# PRADEEP SINGH, IFS MEMBER SECRETARY SEIAA (GUJARAT)



# STATE LEVEL ENVIRONMENT **IMPACT ASSESSMENT AUTHORITY GUJARAT**

Government of Gujarat

No. SEIAA/GUJ/EC/7(d)/997/2018

2 9 SEP 2018 Date:

By R P A D

**Time Limit** 

Sub: Environment Clearance to M/s. Bharuch Enviro infrastructure Limited (BEIL), for setting up of a common hazardous waste Treatment, Storage, Disposal Facility (TSDF) at Plot no 911/C, Jhagadia Industrial Estate, Bharuch. In Category 7(d) of Schedule annexed with EIA Notification dated 14/09/2006.

Ref: Your Proposal No. SIA/GJ/MIS/19216/2016.

Dear Sir,

This has reference to your application along with EIA report dated 29/07/2017 submitted to SEIAA, seeking. Environmental Clearance under Environment Impact Assessment Notification, 2006 and additional information / documents submitted to the SEAC.

The proposal is for Environmental Clearance to M/s. Bharuch Enviro Infrastructure Limited (BEIL), for setting up of a common hazardous waste Treatment, Storage, Disposal Facility (TSDF) at Plot no 911/C, Jhagadia Industrial Estate, Bharuch. It is a proposed Common Hazardous Waste Treatment, Storage, Disposal Facility (TSDF), which falls in the category -7(d) of the schedule of the EIA Notification-2006:

Sr No	Particulars	Details					
1	Area of Land	87226.31Sq. mtrs.	87226.31Sq. mtrs.				
2	Landfill Area	42068.56 Sq. mtrs.					
3	Total Capacity	10 Lacs MT					
4	Total no. of Cell	6 (Six)					
5	Side Slope	1 V: 2.5 H					
6	Bottom Liner	First from (TOP)	:	Non-Woven Geo textile 200 GSM			
		Second Layer	:	Woven Geo textile 250 GSM			
		Third Layer	:	300 mm clean coarse sand and gravel			
		•		(Rounded) ≤ 40 mm size.			
				(k> 10 <sup>-2</sup> cm/sec.)			
		Fourth Layer	:	Non-woven Geo textile 200 GSM			
		Fifth Layer		2 mm thick HDPE Geo membrane			
		Sixth Layer	:	1.5 mtr. clay liner with permeability			
				K< 10 <sup>-7</sup> cm/sec			
	Top Liner	First from (TOP)	:	(100 mm sweet soil, vegetation /grass)			
		Second Layer		600 mm Top soil layer			
		Third Layer	:	Non-Woven Geo textile 200 GSM			
į		Fourth Layer	:	300 mm clean river bed coarse sand and gravel ≤ 40 mm size. (k > 10 <sup>-2</sup> cm/sec.)			
		Fifth Layer	:	Woven / Non-Woven Geo textile 200 GSM.			
		Sixth Layer		1.5mm thick HDPE GEOMEMBRANE			
		Seventh Layer		600 mm thick Clay liner. ( k< 10 <sup>-7</sup> cm/sec)			
		Eighth Layer	:	300 mm thick Gravel vent media with 50 mm sand on top.			
		Ninth Layer		300 mm thick soil layer.			
	Side Liner System	First Layer	1:	65 mm block / 115 mm brick pitching			
		Second Layer	1:	Non-Woven Geo textile 200 GSM			
		Third Layer	:	150 mm clean river bed sand (sub rounded to rounded). (k > 10 <sup>-2</sup> cm/sec.)			
		Fourth Layer	1:	2 mm HDPE Geo membrane			
		Fifth Layer	1:	1.5 mm compacted clay / Amended soil with			

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	, ,			K< 10 <sup>-7</sup> cm/sec.		
		Sixth Layer	:	Compacted sub base.	<u> </u>	
7	No. of Leachate collection wells	4 (Four)				
8	Slop towards drain	(2 %)				
9	Size of the leachate collection sump	@ 3/2.75 Mtr dia from Inside @ Minimum 1.25 Mtr Depth from inlet pipe.				

The project activity is covered in 7(d) and is of 'B' Category. Since, the proposed project is located in notified industrial area, public consultation is not required as per paragraph 7(i) (III) (i) (b) of the Environment Impact Assessment Notification-2006.

The SEAC, Gujarat vide their letter dated 21/09/2018 had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on 12/07/2018. The proposal was considered by SEIAA, Gujarat in its meeting held on 25/09/2018 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to the compliance of the following conditions.

#### SPECIFIC CONDITION:

- Unit shall comply provisions of MoEFCC's O.M. No. 22-65/2017-IA.III dated 01/05/2018 regarding Corporate Environment Responsibility (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per the said OM dated 01/05/2018 for various activities therein.
- In case of waste consignment not meeting the acceptance criteria, it shall be either returned to the waste generator or taken for appropriate treatment (like neutralization / stabilization etc) & only after qualifying acceptance criteria, it shall be disposed off.
- 3. Unit shall provide monitoring wells (Peizometric) at the site for ground water monitoring. (In upstream and at the downstream of Landfill site).
- 4. Unit shall carry out regular monitoring of work zone area and Air vents during active and post closure period as per the prevailing guidelines R shall maintain records of the same.
- 5. Project proponent shall start project activity only after obtaining the Notification of proposed site as per the Hazardous and Other wastes (Management and Transboundary Movement) Rules 2016.
- 6. Project proponent shall have to provide waste stabilization/solidification facility, a laboratory capable of Finger-printing analysis, mechanized operation of transportation and handling of wastes with trained manpower at Site.
- 7. Adequate number of vents shall be installed during post closure period of the Cell & monitoring program for emission of vent gases shall be prepared & records shall be maintained.
- 8. Ground water table at the project site shall be ascertained through the GWRDC (Gujarat Water Resources Development Corporation) before initiating construction of secured landfill site. The depth of the secured land fill site shall be decided based on the ground water level at the site and bottom of the secured landfill site shall be kept at least 2 m above the ground water table.
- Construction of the secured landfill site shall be undertaken meticulously keeping in view the existing natural drainage
  pattern of the site to ensure that the natural drainage is not affected. All construction designs/drawings relating to the
  proposed landfill site must have approvals of reputed institutes like NPC / IIT.
- 10. The proponent shall ensure that design and construction of secured landfill site is as per the guidelines of CPCB with proper leachate collection arrangement.
- 11. Project proponent shall have to strictly adhere to and comply with the Guidelines / Manuals published by the different authorities for Construction and safe operation of the Hazardous Waste TSDF sites like (a) Criteria for Landfills (b) Manual for design, construction and quality control of liners and covers of Hazardous Waste Landfills (c) Guideline for proper functioning and upkeep of disposal site (d) Guideline for transportation of Hazardous Waste (e) Guideline for setting up of operating facility along with the instruction and stipulation issued time to time for the safe handling, construction and operating of Hazardous Waste TSDF Sites.
- 12. Project proponent shall have to follow the Guideline for Transportation, Storage, Handling and Labeling of Hazardous Waste published by CPCB.
- 13. The proponent shall ensure that the transportation of the Hazardous wastes to the TSDF conforms to the norms laid down in the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
- 14. Project proponent shall ensure that wastes with organic content > 5% of degradable organic matters are not disposed in to the landfill. However, required arrangement for collection, treatment and disposal of gases from the secured landfill, if any, shall be provided.
- 15. The TSDF shall only handle the waste generated from the member units.
- 16. The project proponent shall set up necessary facility for on-site testing of wastes to decide the requirement of treatment if

any, before disposal.

- 17. Project proponent shall carryout periodical ground water/soil monitoring in and around the site to check the contamination including TCLP test for heavy metals.
- 18. The third party assessment on functioning of the TSDF shall be carried out through a reputed institute like NPC, IIT or any academic / research institute of similar repute once in a year and mitigation measures as may be suggested by such institute shall be implemented in consultation with the Gujarat Pollution Control Board.
- All measures shall be taken to prevent soil and ground water contamination.
- 20. The project proponent shall submit the detailed study report to Gujarat Pollution Control Board (GPCB) at least once in a year comprising details of percolation rate of surface water, ground water analysis and observations of contamination to soil & ground water (If any) and mitigation measures to curb ground water & Soil contamination.
- 21. The project proponent shall transport Hazardous waste through authorized dedicated Vehicles with GPS (Global Positioning System) enabled system and in line with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
- 22. All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the revised EIA report of the project prepared by M/s: Shivalik Solid Waste Management Ltd., Zirakpur, Panjab and submitted by project proponent vide letter no. NIL dated 10/02/2018 and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.

#### WATER:

- 23. Fresh water requirement shall not exceed 350 KL/day and it shall be met through GIDC water supply only. Prior permission from the concerned authority shall be obtained for withdrawal of water.
- 24. Water meter shall be installed and its records of daily water consumption shall be maintained
- 25. Adequate leachate collection system shall be provided to collect the leachates at a collection point.
- 26. Waste water generation from the Floor/vehicle washing and Leachate well shall not exceed 106 KL/day. Entire effluent shall be sent to Common MEE at BEIL, Ankleshwar in dedicated tankers.
- Domestic wastewater (27 KL/day) shall be disposed into Soak Pit system.
- 28. There shall be no discharge of waste water inside or outside the premises in any case.
- 29. Enough care shall be taken to prevent any leakages/accidental spillages during conveyance of the leachate from the leachate well to Leachate collection tanks and finally to Common MEE.
- 30. A proper operation logbook containing records of quantities and qualities of leachate from secured landfill site, floor/vehicle washing waste water, disposal of effluent etc. shall be maintained and furnished to the GPCB from time to time.
- 31. Diesel to the tune of 3 KL/Month shall be used as a fuel in D.G. Set 125 KVA.
- 32. Stack of adequate height shall be provided for DG set as per the prevailing norms.
- 33. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- 34. The flue gas emission from D.G. Set shall conform to the standards prescribed by GPCB. At no time, the emission levels shall go beyond the stipulated standards.
- 35. Regular monitoring of ground level concentration of SO2, NOx, PM10, PM2.5, HC and VOC shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by the GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.
- 36. All transporting routes within the premises shall have asphalt roads to minimize fugitive emission.

## SOLID / HAZARDOUS WASTE:

- 37. The proponent shall ensure that the TSDF fulfils all the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016 and the design and construction of secured landfill site is as per the guidelines of CPCB with proper leachate collection arrangement.
- 38. Temporary hazardous waste storage area having impervious bottom and roof cover shall be provided as proposed.
- 39. The project proponent shall not store the hazardous wastes more than the quantity that has been permitted by the CPCB / Gujarat State Pollution Control Board (GPCB).
- 40. The main operational site shall be kept covered by tarpaulin with separate rain water collection system during monsoon period.
- 41. Used oil shall be sold only to the registered recyclers.
- 42. Project proponent shall explore possibilities with respect to reduction and reuse of hazardous waste generated by member units and received at the project site.

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43. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF. This ensured by TSDF management through continuous monitoring of member industries, guidance & training program

### SAFETY:

- 44. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling on hazardous wastes.
- 45. Handling and storage of wastes shall be done in such a manner that minimal human exposure occurs.
- 46. All transportation of hazardous materials shall be as per the Motor Vehicle Act & Rules.
- 47. Hazardous materials storage shall be at an isolated designated location, bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals.
- 48. Personal Protective Equipment shall be provided to workers and its usage shall be ensured and supervised.
- 49. First Aid Box and required Antidotes for the chemicals used in laboratory shall be made readily available in adequate quantity at all the times.
- 50. Training shall be given to all workers on safety and health aspects of handling hazardous wastes.
- 51. Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act and Rules. Pre-employment and periodical medical examination for all workers shall be undertaken as per statutory requirement.
- 52. Project proponent shall prepare and implement an On Site Emergency Management Plan and Disaster Management Plan (DMP) for the project as per the guidelines from Directorate of Industrial Safety and Health. Adequate fire fighting facilities shall be installed to handle the fire.

## NOISE:

53. The overall noise level in and around the premises shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall confirm to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.

## GREEN BELT AND OTHER PLANTATION:

- 54. Project proponent shall develop green belt all along the periphery of the TSDF as per the CPCB guidelines with plant species that are significant and used for the pollution abatement. Drip irrigation system shall be used for the green belt for optimum utilization of the water resources.
- 55. Project proponent shall also tie up with local agencies like gram panchayat, schools, social forestry office etc. for plantation at suitable open places in nearby villages and shall submit an action plan of plantation for next five years to the GPCB.

#### OTHER CONDITIONS:

- 56. Project proponent shall obtain necessary Consents/ Authorization from the Gujarat Pollution Control Board.
- 57. A separate Environment Management Cell equipped with full fledged testing laboratory facilities shall be set up to carry out the Environment Management and Monitoring functions.
- 58. In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
- 59. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.
- 60. Project proponent shall comply with all the provisions of CPCB guidelines for TSDF as may be applicable from time to time.
- 61. Project proponent shall maintain accurate records of their member units in respect of quantity of each product manufactured, quantities and qualities of waste generated, booked & supplied to the TSDF on day to day basis and shall submit the compiled records to the GPCB on monthly basis.
- 62. Project proponent shall ensure that each & every member unit renews the agreement / membership on/before expiry of said agreement / membership and shall inform the GPCB about any unit not renewing the agreement / membership within stipulated period. Project proponent shall immediately inform the Gujarat Pollution Control Board about termination / suspension of membership of any member unit.
- 63. Project proponent shall instruct and make sure that each member unit provides hazardous waste storage area having adequate retention time.
- 64. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
- 65. Good house keeping shall be maintained within the premises. All pipes, valves and drains shall be leak proof. Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly. Floor washing shall be admitted in to

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- the effluent collection system for subsequent treatment and disposal through Common MEE at BEIL, Ankleshwar.
- 66. During effluent transfer, spillages shall be avoided and garland drain be constructed to avoid mixing of accidental spillages with storm water.
- 67. Necessary measures shall be taken to prevent contamination of storm water from wastes / effluent handled at site. The storm water drains shall be kept separate and shall remain dry throughout the year except monsoon.
- 68. Project proponent shall intimate the GPCB about occurrence of any accident, act or event resulting in discharge of poisonous, noxious or polluting matter or the likelihood of the same into a stream or land or well.
- 69. The funds earmarked for environment protection measures should be maintained in a separate account and there should be no diversion of these funds for any other purpose. A year-wise expenditure on environmental safeguards should be reported.
- 70. Project proponent shall assign specific budget for socio-economic upliftment of the surrounding villages and shall undertake eco-developmental measures including community welfare program most useful in the project area for the overall improvement of the environment in consultation with the District Development Officer / District Collector.
- 71. Project proponent shall comply with all the recommendations as well as the environmental protection measures and risk mitigation measures/safeguards proposed in the REIA Report, Risk Assessment Report & Disaster Management Plan of the project.
- 72. No further expansion or modifications in the TSDF likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
- 73. In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the SEIAA / SEAC.
- 74. Project proponent shall thrive to obtain the ISO 14001 and OSHAS 18001 certification.
- 75. The project management shall extend full support to the officers of MoEF&CC / CPCB / GPCB 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.
- 76. A six monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of the MoEF&CC and SEIAA regarding the implementation of the stipulated conditions.
- 77. The project proponent shall inform the Regional Office of MoEF&CC at Bhopal as well as the SEIAA, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work
- 78. The Project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.
- 79. The above conditions will be enforced, inter-alia under the provisions of the Water(Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
- 80. The project proponent shall have to comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.
- 81. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
- 82. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
- 83. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.
- 84. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
- 85. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- 86. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
- 87. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
- 88. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.

- 89. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial and final approval of the project by the concerned authorities and the date of start of the project.
- 90. This environmental clearance is valid for seven years from the date of issue.
- 91. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

With regards,
Yours sincerely,
(PRADEEP SINGH)
Member Secretary

Issued to:

M/s. Bharuch Enviro Infrastructure Limited (BEIL) Mr. B. D. Dalwadi (CEO), Plot No. 9701-9716, GIDC Industrial Estate, Ankleshwar-393002, Bharuch.

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# Dr. K. RAMESH, IFS MEMBER SECRETARY SEIAA (GUJARAT)



# STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY GUJARAT

Government of Gujarat

No. SEIAA/GUJ/EC/5(f)/ 1569 /2020

Date: 1 6 DEC 2020 BY R.P.A.D.

Page 1 of 1

Amendment to Environment Clearance Order No:- SEIAA/GUJ/EC/7(d)/997/2018 dated 29/09/2018.

(Under the provision of Environmental Impact Assessment (EIA) Notification, 2006)

In exercise of the power conferred under the provision of Environmental Impact Assessment (EIA) Notification, 2006 under sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986, the Environment Clearance granted to M/s Bharuch Enviro Infrastructure Ltd for setting up "Common Treatment Storage and Disposal of Hazardous waste (TSDF) having Secured Landfill Facility (SLF) of 10 lacs MT at Plot No. 911/C, Jhagadia Industrial Estate, Bharuch, Gujarat, vide this office letter no. SEIAA/GUJ/EC/7(d)/997/2018 dated 29/09/2018, is being subjected to amendment for the following change in the project.

And whereas SEIAA has granted Environment Clearance vide office order letter no. SEIAA/GUJ/EC/7(d)/997/2013 dated 29/09/2018, under the provisions of the aforesaid Notification.

And whereas project proponent has applied for amendment in the environmental clearance vide their online application vide No. SIA/GJ/MIS/153617/2020 dated 19-05-2020. The project was scheduled for hearing in the SEAC meeting held on 19/10/2020.

The SEAC, Gujarat had recommended the project vide their letter dated 12/11/2020 to grant amendment in Environmental Clearance to the SEIAA, Gujarat based on the decision taken during SEAC meeting held on 19/10/2020. The proposal was considered by SEIAA, Gujarat in its meeting held on 26/11/2020 at Gandhinagar. After careful consideration, Environment Clearance order dated 29/09/2018 is hereby amended as under, subject to amendment with respect to changes in the planning of the project.

1. Name of the unit shall be read as "M/s BEIL Infrastructure Ltd." instead of "M/s. Bharuch Enviro Infrastructure Ltd".

Rest of all the conditions of the Environment Clearance orders no SEIAA/GUJ/EC/7(d)/997/2018 dated 29/09/2018 shall remain unchanged.

With regards, Yours sincerely

(Dr. K. RAMESH)\
Member Secretar

Issued to:

**BEIL INFRASTRUCTURE LIMITED** 

ownent impact

Plot No. 911/C,

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