the prior environmental clearance may not be required for the instant proposal.

AGENDA ITEM NO: 94.3.4

Establishment of Integrated Common Hazardous Waste Treatment, Storage, Disposal and Recycling Facility (ICHWTSDF) at Kansal & Hendavli villages, Sudhagad Taluk, Khopoli-Pali Road, Raigad District, Maharashtra by M/s Mumbai Waste Management Limited (MWML), a unit division of M/s Ramky Enviro Engineers Ltd. – Re-consideration for Terms of Reference.

(IA/MH/MIS/249282/2021; F. No. 21-1/2022-IA-III)

1. The proposal was earlier considered by EAC in its 81st meeting held on 31st January, 2022. The details of the project, as per the documents submitted by the project proponent, and as informed during the aforesaid meetings are provided below for reference:

i. The project is located at Plot/Survey/Khasra No. 54, 59, 78, 79, 80, 81, 214, 227, 228, 229, Kansal & Hendavli Villages, Sudhagad Taluk, Khopoli–Pali Road, Raigad District, Maharashtra.

ii. The project is new.

iii. Details of project facilities and capacities are in the proposed "Integrated Common Hazardous Waste Treatment Storage Disposal and Recycling Facility (ICHWTSDRF)" are given as under:

S. No.	Proposed facilities	Capacity
1.	Secured Landfill (Direct to Landfill)	4,50,000 MTA
2.	Landfill After Treatment	
3.	Hazardous Waste Incineration	Incinerator scalable up to 1.5 Tons/per hour × 3 incinerators in modular form
4.	Bio-Medical Waste	250 kg per hr ×2
5.	AFRF	100 TPD
6.	E- Waste	100 TPD
7.	Drum/Decontamination Recycling Plant	200 drums/day
8.	Spent Oil Recycling	20 KLD
9.	Paper Recycling	20 TPD
10.	Plastic Recycling	50 TPD
11.	SPL (Carbon Portion)	100 TPD
12.	SPL (Refractory Portion)	100 TPD

iv. The site was confirmed after examination & assessment of three other /alternative sites being at
   a. Jirne village, Raigad
   b. Nive village, Pune
   c. Vengoan village, Raigad

v. Location criteria for Hazardous Waste Landfills by Central Pollution Control Board & MoEF&CC wrt the proposed site is given as under:

S. No.	Parameter	Criteria	Observation
1.	Lake or pond (Distance from SW body)	Should not be within 200 m	No lake or pond located within 200 m. Dhokshet lake is located at 2.6 km NW.
2.	River	Should not be within 100 m	No river located within 100 m from the landfills. Amba River is located at 360 m W from the landfills of the site.
3.	Flood plain	Should not be within 100 year flood plain	Not within Flood plain area. Flood plain is an area of land adjacent to a stream or river which stretches from the banksof its channel to the base of the enclosing valley walls, and which experiences flooding during periods of high discharge. The soils usually consist of levees, silts, and sands deposited during floods. Site is elevation range is 22m to 33 m whereas river elevation is 21 m.
4.	Highway – State or National	Should not be within 500 m	Yes, State Highway (SH -92) is located adjacent to the site. NH-48 located at 15 km towards north of the site.
5.	Habitation – Notified habituated area	Should not be within 500 m	The site is 60 m far from Adyachiwadi village towards NW of the site.
6.	Public Parks	Should not be within 500 m	There are no public parks within 500 m.
7.	Critical habitat area– areain which one or more endangered species live	Not suitable	The proposed site is not within critical habitat area.
8.	Wetlands	Not suitable	The proposed site is not within wetlands.
9.	AirPort	Should not be within zone around the airport(s)	Mumbai airport is located at 65 km NW from the site.
10.	Water supply well	No water supply well within 500 m	No water supply well located within 500 m.

S. No.	Parameter	Criteria	Observation
11.	Coastal Regulation Area	Not suitable	No, CRZ is 45 km far from site.
12.	Ground Water Table level	GW table should be >2m from the base of the landfill	Pre monsoon- 2 to 5mbgl. Postmonsoon-1 to 3 mbgl
13.	Presence of monuments/religious structures	Not suitable	The proposed site does not have monuments/ religious structures. Anghai Fort – 5.7 km (SE), Sudhagad Fort – 11.3 km (SSE).

vi. The total land allotted for the proposed project is around 53 Acres. This land has been purchased by MWML. The present land use pattern of the site is Scrubland. This land has been notified as an industrial zone in (1984-85) by Nagar Sanrachana Vibahag (Govt. of Maharashtra) for industries.

vii. A minimum area with a width of 10 m will be left for greenbelt development along the boundary and one row of plants (both sides) will be planted along the internal roads within the project site to minimize the environmental impacts of the site on its surroundings. The proposed greenbelt will consist of native and pollution tolerant species.

viii. The total water requirement for the project is around 120 KLD water (81.6 KLD Fresh Water + 38.4 KLD Treated Water). Methods may be adopted to reduce groundwater requirement such that around 20-25 KLD of freshwater while the rest of treated water will be used for project operations) required for the proposed project will be sourced from the bore well and the Department of Irrigation, Govt of Maharashtra.

ix. Around 24.3 KLD of wastewater is expected from various TSDF operations (19.8 KLD) and sewage (4.5 KLD) from domestic purposes. Leachate generated (3.5 KLD) will be treated in LTP & reused for spraying on the landfill or disposed of through an incinerator (spray dryer). Other process effluents will be sent to ETP for treatment and the treated water will be re-used as required. Domestic sewage will be sent to soak pit/treated in STP. Zero liquid discharge (ZLD) will be implemented.

x. Solid waste management details are given as follows:

Description	Quantity	Remarks
Ash from incinerator	60 TPD	Sent to Landfill
Sludge from ETP	135 Kg/day	

Sludge from waste/used oil	2 TPD	Sent to incinerator
Municipal solid waste	18 kg/day	Sent to nearest municipal bin

xi. The power required for operations is 375 kVA which will be taken from Maharashtra State Electricity Board. DG set of 375 kVA capacity will be used as backup power source during emergency necessity.

xii. The Nearest Habitation is Adyachiwadi village which is 60 m from the site towards the (NW) direction.

xiii. NBWL Clearance is not required.

xiv. Forest Clearance is not required.

xv. No court case is pending against the project.

xvi. CRZ Clearance is not required.

xvii. Investment/Cost of the project is around ₹105 crore.

xviii. Employment potential – About 200 persons during establishment period and 125 direct employments and around 100 indirect employments during operation phase.

xix. Benefits of the project - Wastes generated from existing industries will be addressed in a better and environmentally safe way. It provides a one-stop solution for the management of various types of wastes such as hazardous waste & domestic hazardous waste etc. Minimizes pollution load on the environment with an additional benefit of green and clean surroundings. Possibility for recovery of materials thereby conserving the natural resources. Management of wastes is relatively easier and economically viable at a common facility. Most viable option in the absence or availability of expertise. Reduced environmental liability due to captive storage of hazardous waste in the premises of industries. Prevention of natural resource contamination. Employment opportunity is envisioned for the nearby inhabitants thereby improving their lifestyle & economic conditions. New infrastructure and development of amenities in and around the project site is expected.

2. The EAC noted that the project/activity is covered under category 'A' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

3. The EAC in its 81st meeting held on 31st January, 2022 deferred the proposal and asked the project proponent to provide following additional information:

i. Capacity utilization of current Bio Medical Waste (BMW) management facilities in the state has been given as only 48%. Therefore, justify the need for the proposed BMW management facility. Also provide the

distance of nearest existing (BMW) management facility (aerial distance) from the proposed site.

ii. Form 1 incorrectly mentions that no alternative sites have been considered. Also, the alternative sites considered were not presented along with the proposed site to justify the selection. Comparative chart showing all the sites considered along with selection criteria needs to be submitted.

iii. Data from the surrounding area i.e. proposed catchment area for collection of Hazardous Wastes may be quantified and included.

iv. Submit details of estimation of solid waste generation.

v. It is noted that the proposed location is situated in hilly terrain and adjacent to the Amba river as well as in a heavy rainfall area which poses possibilities of contamination. Detailed contour map of the project site as well as confirmation from competent authority that the project site lies outside the 100-year flood plain of the Amba River needs to be submitted.

vi. Rejection/knock out criteria for site selection for Common Hazardous Waste Management Facility by Central Pollution Control Board & MoEF&CC is given as "closer than 200 meters to river boundaries". It has been submitted that Amba river is 360 m far from the landfills of the site and adjacent to the total site boundary. Clarification may be sought from CPCB/SPCB whether the knock out criteria specifies distance specifically from landfill or for the setting up of Common Hazardous Waste Management Facility. It is also observed that the proposed location does not meet the siting criteria for hazardous waste landfills with respect to nearest habitation (60 m), ground water table (1-3 m BGL post-monsoon) as well as nearest highway (adjacent to the project site). Accordingly, submit NOC from CPCB/SPCB and Highway Authority for site suitability for landfill.

vii. Document in regional language has been submitted in evidence of industrial estate. Submit the translation of the same. Also submit clarification if the proposed site is part of officially formed Industrial Estate or the proposed site is converted into Industrial use from the agricultural land use? If it is part of any industrial estate, authenticated layout map of industrial estate formed to be submitted. Land ownership document also to be submitted.

4. Accordingly, the PP submitted their response to previously mentioned quires through PARIVESH on 04.08.2022 and the same was considered by the EAC (Infra-2) in its 94th meeting held on 08.09.2022. The information presented by the PP is as under:

i. The capacity utilization of current Bio-Medical Waste (BMW) management facilities in the state indicated as 48% related to the entire Maharashtra. However, due to rapid civilization in urban areas, a number of hospitals and dispensaries have come up in the Navi

Mumbai and Raigarh Districts. In Raigarh district, presently there are two existing BMW facilities that cater to hospitals, PHCs, dispensaries, etc. The distance of these existing BMW facilities is more than 50 km from the present proposed site and is shown in table below. Currently, the existing BMW facility at Taloja is fully utilized and hence a need for another facility in the Raigarh district is urgently required. In addition, there is a plan to send the Bio-medical waste generated in the Thane district to facilities in the Raigarh district.

ID	Name	Distance (km)	Direction
1	M/s. Life Secure enterprises-MIMER Pune	42	NE
2	M/s. Evergreen Environmental-Taloja	50	NW
3	M/s. Mumbai Waste Management-Taloja	54	NW
4	M/s. Passco Environmental Solution Pvt. Ltd.-YCM Hospital	56	E
5	M/s. SMS Envocleane Pvt. Ltd.- Deonar Dumping Ground	60	NW
6	M/s. Passco Environmental Solution Pvt. Ltd.-Kailash Crematorium Compound	62	SE
7	M/s. Envision Enviro Engineering Pvt. Ltd.-Kalyan	69	NW
8	M/s. Envirovigil TMC's-Chhatrapati Shivaji Maharaj Hospital	69	NW

ii. There are four sites are identified for the proposed TSDF facility (Kansal & Hedavli, Jirne, Nive and Vengoan). A comparison chart is presented in table below. The same has been rectified in the revised PFR.

Identification Location	Selected Site	Alternate Site 1	Alternate Site 2	Alternate Site 3
Name of village	Kansal & Hedavli	Jirne	Nive	Vengoan
Tehsil	Sudhagad	Pen	Mulshi	Karjat
District	Raigad	Raigad	Pune	Raigad
State	Maharashtra	Maharashtra	Maharashtra	Maharashtra
Coordinates	18°38'9.13"N 73°17'8.48"E	18°40'30.85" N 73°05'58.25" E	18° 29' 31.89" N 73° 25 55.49" E	18° 54' 20.36" N 73° 20 55.04" E

iii. The proposed TSDF catchment area for the hazardous waste collection is from Roha, Mahad, Lote, Khopoli, and Ratnagiri. The estimated

quantity is 2,29,838 MT, out of which 23980 MT is direct land filled which is mainly non-biodegradable. 174611 MT will be with stabilization with additives/reagents chemical whereas 31247 MT for Incinerable due to high calorific value.

iv. The estimated solid waste generation from the project site is as follows:

Description	**Quantity**	**Remarks**
Ash from incinerator	7.5 TPD	Sent to secured landfill
Sludge from ETP	135 kg/day	
Sludge from waste/used oil	2 TPD	Sent to incinerator
Municipal solid waste	40 kg/day	Sent to the nearest municipal bin/ facility

v. A rainfall datasheet from 2009 to 2021 was prepared. The rainfall ranges from 407.4 mm to 1188 mm with an average of 671 mm for June. The rainfall ranges from 813.2 mm to 1977 mm with an average of 1315 mm for July. The rainfall ranges from 454.7 mm to 1129 mm with an average of 778 mm for the month of August and the rainfall ranges from 89.6 mm to 753.6 mm with an average of 398 mm for September. A detailed contour map of the project site is prepared ranging from 25 m to 35 m. The flood details are provided and were sourced from the Water resource department, Raigad Irrigation division, Govt. of Maharashtra.

vi. We have received a letter from CPCB dated March 03, 2022, stating "it is to inform that the location criteria as mentioned in the said guidelines be maintained from the edge of the landfill site (TSDF facility). The landfill site shall include a waste filling area along with an area for support facilities as per the layout of the facility (in compliance with section 5.4 of the said CPCB guidelines).

vii. PP submitted land documents and a copy of the translated version of the document.

5. The EAC noted that the project/activity is covered under category 'A' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC. Further, EAC opined that project proponent's claim for exemption from public hearing may not be accepted as there is no documentary proof regarding declaration of the said industrial zone through notification issued by the Central Government or the State/UT Governments, as mentioned in the Ministry's OM. No. J-11011/321/2016-IA.II (I) dated 27.04.2018.

6. Further, EAC has observed that in the application and related documents submitted to the Ministry, name of the proponent is different in different parts of the proposal and calculation of space (area) requirement for storage-cum-operation for various types of waste material is not mentioned. Further, there are certain activities that do not require the prior environmental clearance under EIA Notification, 2006 as amended. Those need to be removed from the proposal or be justified in respect of area required for processing units-cum-storage as per various notifications/guidelines issued by the Ministry and/or CPCB. In view of these shortcomings, EAC suggested Project Proponent to submit following:

(i) An undertaking mentioning the correct name and address of the project proponent.

(ii) Item wise calculation for space (area) requirement for handling various types of waste material, mentioned in the ToR application, along with justification as per extant rules, regulations and guidelines issued by this Ministry and/or CPCB.

(iii) Also specify activities which attract the provisions of the EIA Notification, 2006 as amended and the reason for including other activities in the instant proposal.

(iv) The green belt of at least 33% of total area should be ensured while making adequate provisions for all other facilities besides operation-cum-storage area for various types of wastes.

(v) Revised layout plan showing storage-cum-operation areas of various types of facilities, green belt and other activities as proposed.

7. The EAC, based on the information and clarifications provided by the Project Proponent and detailed discussions held on all the issues, **recommends** for grant of Terms of Reference, subject to submission of documents mentioned in para 6 above, and the following specific ToR in addition to the Standard ToR for conducting public consultation and 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 indicating size and capacity to be provided. Specify the land area and space allotted for each activity proposed within the integrated waste management facility which should be in accordance with the CPCB guidelines for the specified activity.

iii. Details of Disaster Risk Resilient Infrastructure (in addition to Disaster Management Plan).

iv. 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.

v. The unit shall strictly comply with the CPCB guidelines for setting up the Common Biomedical Waste Treatment Facilities (CBWTF).

vi. Colour coding for handling waste shall be strictly followed as per BMW Rules, 2016.

vii. Technological option and plan for each proposed activity.

viii. List of waste to be handled and their source along with mode of transportation.

ix. Characteristics and source of each type of waste to be handled.

x. Details of storage and disposal of pre-processing and post-processing rejects/inerts and products.

xi. List of proposed end receivers for the rejects/inerts/products should be provided. MoUs to be submitted in this regard.

xii. 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.

xiii. 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.

xiv. Other chemicals and materials required with quantities and storage capacities.

xv. Details of temporary storage facility for storage of hazardous waste at project site.

xvi. Details of pre-treatment facility of hazardous waste at TSDF.

xvii. Details of air emissions, effluents, hazardous/solid waste generation and their management.

xviii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).

xix. Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.

xx. Hazard identification and details of proposed safety systems.

xxi. 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.

xxii. Ground water quality monitoring in and around the project site.

xxiii. Detailed plan for ensuring zero effluent discharge.

xxiv. The Air Quality Index shall be calculated for base level air quality.

xxv. 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.

xxvi. Details of effluent treatment and recycling process.

xxvii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.

xxviii. A detailed plan for green belt development.

xxix. Recycling option for waste (Ash from incinerator and sludge from ETP & waste/used oil) generated from the project activity.

xxx. 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

xxxi. 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.

xxxii. Cost of project and time of completion.

xxxiii. A tabular chart with index for point wise compliance of above TORs. 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: 94.3.5

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 – Re-consideration for Environmental Clearance

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

1. The proposal was earlier considered by EAC in its 91st meeting held on 30th June, 2022. The details of the project, as per the documents submitted

by the project proponent, and as informed during the aforesaid meetings are provided below for reference:

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 (; land use break-up of the proposed facility as follows:

Sl. No.	Description	Size(sq m)	Percentage (%)
1	Built-up area	1142.19	14.16
2	Platform area	396.00	4.90
3	Road area	400.37	5.0
4	Plantation area	2700.00	33.47
5	landfill area	3200.00	39.67
6	Open area	166.719	2.06
7	Tipping area	60.50	0.75
Total area		**8065.779**	**100**

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. Tree plantation and ban on illegal felling of trees, mosquito's problem and water contamination are the major issues raised during the public hearing. Based on the issues/representation received from the public, project proponent made a statement, commitment and time bound action plan including budgetary provision in the EIA report.

viii. The baseline environmental monitoring was carried out during pre-monsoon of year 1st March to 31st May 2019. The predominant wind direction during study period was SE to NW.

ix. 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	20-25 years	More than 20 years

Distance from River	>100 m	No river flowing within 100 m fromthe 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 fromthe project boundary
Distance from Water supply wells	>200 m	No any water supply well was observed within 200m from theproject boundary
Water table	2m from bottomliner 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. 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. The generated domestic waste water 0.08 KLD will be send to septic tank/soak pit. The waste water generated through floor washing/vehicle maintenance shed (0.36 KLD) will be treated in

Effluent Treatment Plant & reused for floor washing/vehicle maintenance shed and greenbelt purpose.

xi. Total power requirement will be 63 kVA and same will be sourced through JVVNL. In addition, one DG set of 63 kVA capacity is proposed for power back-up.

xii. LED Lamps and Solar panel is proposed as energy saving conservation in the project area.

xiii. Greenbelt is planned to develop in the periphery of the proposed project site which along with the other planned green areas within the site. Greenbelt will cover about 33% of the total project area. Accordingly, about 2700 sq. m area is proposed for greenbelt development.

xiv. The capital cost of project is ₹ 494.36 Lakhs; Capital cost of EMP ₹ 30.0 Lakhs; recurring cost of EMP ₹ 12.5 lakhs per Annum.

xv. Proposed provisions for rainwater harvesting from rooftop, paved areas and landscaping areas. Proposed ₹ 5.0 Lakhs of Capital Cost and ₹ 0.5 Lakhs Annual recurring cost for Rain Water Harvesting.

xvi. No tree cutting involved

xvii. Forest Clearance is not required

xviii. Wildlife Clearance is not required

xix. The project is not located in Critically Polluted area

xx. No litigation pending against the project &project proponent.

xxi. No environmental sensitive area like National park, Sanctuary, Biosphere reserve Wild life corridor, Tiger/Elephant reserve exists in the 10 Km radius.

xxii. Employment potential: In construction phase about 10 people will get employment. Manpower requirement for the proposed project will be 9 people on site. (About 100-150 temporary employees will be hired for primary collection, transportation and miscellaneous jobs.).

xxiii. Benefits of the project: Reduction, reuse and recycle of the waste, Source segregation & Collection of waste, Transportation of waste in covered/closed vehicles to the site, Commercially viable project and long term sustainability, Inert/processing rejects to be disposed in scientifically engineered Sanitary Landfill, Increase in employment opportunities, Compost for captive green belt and near its consumers like ULB, local farmers & commercial plant nursery, and Reduce financial burden and operational hassles on the Nagar Panchayat.

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 Jharkhand and West Bengal falls within 4.53 km in

East from the proposed site. Accordingly, the project comes under category 'A' and requires appraisal at Central level by Sectoral EAC.

3. The EAC in its 91st meeting deferred the proposal and asked the PP to submit the following additional information:

i. Detailed segregation process of waste

ii. Number windrow proposed

iii. Water table of the proposed site

iv. Leachate management plan

4. Accordingly, the PP submitted their response to previously mentioned quires through PARIVESH on 22nd August, 2022 and the same was considered by the EAC in its 94th meeting held on 08th September, 2022. The information presented by the PP is follows:

i. Detailed segregation process of waste: Two dustbins green for bio-degradable & blue for non-biodegradable waste is proposed to be provided under this project to promote source segregation and awareness program at regular interval is the integral part of project to promote awareness for source segregation. The process adopted for processing of municipal solid waste at Chakulia involves conversion of bi-degradable fraction of waste into compost through windrow composting and conversion of fuel grade fluffy material like soiled paper, cardboard, dry leaves, packaging into refused derived material. Considering the quantity of solid waste generation in the project area, it is proposed to establish a 15 TPD waste processing including a) One number pre-segregation unit of 15 TPD capacity to segregate into two different streams i.e., compost and Refused Derived Fuel (RDF) b) an aerobic composting plant to process 8 TPD of bio-degradable material and c) a RDF processing plant of 7 TPD capacity.

ii. Number windrow proposed: Total 35 windrows are proposed. Dimension windrows are as follows:

Description	Unit	Quantity
Dimension of windrow		
Width	m	1.0
Height		1.8
Number of windrow in width		7.0
Number of windrow in length		5.0
Total number of windrows		35
Width of peripheral movement way		2.0
Clear gap between windrow: length side		
2.5 m		2.0
1m		2.0
Clear gap between windrow: width side		

1 m		6.0
Total width of platform		18.0
Total length of platform		22.0
Area required	sq. m	396

iii. Water table of the proposed site: There is no tube well/bore well at the proposed project site. However, the depth of the groundwater table is more than 9.75 m below the general ground level, measured at the nearest tube well located at near Shri Naga Baba Mandir located at 645 m away from the site. In the area, pre-monsoon groundwater level is 10 m bgl and in post monsoon it is 7 m bgl. There will be no groundwater intersection/water withdrawal due to the proposed project activity during project life. Desired water will be supplied from PHED (Govt. agency).

iv. Leachate management plan: Quantity of Leachate generation will be computed by water balance method and the leachate is collected in leachate collection sump and wil be partially re-circulated to windrow and landfill and balance pumped to Leachate evaporation pond.

5. The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, **recommends** the grant of 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.

i. Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.

ii. 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; ventury 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, SO_2, NOx and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.

iii. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concern Authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Where the trees need to be cut/transplanted 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/ non-survival of any transplanted tree) shall be done and maintained. Plantations to be ensured species (cut) to species (planted).

iv. Project Proponent shall develop green belt in 2700 sq. m of area as committed.

v. Project proponent shall implement rainwater harvesting from rooftop, paved areas and landscaping areas as committed.

vi. Project proponent should use LED Lamps and Solar panel as energy saving conservation in the project area as committed.

vii. 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.

viii. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.

ix. Leachates to be collected and utilized within project after proper treatment. PP should submit the details regarding Leachate collection and treatment system to be installed to concerned Integrated Regional Office of the Ministry. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.

x. No fresh water to be used except for potable use.

xi. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the Delhi Pollution Control Committee/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.

xii. Ground water monitoring for Physico-Chemical parameters to be carried out and record maintained by providing piezometric wells along the flow channel (up and down).

xiii. Ambient air quality monitoring shall be carried out in and around the landfill site at up wind and downwind locations.

xiv. The depth of the land fill site shall be decided based on the ground water table at the site.

xv. Environmental Monitoring Programme shall be implemented as per EIA report and guidelines prescribed by CPCB for hazardous waste facilities. Periodical ground water/soil monitoring to check the contamination in and around the site shall be carried out.

xvi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.

xvii. On line real time continuous monitoring facilities shall be provided as per the CPCB or State Board Directions.

xviii. Scrubber water, leachate water or wheel wash shall be treated properly and recycled to achieve zero liquid discharge.

xix. Gas generated in the Land fill should be properly collected, monitored and flared.

xx. Pre-medical check-up to be carried out on workers at the time of employment and regular medical record to be maintained.

xxi. 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 non sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water.

xxii. Rainwater runoff from the landfill area shall be collected and treated in the effluent treatment plant.

xxiii. Adequate covering arrangement in site should be done to prevent the runoff of rainwater in the project premises.

AGENDA ITEM NO: 94.3.6

Setting up Common Solid Waste Management and Disposal Facility at Kotdwar, District Pauri-Garhwal, Uttarakhand by M/s Nagar Palika Parishad, Kotdwara – Terms of Reference

(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) and minutes of 92nd meeting of EAC (Infra-2), in which the proposal for Terms of Reference for Solid Waste Management and Disposal Facility at Kotdwar, District Pauri Garhwal, Uttarakhand by Nagar Palika Parishad, Kotdwar has been recommended, for further comments.

Based on the detailed deliberations, the EAC (Infra-2) reiterate the recommendation of 92nd EAC (Infra-2) meeting.

Additional Agenda 94.4.1

Partial Transfer and Amendment of Environmental Clearance for Common Hazardous Waste Treatment Storage & Disposal Facility at Village Juna Katariya, Lakadiya, District Kutch, Gujarat by M/s Detox India Private Limited (DIPL)

[Proposal No. IA/GJ/MIS/262113/2022; F. No. 21- 46/2022-IA.III]

1. The instant matter pertains to partial transfer and amendment of Environmental Clearance dated 30.07.2020 granted to M/s Detox Private Limited (M/s DIPL) by the Ministry for Common Hazardous Waste Treatment Storage & Disposal Facility at Village Juna Kataria and Lakadia, District Kutch, Gujarat.

2. The abovementioned proposal was examined by the Expert Appraisal Committee (Infra-2) in its 86th meeting held on 19-20 April 2022, 91st meeting held on 30th June, 2022 and 92nd meeting held on 04th July, 2022 and recommended for the grant of Partial Transfer and Amendment as proposed.

3. Accordingly, the file was forwarded for approval on PARIVESH portal. However, following queries were raised.

> *The observations of EAC namely "The EAC also observed that, after the proposed amendment and partial transfer, M/s Detox India Private Limited (DIPL) shall only be engaged in landfilling activity, which is covered under category 'B' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)'of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, M/s. Saurashtra Enviro Projects Private Limited (SEPPL) shall be engaged in incineration and landfilling activities, which is covered under category 'A' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)'of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC." needs to be examined by IA - Policy first. Why can't one component of the transferred Project be assessed by SEIAA, Gujarat and the other by EAC at the Central level. Please obtain the opinion of IA-Policy.*

4. In view of above, the matter was forwarded to IA (Policy) for their comments in this regard. Accordingly, IA (Policy) submitted the followings:

> *The EC currently in the name of M/s DIPL (M/s Detox Private Limited) is being proposed to be part transferred to M/s SEPPL. The change in category from A to B, for a part of the project for which the EC was granted shall emanate only after the EC dated 30.07.2020 is amended and split/part-transferred. Once the EC is part transferred to M/s. Saurashtra Enviro Projects Private Limited (SEPPL), the EC shall be construed as a category-A project EC and shall continue to be appraised at the Central level for subsequent expansions or amendments etc., while the EC which shall be construed as a Category-B project EC, shall be appraised at the State level for subsequent expansions or amendments etc., subject to the applicability of General Conditions.*

5. In addition to above, IA (Policy) has also pointed out that it is unclear to which transferred part of EC, the existing ETP of 100 m^3 per day shall be allocated. Therefore, it was decided to take up the matter before EAC in its 94th meeting for further deliberation on issues raised above.

6. The project proponent attended the 94th meeting and explained that they are using forced evaporation method for treating the effluent and

leachate generated from the landfill since 2012. They mentioned about one of the specific conditions stipulated vide EC letter dated 15.04.2008, which states, "*Forced evaporation should be provided to treat the effluent/leachate generated from the landfill.*" The project proponent has further informed that the total capacity of Forced Evaporation System is 500 KL/day, which caters the treatment requirement of leachate generated from the entire landfill.

7. Considering above mentioned submission of the project proponent, the EAC has opined that both the entities, i.e., DIPL and SEPPL shall be responsible for compliance monitoring of the landfill's effluent/leachate treatment through Forced Evaporation System. As per latest Certified Compliance Report dated 20.07.2021 issued by the IRO-Bhopal, both the DPIL and SEPPL are presently responsible for collecting the leachate and disposing it through forced evaporation system.

8. EAC opined that implementation of forced evaporation treatment instead of ETP (of 100 m^3 capacity) for disposal of leachate might be better and more effective from environmental angle but this change would certainly call for an amendment in EC. In view of this EAC **recommends** to include this particular amendment along with the proposed amendments as per extant rules and regulations under EIA Notification, 2006 as amended. Further, the EAC reiterated the recommendation of 92nd EAC meeting and correction approved by EAC in its 93rd meeting.

Additional Agenda 94.4.2

Environmental Clearance for Expansion within existing hotel project with increase in total built-up area from 29,711.63 sq. m to 31,228.33 sq. m at Survey Nos. 84/5, 84/10, Thycaud Village, Thiruvananthapuram Municipal Corporation, Taluk & District, Kerala by M/s Lulu Hospitality Limited.

[Proposal No. IA/KL/MIS/237929/2021; F. No. 21-101/2021-IA.III]

1. The instant matter pertains to Environmental Clearance for the Expansion within the Existing Hotel Project of M/s Lulu Hospitality Limited. (Addition of a Dining hall within the existing Hotel building block).

2. Earlier PP has obtained EC for Multilevel Car Parking (MLCP) building with built-up area of 10,046.26 sq. m within the existing hotel from SEIAA Kerala vide E.C. Order No. 28/2021 (Proposal No. SIA/KL/MIS/153098/2020 & File No. 1662/EC1/2020/SEIAA) dated 07.06.2021, for a period of 5 years**.**

3. Though the PP submitted EIA/EMP report for whole project and EC was sought for a total area of 29,711.63 sq. m (Exiting 19,665.37 sq. m +

Expansion 10,046.26 sq. m) and SEAC has recommended for issue of EC for the total area of 29,711.63 sq. m, SEIAA- Kerala issued the EC only for the MLCP building, having floor area of 10,046.26 sq. m for a period of 5 years stating the reason as follows:

> *"The proposal was placed in the 109th SEIAA meeting held on 26th & 27th April, 2021. Authority observed that the Project Proponent has specified the project as an expansion project in Form 1 and the built up area of existing Hotel component is 19,665.37 sq. m which was built without EC long back as it was less than the prescribed limit of 20,000 sq. m and started functioning way back in 2008. Now the proposal is for adding an MLCP system, having a floor area of 10,046.26 sq. m. The Project Proponent could have built this building also without EC as it is below the prescribed limit. Generally, at this distant date there is no need to consider the present project as an expansion of the existing project for which EC was not given by SEIAA. The terms and conditions under which the existing building was built is not known to SEIAA."*

4. Thereafter, the PP applied for expansion with increase in built up area from 29,711.63 to 31,228.33 sq. m in the Ministry, and the EAC has recommended the proposal in its 76th meeting held on 16.11.2021**.**

5. Since the existing EC granted by SEIAA, Kerala is only for a built up area of 10,046.26 sq. m for a period of 5 years (which is less than the prescribed limit of 20,000 sq. m), it was decided to get clarification from SEIAA.

6. Accordingly, email dated 21.04.2022 has been sent to SEIAA for clarification in this regard. In response, SEIAA Kerala vide letter no. 1662/EC1/2020/SEIAA dated 14.07.2022 has informed the following:

> *The clarification sought regarding the EC issued to M/s Lulu Hospitality Limited was placed in 114th SEIAA meeting. The Authority noted that the project Proponent had specified the project as an expansion project in Form 1 and the built-up area of existing Hotel Component is 19,665.37 sq. m which was constructed and had started functioning in 2008 without EC as it was less than 20,000 sq. m in area. However, an EIA report and EMP were prepared combining both the projects and EC is sought for a total of 29,711.63 sq. m as it exceeds prescribed limit of 20, 000sq. m.*
>
> *On deliberation, the authority in its 109th meeting decided to issue EC only for MLCP building, having a floor area of 10,046.26 sq. m for 5 years subject to the following specific conditions and general conditions.*

7. The matter has also been examined in the ministry and it was decided to grant Environmental Clearance for the instant proposal for expansion from 29,711.63 sq. m to 31,228.33 sq. m as requested by the PP and recommended by the EAC in supersession of EC granted by SEIAA vide Order no. 28/2021 (Proposal No. SIA/KL/MIS/153098/2020 & File No. 1662/EC1/2020/SEIAA) dated 07.06.2021 for the construction of Multi Level Car Parking (MLCP) to M/s Lulu Hospitality Limited.

8. However, minutes of 76th meeting held on 16.11.2021 did not clearly spell out that entire project with built up area of 31,228.33 sq. m is recommended for grant of EC. In this regard, the instant matter was deliberated by EAC in its 94th meeting.

9. Based on the information submitted by PP and detailed deliberation and discussion held, the EAC **recommends** the grant of environmental clearance for entire project with built up area of 31,228.33 sq. m in supersession of EC granted by SEIAA vide Order 07.06.2021. General and Specific conditions stipulated by EAC in its 76th meeting remains unchanged except the specific condition no. i, which states, "*Conditions as specified in E.C. Order no. 28/2021 (Proposal No. SIA/KL/MIS/153098/2020 & File No. 1662/EC1/2020/SEIAA) dated 07.06.2021 shall be strictly complied.*"

The meeting ended with a vote of thanks to the Chair.

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LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 94th MEETING OF EAC (INFRA-2) HELD ON 08.09.2022

S. No.	Name	Designation	Attendance	Remarks
1.	Dr. Promode Kant	Chairman	Present	Physical
2.	Shri Monish Mullick	Member	Present	Physical
3.	Dr. Satish C. Garkoti	Member	Present	Virtual
4.	Dr. Arun Jyoti Nath	Member	Present	Physical
5.	Prof. Inderjit Singh	Member	Present	Physical
6.	Prof P. K Joshi	Member	Present	Physical
7.	Dr. Arun Kumar Saraf	Member	Present	Physical
8.	Dr. Hema Achyuthan	Member	Present	Physical
9.	Dr. Harish C. Nainwal	Member	Absent	-
10.	Shri Ashwani Kumar	Member	Present	Physical
11.	Dr. Meenakshi Dhote	Member	Present	Virtual
12.	Dr. Ragavan P	Special Invitee	Present	Physical
13.	Dr. Ashish Kumar	Additional Director & Member Secretary	Present	Physical

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