

**F.No.10-6/2013-IA.III**  
Government of India  
Ministry of Environment, Forest & Climate Change  
(IA-III Section)

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

Dated: 2<sup>nd</sup> December, 2015

**To**

The National Head (IWM & BMW),  
M/s Ramky Enviro Engineers Ltd,  
Door No. 6-3-1090, 4<sup>th</sup> Floor TSR Towers,  
Above Standard Chartered Bank,  
Rajabhawan Road, Somajiguda,  
**Hyderabad** – 82

**Sub: 'Integrated Hazardous Waste Treatment, Storage, Disposal and Recycling facilities' in village Mahui Mauja of District Bhojpur (Bihar) by Bihar Waste Management Limited – Environmental Clearance - reg.**

Sir,

This is with reference to your application dated 17.04.2015 submitted the above mentioned proposal 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 **'Integrated Hazardous Waste Treatment, Storage, Disposal and Recycling facilities' in village Mahui Mauja of District Bhojpur (Bihar) by Bihar Waste Management Limited (A Division of M/s Ramky Enviro Engineers Ltd)**, was considered by the Expert Appraisal Committee (EAC) in the Ministry for Infrastructure Development, Coastal Regulation Zone, Building/ Construction and Miscellaneous projects, in its 149<sup>th</sup> meeting held on 24<sup>th</sup> – 26<sup>th</sup> June, 2015.

3. The details of the project, as per the documents submitted by the Project Proponents (PP), and also as informed during the above said EAC meeting, are reported to be as under:-

- (i) The project was earlier accorded TOR vide letter No.10-6/2013-IA.III dated 21.08.2013.
- (ii) The proposal is for setting up an Integrated Common Hazardous Waste Treatment, Storage, Disposal and Recycling Facilities in Mahui Mauja of District Bhojpur (Bihar) by Bihar Waste Management Limited (A Division of M/s Ramky Enviro Engineers Ltd). The proposed project is located at Survey Numbers Plot no: 401, Khata No: 69-68/2, 67/3, Thana no: 107, Mahui Mauza, Jamalpur- Koelwar road, near Mohammadpur- Sadashivpur Village, District Bhojpur (Bihar).
- (iii) The project will be established on the barren land with 57.24 Acres.
- (iv) The total water requirement for the facility is 423 KLD which will be drawn from groundwater. Necessary clearance will be taken from the concerned authorities after obtaining EC.
- (v) Total hazardous waste generation will be 100045 MTA.
- (vi) The quantity of wastewater generated will be 80.5 KLD from various stages of the operation and most of the wastewater is treated and recycled to minimise the

usage of groundwater. The entire waste water will be treated and reused for various activities such as vehicle tyre washing, dust suppression on roads, landfill, green belt development etc.

(vii) The total power required is 1500 kVA. Power supply shall be sourced from Power Development Department/ agency of Bihar.

(viii) **Parking facilities** will be provided for employees near the main entrance, trucks carrying waste will be kept near Vehicle workshop.

(ix) A greenbelt of 15m wide is provided for along the boundary of the project. Overall 33% of the total area will be developed as greenbelt (open areas, along the roads, road junctions).

(x) **Trees cutting:** There will not be any tree cutting in the proposed site, but some bushes are cleared for the development of the site.

(xi) **Water bodies:** Son-River is flowing from south to north approximately 1.0 km East of the project site.

(xii) **Investment/Cost:** The Total cost of the project is Rs.248.67 Crores.

(xiii) **Wildlife issues:** There are no National Parks, Wildlife sanctuary, biosphere reserves found around the 10 km buffer zone.

(xiv) **Forest Land:** No forest land is involved in the project.

(xv) There are no court cases/violations pending with the project proponent.

(xvi) **Public Hearing:** The Public Hearing was conducted on 16.10.2014 at premises of Ambika Sharan Singh High School, Jamalpur, New Mohmadpur, Koilwar- Babura Road, District Bhojpur.

(xvii) **Major issues raised during Public Hearing:** The major issues raised during public hearing are about the air pollution due to the recycling process, burning of waste, groundwater depletion and the presence of water body within 50m from the site boundary and burning of plastic wastes leading to the formation of Dioxins and Furans. The project proponent informed that steps would be taken to prevent reformation of dioxins by rapidly lowering the flue gas temperatures. Common facilities related to Biomedical Waste Treatment and Disposal Facilities will be as per CPCB guidelines. As regards the issue on whether the project site is located in a flood prone area, it was clarified by the PP that a certificate has been obtained from the revenue department, block development officer, Bhojpur district stating that that the land is not prone to flood and is around 1.25km away from Sone River on the western side.

(xviii) **Employment potential:** During construction around 65 no. and during operational around 220 no. employment will be given to the local youth based on the qualification and experience.

(xix) **Benefits of the project:**

a. There are 98 hazardous waste generating industries in Bihar where the expected quantity of hazardous waste is 3439 MTPA. Ramky proposes to establish an integrated hazardous waste treatment & disposal facility meeting CPCB guidelines to cater to the requirement of disposal of such wastes in the State of Bihar. This project is 1<sup>st</sup> of its kind in Bihar.

b. The project will be designed as per standards of MoEFCC and CPCB guidelines for disposal of hazardous waste (direct landfill, landfill after stabilisation and incineration) which will cater to all industries present in Bhojpur and its nearby districts.

c. The project also consists of Bio Medical Waste treatment, E-waste management, Spent Solvent recycling, Used oil recycling, alternative fuel and raw material facility, Used Lead Acid batteries, Waste plastic recycling, Waste paper recycling, renewable energy (Solar), waste energy plant.

d. As this is a hazardous waste management project, it is proposed to setup a solar power of 2MW and waste to energy of 2MW power plants. Energy

conservation measures such as use of LED lights, solar panels for street lighting are proposed.

4. The EAC in its 149<sup>th</sup> meeting held on 24<sup>th</sup> – 26<sup>th</sup> June, 2015, has recommended the project for grant of Environmental Clearance. As per recommendations of the EAC, the Ministry of Environment, Forest & Climate Change hereby accords Environmental Clearance to the above-mentioned project '**Integrated Hazardous Waste Treatment, Storage, Disposal and Recycling facilities**' in village Mahui Mauja of District Bhojpur (Bihar) by Bihar Waste Management Limited (A Division of M/s Ramky Enviro Engineers Ltd), under the provisions of the EIA Notification, 2006 and amendments thereto and circulars issued thereon and subject to the compliance of the following specific and general conditions:-

**A. SPECIFIC CONDITIONS:**

- (i) 'Consent to Establish' shall be obtained from State Pollution Control Board under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii) The Project Proponent (PP) shall maintain Zero effluent discharge.
- (iii) The PP shall arrange for third party monitoring of existing environmental conditions through Special Purposed Vehicle (SPV).
- (iv) Green belt of 15 meters, with plant species that are significant and used for the pollution abatement, shall be provided all along the periphery of the site. The green belt area shall not be used for any other purpose. The names of plant species shall be submitted immediately to MoEFCC.
- (v) At least 20% energy conservation shall be maintained.
- (vi) Certification that project is not falling under flood plain area of Son River from Irrigation Department of the State shall be submitted by PP, before commencement of work at site, to the MoEFCC.
- (vii) Transportation and handling of Hazardous Wastes shall be as per the Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules, 2008 including the section 129 to 137 of Central Motor Vehicle Rules, 1989.
- (viii) Guidelines of Central Pollution Control Board (CPCB) for Common Hazardous Wastes Incinerators shall be followed.
- (ix) Incinerated ash shall be disposed at approved TSDF and MoU made in this regard shall be submitted to the Ministry prior to the commencement.
- (x) Periodical air quality monitoring in and around the site shall be carried out. The parameters shall include Dioxin and furans.
- (xi) Use only low sulphur diesel. No other oil shall be used.
- (xii) The proponent shall comply with the Environmental standards notified by Ministry of Environment, Forest & Climate Change for incinerators along with the technology/guidelines.
- (xiii) Necessary provision shall be made for firefighting facilities within the complex.

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- (xiv) The Project Proponent should carryout periodical air quality monitoring in and around the site including VOC, HC.
- (xv) Treated flue gas emissions discharge through stack to atmosphere shall always be less than or equal to the parameter-specific emission standards notified by the CPCB.
- (xvi) All the facilities shall be designed to achieve a minimum temperature of 1100°C in secondary combustion chamber and with a gas residence time in secondary combustion chamber not less than 2 (two) seconds.
- (xvii) Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, so as to achieve Total Organic Carbon (TOC) content in the slag and bottom ashes less than 3%, or their loss on ignition is less than 5% of the dry weight of the material.
- (xviii) Guidelines published by the Central Board from time to time for common incineration facilities shall be referred for implementation.
- (xix) Transportation and handling of Bio-medical Wastes shall be as per the Bio-medical Wastes (Management and Handling) Rules, 2000 including the section 129 to 137 of Central Motor Vehicle Rules, 1989.
- (xx) The proponent should ensure that the project fulfills all the provisions of Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 including collection and transportation design etc and also guidelines for Common Hazardous Waste Incineration - 2005, issued by CPCB.
- (xxi) The gas generated from the Landfill facility shall be collected and disposed as per rules.
- (xxii) The Leachate from the facility shall be collected and treated to meet the prescribed standards before disposal.
- (xxiii) The proponent should obtained necessary clearance from the Ground Water Authority.
- (xxiv) The depth of the land fill should be decided based on the ground water level at the site.
- (xxv) Project proponent should prepare and implement an On Site Emergency Management Plan.
- (xxvi) Project proponent should carryout periodical ground water/ soil monitoring in and around the site to check the contamination.
- (xxvii) Project proponent should carryout periodical ground water/ soil monitoring in and around the site to check the contamination including TCLP test for heavy metals.
- (xxviii) All measures for air pollution control shall be adopted.
- (xxix) Rain water runoff from the landfill area and other hazardous waste management area shall be collected and diverted to the leachate treatment plant.
- (xxx) There should not be any spillage from the transportation vehicles.
- (xxx) The width of all internal roads should be 9.0 meters. The entry and exit point should be at different location.

- (xxxii) Double containment system shall be provided for all waste transport vehicles to avoid spillage. The spillage shall be cleared immediately.
- (xxxiii) Vehicles should prominently display complaint numbers for use of public as well as antidotes to any toxic waste.
- (xxxiv) All the recommendations of EMP/DMP shall be strictly complied.
- (xxxv) The project proponent will set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- (xxxvi) Untreated domestic effluent should not be discharged into open drain. Till the sewerage system in the Industrial Estate, which is presenting being laid, is completed, the domestic effluent should be treated in a well designed septic tank with soak pit, as committed. As soon as the sewerage system is made operational the domestic effluent from the project should be discharged only into the sewerage system for treatment in terminal STP.
- (xxxvii) The responses/commitments made to the issues raised during public hearing shall be complied with in letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.
- (xxxviii) Corporate Environment Responsibility:
- a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.
  - b) The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/ conditions.
  - c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.
  - d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/ violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

**B. GENERAL CONDITIONS:**

- (i) The project proponent should set up necessary facility for on-site testing of wastes to decide the requirement of treatment if any, before disposal.
- (ii) Full support shall be extended to the officers of this Ministry/Regional Office at Ranchi by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.
- (iii) A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Ranchi regarding the implementation of the stipulated conditions.
- (iv) Ministry of Environment, Forest & Climate Change or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with

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) In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment, Forest & Climate Change.
- (vi) The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
- (vii) A copy of the clearance letter shall be marked to concerned Panchayat/ local NGO, if any, from whom any suggestion/ representation has been made received while processing the proposal.
- (viii) The environmental safeguards contained in the EIA Report should be implemented in letter and spirit.
- (ix) 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.
- (x) A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.

5. These stipulations would be enforced among others under the provisions of 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 Hazardous Wastes (Management, Handling and Transboundry) Rules, 2008 including the amendments and rules made thereafter.

6. 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.

7. 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 & Climate Change at <http://www.envfor.nic.in>. The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Ranchi.

8. This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

9. 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.

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10. 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.

11. 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 MoEFCC, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (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.

12. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB.

13. The environmental statement for each financial year ending 31<sup>st</sup> 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.

*SKJ*  
2/12/2015

**(S.K. Srivastava)**  
**Scientist E**

Copy to:

- 1) The Secretary, Department of Environment, Government of Bihar, Secretariat, Patna, Bihar
- 2) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
- 3) The Member Secretary, Bihar Pollution Control Board, Department of Environment, 2<sup>nd</sup> Floor, Beltron Bhavan, Jawaharlal Nehru Marg, Shastri Nagar, Patna - 23 (Bihar)
- 4) The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forests and Climate Change, Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony, Ranchi - 1
- 5) IA Division, Monitoring Cell, MoEFCC, New Delhi - 3
- 6) Guard file

*SKJ*  
2/12/2015

**(S.K. Srivastava)**  
**Scientist E**