

S: M. SAIYAD, IFS  
MEMBER SECRETARY  
SEIAA (GUJARAT)



STATE LEVEL ENVIRONMENT  
IMPACT ASSESSMENT  
AUTHORITY  
GUJARAT

Government of Gujarat

No. SEIAA/GUJ/EC/7(d)/482/2020

Date: 5 JUN 2020 By R P A D

Time Limit

Sub: Environment Clearance to M/s. Gujarat Alkalies And Chemical Ltd. for setting up of a common hazardous waste Treatment, Storage, Disposal Facility (TSDF) at Plot No D III/3, Dahej GIDC Dahej, Vagra, Bharuch. In Category 7(d) of Schedule annexed with EIA Notification dated 14/09/2006.

Ref: Your Proposal No. SIA/GJ/MIS/39617/2018.

Dear Sir,

This has reference to your application along with EIA report dated 16/09/2019 submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006 and additional information / documents submitted vide letter dated 26/11/2019, 27/12/2019 and 12/03/2020 to the SEAC.

The proposal is for Environmental Clearance to M/s. Gujarat Alkalies And Chemical Ltd. for setting up of a common hazardous waste Treatment, Storage, Disposal Facility (TSDF) at Plot No D III/3, Dahej GIDC Dahej, Vagra, Bharuch. It is a proposed facility with following, which falls in the category - 7(d) of the schedule of the EIA Notification-2006:

Sr. no	Particulars	Details
1	Area of Land	516548 Sq. m
2	Size of Landfill	404352 m3
3	Total Capacity	5,66,093 MT
4	Total no. of Cell	01 (One)

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 04/04/2020 had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on 17/03/2020. The proposal was considered by SEIAA, Gujarat in its meeting held on 20/04/2020 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.

**A. CONDITIONS :**

**A. 1 SPECIFIC CONDITION :**

1. Unit shall no carry out any activity in the matter pertaining of M. A. No. 553/2018 with Appeal No. 02 of 2018 (WZ); Brackish Water Research Center Vs. Gujarat State Environment Impact Assessment Authority & Ors.
  2. This TSDF site shall be used only for the purpose of disposal of new sludge to be generated in future at the plants belonging to GACL and its subsidiary company in Dahej Industrial area.
  3. 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.
  4. Project proponent shall have to provide a laboratory capable of Finger printing analysis, mechanized operation of transportation and handling of wastes with trained manpower at Site.
  5. 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.
  6. 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.
8. The proponent shall ensure that design and construction of secured landfill site is as per the guidelines of CPCB with proper leachate collection arrangement.
  9. 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.
  10. Project proponent shall have to follow the Guideline for Transportation, Storage, Handling and Labeling of Hazardous Waste published by CPCB.
  11. 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.
  12. 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.
  13. The project proponent shall set up necessary facility for on-site testing of wastes to decide the requirement of treatment if any, before disposal.
  14. Project proponent shall carryout periodical ground water/soil monitoring in and around the site to check the contamination including TCLP test for heavy metals.
  15. 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.
  16. All measures shall be taken to prevent soil and ground water contamination.
  17. 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.
  18. 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.
  19. All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by M/s: Eco Chem Sales and Services and submitted by project proponent; and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.
  20. 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 each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
  21. Pre-medical check-up to be carried out on workers at the time of employment and regular medical record to be maintained.
  22. PP shall strictly adhere with undertaking submitted by Executive Director of GACL vide dated 07/03/2020 regarding this is an independent project site (TSDF site) and not having connection with existing GACL complex and Hazardous and non-hazardous solid waste shall be accepted from the plant belongs to GACL and its subsidiary company located at Dahej.
  23. Continuous monitoring of proposed TSDF/SLF shall be carried out as per GPCB/CPCB guidelines.

#### **A. 2 WATER :**

24. Total water requirement for the project shall not exceed 137 KLD. Unit shall reuse 7 KLD treated wastewater. Hence, the total fresh water requirement shall be 130 KLD and it shall be met through GIDC water supply only. Prior permission from the concerned authority shall be obtained before withdrawal of water.
25. Water meter shall be installed and its records of daily water consumption shall be maintained.
26. Adequate leachate collection system shall be provided to collect the leachates at a collection point.
27. Waste water generation from the Floor/vehicle washing and Leachate well shall not exceed 83.3 KLD. Entire effluent shall be treated in-house in ETP having primary treated and then treated effluent shall be sent to CETP Dahej for further treatment and disposal after ensuring that it meets with the CETP inlet norms prescribed by GPCB.
28. Domestic wastewater generation shall not exceed 8 KL/day for proposed project and it shall be treated in STP. Treated

sewage shall be utilized for gardening and plantation purpose within premises after achieving on-land discharge norms prescribed by the GPCB.

29. During monsoon season when treated sewage may not be required for the plantation / Gardening / Green belt purpose, it shall be stored within premises. There shall be no discharge of waste water outside the premises in any case.
30. Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during rainy days.
31. 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 ETP.
32. 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.

#### **A. 3 AIR:**

33. Unit shall provide adequate APCM with flue gas generation sources as mentioned below:

Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
1	D.G. Set (100 kVA)	11	HSD	636	PM, Sox & NOx	Adequate Stack Height

34. Fuel consumption in DG set shall be as mentioned above.
35. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
36. 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.
37. Regular monitoring of ground level concentration of SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub> 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.
38. All transporting routes within the premises shall have asphalt roads to minimize fugitive emission.

#### **A. 4 SOLID / HAZARDOUS WASTE:**

39. 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.
40. Temporary hazardous waste storage area having impervious bottom and roof cover shall be provided as proposed.
41. 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).
42. The main operational site shall be kept covered by tarpaulin with separate rain water collection system during monsoon period.
43. Used oil shall be sold only to the registered recyclers.
44. Project proponent shall explore possibilities with respect to reduction and reuse of hazardous waste generated by them and received at the project site.
45. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF. This shall be ensured by TSDF management through continuous monitoring of waste generation scenario at group industries, guidance & training programs.

#### **A. 5 SAFETY:**

46. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of hazardous wastes.
47. Handling and storage of wastes shall be done in such a manner that minimal human exposure occurs.
48. All transportation of hazardous materials shall be as per the Motor Vehicle Act & Rules.
49. Personal Protective Equipment shall be provided to workers and its usage shall be ensured and supervised.
50. First Aid Box and required Antidotes for the chemicals used in laboratory shall be made readily available in adequate quantity at all the times.
51. Training shall be given to all workers on safety and health aspects of handling hazardous wastes.
52. 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.
53. 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.

**A. 6 NOISE:**

54. 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 conform to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.

**A. 7 GREEN BELT AND OTHER PLANTATION:**

55. 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.
56. 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.

**B. OTHER CONDITIONS:**

57. All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by Eco Chem Sales and Services and submitted by project proponent and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.
58. Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No. 22-34/2018-IA.III dated 09/08/2018.
59. In case of use of spray dryer, the unit shall provide the adequate & efficient APCMs with spray dryer so that there should not be any adverse impact on human health & environment. Unit shall carry out third party monitoring of the proposed Spray dryer & it's APCM through the credible institutes and study report for impacts on Environment and Human Health shall be submitted to GPCB every year along with half yearly compliance report.
60. The project proponent shall allocate the separate fund of Rs. 71.04 Lakhs i.e. 2 % of the capital investment for Skill development of women through Anganwadi, Facility for Drinking Water in nearby villages, Medical camp at nearby villages, Promote and distribution of nutrition food for patients in Village Health Centre, General awareness health-program, Distribution of tree guard, sapling and pots, Training and awareness programme in school on Environment and Safety Day, Scientific support and awareness to local farmers to increase yield of crop at Farmers Toll free services in accordance to the MoEF&CC's Office Memorandum No. F.No.22-65/2017-IA.III dated 01/05/2018. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.
61. 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.
62. All the recommendations / commitments made in the EIA/EMP report of the project shall be implemented.
63. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.
64. During material transfer, spillages shall be avoided and gulland drain be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.
65. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
66. The funds earmarked for environment protection measures shall be maintained in a separate account and there shall not be any diversion of these funds for any other purpose. A year-wise expenditure on environmental safeguards shall be reported.
67. Project proponent shall obtain necessary Consents/ Authorization from the Gujarat Pollution Control Board.
68. 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.
69. 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.
70. Project proponent shall comply with all the provisions of CPCB guidelines for TSDF as may be applicable from time to time.
71. Project proponent shall maintain accurate records of their waste generation 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.

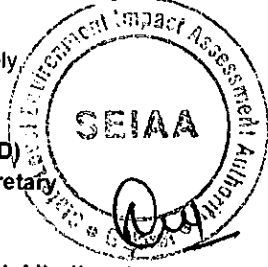
72. Project proponent shall make sure that they provide hazardous waste storage area having adequate retention time.
73. Good house keeping shall be maintained within the premises. All pipes, valves and drains shall be leak proof. Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly. Floor washing shall be admitted in to the effluent collection system for subsequent treatment and disposal.
74. 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.
75. 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.
76. 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.
77. 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.
78. 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.
79. Project proponent shall strive to obtain the ISO 14001 and OSHAS 18001 certification.
80. 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.
81. Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly.
82. 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.
83. 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, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
84. The project proponent shall 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.
85. The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.
86. 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.
87. 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.
88. 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.
89. 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 soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
90. 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.
91. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
92. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
93. 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.



94. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
95. This environmental clearance is valid for seven years from the date of issue.
96. Any appeal against this environmental 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.
97. Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.

With regards,  
Yours sincerely,

  
(S. M. SAIYAD)  
Member Secretary



**Issued to:**  
**M/s. Gujarat Alkalies And Chemical Ltd.**  
**Plot No. D III/3, Dahej GIDC,**  
**Vagra, Bharuch**