

F. No. 10-23/2018-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 3

Date: 16th November, 2018

To,

M/s Tamil Nadu Waste Management Limited,
Level- 4, Diamond Dune, 323, NH 4, Aminjikarai,
Chennai- 600029, Tamil Nadu
E- Mail: treddy@ramky.com

Subject: Integrated Common Hazardous Waste Treatment, Storage & Disposal Facility by Tamil Nadu Waste Management Limited, Unit-3 at Bargur, Krishnagiri District, Tamil Nadu by M/s Tamil Nadu Waste Management Limited - Environmental Clearance - reg.

Sir,

This has reference to your online proposal No. IA/TN/MIS/73565/2018 dated 28th July, 2018, submitted to this Ministry for grant of Environmental Clearance (EC) in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.

2. The proposal for grant of environmental clearance to the project 'Integrated Common Hazardous Waste Treatment, Storage & Disposal Facility by Tamil Nadu Waste Management Limited, Unit-3 at Bargur, Krishnagiri District, Tamil Nadu by M/s Tamil Nadu Waste Management Limited was considered by the Expert Appraisal Committee (Infra-2) in its 34th meeting held on 24-26 September, 2018. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above meeting, are as under:-

- (i) The proposed project will be established at Plot No. 141A, 142 & 143, SIPCOT Industrial Complex, Bargur, Pokkampatti (V), Pochampalli (T), Krishnagiri (D), Tamil Nadu.
- (ii) The project is proposed in an area of 25 acres. The facilities proposed for the treatment of Hazardous waste, Bio-medical waste, management of E-waste, recycling of used oil, spent solvent, paper, plastic, lead and Alternative fuel and raw material recovery. The proposed facilities along with size and quantity are given in Table.

S. No.	Description	Proposed Capacities
1.	Direct landfill	83.0 TPD
2.	Landfill after treatment	166.0 TPD
3.	Alternative Fuel & Raw Material facility	83.0 TPD
4.	Biomedical waste treatment facility	2.0 TPD
5.	Incinerator	500 Kg/hr
6.	E- waste recycling facility	16.0 TPD
7.	Paper recycling facility	2.0 TPD
8.	Plastic recycling facility	2.0 TPD
9.	Waste oil / used oil recovery facility	2.0 KLPD
10.	Spent solvent recovery facility	5.0 KLPD
11.	Used lead acid battery recycling facility	5.5 TPD

- (iii) As per the Land Acquisition, Rehabilitation and Resettlement Bill, 2011, the land area of 25 acres may not attract R&R plans as the LARR bill specifies that R&R is applicable for land acquisition of more than 100 acres of land in rural area.
- (iv) Green belt will cover 33% of the total area. Greenbelt of 10 m will be developed along the boundary, 1m along the road (two sides), open areas, other than active landfills.
- (v) The Total water requirement is 170 KLD in which 125 KLD shall be fresh water requirement and 45 KLD shall be used recycled/treated water. The fresh water supplied through pipelines/tankers from the SIPCOT/villages. Tamil Nadu Water supply and Drainage and board (TWAD) has allotted 7 MLD water for Bargur SIPCOT industrial complex which is 4 MLD from local source and 3 MLD from river Thenpernaiyar.
- (vi) The effluents generation is expected to be around 50 KLD which will be treated in ETP and the treated waste water will be reused in the process. Sludge generated in the pond shall be disposed in the secured landfill as per landfill disposal regulations. 4 KLD of domestic sewage will be sent to septic followed by soak pit/ETP/Mobile STP. There will not be any wastewater discharge to any nearby water body and adopts the zero liquid discharge concept.
- (vii) Solid waste generated within the premises shall be disposed off in incinerator. Otherwise, waste shall be segregated and disposed off as per MSW Rules, 2016. The ash generated in the incinerator is considered as a hazardous solid waste. The incinerator ash will be collected in specified containers and stored in the pre-destinated totally enclosed storage yards lined with HDPE and disposed in the secured landfill. All the hazardous solid wastes generated are properly handled and treated and hence, there is no adverse impact of hazardous solid wastes on soil, air or water environment.
- (viii) The proposed project is located inside Bargur SIPCOT industrial complex, total power requirement is 1500 KVA and shall be supplied by SIPCOT through Tamil Nadu Electricity Board (TNEB) from nearby substation.
- (ix) Terms of Reference (ToR) was accorded by MoEF&CC vide letter F.No 10-23/2018-IA-III dated 14.06.2018.
- (x) The project has been exempted from Public Hearing as per Para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006 for preparation of EIA/EMP report, being site is located in the notified industrial area.
- (xi) The baseline study was carried out during summer season from March 2018 - May 2018. The data is collected with respect to meteorological conditions, air pollution levels, noise levels, water quality, soil quality, land use and socio-economic conditions during the study period.
- (xii) As per the current status, there are no litigations/judicial issues pending against the proposed project.
- (xiii) The cost of the project is Rs. 80 Crores.
- (xiv) Budgetary provision of Rs. 9 Crores (capital cost) and Rs. 150 Lakhs (recurring cost) is allocated towards EMP for environmental protection and safety measures. Rs. 160 Lakhs (i.e. 2% of the project cost) shall be allotted

for Corporate Environment Responsibility (CER) activities as specified under Ministry's office memorandum vide F.No 22-65/2017-IA.iii dated 1st May 2018.

- (xv) Employment potential: Employment generated during construction period is around 200 people, in operation period is around 100 (administrative -15, Skilled - 35, Unskilled - 50).
- (xvi) Benefits of the project: Facilitating better management of Solid wastes, Provides a one stop solution for the management of various types of wastes, 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, Better occupational health and safety at individual industry level and Prevention of natural resource contamination.

3. 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.

4. The EAC deliberated upon the proposal and noted that the project has been given exemption from conducting public hearing as per para 7(i) III Stage (3) (i) (b) of EIA Notification, 2006, being site is located in Notified Industrial Area.

5. The EAC, in its meeting held on 24-26 September, 2018, after detailed deliberations on the proposal, has recommended for grant of Environmental Clearance to the project. As per recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the project 'Integrated Common Hazardous Waste Treatment, Storage & Disposal Facility by Tamil Nadu Waste Management Limited, Unit-3 at Bargur, Krishnagiri District, Tamil Nadu by M/s Tamil Nadu Waste Management Limited, under the provisions of the EIA Notification, 2006 and amendments/circulars issued thereon, and subject to the specific and general conditions as under:-

PART A – SPECIFIC CONDITIONS:

- (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) The Project proponent should ensure that the TSDF fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.
- (iii) Ground water abstraction shall be as prescribed by the CGWA. A clearance/permission of the CGWA shall be obtained in this regards.
- (iv) It shall be ensured that all the trees and other plantation are of the non edible varieties and do not in any way encourage the incorporation of toxic materials in the food chain.
- (v) The TSDF should only handle the waste generated from the member units.

- (vi) As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bagfilter/ESP for removal of particulate matter; ventury scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator. Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO₂, NO_x and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.
- (vii) Analysis of Dioxins and Furans shall be done through CSIR – National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
- (viii) The project proponents shall adhere to all conditions as prescribed in the Protocol for 'Performance Evaluation and Monitoring of the Common Hazardous Waste Treatment, Storage and Disposal Facilities' published by the CPCB in May, 2010.
- (ix) Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
- (x) Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
- (xi) Ambient air quality monitoring shall be carried out in and around the landfill site at up wind and downwind locations.
- (xii) The depth of the land fill site shall be decided based on the ground water table at the site and may be such as permitted by the Pollution Control Board.
- (xiii) 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.
- (xiv) The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- (xv) On line real time continuous monitoring facilities shall be provided as per the CPCB or State Board Directions.
- (xvi) No non hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.
- (xvii) Gas generated in the Land fill should be properly collected, monitored and flared.
- (xviii) Project Proponent shall develop green belt with native plant species that are significant and used for the pollution abatement. At least 10 m thick greenbelt shall be developed in the periphery of hazardous waste facility.
- (xix) Project should ensure that the site is properly cordoned off from general movement and no unauthorized person or goods permitted to enter the premises. Necessary security provision should be made as a condition in the

Authorization under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 to prevent unwanted access.

- (xx) Pre medical check-up to be carried out on workers at the time of employment and regular medical record to be maintained.
- (xxi) Emergency plan shall be drawn in consultation with SPCB/CPCB and implemented in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or non sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water.
- (xxii) Rain water runoff from the landfill area and other hazardous waste management area shall be collected and treated in the effluent treatment plant.
- (xxiii) The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.
- (xxiv) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May 2018, and as proposed, a fund of Rs. 1.6 Crore @ 2% of project Cost, shall be earmarked under Corporate Environment Responsibility (CER) for the activities mentioned in the EIA Report. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

PART B - GENERAL CONDITIONS

- (i) The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.
- (ii) Officials from the Regional Office of MoEF&CC, Chennai who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF&CC shall be forwarded to the APCCF, Regional Office of MoEF&CC, Chennai.
- (iii) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.
- (iv) The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- (v) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
- (vi) These stipulations would be enforced among others under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention

and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and the EIA Notification, 2006.

- (vii) The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at <http://www.envfor.nic.in>. The advertisement shall be made within Seven days from the date of receipt of the Clearance letter and a copy of the same shall be forwarded to the Regional Office of this Ministry at Chennai.
- (viii) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.
- (ix) Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- (x) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- (xi) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
6. This issues with the approval of the Competent Authority.


(Kushal Vashist)
Director

Copy to:

- 1) The Secretary, Department of Environment, No.1, Jeenu Road, Panagal Building, Ground Floor, Saidapet, Chennai-600 015, Tamil Nadu.
- 2) Addl. Principal Chief Conservator of Forests (Central), Ministry of Environment, Forests and Climate Change, 1st and 11nd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai-34.

- 3) The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
- 4) The Member Secretary, Tamil Nadu Pollution Control Board, 76, Anna Salai, Guindy Industrial Estate, Race View Colony, Guindy, Chennai, Tamil Nadu 600032.
- 5) Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
- 6) Guard File/ Record File/ Notice Board.
- 7) MoEF&CC website.



(Kushal Vashist)
Director