Minutes of 100th Meeting of Expert Appraisal Committee (Infra-II) for projects related to airports 7(a); common hazardous waste treatment, storage and disposal facilities 7(d); common bio-medical waste treatment facilities 7(da); common effluent treatment plants 7(h); common municipal solid waste management facility 7(i); building and construction 8(a) and townships and area development projects 8(b), held on 11.01.2023.

VENUE: Hybrid Mode, Indus Hall, Ground Floor, Jal Wing, Ministry

of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, New Delhi – 110 003.

DATE: 11.01.2023

PROCEEDINGS

100.1 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 adopted by the EAC. The Member Secretary was then requested to begin the proceedings.

100.2 Confirmation of Minutes of 99th Meeting of Expert Appraisal Committee (Infra-II) held on 21.12.2022.

The Expert Appraisal Committee (Infra-II), hereinafter referred to as the EAC (Infra-II), was informed by the Member Secretary that no representation has been received regarding the correctness of the minutes of the 99th meeting of EAC (Infra-II) held on 21.12.2022 after it was uploaded on the PARIVESH. The EAC Members also did not notice any mistakes in it. The Minutes of 99th meeting of EAC were, therefore, confirmed with the observation that the typo errors, if any noticed during processing of these cases, may be corrected appropriately in the light of relevant facts and figures.

100.3 Consideration of Proposals: The EAC (Infra-II) considered proposals as per the agenda adopted for the 100th meeting. The details of deliberations held and decisions taken in the meeting are as hereunder:

Agenda 100.3.1

Environmental Clearance for Integrated Municipal Solid Waste Management Facility at Village Begunadih, Tehsil Potka, District East Singhbhum, Jharkhand by M/s Tata Steel Limited – Environmental Clearance

(IA/JH/INFRA2/410593/2022; F. No. 10-56/2019-IA.III)

Detailed information on the proposal is given in **Annexure-1**. Based on the information submitted and clarifications provided by M/s Tata Steel Limited along with EIA consultant M/s Crystal Consultants detailed discussions were held on the relevant issues. The EAC noted that 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, as amended and would have required appraisal only at state level. However, since the project site is located at the distance of 4 km from the state boundary of Odisha, the project comes under Category 'A' and requires appraisal at Central level by Sectoral EAC.

- 2. The project proposes to segregate municipal solid waste at point of generation, process it through composting, utilizing the nutrients produced through Reduced Derived Fuel (RDF), bio-methanation and sending the final inert material, expected to be about 15% of total waste material collected, to the now proposed site for final disposal. Total water requirement of the project is 70 KLD of which 50 KLD is fresh water, which shall be taken from the ground water source. The project does not fall in critically polluted area/severely polluted area and does not lie within any eco-sensitive zone and no tree cutting is involved.
- **3.** The public hearing was held on 25.09.2022 and all the issues raised during the public hearing have been adequately addressed by the project proponent. The EMP presents effective mitigation measures at the total cost of Rs. 2.76 crores.
- **4.** Having considered all aspects of the proposal, the EAC **recommended** the proposal for grant of Environmental Clearance with following specific conditions in addition to standard general conditions stipulated by the Ministry for such projects:
 - (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; 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) No tree can be felled/transplanted 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. While raising compensatory plantations it may be ensured that all the native species felled are replaced by the same native species to the extent possible while the non-native species may be replaced by any native species of choice.

- (iv) Project Proponent shall develop green belt in 5 ha 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.
- (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. Proponent 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) Fresh water requirement shall not exceed 50 KLD during operational phase. Extraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA).
- (xi) Treated wastewater of 20 KLD shall be recycled within the premises as committed.
- (xii) No fresh water to be used except for potable use.
- (xiii) 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.
- (xiv) 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).
- (xv) Ambient air quality monitoring shall be carried out in and around the landfill site at up wind and downwind locations.

- (xvi) The depth of the land fill site shall be decided based on the ground water table at the site to avoid contamination of the ground waters.
- (xvii) 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.
- (xviii) The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- (xix) On line real time continuous monitoring facilities shall be provided as per the CPCB or State Board Directions.
- (xx) Scrubber water, leachate water or wheel wash shall be treated properly and recycled to achieve zero liquid discharge.
- (xxi) Gas generated in the Land fill should be properly collected, monitored and flared.
- (xxii) Pre-medical check-up to be carried out on workers at the time of employment and regular medical record to be maintained.
- (xxiii) 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.
- (xxiv) Rainwater runoff from the landfill area shall be collected and treated in the leachate treatment plant.
- (xxv) Adequate covering arrangement in site should be done to prevent the runoff of rainwater in the project premises.

Agenda 100.3.2

Environmental Clearance for Common Hazardous Waste Treatment Storage & Disposal Facility at Khasra No. 1004 to 1022, 1027 & 1028 of Kesda Village, Simga Tehsil, Baloda Bazar District, Chhattisgarh State by M/s Re Sustainability Limited – Further consideration for Environmental Clearance

(IA/CG/MIS/283620/2022; F. No. 10-54/2020-IA.III)

Detailed information on the proposal is given in **Annexure-2**. Based on the information submitted and clarifications provided by M/s Re Sustainability Limited and detailed discussions held on all the issues, the EAC has 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 as amended, and requires appraisal at Central level by sectoral EAC.

- **2.** The proposal was last considered by EAC in its 97th meeting held on 28.10.2022; wherein EAC had felt that the proposed land area may not be sufficient to accommodate the proposed facilities as per the CPCB norms. During this meeting, the proponent resubmitted the proposal giving the details of land requirement for incineration and recycling of all hazardous and other wastes as per CPCB norms. Adequate physical distances in between these facilities have now been appropriately delineated.
- **3.** After detailed examination the EAC **recommended** the proposal for grant of Environmental Clearance with the following specific conditions in addition to the standard general conditions stipulated by the Ministry for such projects:
 - (i) The proponent should ensure that the project fulfils all the provisions of Hazardous and other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the 'Protocol for Performance Evaluation and Monitoring' for the same as published by the CPCB including collection, transportation, design etc.
- (ii) Guidelines for Secured Landfill issued by CPCB shall be followed.
- (iii) Necessary provision shall be made for fire-fighting facilities within the complex.
- (iv) Project proponent should prepare and implement an on-site **Emergency Management Plan** a copy of which should be submitted to the SPCB before the plant is made operational.
- (v) Employees shall be provided work specific PPE such as helmets, safety shoes, masks etc.
- (vi) Project proponent should develop green belt all along the periphery of the TSDF with plant species suitable for air pollution abatement in consultation with the state forest department. Total green area of 67,339.69 sq. m shall be maintained as proposed.
- (vii) Fresh water requirement shall not exceed 50 KLD during operational phase. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA).
- (viii) Gas generated in the Landfill should be properly collected, monitored and flared.
- (ix) 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 (SPCB)/CPCB. Trend analysis of ground water quality shall be carried out for each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
- (x) The depth of the landfill site shall be decided based on the ground water table at the site in order to ensure the contents of the landfill are never able to contaminate the ground water.
- (xi) Project proponent shall ensure proper handling of all spillages by

- introducing spill control procedures for various chemicals.
- (xii) As committed the estimated wastewater of 57.2 KLD will be treated and recycled within the premises as committed. Toxicity Characteristic Leaching Procedure (TCLP) test should be performed on leachates regularly.
- (xiii) Rain water runoff from the landfill area and other hazardous waste management area shall be collected and treated as per the norms.
- (xiv) The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and be 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.
- (xv) 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.
- (xvi) No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016, shall be handled in the premises. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016. 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 MSW generated from project.
- (xvii) 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 Trans-boundary Movement) Rules, 2016 to prevent unwanted access.
- (xviii) 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.
- (xix) A detailed traffic management & decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 2 km 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 2 km 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 PWD/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.

(xx) 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.

100.4 Additional Agenda

Additional Agenda 100.4.1

Terms of References for 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. – Reconsideration for Terms of Reference

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

Detailed information on the proposal is given in **Annexure-3**. Based on the information submitted and clarifications provided by M/s Re Sustainability Limited and detailed discussions held on all the issues, the EAC has noted that the 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 as amended, and requires appraisal at Central level by sectoral EAC.

- **2.** The proposal was last considered by EAC in its 97th meeting held on 28.10.2022; wherein EAC had felt that the proposed land area may not be sufficient to accommodate the proposed facilities as per the CPCB norms. During this meeting, the proponent resubmitted the proposal giving the details of land requirement for incineration and recycling of all hazardous and other wastes as per CPCB norms. Adequate physical distances in between these facilities have also now been appropriately delineated.
- **3.** In view of the above the EAC **recommended** the proposal for the grant of Terms of References and for preparation of EIA/EMP report along with public consultation subject to compliance of all conditions as notified in the standard ToR applicable for such projects along with specific conditions as mentioned below:
 - (i) Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided.
- (ii) 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.

- (iii) List of waste to be handled and their source along with mode of transportation.
- (iv) Characteristics and source of each type of waste to be handled.
- (v) Details of storage and disposal of pre-processing and post-processing rejects/inerts and products.
- (vi) List of proposed end receivers for the rejects/inerts/products should be provided. MoUs to be submitted along with the EC application.
- (vii) Other chemicals and materials required with quantities and storage capacities.
- (viii) Details of temporary storage facility for storage of hazardous waste at project site.
- (ix) Details of air emissions, effluents, hazardous/solid waste generation and their management.
- (x) The EIA should conform to the stipulations in the Biomedical Waste Management Rules 2016 and CPCB's Revised Guidelines for Common Bio-medical Waste Treatment and Disposal Facilities and should indicate conformity to the said rules at the beginning of the document.
- (xi) NOC shall be obtained from State Pollution Control Board regarding site suitability for the establishment of CBWTF.
- (xii) 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.
- (xiii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xiv) Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- (xv) Details of temporary storage facility for storage of hazardous waste at project site.
- (xvi) Details of pre-treatment facility of medical waste at CBWTF.
- (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) Hazard identification and details of proposed safety systems.
- (xxii) 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.
- (xxiii) Ground water quality monitoring in and around the project site.
- (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 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.
 - (xxix) 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.
 - (xxx) Cost of project and time of completion.
 - (xxxi) A tabular chart with index for point wise compliance of above TORs.
- (xxxii) 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.
- (xxxiii) A detailed plan for green belt development along with timeline.
- (xxxiv) Details of Disaster Risk Resilient Infrastructure (in addition to Disaster Management Plan).
- (xxxv) Details of Risk assessment and safeguarding the health of the workers.
- (xxxvi) Installation of Automatic Weather Station (AWS) at project site.
- (xxxvii) Details of baseline data on Public Health for 2 km radius of the project site.

Additional Agenda 100.4.2

Terms of Reference for 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) – Reconsideration for Terms of Reference

(IA/PY/MIS/286683/2022; F. No. 21-65/2022-IA.III)

Detailed information on the proposal is given in **Annexure-4**. Based on the information submitted and clarifications provided by M/s Re Sustainability Limited and detailed discussions held on all the issues, the EAC has noted that the 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 as amended. Further, General Condition is applicable, as the state boundary of Tamil Nadu is 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.

- **2.** The proposal was last considered by EAC in its 97th meeting held on 28.10.2022; wherein EAC had felt that the proposed land area may not be sufficient to accommodate the proposed facilities as per the CPCB norms. During this meeting, the proponent resubmitted the proposal giving the details of land requirement for incineration and recycling of all hazardous and other wastes as per CPCB norms. Adequate physical distances in between these facilities have also now been appropriately delineated.
- The project proponent has claimed that public hearing may be exempted as the project site is located within the Industrial Growth Centre (IGC) under Pondicherry Industrial Promotion Development and Investment Corporation (PIPDIC) at Polagam (Village), Karaikal (District), Puducherry. During 94th meeting held on 08.09.2022, the EAC recommended the proposal for grant of ToR with exemption from public consultation. However, on further perusal of the documents submitted by the proponent, it has been observed that proponent has not submitted the requisite documents. As per Ministry's O.M. J-11011/321/2016-IA.II(I) dated 27.04.2018, exemption from the public consultation may be granted only if the industrial estate has been notified by the central or state government prior to 14.09.2006 or it has been granted environmental clearance by the competent regulatory authority (i.e. the Ministry or SEIAA) or it has valid ToR. However, the project proponent has failed to produce any of the above mentioned documents in support of their claim for exemption from the public consultation.

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- **4.** In view of the above the EAC **recommended** the proposal for grant of Terms of References and for preparation of EIA/EMP report along with public consultation. This will be subject to compliance of all conditions as notified in the standard ToR applicable for such projects along with specific conditions as mentioned below:
 - (i) Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided.
- (ii) 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.
- (iii) List of waste to be handled and their source along with mode of transportation.
- (iv) Characteristics and source of each type of waste to be handled.
- (v) Details of storage and disposal of pre-processing and post-processing rejects/inerts and products.
- (vi) List of proposed end receivers for the rejects/inerts/products should be provided. MoUs to be submitted along with the EC application.
- (vii) Other chemicals and materials required with quantities and storage capacities.
- (viii) Details of temporary storage facility for storage of hazardous waste at project site.
- (ix) Details of air emissions, effluents, hazardous/solid waste generation and their management.
- (x) The EIA should conform to the stipulations in the Biomedical Waste Management Rules 2016 and CPCB's Revised Guidelines for Common Bio-medical Waste Treatment and Disposal Facilities and should indicate conformity to the said rules at the beginning of the document.
- (xi) NOC shall be obtained from State Pollution Control Board regarding site suitability for establishment of CBWTF.
- (xii) 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.
- (xiii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).

- (xiv) Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- (xv) Details of temporary storage facility for storage of hazardous waste at project site.
- (xvi) Details of pre-treatment facility of medical waste at CBWTF.
- (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) Hazard identification and details of proposed safety systems.
- (xxii) 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.
- (xxiii) Ground water quality monitoring in and around the project site.
- (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 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.
- (xxix) 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.
- (xxx) Cost of project and time of completion.
- (xxxi) A tabular chart with index for point wise compliance of above TORs.

- (xxxii) 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.
- (xxxiii) A detailed plan for green belt development along with timeline.
- (xxxiv) Details of Disaster Risk Resilient Infrastructure (in addition to Disaster Management Plan).
- (xxxv) Details of Risk assessment and safeguarding the health of the workers.
- (xxxvi) Installation of Automatic Weather Station (AWS) at project site.
- (xxxvii) Details of baseline data on Public Health for 2 km radius of the project site.

Additional Agenda 100.4.3

Environmental Clearance for Development of secured Landfill Facility for Hazardous Waste (30 Lakh MT) (TSDF site) at Village Jitali, Ankleshwar, District Bharuch, Gujarat by M/s Bharuch Enviro Infrastructure Limited - Environmental Clearance

(IA/GJ/INFRA2/406821/2022; F. No. 21-78/2022-IA.III)

Detailed information on the proposal is given in **Annexure-5**. EAC has noted that the proposal was recommended for the grant of Environmental Clearance in its 99th meeting held on 21.12.2022 with following specific conditions in addition to standard general conditions stipulated by the Ministry for such projects:

- (i) The proponent should ensure that the project fulfils all the provisions of Hazardous and other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the 'Protocol for Performance Evaluation and Monitoring' for the same as published by the CPCB including collection, transportation, design etc.
- (ii) Guidelines for Secured Landfill issued by CPCB shall be followed.
- (iii) Necessary provision shall be made for fire fighting facilities within the complex.
- (iv) Project proponent should prepare and implement an on-site Emergency Management Plan.
 - (v) Employees shall be provided work specific PPE such as helmets, safety shoes, masks etc.
- (vi) Project proponent should develop green belt all along the periphery of the TSDF with plant species suitable for air pollution abatement in consultation with the state forest department. Total green area of 51,354 sq. m shall be maintained as proposed.

- (vii) Fresh water requirement shall not exceed 350 KLD during operational phase. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA).
- (viii) Gas generated in the Landfill should be properly collected, monitored and flared.
- (ix) 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 (SPCB)/CPCB. Trend analysis of ground water quality shall be carried out for each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
- (x) The depth of the landfill site shall be decided based on the ground water table at the site in order to ensure the contents of the landfill are never able to contaminate the ground water.
- (xi) Project proponent shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- (xii) As committed domestic wastewater will be treated in STP; whereas industrial wastewater generated from the process including leachates arising from premises shall be treated in MEE Plant of M/s. BEIL. Treated domestic waste water shall be reused within the project. Toxicity Characteristic Leaching Procedure (TCLP) test should be performed on leachates regularly.
- (xiii) Rain water runoff from the landfill area and other hazardous waste management area shall be collected and treated as per the norms.
- (xiv) The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and be 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.
- (xv) 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.
- (xvi) No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016, shall be handled in the premises. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016. 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 MSW generated from project.
- (xvii) 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 Trans-boundary Movement) Rules, 2016 to prevent unwanted access.
- (xviii) 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.
- (xix) A detailed traffic management & decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 2 km 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 2 km 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 PWD/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.
- (xx) 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.
- 2. However, since the proposed site is located at Ankleshwar within the critically polluted area, it is required to be appraised in light of provisions mentioned in the Ministry's OM dated 31.10.2019 including the guidelines regarding grant of ToR/EC for new and expansion activities listed in Red and Orange categories located in Critically Polluted Areas and Severely Polluted Areas. As per CPCB's O.M. dated 10.04.2019 (latest and updated as received from CPCB on 09.01.2023), the Comprehensive Environmental Pollution Index (CEPI) score of Ankleshwar (where the proposed site is located) is 80.21. The air component contributes the maximum with EPI score of 72.00, followed by water (EPI score 57.00) and Land (EPI score 51.00).
- **3.** In view of above, EAC felt the need of additional mitigation measures in respect of air pollution. Accordingly, the EAC reiterated the earlier decision taken during 99th meeting held on 21.12.2022 with following additional specific conditions:
 - (i) Stack emission levels should be more stringent than the existing standards in terms of the identified critical pollutants.
- (ii) Effective fugitive emission control measures should be implemented.
- (iii) Proponent should use cleaner fuel. Use of pet coke/furnace oils/LSHS should be avoided.

- (iv) Unit shall provide green belt of 40% of the plot area along with development of a wide and effective green belt outside the project premises in adjacent areas through social forestry.
- (v) Unit shall provide wall to wall carpeting in vehicle movement areas within premises to avoid dusting.
- (vi) The unit shall adhere to sector specific guidelines/SOP published by SPCB/CPCB from time to time.

Additional Agenda 100.4.4

Terms of References for Expansion of Common Bio-medical Waste Treatment Facility at Plot No. 310/2, Phase-2, GIDC, Vapi, District Valsad, Gujarat by M/s En-cler Biomedical Waste Private Limited - Terms of Reference

(IA/GJ/INFRA2/407950/2022; F. No. 21-75/2022-IA.III)

Detailed information on the proposal is given in **Annexure-6**. EAC has noted that the proposal was **recommended** in its 99th meeting held on 21.12.2022 for the grant of Terms of References subject to compliance of all conditions as notified in the standard ToR applicable for such projects along with specific conditions as mentioned below:

- (i) Submission of Certified Compliance Report from the concern IRO at the time of EC application.
- (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 CBWTF. 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/inert and products.
- (vii) List of proposed end receivers for the rejects/inert/products should be provided. MoUs to be submitted along with EC application.
- (viii) The EIA should conform to the stipulations in the Biomedical Waste Management Rules 2016 and CPCB's Revised Guidelines for Common Bio-medical Waste Treatment and Disposal Facilities and should indicate conformity to the said rules at the beginning of the document.
- (ix) NOC shall be obtained from State Pollution Control Board regarding site suitability for establishment of CBWTF.

- (x) 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.
- (xi) Other chemicals and materials required with quantities and storage capacities.
- (xii) Details of temporary storage facility for storage of hazardous waste at project site.
- (xiii) Details of pre-treatment facility of medical waste at CBWTF.
- (xiv) Details of air emissions, effluents, hazardous/solid waste generation and their management.
- (xv) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xvi) Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- (xvii) Hazard identification and details of proposed safety systems.
- (xviii) 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 should be provided in the EIA report. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.
- (xix) Ground water quality monitoring in and around the project site.
- (xx) The Air Quality Index shall be calculated for base level air quality.
- (xxi) 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.
- (xxii) Details of effluent treatment and recycling process.
- (xxiii) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- (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.
- (xxix) A detailed plan for green belt development along with timeline.
- (xxx) Details of Disaster Risk Resilient Infrastructure (in addition to Disaster Management Plan).
- (xxxi) Details of Risk assessment and safeguarding the health of the workers.
- (xxxii) Installation of Automatic Weather Station (AWS) at project site.
- (xxxiii) Details of baseline data on Public Health for 2 km radius of the project site.
 - 2. However, since the proposed site is located within the critically polluted area, it is required to be appraised in light of provisions mentioned in the Ministry's OM dated 31.10.2019 including the guidelines regarding grant of ToR/EC for new and expansion activities listed in Red and Orange categories located in Critically Polluted Areas and Severely Polluted Areas. As per CPCB's O.M. dated 10.04.2019 (latest and updated as received from CPCB on 09.01.2023), the Comprehensive Environmental Pollution Index (CEPI) score of Vapi (where the proposed site is located) is 79.95. The water component contributes the maximum with EPI score of 75.00, followed by air (EPI score 66.00) and Land (EPI score 30.00).
 - **3.** In view of this, EAC felt the need of additional mitigation measures in respect of both air and water pollution as their EPI scores are exceeding 60. In this regard, the EAC has directed the project proponent to strictly adhere the sector specific guidelines/SOP published by SPCB/CPCB from time to time for preparing EIA/EMP report. Since, the proposed project is located in GIDS-Vapi, an industrial estate notified by the State Government of Gujarat vide notification dated 06.05.1975, public consultation is not required as per para 7(i) (III) (i) b of the EIA Notification, 2006 as amended.
 - **4.** In view of above, EAC felt the need of additional mitigation measures in respect of air pollution. Accordingly, the EAC reiterated the earlier decision taken during 99th meeting held on 21.12.2022 with following additional specific conditions:
 - (i) Stack emission levels should be stringent than the existing standards in terms of the identified critical pollutants.
 - (ii) Effective fugitive emission control measures should be implemented.

- (iii) Proponent should use cleaner fuel. Use of pet coke/furnace oils/LSHS should be avoided.
- (iv) Unit shall provide green belt over 40% of the plot area and also develop a wide and effective green belt outside project premises in adjacent areas through social forestry.

(v)

- (vi) Unit shall provide wall to wall carpeting in vehicle movement areas within premises to avoid dusting.
- (vii) All measures shall be taken to prevent soil and ground water contamination.
- (viii) The unit shall explore Techno-Economic feasibility of Zero Liquid Discharge (ZLD) and if feasible, ZLD should be adopted.

Additional Agenda 100.4.5

Terms of Reference for Capacity enhancement of SLF 19 Lakh MT to 42.86 Lakh MT in existing Common Hazardous Waste Treatment Storage, Disposal Facilities (TSDF) at Plot No. D-43, Dahej Industrial Estate, Taluka Vagra, District Bharuch, Gujarat by M/s BEIL Infrastructure Limited - Terms of Reference

(IA/GJ/INFRA2/405298/2022; F. No. 21-76/2022-IA.III)

The proposal was recommended for the grant of Terms of References by EAC in its 99th meeting held on 21.12.2022. However, the Member Secretary sought the permission of the Chair to take this matter for the consideration of the EAC as exemption of Public Consultation for the instant proposal was inadvertently not recorded in the recommendation part of the minutes of 99th EAC meeting. Permission was accorded.

- 2. The proposed project site is located within the notified Industrial Area which has already been granted environmental clearance by the Ministry vide F. No. 21-49/2010-IA-III dated 14.09.2017. So the public hearing may be exempted for the proposed project as per para 7(i) (III) (i) b of the EIA Notification, 2006 as amended.
- **3.** In view of above the EAC **recommended** the proposal for grant of Terms of References and for preparation of EIA/EMP report with exemption from the public consultation subject to compliance of all conditions as notified in the standard ToR applicable for such projects along with specific conditions as mentioned in the minutes of 99th meeting held on 21.12.2022:

Additional Agenda 100.4.6

Compliant against the grant of Environmental Clearance for Common Bio-medical Waste Treatment & Plastic Waste Management Facility at Plot No. D- 17, Eldeco, SIDCUL, Industrial Park, Udham Singh Nagar, Uttarakhand by National Biomedical Waste Solutions

(IA/UK/MIS/272601/2021; F. No. 21-64/2022-IA.III)

The Member Secretary brought to the attention of EAC that a complaint against the grant of environmental clearance to M/s National Biomedical Waste Solutions Private Limited has been received on the ground that a similar facility already existed within 75 km radius.

2. This proposal was recommended in its 92nd meeting held on 04.07.2022 by the then EAC on the basis of the facts of the case presented before them. On reconsideration of the matter, the present Chairman and Members of EAC observed that due to prevailing COVID pandemic situation, it is most important that the Bio-medical waste disposal facilities are located as close to pollution generation sources as possible so that the chances of spreading contamination through waste are greatly minimized. The EAC further recommended that the extant regulations limiting the number of biomedical waste disposal facilities such as mandatory minimum distance between facilities may be reviewed by the CPCB/Ministry most urgently in the interest of public health.

LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 100th MEETING OF EAC (INFRA-2) HELD ON 11.01.2023

S1. No.	Name	Designation	Attendance	Remarks
1.	Dr. Promode Kant	Chairman	Present	Physical
2.	Shri Monish Mullick	Member	Present	Virtual
3.	Dr. Satish C. Garkoti	Member	Present	Physical
4.	Dr. Arun Jyoti Nath	Member	Absent	-
5.	Prof. Inderjit Singh	Member	Absent	-
6.	Prof. P. K Joshi	Member	Present	Physical
7.	Dr. Arun Kumar Saraf	Member	Absent	-
8.	Dr. Hema Achyuthan	Member	Present	Virtual
9.	Dr. Harish C. Nainwal	Member	Absent	-
10.	Shri Ashwani Kumar	Member	Present	Virtual
11.	Dr. Meenakshi Dhote	Member	Present	Physical
12.	Dr. Ragavan P	Special Invitee	Present	Virtual
13.	Dr. Ashish Kumar	Additional Director & Member Secretary	Present	Physical

Annexure -1

Background information, details of appraisal during earlier EAC meetings and information submitted by the project proponent in compliance to ADS raised, if any

Agenda 100.3.1

Environmental Clearance for Integrated Municipal Solid Waste Management Facility at Village Begunadih, Tehsil Potka, District East Singhbhum, Jharkhand by M/s Tata Steel Limited – Environmental Clearance

(IA/JH/INFRA2/410593/2022; F. No. 10-56/2019-IA.III)

- 1. The Project Proponent (M/s Tata Steel Limited) along with his EIA consultant (M/s Crystal Consultants) 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 project is new.
- (ii) The proposed project is located at Village Begunadih, Tehsil-Potka, District-East Singhbhum, Jharkhand. The site is located about 41 km away from Jamshedpur city. Co-ordinates of the project are Latitude: 22°31'4.00"N Longitude: 86°11'32.00"E.
- (iii) The capacity of the proposed Integrated Municipal Solid Waste Management Facility is 400 TPD. This is in compliance to the provision of Municipal Solid waste management Rule 2016. The expected life of the facility will be 30 years and 10 years monitoring period post closure.
- (iv) The Project proposes to segregate solid wastes at point of waste generation through placing green bins for bio degradable solid, white for non- biodegradable non-recyclable solid waste, blue bins for non-biodegradable recyclable solid, black bins for domestic hazardous waste and yellow bins for E-waste. The hazardous waste collected from generation point is being handed over to the approved recyclers. Non- biodegradable recyclable waste is being handed over to Self Help Group identified by the proponent. Bio-degradable solid is being sent to existing composting plant.
- (v) The project site measures 14.95 ha. The entire land required for the proposed facility has been procured by the Proponent (M/s Tata Steel Ltd.) and is under its possession. Current land use type of the project site is 'barren land'. Proposed land use pattern of the project site is given below:

Sl. No.	Particulars	Area (ha)
1.	Processing Facility	0.9
2.	Sanitary Landfill	6.6
3.	Green Belt & Boundary	5.0
4.	Internal Road	0.5
5.	Infrastructure	1.0
6.	Land reserved for future expansion	0.95
	Total	14.95

- (vi) Major Component of proposed facility are as follows:
 - Pre- Sorting
 - RDF Plant
 - Compost Plant
 - Bio-Methanation Plant
 - Waste to Energy Plant
 - Secure Landfill Site

Integrated Facility also included viz., Mechanism for Segregation, collection processing, transportation, disposal of non-biodegradable, non-recyclable, inert component of MSW generated.

(vii) Capacity of the different processing units/disposal units is as follows:

Sl. No.	Items	Quantity (TPD)
1.	Composting Unit	150.00
2.	Bio-methanation	82.00
3.	RDF Plant	73.20
4.	Recyclable Plastic	16.00
5.	SLF	48.00
6.	C & D Waste	30.80
	Total	400

- (viii) Bio-degradable waste collected from point of generation will be transported to existing composting plant. Non bio-degradable, non-recyclable waste and residual from existing plant would be transported to proposed new site for disposal into sanitary land fill (SLF). Tata Steel Limited has an agreement with external agency to produce Refuse Dry Fuel (RDF) from combustible non bio-degradable solid waste. The proponent is also planning to set-up a bio-methanation unit within the existing composting plant. Hazardous solid waste will be handed over to authorised recyclers. Non bio-degradable recyclables will be handed over to the identified Social Entrepreneur group (SEG). There will be 8 transfer stations (Existing and New) within the command area for storage and transfer of solid waste collected in the city to the proposed facility.
 - (ix) Total water requirement of the project is 70 KLD, which include 20 KLD of recycled water and 50 KLD of fresh water. Fresh water requirement shall be fulfilled by Groundwater sources.

- (x) Waste water Generation (KLD) (Including leachate from SLF if any) is 25 KLD and same will be treated in Leachate treatment plant. Treat waste water of 20 KLD will be recycled.
- (xi) Leachate generated SLF shall be collected and treated, treated waste water shall be utilized for green belt development vehicle washing & floor washing and the plant will be based on Zero discharge principle. No significant adverse impact will be on water environment.
- (xii) The area proposed for green belt development is 5 ha. Green belts will be developed all around the boundary of the landfill in consultation with State Pollution Control Boards or Pollution Control Committees
- (xiii) Total Power required of the project is 70 KWH. Power requirement will be fulfilled by JSEB. In addition, a DG set with the capacity of 100 KWH will be provided as backup power supply.
- (xiv) Roof top rain water harvesting is proposed as measures of water conservation.
- (xv) Earlier the project was granted Terms of Reference by the Ministry vide letter no. 10-56/2019-IA-III dated 10.01.2020 for preparation of EIA/EMP report and organization of public hearing.
- (xvi) Accordingly, baseline environmental data were generated for one complete season during October to December 2019 for preparation of EIA/EMP report and Public hearing was conducted on 25.09.2022 at Panchayat Bhawan, Village Janamdih, Block-Potka, District-East-Singhbhum under the chairmanship of Deputy Commissioner East-Singhbhum, Jharkhand.
- (xvii) Major queries raised by participants are pollution of ground water, lowering of ground water table, environmental pollution in the area, loss of vegetation, and road Accident on account of transportation of solid waste from city to the Facility site. In response, the proponent informed the following proposed action plan to address issues raised by the participants:
 - Proponent informed that municipal solid waste will be treated in existing treatment facility at Jamshedpur. Only inert material & residual, generated in existing plant at Jamshedpur, would be disposed in land fill at the proposed site. At end of disposal of residuals, it will be covered by soil & plantation will be raised on the filled up area. The Facility will not generate many employments opportunity. However, preference will be given to local people for employment in the proposed Facility for employment opportunity arising in the facility. It was also assured that care would be taken not to affect identified land for, religious purposes in construction of Facility.
 - Proponent would take up schemes for education, health care in this area under its CSR programme. A medical doctor will be

deputed in the village for free consultation & also arrangement would be made for dispensing free medicine.

- (xviii) NBWL Clearance is not required.
- (xix) Forest Clearance is not required.
- (xx) CRZ Clearance is not required.
- (xxi) No court case is pending against the project.
- (xxii) The project site is not fall within the Critically Polluted Area.
- (xxiii) The project site is not lying within any eco sensitive zone/area.
- (xxiv) No tree cutting is involved.
- (xxv) Total estimated cost of project is Rs. 64 Crores. EMP Cost is Rs 2.76 Crores.
- (xxvi) Employment generation: The upcoming project will generate direct and indirect employment opportunities for the local people. The CMSWMF will create employment including skilled as well as semi-skilled staff directly or indirectly. The secondary employment in the form of providing services to the employed manpower will also be developed in the neighbouring villages.
- (xxvii) Benefits of the project: Improvements in the physical infrastructure, Improvements in the social infrastructure, Employment potential and other tangible benefits.
 - 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 requires appraisal at state level. However, general condition is applicable, as the state boundary of Odisha is at a distance of about 4.00 km from the project site. Accordingly, the project comes under category 'A' and requires appraisal at Central level by Sectoral EAC.

Annexure -2

Background information, details of appraisal during earlier EAC meetings and information submitted by the project proponent in compliance to ADS raised, if any

Agenda 100.3.2

Environmental Clearance for Common Hazardous Waste Treatment Storage & Disposal Facility at Khasra No. 1004 to 1022, 1027 & 1028 of Kesda Village, Simga Tehsil, Baloda Bazar District, Chhattisgarh State by M/s Re Sustainability Limited – Further consideration for Environmental Clearance

(IA/CG/MIS/283620/2022; F. No. 10-54/2020-IA.III)

- 1. Earlier, the project proponent submitted the same proposal bearing proposal no. IA/CG/MIS/171901/2020 (F. No. 21-109/2021-IA-III) to the Ministry. The proposal was considered by EAC in its 78th meeting held on 14-15 December, 2021, 82nd meeting on 82nd meeting held on 15-16 February 2022 and 90th meeting held on 14th June, 2022. During the detailed deliberations during these meetings, the EAC observed several flaws in the proposal, EIA/EMP report, public hearing and authenticity of the EIA consultant due to its debarment by QCI/NABET. The details may be seen in the minutes of above mentioned meetings, which are available in public domain at PARIVESH portal of this Ministry. Further, EAC observed that the name of PP has been changed from M/s Ramky Enviro Engineers Ltd to M/s Re-Sustainability Limited and asked the PP to revise the application as per the recent name change. Accordingly, the proposal was returned in present form.
- **2.** Thereafter, PP submitted proposal (no. IA/CG/MIS/283620/2022) on PRAIVESH portal for change in name of the proponent as mentioned in the ToR letter issued by this Ministry on 03.11.2020. Subsequently, the name of the proponent from M/s Ramky Enviro Engineers Ltd to M/s Re-Sustainability Limited was approved by the Ministry vide letter dated 30.08.2022. Meanwhile, suspension period of the accreditation is completed and M/s Re Sustainability Solutions Pvt. Ltd. has received the extension of validity of Accreditation till 8th December, 2022 from QCI-NABET Vide Letter No. QCI/NABET/ENV/ACO/22/2518 dated 09th September, 2022.
- **3.** Then, the PP submitted the proposal for grant of EC and the same was considered as a fresh proposal by the EAC (Infra-2) in its 95th meeting dated 15.09.2022 wherein the project proponent informed following:
 - (i) The project is located at Plot Nos: 1004 to 1022, 1027 & 1028 of Kesda Village, Simga Tehsil, Baloda Bazar District, Chhattisgarh.
 - (ii) The project is new.

- (iii) The project was issued ToR vide letter no. 10-54/2020-IA.III dated 03.11.2020. The baseline monitoring studies have been carried out during October to December, 2020.
- (iv) The total land area for the proposed project is around 50 acres (20.42 ha). A minimum area of 15 m wide will be left for greenbelt development all along the boundary. The project is proposed to treat hazardous wastes and also comprises of AFRF, paper recycling, plastic recycling, E-waste recycling, used oil/spent oil recycling, drum recycling/decontamination recycling plant, solvent recovery, Aluminum dross reprocessing, Spent Pot Liner (SPL) (Refractory portion) processing & disposal, SPL (Carbon portion) reprocessing, renewable energy facilities. The project details are given as follows:

S1. No.	Type of Wastes/Unit	Capacity Scalable Up to
1.	Secured landfill (Direct to Landfill)	
2.	Landfill After Treatment	4,50,000 MTA
3.	Hazardous Waste Incineration(Common for Hazardous waste, domestic hazardous waste & Other Incinerable waste)	
4.	E Waste Recycling	100 TPD
5.	Alternative Fuel and Raw Material Facility (AFRF)	100 TPD
6.	PlasticRecycling (hazardous in nature/contaminated elements)	20 TPD
7.	Paper Recycling (hazardous in nature /contaminated elements)	50 TPD
8.	Solvent Recovery (hazardous in nature/contaminated elements)	18 KLD
9.	Aluminum Dross	100 TPD
10.	Used/Spent Oil Recycling	15 KLD
11.	Renewable Energy	2 MW
12.	SPL (Carbon Portion)-Hazardous in nature and contaminated elements	100 TPD
13.	SPL (Refractory Portion)-Hazardous in Nature/Contaminated elements	100 TPD
14.	Drum/Decontamination Recycling Plant	200 Drum/day

(v) The land area requirement for the project is given as follows:

Sl. No.	Proposed Facility	Land Area in Acre
		(approx.)
1.	Landfill	28.18
2.	Greenbelt	10.77
3.	Facilities	2.43
4.	Paved roads	2.14

5.	Open spaces/ future expansion	6.83
6.	Parking	0.06
Total Area (approx.)		50.41

- (vi) Water requirement is 100 KLD i.e. 50 KLD of treated water and 50 KLD of fresh water sourced from bore well to be dug with prior permission of CGWA.
- (vii) Around 57.2 KLD of wastewater will be generated in the project. The leachate generated from landfill will be collected into leachate collection ponds. The leachate collected will partly treated and will be sent in to spray drier of incinerator and a part is sprayed back onto landfill for dust suppression, stabilization of hazardous waste, etc. The wastewater from TSDF operations, floor washings, workshop etc., will be collected, disinfected and then treated for oil and suspended solids by skimming and settling in sedimentation tank and the clarified water would be recycle for incinerator spray drier, washing, spraying on landfill and for dust suppression, etc., The waste water generated from boiler and cooling tower would be used in ash quenching and for greenbelt development purpose. Around 3.6 KLD of sewage generated will be treated in septic tank. There will not be any wastewater discharge to any nearby water body and the proposed project adopts zero wastewater discharge concept. The details of wastewater generation and management are given as follows:

	Wastewater Generation (KLD)	Remarks
Secured Land Fill	1.4	Sent for Leachate
		treatment & reused
Incinerator + plant - wet	30.2	Sent to wastewater
& venturi scrubber		treatment scheme for
Boiler spent solvent &	18.2	treatment & reuse
used		
oil recovery		
Plastic, Paper, & E-waste	2.4	
Truck wheel wash	1.4	
Sub Total	53.6	
Domestic	3.6	Sent to septic tank or
Greenbelt	-	soak pit
Grand Total	57.2	

(viii) An estimation of around 24 kg/day municipal solid waste is expected to be generated from the facility and shall be sent to nearest municipal facility for disposal. Hazardous & domestic hazardous waste generated within the premises shall be disposed of in incinerator or landfilled as required within the proposed Page 28 of 63

- facility. The ash coming from the incinerator and power plant will be used as a daily cover for landfill along with soil and mud.
- (ix) The drainage pattern in the study area can be described as subdendritic to dendritic. Seonath River is located at 9.3 km west; it is tributary of Mahanadi. Ghughua tank is located at 1.7 km west from the site. A man-made canal namely Bhatpara branch canal is located at a distance of 0.6 km west.
- (x) The power required for operations is 320 kVA, which will be taken from Chhattisgarh State Power Distribution Company Limited. 320 kVA DG set (standby) will be used as backup power during emergency requirement.
- (xi) In the proposed project it is intended to set up 2 MW solar power project in the closed landfill after evaluating the recent developments in solar energy on closed landfill on following criteria. a) Solar power system considerations with respect to landfill applications, b) Landfill technical and engineering considerations, and Regulatory considerations.
- (xii) No rainwater harvesting system or other artificial structures for ground water recharge are proposed within the facility, due to the nature of facility being hazardous waste management, to eliminate the probability of groundwater contamination. However, it is proposed to make proper utilization of rainwater collected from within the facility. A rainwater collection pond has been designed to hold rainwater. The rainwater thus collected, after treatment as necessary, shall be used for various uses (dust suppression, floor washings, toiler flushing, greenbelt, etc.).
- (xiii) The gases coming out of the incinerator stack are passed through scrubber, multi cyclone and bag filter for the removal of particulates. For proper dispersion of SO2 and NOx emissions into atmosphere, incinerator stack height meeting MoEF&CC/CPCB guidelines will be provided. To prevent the formation of dioxins, the flue gas temperature is rapidly lowered from 500°C to less than 200°C by adopting rapid quench/catalyst/adsorption by activated carbon.
- (xiv) Adequate greenbelt will be developed for the proposed project in an area of 10.7 acres (43,601 sq. m). It includes greenbelt along the boundary, roads and open spaces. 10 m wide green buffer shall be developed along the boundary of the project and 1 m wide buffer along the road (two sides).
- (xv) The project is not located in Critically Polluted area.
- (xvi) The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- (xvii) Forest Clearance is not required.
- (xviii) No court case is pending against the project.

- (xix) The project is expected to be completed within 12 (twelve) months. xx. Public Hearing was held on 07.08.2021 at around 11 A.M. at Ground situated in front of Venkatarmana Poultry Farm of Village Kesda under Tehsil Simga, District Balodabazar.
- (xx) Investment/Cost of the project is estimated to be around ₹ 36 Crores. Budget of EMP is ₹ 3.2 Crores with a Recurring cost of ₹ 32 Lakhs/annum. The overall project cost works out to be around ₹ 75.10 Crores, which includes land and other CSIDCL regulatory costs.
- (xxi) Employment potential About 50 persons shall be deployed during the construction phase. Once the facility is operational, about 40 persons including skilled and unskilled workers shall be deployed.
- Benefits of the project: Wastes generated from existing industries (xxii) 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 and domestic hazardous waste etc. Minimizes pollution load on 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.
- **4.** The EAC also noted that earlier committee (the then EAC Infra-2), during its 78th meeting held on 14-15 December 2021 raised 20 ADS point in respect of various issues related to the project. Project Proponent provided pointwise clarification in respect of each ADS during 82nd meeting of EAC held on 15-16 February 2022. However, the EAC was not completely satisfied with the response to the queries raised. The EAC deferred the proposal and asked for the following additional information/clarifications:
 - (i) The proposed leachate management system requires further clarification. The details of leachate management system do not given any ETP design or components of ETP. The water balance diagram does not clarify the final disposal of leachate.
- (ii) Fire potential and its critical relevance is not captured: The response is very vague and generic. It does not give any details of possible hazards/risks and specific mitigation measures. SOP to manage fire and other hazards need to be spelled out specifically.

- (iii) Clarifications were sought on generation of landfill gas from TSDF facility. Any waste that goes into a secure landfill must be pretreated, stabilized and immobilized. The response maintains generation of landfill gas like methane, carbon dioxide, oxygen, hydrogen sulphide. There is no clarification how and why the gas is generated from stabilized/immobilized waste. This needs to be clarified.
- (iv) ADS sought characteristics of possible waste coming to the facility from industries and anticipated quantities. This has not been provided.
- (v) The response is vague. Needs clarification/explanation on the nature of pre-treatment and probable quantity of materials to be consumed and stored in the facility.
- (vi) The response sought was regarding capacity utilization and estimated stack emissions including dioxin and furan level based on their experience of operating 17 TSDFs across the country. The response does not provide the details of Dioxin and Furan measurement.
- **5.** The EAC has further noted that proposal was again considered in the 90th meeting held on 14.06.2022 wherein the Project Proponent was not allowed to make presentation due to: (i) debarment of consultant by NABET from attending any EC related activities; (ii) name of the proponent has been from M/s Ramky Enviro Engineers Ltd to M/s Re-Sustainability Limited. In view of this, PP was asked to revise the application as per the recent name change. Accordingly, the proposal was returned in present form.
- **6.** Thereafter, PP submitted proposal for name change in ToR dated 03.11.2020 vide proposal no. IA/CG/MIS/283620/2022 on PRAIVESH portal and the same was approved vide letter dated 30.08.2022. Meanwhile, suspension period of the accreditation is completed and M/s Re Sustainability Solutions Pvt. Ltd. has received the extension of validity of Accreditation till 08.12.2022 from QCI-NABET Vide Letter No. QCI/NABET/ENV/ACO/22/2518 dated 09.09.2022.
- **7.** Thereafter, the PP applied afresh for grant of EC and the same was considered by the EAC (Infra-2) in its 99th meeting dated 15.09.2022 wherein the project proponent provided following clarification/information in respect of ADS raised on 82nd meeting of EAC (Infra-2) held on 15-16 February 2022 regarding the project bearing proposal no. IA/CG/MIS/171901/2020 (F. No. 21-109/2021-IA-III).
 - (i) The leachate collection system shall be designed at the base of the landfill and shall comprise of Drainage layer and Perforated pipe collection system for collection and removal using a sump. Leachate will be removed from the landfill by (a) pumping in vertical wells or chimneys (b) pumping inside slope risers, or (c) by gravity drains through the base of a landfill in above-ground and sloped landfills. Side slope risers may be preferred to vertical wells to avoid any down drag problems. Submersible pumps shall be used for pumping, educator pumps are also being increasingly used the leachate may be

stored in a holding tank before being sent for treatment. The details of the leachate management system are shown below and the same has been enclosed as Attachment- 1 for enlarged presentation. The following are the leachate management system proposed for TSDF: 1) Mixing and solidification of the leachate through waste, reagents, and other solids 2) Spraying of the leachate on the landfill and during operation 3) Solar Evaporation Pond: A double liner system-based Solar Evaporation pond shall be constructed wherein the leachate shall be stored for forced evaporation. The dry sludge post evaporation of leachate shall be treated and disposed of in the landfill. 4) Spray Dryer of common hazardous waste incinerator: The leachate shall be used for quenching in the spray dyer of the incinerator for flue gas management as leachate has high TDS and shall be helpful in exchanging the heat. However, leachate shall be treated prior to its use to achieve a COD <250 mg/l. 5) Effluent Treatment Plant (ETP): Depending upon the requirement, an ETP having suitable technology may also be considered for installation for the treatment of leachate. 6) Multi-Effect Evaporator (MEE): If required, MEE of adequate capacity shall also be considered for the management of leachate.

- Critical infrastructure/waste processing facilities like incinerator area, incinerable waste storage area, stabilization unit, plastic recycling unit, paper recycling unit, used/spent oil recycling unit, spent solvent recovery unit, SPL – carbon portion & a refractory portion will have a fire protection system through heat & smoke detectors, sprinkler system and fire extinguishers of suitable capacities and classes to mitigate the fire hazards. In other facilities like admin buildings, laboratories, etc., fire extinguishers of suitable capacity and class will also be provided. In every 30 m, fire hydrant valves will be set up along the boundary of the project as well as in the vicinity of the facilities. An adequate number of around 15- 20 fire extinguishers will be provided as per fire norms followed by approval from the fire department. A fire pump house of suitable capacity with an electrical pump, diesel pump, and jockey pump will be provided as per the fire norms. An emergency control center will be constructed, which would act as a command center during any emergency if any. The control center would house emergency equipment like self-controlled breathing apparatus (SCBA) sets, fire extinguishers, safety jackets, safety helmets with face shields, safety goggles, safety gloves, gumboots, etc. These equipments will be provided in suitable numbers to successfully extinguish any hazards. The following is the SOP for managing fire and other hazards:
 - a. Access to building: The premises is proposed to be located 60 meters wide and the accessible through a 10-meter wide main gate & allaround 6 meters to the incineration shed which meets the requirement as per UBBL 2016.

- b. Number, width, Type, and arrangement of exits: All staircases shall meet the requirement of travel distance, width, and construction as per UBBL-16/NBC-IV. Clear-cut width of existing/staircases shall be maintained at the time of completion. (UBBL- Unified Building ByeLaws, NBC- National Building Code).
- c. Protection of existing by means of fire check doors and or pressurization: The fire check doors of minimum 02hrs fire resistance rating shall be provided as per NBC part-IV, wherever applicable. The exit minimum width of exit doorways shall be equivalent to the width of the staircase as per clause 7.12.2 of UBBL 2016. The exit doorway shall be operated from the side which serves as clause 7.12.5 of UBBL 2016. The fire check door shall confirm to IS 3614:2021
- d.Compartmentation: The building shall be suitably compartmentalized so that the fire/smoke remains confined to the area where the fire incident has occurred and does not spread to the remaining part of the building. This shall confirm clause 8.4.6 of UBBL 2016 and NBC-IV. There shall be no opening /window assemblies with a rating of 60 minutes as per clause 4.4.2.4.3.4 of NBC-IV.
- e. Smoke management system: smoke venting facilities shall be provided as per NBC 2016 Part IV.
- f. Fire Extinguishers: Fire extinguishers of ISI (Indian Standards Institution) mark suitable to risk at all floors shall be provided as per clause 9.3.9 of UBBL- 2016 in accordance with IS 210-1992
- g. First Aid Hose Reel: A hose reel containing 30m length of 20 mm bore terminating into a shut-off nozzle of 5mm outlet connected directly to riser shall be provided as per clause 9.3.9 of UBBL- 2016. This shall be provided as per clause 9.3.9 of UBBL-2016. This shall conform to IS: 884/1998.
- h.Automatic Fire Detection and Alarming Systems: Automatic fire detection system i.e. smoke/heat detection system shall be provided in the entire building in all area including machine rooms as per clause 9.3.9 of UBBL 2016. The system shall be connected to a fire alarm system and shall conform to IS: 2189/1999
- i. Manually operated Fire Alarm System: Manually operated electric fire alarm (MOEFA) including talkback system shall be provided as per clause 9.3.9 of UBBL-2016/ NBC part –IV and the same shall conform to IS: 2189/1999
- j. Public Address System: The public address system shall be provided in the building having loudspeakers in the common area. The microphone and control switches of the public address system shall be installed as per clause 9.3.10 of UBBL-2016
- k.Internal Hydrant and Yard Hydrant: Wet riser/down comer system in the building near staircases shall be provided as per clause 9.3.9 of UBBL 2016 and it shall conform to IS 3844 1989. Hose box of

suitable dimensions shall be provided near each internal hydrant. Its design shall be such that it can be readily opened in an emergency. Each box shall contain two lengths of 63 mm diameter, 15m length, rubber lined delivery hoses conforming to IS: 636 complete with 63mm instantaneous coupling conforming to IS: 903 with a nozzle of 16 mm diameter. Yard hydrants shall be provided in the premises as shown on plans and the same shall conform to IS 13039/1991.

- 1. Pumping Arrangements: A fire pump house having 02 number of electrical engine driven pump of 2280 LPM capacity, 01 number of Diesel Engine Driven Pump of similar capacity and 02 number of Jockey pump of 180 LPM capacity with suitable head shall be provided as per part IV NBC 2016. The pump house shall be directly accessible. A suitable orifice plate/ reduce shall be provided to maintain the requisite pressure. Additional terrace pump of 900 LPM capacity with 40-meter head shall be provided. All the pumps shall be automatic in operation.
- m. Exit Signs: Exit signage shall be provided in the building at an appropriate location. Floor level marking, all existing waymarking signs (green in color) in the entire building must be illuminated and wired to an independent circuit supplied by alternate source of power supply. Wiring for the illuminated / glowing strips paint shall be provided at each level to guide the direction for escaping towards a safe place. The size and color of the exit signs shall be as per IS 9457: 1980
- n. Special Fire Protection Systems for protections of special risks: The electric sub-station, if constructed, installation of Transformer, LT & HT panel shall be as per the provisions specified by the Electric Authority.
- (iii) As a preventive measure gas venting system is proposed; mixed waste having biodegradable constituents may cause gas generation. As per the criteria for hazardous waste landfills, series: HAZWAMS/17/2000-01, Landfill gas is generated as a product of waste biodegradation or on account of the presence of VOCs in the waste. Gas generation can be reduced or eliminated by avoiding the disposal of biodegradable/ organic wastes. For HW landfills where gaseous emissions are anticipated (as in the case of mixed waste) shall be regulated by (a) controlled passive venting or (b) controlled collection and treatment/ reuse.
- (iv) The following are the possible waste coming to the facility from various industries

S1.	No.	Name of the Industries	Expected Waste Description
1.		Balco	SPL refractory, Shot blast dust,
2.		Vijay Transmission	ETP Sludge
3.		Nandan Steel	ETP Sludge
4.		Hira Group	ETP Sludge

	Gevra open cast mine,	
5.	SECL	Waste Containing oil, ETP Sludge
6.	IOTL	Bottom oily sludge from tank
	Kusmunda Open cast	
7.	Mine,SECL	Waste containing oil, ETP Sludge
	Dipka Open Cast	
8.	Mine,SECL	Waste containing oil, ETP SLUDGE
9.	NTPC Korba	Glass wool, Asbestos sheet, Silica
10.	Apollo India	ETP Sludge
11.	Star Processor	Used puff, Waste glass
12.	ACB India ltd	Glass wool
13.	Jindal Power	Glass wool
14.	Chirmiri Open cast Mine	Used filter, ETP Sludge
15.	Godavari Power	Glass wool
16.	CSPGCL East	Glass wool
17.	Dspm Korba	Glass wool
18.	NTPC, Lara	Resin Waste, Waste contains oil
19.	NTPC SIPAT Bilaspur	Glass wool
20.	HPCL Mandirhasod	Paint sludge
21.	NMDC	Resin Waste, Waste contains oil
22.	JSPL	Glass wool
23.	SKS ISPAT	Resin Waste, Waste contains oil

(v) CSIDC has been developing Industrial Parks/Estates in the State of Chhattisgarh. CSIDC proposed for setting up and operating the Common Hazardous Waste Treatment, Storage and Disposal Facility (HWTSDF) through private sector participation for Hazardous Waste generated from Industries located in the State of Chhattisgarh. As per the study conducted by the CECB, the total hazardous waste generation of Chhattisgarh State in the year 2018 is approx. 3, 14,903 MT, and the details are shown in Table:

S1. No	Type of Wastes	Quantity in MT
1.	Landfillable Waste	31594
2.	Recyclable Waste	259821
3.	Incinerable Waste	23488
Total		314903

- (vi) Total hazardous waste generation in the year 2018 in Chhattisgarh state is Approx. 55082 MT /Annum (excluding the Recyclable Waste) (Source: CSIDC Tender doc.)
- (vii) In Landfill after treatment, due to moisture, heavy metals content required stabilization using reagents like, sawdust, fly ash, lime, cement, etc. Based on the concentration of the heavy metal and chemical composition the lab decides the percentage of reagents to be

used to neutralize the waste which requires approx. 20 – 70% of reagent consumption. The waste sample shall be analyzed by the site Lab team and based on the outcome of the comprehensive analysis report, the pre-treatment method shall be decided. The quantity and type of reagent to be used for pre-treatment vary based on the characteristic of waste. Accordingly, reagents like lime, fly ash, cement etc. of a minimum quantity of 100 tons are to be stored in the facility and used as per the lab prescription for pre-treatment.

- (viii) The stack emission report of Ramky Facilities at Madhya Pradesh and Telangana is enclosed as Attachment-5 for kind reference which indicates that the stack emissions including dioxin and furans are within the prescribed limits.
- **8.** Thereafter, the proposal was considered by EAC in its 95th meeting held on 15.09.2022 and deferred the proposal based on the following observation:
 - (i) The clarifications provided by the PP in respect of ADS related to land use breakup for various activities and details of source of waste are not included in the EIA/EMP report. In the revised EIA/EMP report, the proponent is required to incorporate all the details related to these two ADS points. It is ensured that all details of various ADS points raised by EAC in its previous meetings is adequately incorporated in the EIA/EMP report.
- (ii) The proponent has proposed a total of 14 waste management activities involving huge amount of distinct hazardous and non-hazardous waste material. Handling such a huge quantity would require adequate space for its operation in the facility and storage. The storage sheds for the hazardous waste should be designed as per CPCB's norms. In view of this, the proponent is required to provide item wise calculation for space (area) requirement for handling various types of waste materials along with the proper justification as per extant rules, regulations and guidelines issued by this Ministry and/or CPCB. Minimum requirement of the space (area) for storing various hazardous materials as per norms set by the Ministry/CPCB should also be mentioned.
- (iii) Some of the activities mentioned in the proposal are not covered under EIA Notification, 2006 as amended. Proponent is required to specify such activities along with the reason/justification for including them in the proposal. Such activities can be included only if there is enough additional space (area) is available after fulfilling the minimum requirement for carrying out operation-cum-storage of those activities covered under the EIA Notification, 2006 as amended. Otherwise, such activities including e-waste should be removed from the proposal and the EIA/EMP report be revised accordingly.
- (iv) The proposed green belt coverage is only 21%. However, at least 33% of total area should be ensured while making adequate provisions for

- all other facilities besides adequate storage for various types of wastes. In view of this, proponent is required to revise the green belt plan accordingly.
- (v) All changes suggested above should also be incorporated in the layout of the project. The proponent is required to provide details on requirement of minimum space (area) for operation-cum-storage of each activity considered and same is to be clearly depicted in the layout. The layout of the proposed project should be revised accordingly.
- (vi) The various chapters/sections of the EIA/EMP report including proposed mitigation measures and environmental management plan shall also be revised in accordance to the above suggested changes.
- 9. Subsequently, proponent has replied the aforesaid queries of the EAC on 18.10.2022 and the proposal was again considered by EAC in its 97th meeting held on 28.10.2022; wherein, after detailed deliberation, the EAC opined that the proposed land area was not sufficient in extent to accommodate all the proposed facilities as per the CPCB norms. The PP also admitted that they had not calculated the area requirement of various kinds of waste materials as per the CPCB norms. Hence, EAC asked the project proponent to resubmit the proposal after calculating the land requirement for incineration and recycling of all hazardous and other wastes as per the CPCB norms. The lands allocated to the facilities, and for the physical distance from each other, should also be clearly delineated to scale on the site map. Accordingly, EAC defers the proposal.
- **10.** In response, proponent has now submitted the following additional information on 17.12.2022 through PARIVESH portal.
 - (i) Total area for the project is 204082.97 sq. m. Proposed land use pattern of the project site is as follows:

Sl. No.	Particular	Area in sq. m
1.	Area of infrastructure	1,36,743.28
2.	Area of Greenbelt	67,339.69
3.	Paved Area	909.00
4.	Open area	67,339.69
Total		204082.97

(ii) Proposed facilities and its capacity are as follows:

S1. No	Type of Wastes/Unit	Capacity Scalable Up to	
1	Secured landfill (Direct to Landfill)	4 50 000 MTA	
2	Landfill After Treatment	4,50,000 MTA	
3	Hazardous Waste Incineration (Common for Hazardous waste, domestic hazardous waste & Other incinerable waste) in Modular form	1.5 Tons/hr	

4	E Waste Recycling	2 TPD
5	Alternative Fuel and Raw Material Facility (AFRF)	100 TPD
6	Plastic Recycling (hazardous in nature / contaminated elements)	20 TPD
7	Paper Recycling (hazardous in nature /contaminated elements)	50 TPD
8	Solvent Recovery (hazardous in nature/contaminated elements)	18 KLD
9	Aluminum Dross	100 TPD
10	Used / Spent Oil Recycling	15 KLD
11	Renewable Energy	2 MW
12	SPL (Carbon Portion)-Hazardous in nature and contaminated elements	100 TPD
13	SPL (Refractory Portion)-Hazardous in Nature/Contaminated elements	100 TPD
14	Drum / Decontamination Recycling Plant	200 Drum/day

Note: Out of the 14 facilities proposed, only Incineration and Secured Landfill facility requires prior EC under EIA Notification, 2006 as amended.

(iii) Revised land area for the proposed facilities as CPCB norms are as follows:

S1. No.	Description of Unit	Dimension	Total Area (sq. m)	Qty.
1	Security room	3.46 × 3.46 m	11.97	1
2	Under Ground Sump	3.0 × 3.0 m	9.00	1
3	Admin cum lab, Electrical panel room, canteen & restroom	19.0 ×10.0 m	190.00	1
4	Weighbridge and Room	3.46 × 3.46 m	11.97	1
5	Sample collection platform	4.25 × 1.76 m	7.48	1
6	Fire Hydrant pump room & tank	8.0 × 8.0	64.00	1
7	Waste Stabilization shed, temporary waste stores & incin. Waste stores	42.90 ×21.90	939.51	1
8	Incinerator shed	75.30 × 23.00 m	1731.90	1
9	Tank farm for incinerator plant	15.0 × 6.0 m	90.00	1
10	PCC/MCC/PLC Building	20.0 × 4.1 m	81.90	1
11	Used/spent oil Recycling Facility	16.0 × 6.0 m	96.00	1
12	Intractable storage shed	20.0 × 20.0 m	400.00	1
13	AFRF shed	13.0 × 20.0 m	260.00	1
14	Aluminum dross facility	12.0 × 20.0 m	240.00	1
15	General Stores and Vehicle Maintenance Store	16.0 × 9.0 m	144.00	1

16	Drum Storage and incinerable waste storage shed	18.0 × 20.0 m	360.00	1
17	Rain water collection pond	20.0 ×16.2 m	324.00	1
18	Leachate Collection Pond & SEP	-	1900.00	1
19	LTP area	-	600.00	1
20	SPL Reprocessing and Disposal Facility	15.0 × 15.15 m	225.00	1
21	E-waste, paper, plastic, metal, drum processing shed	101.00 × 26.00 m	2626.00	1
22	Vehicle Tyre wash	25.0 × 5.0 m	125	1
23	Total landfill	_	125726.00	1
24	Parking shed	15.0 × 11.0 m	150	1
25	First Flush Retention Pond	-	430.00	1
Total A	rea of Infrastructure		1367	43.28
26	Green Belt		673	39.69
27	Paved area		9	09.00
28	Open area			39.69
Total area of project			2040	82.97

11. The EAC (Infra-2) 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.

Annexure -3

Background information, details of appraisal during earlier EAC meetings and information submitted by the project proponent in compliance to ADS raised, if any

Additional Agenda 100.4.1

Terms of References for 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. – Reconsideration for Terms of Reference

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

- **1.** Earlier the proposal was considered by EAC in its 81st meeting held on 31.01.2022, 94th meeting held on 08.09.2022 and 97th EAC meeting held on 28.10.2022.
- **2.** The project details submitted by the proponent during the 81st meeting are as follows:
 - (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	200 drums/day
	Plant	
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
 - 1. Jirne village, Raigad
 - 2. Nive village, Pune
 - 3. Vengoan village, Raigad
- (v) Rejection or knock-out criteria for site selection for Common Hazardous Waste Management Facility by Central Pollution Control Board & MoEF&CC w.r.t the proposed site is given as follows:

S. No.	Criteria	Answer (Yes/No)
1.	Existing or planned drinking water protection and catchment areas	No
2.	High flood-prone areas	No, Site is situated at a higher elevation than a river.
3.	Areas with unstable ground	No
4.	Closer than 200 meters to populated areas	No
5.	Closer than 200 meters to river boundaries	No, Amba river is 360 m far from the landfills of the site and adjacent to the total site boundary.
6.	Close to National Parks, Monuments, Forests with large No. of flora and fauna, historical, religious and other important cultural places 500 m	No, the nearest reserved forest is 0.7 km far towards the West direction. The nearest historical place is Anghai Fort located at 5.7 km towards SE
7.	Existing use of site (Agricultural/Forest/Old dump site)	Scrubland
8.	REMARKS	
	The site is suitable for detailed EIA study (Yes/No)	Yes

(vi) 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	Should not be within	No lake or pond
	(Distance from	200 m	located within 200 m.
	SW body)		Dhokshet lake is
	- ,		located at 2.6 km NW.
2.	River	Should not be within	No river located within
		100 m	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.
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

Ī	13.	Presence of	Not suitable	The proposed site does
		monuments/relig		not have monuments/
		ious structures		religious structures.
				Anghai Fort – 5.7 km
				(SE), Sudhagad Fort –
				11.3 km (SSE).
				, ,

- (vii) 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. [No documentary support has been provided by the project proponent. Further in form-1, it has been mentioned that project site is not located within the notified Industrial Estate]
- (viii) 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.
- (ix) 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.
- (x) 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.
- (xi) 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

- (xii) 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.
- (xiii) The Nearest Habitation is Adyachiwadi village which is 60 m from the site towards the (NW) direction.
- (xiv) NBWL Clearance is not required.
- (xv) Forest Clearance is not required.
- (xvi) No court case is pending against the project.
- (xvii) CRZ Clearance is not required.
- (xviii) Investment/Cost of the project is around ₹105 crore.
- (xix) Employment potential About 200 persons during establishment period and 125 direct employments and around 100 indirect employments during operation phase.
- Benefits of the project Wastes generated from existing industries will (xx)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 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.
- **3.** EAC in its 81st meeting held on 31.01.2022 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 proponent has submitted their response to above mentioned quires through PARIVESH portal on 04.08.2022 and the same was considered by the EAC 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.

Sl. No	Name	Distance	Direction
1.	M/s. Life Secure enterprises-MIMER, Pune	45	NE
2.	M/s. Evergreen Environmental-Taloja	50	NW
3.	M/s. Mumbai Waste Management-Taloja	54	NW
4.	M/s. Passco Environmental Solution	56	E

	Pvt. LtdYCM Hospital		
5.	M/s. SMS Envocleane Pvt. Ltd Deonar	60	NW
	Dumping Ground		
6.	M/s. Passco Environmental Solution	62	SE
	Pvt. LtdKailash Crematorium		
	Compound		
7.	M/s. Envision Enviro Engineering Pvt.	69	NW
	LtdKalyan		
8.	M/s. Envirovigil TMC's-Chhatrapati Shivaji	69	NW
	Maharaj Hospital		

(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	Selected Site	Alternate	Alternate	Alternate
Location		Site 1	Site 2	Site 3
Name of	Kansal &	Jirne	Nive	Vengoan
village	Hedavli			
Tehsil	Sudhagad	Pen	Mulshi	Karjat
District	Raigad	Raigad	Pune	Raigad
State	Maharashtra	Maharashtra	Maharashtra	Maharashtra
Co-ordinates	18°38'9.13"N	18°40'30.85"N	18° 29' 31.89" N	18° 54' 20.36"N
	73°17'8.48"E	73°05'58.25"E	73° 25 55.49" E	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
Sludge from waste/used oil	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.** After detailed deliberation, EAC in its 94th meeting recommended the proposal for the grant of Terms of Reference, subject to submission of following documents:
 - (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.
- **6.** Accordingly, ADS was raised in the PARIVESH portal on 19.09.2022 and proponent has submitted their response on 19.10.2022 through PARIVESH portal. However, it has been found that response provided by the proponent has been unsatisfactory and the proposed area of 53 acres (226624 sq. m) is not adequate to accommodate the various activities proposed by the project proponent. Hence it was decided to place the ADS reply before EAC in its 97th meeting for further appraisal.
- **7.** After detailed deliberation, EAC in its 97th meeting has opined that proposed land area is not sufficient to accommodate all the proposed facility as per the CPCB norms. The proponent also admitted that they have not calculated the area require of various kind of waste materials as per the CPCB norms. Hence, EAC has asked the PP to resubmit the proposal after calculating the land requirement for incineration and recycling of all hazardous and other wastes as per the CPCB norms. The lands allocated to

these facilities, and for the physical distance from each other, should also be clearly delineated to scale on the site map. Accordingly, EAC defers the proposal in its 97th meeting.

- **8.** In response, proponent has submitted the following additional information on 23.12.2022 through PARIVESH portal and the same was considered by EAC in its 100th meeting held on 11.01.2023.
 - (i) Proposed facilities and its capacity are as follows:

S1. No.	Proposed Facility	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	Alternative Fuel & Raw material Facility	100 TPD
6	E-Waste	2 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	Spent Pot Lining - Carbon Portion	100 TPD
12	Spent Pot Lining - Refractory Portion	100 TPD

Note: Out of the 12 facilities proposed, only Incineration, Secured Landfill facility and Biomedical waste treatment requires prior EC under EIA Notification, 2006 as amended.

- (ii) The project site is located within the Notified Industrial zone by Raigad Regional Planning Board, Govt. of Maharashtra. The area was demarcated under Notified industrial zone in Pali-Sudhagad Growth Centre as per Raigad Regional Plan in the year of 1990. As the site is located within Notified Industrial Area public hearing may be exempted.
- (iii) Revised land area for the proposed facilities as per CPCB norms are as follows:

S1. No	Description of Unit	Dimension	Area in sqm	Number
1	Security Room	3.46 × 3.46 m	11.97	1
2	Weigh bridge room	3.46 × 3.46 m	11.97	1
3	sample collection platform	3.46 × 3.46 m	11.97	1
4		3.0 × 3.0 m	9.00	1
5	Admin cum lab , electrical pannel room, canteen and toilet	23.0 × 9.73 m	223.79	1

		140,00 × 01,00	<u> </u>	
6	waste stabilisation shed cum temporary waste stores	#2.92 × 21.90 m	939.95	1
7	First flush retention pond	15.00 × 22.0 m	330.00	1
8	general store and vehicle maintenance shed	20 × 12.46 m	249.20	1
9	vehicle tire wash	24.0 × 6.66 m	159.84	1
10	Landfill (28.0 acre)	-	113517.00	1
11	Leachate collection pond	60.0 × 50.0 m	3000.00	1
12	Area for LTP	-	-	1
13	AFRF shed	24.90 × 13.0 m	323.70	1
14	SPL reprocessing and disposal facility (Carbon & refractory portion)	10.0 × 5.0 m	50.00	1
15	Solvent recycling facility	10.0 × 31.0 m	310.00	1
16	Drum/decontamination recycling facility	35.50 × 38.50 m	1366.75	1
17	Metal drum			
18	Plastic drum	75 0 × 05 0	1075 00	1
19	Paper	75.0 × 25.0 m	1875.00	1
20	e waste storage (600 sqm)			
21	Spent oil recycling facility	15.23 × 28.50 m	434.06	1
22	Incinrator plant (1.50 TPH × 3 Nos.)	58.0 ×52.0 m	3016.00	1
23	Tank form for incinrator plant	19.70 × 7.0 m	137.90	1
24	PCC/MCC/PLC Room	27.50 × 7.30 m	200.75	1
25	Incinerable waste storage shed	20 × 15 m	300.00	1
26	worker washrooms & rest room	3.46 × 11.40 m	39.44	1
27	Fire Hydrant pump room and tank	11.20 × 10.50 m	117.60	1
28	Secuirity post	1.20 × 1.20 m	1.44	1
29	Under ground water storage sump for BMW facility	3.46 × 3.46 m	11.97	1
30	Vehicle parking (BMW facility)	-	100.00	1
31	BMW waste storage shed	25.45 × 7.46 m	189.93	1
32	BMW processing shed	15.0 × 30.0 m	450.00	1
33	Area of LTP	-	50.00	1
-	Project Facility Area	-	128139.23	
34	Green Belt area	-	70782.03	
35	Paved Road	-	2876	
36	Misc. Area	-	12693.74	
Total	area of project		214491	

9. The 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, and requires appraisal at Central level by sectoral EAC.

Annexure -4

Background information, details of appraisal during earlier EAC meetings and information submitted by the project proponent in compliance to ADS raised, if any

Additional Agenda 100.4.2

Terms of Reference for 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) – Reconsideration for Terms of Reference

(IA/PY/MIS/286683/2022; F. No. 21-65/2022-IA.III)

- **1.** Earlier, the proposal was considered by EAC in its 94th meeting held on 08.09.2022 and 97th meeting held on 28.10.2022.
- **2.** The project details submitted by the proponent during the 94th meeting are as follows:
 - (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 No's 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-190pt., B-14pt., 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. Land has been allotted to Re Sustainability IWM Solutions Limited (Formerly Known as TamilNadu Waste Management Limited) as per allotment no. F. 34-123/613/2020/Constn/3975 dated 25.04.2022.
- (ii) It is new project.
- (iii) As the project site is located within Industrial area notified in year 2002, which is prior to promulgation of EIA Notification, 2006, public hearing may be exempted wrt Ministry's OM dated 27.04.2018. [No documentary support has been provided in support of this claim]
- (iv) Location details of project site is as follows:

ID	Latitude	Longitude
A	10°51'30.31"N	79°48'46.69"E
В	10°51'30.68"N	79°49'01.89"E
С	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 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:

S1.	Name of the facility	Proposed
No.		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 numbers
		per/day
11.	Aluminum Dross Reprocessing 165 TPD	
12.	Spent Pot Liner (SPL)(Refractory Portion)	165 TPD
	Processing & Disposal	
13.	Spent Pot Liner (SPL)–(Carbon Portion)	165 TPD
	processing and disposal	
14.	Used Oil/Spent Oil Recycling	54 KLD
15.	Solvent Recovery	27 KLD

(viii) Rejection or Knock-Out Criteria for the proposed site is as follows:

Identification Location		
S1. No	Criteria	Answer
		Y / N

1	Existing or planned drinking water protection and catchment areas	N
2	High flood prone areas	N, there is no river within 500 m of the site and major river Tirumalarajanar which is located, around 3 km far from the site
3	Areas with unstable ground	N
4	Closer than 200 meters to populated areas	N, Polagam Village is located towards north east at 700 m distance from the site.
5	Closer than 200 meters to river boundaries	N, Puravadaiyanar river is located 700 m South- from the site.
6	Close to National Parks, Monuments, Forests with large No. of flora and fauna, historical, religious and other important cultural places 500 m	N
7	Existing use of site (Agricultural/Forest/Old dump site)	Scrub bushes in the Industrial layout
REMARK	S	
Site is su	itable for detailed EIA study (Y/N)	Y

(ix) Site selection criteria as per the guidelines of CPCB as follows:

S1. 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 Canals is inside the site	
2.	River	Should not be within 100 m	No river presented 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-same as Knock-out- criteria No.2	
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	Not suitable	No	

	one or more endangered species live		
8.	Reserved Forest area	Not suitable	No
9.	Wetlands	Not suitable	No
10.	Airport	Should not be within zone around the airport(s)	No Airport located within 50 Km from the site. Thanjavur Airport 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

- (x) 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.
- (xi) 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 (2 KLD) 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 (2.5 KLD) will be sent to to soak pit/treated in STP.
- (xii) 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.
- (xiii) The site is covered by majorly scrub bushes. No major tree will be removed. The same will be retained and maintained under Greenbelt.
- (xiv) A manmade water supply canal is passing through the site and the buffer of 9 m from both sides of the canal will be left over for any green belt development.
- (xv) Estimated power requirement is 375 kVA and same will sourced through Pondicherry electricity board. DG sets (2×250 kVA) will be used as an emergency power backup.
- (xvi) HSD fuel will be used for operation of DG set/Incinerator (106 liters/hr) and same will be sourced through local dealers.

- (xvii) NBWL Clearance is not required.
- (xviii) Forest Clearance is not required.
- (xix) No court case is pending against the project.
- (xx) 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

- (xxi) The project is not located in critically polluted area.
- (xxii) The project cost is around ₹ 35 crores. EMP capital cost is ₹ 3.5 Crores. Recurring cost is ₹ 0.35 Crores/annum.
- (xxiii) Employment potential: Indirect employment at peak period during operation around 100 persons; during establishment period, around 200 persons.
- (xxiv) 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 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
 - **3.** EAC in its 94th meeting 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.

- **4.** In view of above shortcomings, EAC in its 94th meeting recommended the proposal for the grant of Terms of Reference subject to submission of following documents:
 - (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.
- **5.** In response, proponent has submitted their response through PARIVIESH portal on 18.10.2022. However, during processing the file it has been found the proposed area of 27 acres (109269 sq. m) is not adequate to accommodate the various activities proposed by the project proponent. Hence, it was decided to place the ADS reply before EAC in its 97th meeting for further appraisal.
- **6.** After detailed deliberation, the EAC in its 97th meeting has opined that proposed land area is not sufficient to accommodate all the proposed facility as per the CPCB norms. The PP also admitted that they have not calculated the area require of various kind of waste materials as per the CPCB norms. Hence, EAC asked the PP to resubmit the proposal after calculating the land requirement for incineration and recycling of all hazardous and other wastes as per the CPCB norms. The lands allocated to these facilities, and for the physical distance from each other, should also be clearly delineated to scale on the site map. Accordingly, EAC defers the proposal in its 97th meeting.
- **7.** In response, proponent has submitted the following additional information on 17.12.2022 through PARIVESH portal and the same was considered by EAC in its 100th meeting held on 11.01.2023.
 - (i) Total area for the project is 109267.58 sq. m and the proposed land-use pattern is as follows:

Particular	Area in sq. m
Area of Infrastructure	47283.92
Roads	16779.00
Greenbelt	36058.77
Misc. Area	9145.89
Total	109267.58

(ii) Proposed facilities and its capacity are 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	2 TPD
8	Plastic Recycling	10 TPD
9	Paper Recycling	10 TPD
10	Drum Recycling	200 numbers per/day
11	Aluminum 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

Note: Out of the 15 facilities proposed, only Incineration, Secured Landfill facility and Biomedical waste treatment requires prior EC under EIA Notification, 2006 as amended.

(iii) Revised land area for the proposed facilities as per CPCB norms are as follows:

Sl. No.	Description of Unit	Dimension	Area in sq. m	Qty.
1.	ETP for BMW	50 sq. m	50	1
2.	BMW Processing Shed	18.75 × 24m	450	1
3.	Vehicle wash & Parking	100 sq. m	100	1
4.	Workers washrooms & Rest rooms	3.46 ×11.40 m	39.444	1
5.	Waste Storage shed	15 × 10 m	150	1
6.	Security &Visitor Room cum Toilet	6.00 × 3.00 m	18	1
7.	Underground Sump	3.00 × 3.00 m	9	1
8.	Admin cum Lab, Electrical Panel Room, Canteen & Restroom	15 × 10 m	150	1
0	Weigh Bridge Control Room &Weigh Bridge	3.40 × 6.40 m	21.76	1
9.	Platform(50 Tons capacity)	3.00 × 18.00 m	54	1
10.	Sample collection platform	4.25 × 1.76 m	7.48	1
11.	Fire Hydrant Pump Room &Tank	10.96 × 12 m	131.29	1
12.	E waste, Paper, Plastic, Metal, Drum Processing Shed	61.92 × 45.70 m	2829.744	1
13.	Tank Farm Solvent Recovery Facility	18.40 × 12.90 m	237.36	1
14.	Waste stabilization shed, Temporary waste store	40.91 × 22 m	900	1
15.	Mechanized Waste stabilization shed equipment	-		1
16.	Solvent Recovery and used oil Recycling	31.00 × 10.23 m	317.13	1

	Facility			
17.	Incinerator Shed(500KG/Hr)	75.30 × 23.00 m	1731.9	1
18.	Tank Farm Incinerator Plant	2.00 × 6.85 m	13.7	1
19.	PCC/PLC/MCC Building	25.90 × 5.46 m	141.414	1
20.	Leachate Collection Pond &SEP	2000 m	2000	1
21.	First Flush Retention Pond	1267m	1267	1
22.	Vehicle Tyre wash	24.00 × 6.66 m	120	1
23.	Landfill (8.09acrs)	32771.00 sq. m	32771	1
24.	General Stores & Vehicle maintenance Shed	20 × 10 m	200	1
25.	AFRF Shed	24.90 × 13.00 m	323.7	1
26.	Area for LTP	750.00 sq. m	750	1
27.	Special waste storage shed/Waste storage shed	50 ×20 m	1000	1
28.	Intractable waste store/Temporary waste store	50 × 20 m	1000	1
29.	Aluminum Dross Processing Facility	20.00 × 10.00	200	1
30.	Incinerable Waste Storage Shed	20.00 × 15.00 m	300	1
		Area of Facility	47	283.92
31.	Road area			16779
32.	Greenbelt area			058.77
33.	3. Misc. Area			45.89
	То	1092	267.58	

- (iv) Total 32771.00 Sq. m area will be used for Secure landfill. The facility is designed for 25 years and additional 25 years post monitoring. As per the CPCB guidelines; storage capacity has been estimated for maximum 90 days.
- **8.** The 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 as amended. 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.

Annexure -5

Background information, details of appraisal during earlier EAC meetings and information submitted by the project proponent in compliance to ADS raised, if any

Additional Agenda 100.4.3

Environmental Clearance for Development of secured Landfill Facility for Hazardous Waste (30 Lakh MT) (TSDF site) at Village Jitali, Ankleshwar, District Bharuch, Gujarat by M/s Bharuch Enviro Infrastructure Limited - Environmental Clearance

(IA/GJ/INFRA2/406821/2022; F. No. 21-78/2022-IA.III)

- 1. Earlier, the proposal was considered by EAC in its 99th meeting held on 21.12.2022 and recommended for the grant of Environmental Clearance (EC). However, as per the provisions mentioned in Ministry's O.M dated 31.10.2019 further discussion by EAC is required on this proposal to incorporate provisions regarding grant of EC for new and expansion activities listed in Red and Orange categories located in Critically Polluted Areas and Severely Polluted Areas.
- **2.** Accordingly, the proposal was examined by EAC it is 100th meeting held on 11.01.2023. Details of the project as follows:
 - (i) The project is new.
- (ii) The project is located at survey no.: 190, 233, 235, 236, 254, 263, 268, 269, 270, 271, 272 & 273 village-Jitali, Ankleshwar Bharuch-Gujarat adjoining to Existing BEIL TSDF site at GIDC, Ankleshwar.
- (iii) The existing BEIL TSDF has total capacity of 50 Lakh MT and until 28.02.2022 approx. 37.29 Lacs MT have already been disposed. The remaining capacity will be sufficient only for another 4 5 years. Also, industries are expanding and there is increasing trend in Hazardous waste generation in the region i.e., Ankleshwar, Panoli, Jhagadia. To facilitate treatment and disposal of Hazardous waste generated by industries in the region, it is proposed to set up a Secured Landfill Facility (30 Lac MT) for hazardous waste.
- (iv) The total plot area of the project is 2,27,959 sq. m. The proposed site is adjacent to the existing site of BEIL TSDF site Ankleswar. The facilities like, MEE, Incineration shall be commonly used. Land use breakup of the proposed project is as follows:

Sl. No.	Land use	Proposed Area (sq. m)
1.	Green Belt Area	51,354
2.	Road Area	26,108
3.	Secured Landfill Area	91,742

4.	Storage area	4,228
5. Building Area		185
6.	Future Expansion Area	18,344
7.	Open Land Area	35,998
	Total	2,27,959

- (v) Earlier the project was granted Terms of Reference by SEIAA-Gujarat vide letter dated 29.09.2018 for Secured landfill capacity of 10 Lac MT. Thereafter, ToR dated 29.09.2018 was amended vide letter dated 02.07.2021. As per amendment letter dated 02.07.2022 total plot area is 2,27,959 sq. m; size of landfill is 91749 sq. m; total capacity is 30 Lac MT; and total number of cell is 10.
- (vi) No alternative site selection study has been conducted by project proponent as the project will be developed adjoining to the existing facility of M/s. BEIL, Ankleshwar.
- (vii) The baseline environmental quality has been assessed in the postmonsoon season of October 2021 to December 2021 in a study area of 10 km radial distance from the project site for preparation of EIA Report.
- (viii) Public Hearing was held on 08.07.2022 at Diamond Children Theater, GIDC Ankleshwar, Taluk. Ankleshwar, Dist. Bharuch Gujarat under the supervision of Resident Additional Collector & Additional District Magistrate, Bharuch.
- (ix) Total water required of the project is 350 KL/day (Domestic: 30.0 KL/Day Gardening: 20.0 KL/Day Industrial: 300.0 KL/Day) and same will be sourced through GIDC water supply & from one Borewell.
- (x) Total wastewater generation will be 227 KL/Day (Domestic: 27 KL/Day; Industrial: 200 KL/Day). Domestic wastewater will be treated in STP and then reused within premises. Leachate from landfill site and laboratory and washing (including tyre washing) will be sent to common MEE plant of M/s. BEIL for treatment and disposal.
- (xi) Total power requirement of project is 125 KVA and same will be sourced through Gujarat Electricity Board (GEB). In case of power failure, D.G. Set (125 KVA capacity) will be used. HSD at rate of 2.5 MT/ Month will be used as fuel in D.G. set.
- (xii) NBWL Clearance is not required.
- (xiii) Forest Clearance is not required.
- (xiv) CRZ Clearance is not required.
- (xv) No court case is pending against the project.
- (xvi) Total area proposed for green belt development is 51354 sq. m.
- (xvii) The estimated cost of the Project is approximately Rs. 125 crores.
- (xviii) Employment generation: During Construction phase the labors and workers will be hired from nearby villages. Number of persons

- required during construction phase is 150 and 15 is required during operation.
- (xix) Benefits of the project: Improvements in physical and social infrastructure and employment generation.
- **3.** The project/activity 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 as amended and requires appraisal by SEIAA. Accordingly, the project was granted ToR by SEIAA vide letter dated 29.09.2018. However, in light of Ministry's O.M. No. 22-23/2018-IA.III [E 1152311] dated 05.07.2022 in compliance of Hon'ble Supreme Court order 25.02.2022, the instant proposal for the grant of EC is being treated as Category 'A' project and requires appraisal at central level as the project site fall within the critically polluted area.

Annexure -6

Background information, details of appraisal during earlier EAC meetings and information submitted by the project proponent in compliance to ADS raised, if any

Additional Agenda 100.4.4

Terms of References for Expansion of Common Bio-medical Waste Treatment Facility at Plot No. 310/2, Phase-2, GIDC, Vapi, District Valsad, Gujarat by M/s En-cler Biomedical Waste Private Limited - Terms of Reference

(IA/GJ/INFRA2/407950/2022; F. No. 21-75/2022-IA.III)

- 1. Earlier, the proposal was considered by EAC in its 99th meeting held on 21.12.2022 and recommended for the grant of Terms of Reference (ToR). However, as per the provisions mentioned in Ministry's O.M dated 31.10.2019 further discussion by EAC is required on this proposal to incorporate provisions regarding grant of ToR for new and expansion activities listed in Red and Orange categories located in Critically Polluted Areas and Severely Polluted Areas.
- **2.** Accordingly, the proposal was examined by EAC it is 100th meeting held on 11.01.2023. Details of the project as follows:
 - (i) It is an expansion project.
- (ii) The project site is located in Notified Industrial Area of Vapi GIDC at Plot No: 310/2, Phase-2, GIDC, Vapi-396195, Dist: Valsad, Guiarat.
- (iii) Earlier, Environment clearance was granted by SEIAA vide letter no. SEIAA/GUJ/EC/7(da)/712/2017 dated 29.06.2017.
- (iv) Since, the proposed project is located in GIDS-Vapi, public consultation is not required as per para 7(i) (III) (i) b of the EIA Notification, 2006 as amended.
- (v) Details of proposed expansion as follows:

S1.	Particular	Capacity			Remark
No.		Existing	Proposed	Total after Expansion	
1.	Incineration Plant	150 kg/hr	200 kg/hr & 100 kg/hr (Stand by)	200 kg/hr & 100 kg/hr (Stand by	*Existing 150 kg/hr Incinerator will be replaced by proposed 200kg/hr Incinerator.
2.	Autoclave	125	-	125	

		kg/hr/cycle		kg/hr/cycle	
3.	Shredder	200 kg/hr		200 kg/hr	
4.	Chemical	-	1 T/day	1 T/day	
	Disinfection				

(vi) The total plot area of the project is 4271 sq. m. The land use break-up of the project site as follows:

S1. No.	Land use	Existing area (sq. m)	Proposed area (sq. m)	Total area (sq. m)
1.	Plant facility and storage area	1334.46	-	1334.46
2.	Office buildings	118.54	-	118.54
3.	ETP	19.40	-	19.40
4.	Green Belt	1442.00	+27.78	1709.0
5.	Vehicle Washing area	41.16	-	41.16
6.	DG set area	2.23	-	2.23
7.	Internal Roads	1143.12	-	1143.13
8.	Other	170.09	-27.78	142.31
	Total	4271.00		4271.00

- (vii) Existing green belt inside the plot premises is 1469.78 sq. m (34.41%). Additional Green belt area (239.22 sq. m) is developed to adjacent area of GIDC, outside the plot premises to develop 40% of greenbelt. Proposed incinerator will be installed in existing plant facility area having sufficient space.
- (viii) Total water requirement of the project is 20.6 KLD (16.0 KLD Fresh +4.6 KLD recycle). Freshwater requirement will be sourced through GIDC water.
- (ix) Total waste water generation will be 6.5 KL/day. Water requirement will be mainly for the Chemical Disinfection & Washing 3.0 KL/Day, Autoclave 2.0 KL/Day approx. Domestic 2.0 KL/Day, Lime Slurry preparation 0.5 Kl/Day and for gardening 8.5 KL/Day. The total industrial waste water generated from the proposed project will be 4.6 KL/day. Of which, domestic wastewater generated (1.8 KL/day) will be send to septic tank/soak pit system. Industrial wastewater generated will be treated in in-house effluent treatment plant. The treated water will be reused in lime slurry preparation to achieve zero liquid discharge.
- (x) For the proposed project Natural Gas for incineration will be 150 SCM/Hr and Diesel i.e. 55 Lit/Hr. will be required for the D.G. set which will be purchased from the nearest petrol pump in drum and transported by road only.
- (xi) Total power requirement of the project is 225 KvA and the same will be sourced through Dakshin Gujarat Vij Company Limited. In case of Power failure, D. G. set of 125 KVA will be provided to fulfil the power requirement.

- (xii) No other CBWTF within 75 km radius. The nearest CBWTF is located at 80.6 km radial distance (i.e., 110 km by road) and having incinerator capacity of 100 kg/hr.
- (xiii) No Ecologically Sensitive Area, Defense Installation, Biosphere Reserve and National Park/Wild Life Sanctuary within 10 KM radius.
- (xiv) NBWL Clearance is not required.
- (xv) Forest Clearance is not required.
- (xvi) CRZ Clearance is not required.
- (xvii) No court case is pending against the project.
- (xviii) No tree cutting is involved.
- (xix) Total estimated Cost of the proposed project is Rs.1.9 crores. Total capital cost for environmental pollution control measures would be Rs. 25 Lacs and recurring cost per annum would be Rs. 10 Lacs.
- (xx) The proposed Common Bio-Medical Waste Treatment Facility will have great employment potential providing employment to approximately 35 full time persons.
- **3.** The project/activity is covered under Category 'B' of Item 7(da) Common Biomedical Waste Treatment Facilities of the Schedule to the EIA Notification, 2006 as amended and requires appraisal by the SEIAA. However, in light of Ministry's O.M. No. 22-23/2018-IA.III [E 1152311] dated 05.07.2022 in compliance of Hon'ble Supreme Court order 25.02.2022, the project is being treated as Category 'A' project and requires appraisal at central level as the project site fall within the critically polluted area.
