

DARPANA DHIMMAR
MEMBER SECRETARY
SEIAA (GUJARAT)



Government of Gujarat

STATE LEVEL ENVIRONMENT
IMPACT ASSESSMENT
AUTHORITY
GUJARAT

No. SEIAA/GUJ/EC/6(b)/1711/2015

Date: 20/05/2015 BY R.P.A.D.

Time Limit

Sub: Environment Clearance for M/s Bharat Petroleum Corporation Ltd. (BPCL) for expansion of isolated storage & handling of petroleum products by installation of additional storage tank at Navagam TOP, Vill:Kanera, N.H. no.8, Village. Kanera, Dist:Kheda..... in Category 6 (b) of Schedule annexed with EIA Notification dated 14/9/2006.

Dear Sir,

This has reference to your application along with Form-I, dated 17/07/2013, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006, additional details, risk analysis report and On Site Emergency Plan submitted vide their letter dated 06/12/2014 to the SEAC.

The proposal is for Environmental Clearance to M/s Bharat Petroleum Corporation Ltd. (BPCL) for expansion of isolated storage & handling of petroleum products by installation of additional storage tank at Navagam TOP, Vill:Kanera, N.H. no.8, Village. Kanera, Dist:Kheda. This is an existing unit engaged in isolated storage, handling and transportation of Petroleum Products like MS, HSD, SKO and SLOP having total storage capacity of 11,011 KL, ethanol having total storage capacity of 104 KL and Lubricants of 100 MT/Month. Now they have propose to expand the total storage capacity by installing one number of additional new tank having storage capacity of 4,710 KL in which they will store Petroleum Products like MS, HSD, SKO and SLOP, hence the total storage capacity of Petroleum Products like MS, HSD, SKO and SLOP will be 15,721 KL after this propose expansion. They have also proposed to increase storage capacity of Lubricants from 100.00 MT/Month to 600.00 MT/Month. The proposal falls in the project/activity 6(b) in the Schedule of the EIA Notification, 2006. The detail of the project is as under.

Sr. no.	Product	Existing	Proposed	Proposed Total
1	Petroleum Products (MS, HSD, SKO & SLOP)	11011 Kiloliter	4710 Kiloliter	15721 Kiloliter
2	Ethanol	104 Kiloliter	---	104 Kiloliter
3	Lubricants	100 MT/Month	500 MT/Month	600 MT/Month

The project activity is covered in 6(b) and is of 'B' Category. As this project categorized as B2 project, public consultation is not required as per paragraph 7(i) (III) (i) (e) of the Environment Impact Assessment Notification-2006.

The SEAC, Gujarat had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project. The proposal was considered by SEIAA, Gujarat in its meeting held on 08.05.2015 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14th September, 2006 subject to the compliance of the following conditions.

A. CONDITIONS :

A.1 WATER:

1. There shall be no increase in water consumption due to proposed expansion. Fresh water requirement for the project shall not exceed 7.5 KL/day.
2. There shall be no increase in generation of industrial waste water after proposed expansion. The quantity of industrial effluent shall not exceed 6.5 KL/day.

3. The final treated effluent conforming to the GPCB norms shall be utilized for gardening / plantation purpose within the industrial premises.
4. The domestic wastewater generation shall not exceed 1 KL/day and it shall be disposed off through septic tank - soak pit system.
5. The company shall develop rain water harvesting structures to harvest rainwater from the rooftops and paved areas and to use the same water for the various activities and as a fire water in order to conserve fresh water.

A. 2 AIR :

6. There shall be no increase in fuel consumption in existing DG sets (65 KVA & 125 KVA) and three numbers of fire water pump engines.
7. The flue gas emissions shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
8. There shall be no process emission.
9. Fugitive emission at workplaces shall be controlled and kept below the limits prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards.
10. For control of fugitive emission following steps shall be followed :
 - a) Closed handling system shall be provided
 - b) Pumps shall be provided with mechanical seals to prevent leakages.
 - c) System of leak detection and repair of pump/pipeline based on preventive maintenance
11. Ambient air quality status with respect to VOC and hydrocarbon in the area shall be monitored in the operation phase of the project and its records shall be submitted to the SEIAA and the GPCB six monthly. The locations of the ambient air monitoring stations shall be fixed in consultation with GPCB.

A. 3 HAZARDOUS WASTE:

12. The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous Waste (Management, Handling and Transboundary Movement) Rules 2008, as may be amended from time to time. Authorization from the GPCB must be obtained for collection / treatment / storage / disposal of hazardous wastes.
13. The hazardous waste shall be packed and stored in separate designated hazardous waste storage facility with impervious bottom and leachate collection facility, before its disposal.
14. Used oil shall be either reused as a lubricant or sold only to the registered recyclers.

A. 4 SAFETY:

15. Necessary permissions from the PESO, Nagpur, State Department of Industrial Safety and Health, and other relevant Government Agencies shall be taken prior to commencement of the project.
16. The project management shall strictly comply with the provisions made in Manufacture Storage and Import of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals. Necessary approvals from the Govt. Authorities shall be obtained before commissioning of the project, if applicable.
17. Fire Water Storage Tanks shall be provided and it shall be adequate to meet the requirements as per the OISD.
18. The entire plant shall be networked with pressurized fire hydrant lines having fire hydrants, long range monitors and deluge valves at strategic locations as per the OISD-144.
19. Design of the Bulk Storage Installations shall be done in accordance with the applicable Oil Industry Safety Directorate (OISD) standards. All safety and fire fighting requirements as per these norms will be put in place inside the petroleum product tank farm.
20. Strict supervision by plant personnel shall be carried out during oil transfer or receipt of petroleum products.
21. Proper earthing shall be provided on the pipelines and storage tanks. The tank gauging operator shall not be earthed with the tank (i.e. he shall wear non conducting shoes).
22. Lightning protection devices shall be provided for all the storage tanks.
23. The entire Tank farm area shall be provided with leak detection sensors located at areas prone to fire risk / leakages.
24. Remotely Operated Valves (ROV's) shall be provided at strategic points on the gas pipeline circuit and also on the feeder lines. These ROV's shall be interlocked for auto-activation in the event of an emergency and provision shall also be made for activation by the emergency shutdown station.
25. All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Close handling system for petroleum products shall be provided. Double mechanical seals shall be provided for pumps /agitators for reactors for reduction of fugitive emissions and leakages. Traps shall be installed wherever necessary.
26. The main ring shall be checked for leaks once in a year and for operation once in a month for all fire water pumps.
27. High temperature and high pressure alarm with auto-activation of water sprinklers as well as safety relief valve shall be provided.
28. All venting equipment shall have vapour recovery system. All the pumps and other equipments where there is a likelihood of leakages shall be provided with Leak Detections and Repair (LDAR) system. Provisions for immediate isolation of such equipment in case of a leakage shall also be made. The detector sensitivity shall be in ppm levels.

29. Auto breather vent shall be provided to the storage tanks to avoid vacuum creation in the tanks
30. During petroleum product transfer, spillages shall be avoided and garland drain be constructed to avoid mixing of accidental spillages with domestic waste and storm water drain.
31. Fire detection and alarm system shall be installed in terminal with sufficient numbers of smoke / heat detectors and mutual call points installed at all locations inside the terminal.
32. Automatic actuated foam flooding system shall be provided for tanks having diameter larger than 60 meter.
33. Necessary flameproof fittings shall be provided in the storage facility.
34. All lighting / electrical equipment and instrumentation inside the installation shall be conforming to IS.2206 (Part I) and IS.2148 Standards.
35. Growth of vegetation in the Tank farm shall be removed on regular basis whenever found.
36. All fire extinguishers shall be placed on enclosure wall, instead near to the tanks.
37. Maintenance of pumps shall be done as per OISD-119.
38. Mechanical seals of pumps, glands and expansion joints of pipelines shall be regularly monitored to prevent leakage.
39. Seal flushing / quenching system for clogging shall be checked regularly. Back washing of strainer shall be done in regular interval in order to avoid chocking.
40. Periodic inspection and maintenance of all the valves, fittings and mountings on the pipelines carrying petroleum products shall be carried out regularly.
41. Visual inspection of pipelines shall be done regularly to locate leaks. Inspection of pipes for internal and external corrosion shall be carried out with special attention.
42. Fire protection facilities and fighting equipments shall be maintained in the terminal as per OISD-117.
43. Emergency responsible vehicle (Gully sucker) and foam / water tender shall be provided in terminal to handle spillage / leakage of petroleum products and fire accidents immediately and effectively.
44. A dedicated Fire Department at the Plant level with fire tenders, specialized fire fighting equipment and experienced manpower will be established and made operational well in advance.
45. Two additional above ground Fire Water Storage Tanks (cap.1365 KL each) shall be provided and it shall be adequate to meet the requirements as per the OISD.
46. Fire fighting facility shall comprise of at least five diesel operated and two electricity operated jockey pumps with auto-changeover to diesel engine driven pumps and a jockey pumps to ensure that the circuit pressure is adequately maintained.
47. All the hydrant points shall be easily accessible. It shall be assured that the pressure is maintained at minimum 7 Kg/cm² at the farthest point (from the hydrant pump house) in the hydrant line.
48. Every fire water pump shall be tested for at least half an hour twice a week and shall be check for performance one in six months.
49. The main ring shall be checked for leaks once in a year and for operation once in a month for all fire water pumps.
50. Periodic preventive maintenance of all fire fighting equipments and all other rotating equipments, transformers, D.G. Sets etc. shall be carried out.
51. A well designed mutual aid agreement amongst the neighboring industries shall be done and renewed time to time to combat the fire emergency. Necessary tie up with the nearby fire stations and other emergency services shall be made to ensure that the required aids reach within the shortest possible time in case of any adverse conditions.
52. It shall be assured that the siren to declare emergency are different in nearby installations to avoid confusion.
53. All alternatives of modern effective communication system shall be installed inside the terminal for obvious and faster communication in case of exigencies like fire & accidents, thereby minimizing loss of human lives & property.
54. As per the Factories Act, first aid training shall be given to all terminal personnel regularly. Training shall also be given to the terminal personnel on safety and health aspects of handling petroleum products.
55. Joint mock drill involving district emergency services (Fire Brigade, Hospitals, Police, District Collectorate etc.) shall be carried out minimum twice in a year, apart from regular mock drills in the terminal.
56. Local people shall be trained and informed about the risks and its consequences. They shall be taught the methods and action plan in case of any emergency with the formation of local committees.
57. Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act & Rules.
58. Hazardous materials storage shall be at an isolated designated location, bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals.
59. All transportation routes within the factory premise shall have paved roads.
60. Proper ventilation shall be provided in the area.
61. Fire extinguishers, foams, sand, first aid box and required antidotes for the materials in the terminal shall be made readily available in adequate quantity at all the times.
62. Personal Protective Equipment shall be provided to workers and its usage shall be ensured and supervised.
63. 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.
64. The project management shall prepare a detailed Disaster Management Plan (DMP) for the project as per the guidelines from Directorate of Industrial Safety and Health.
65. The Safety Audit Report shall be compiled after undertaking a Safety Audit of the terminal and the same shall be submitted to statutory authorities.

66. The unit shall effectively implement all the recommendations of the HAZOP study, Risk Analysis and Disaster Management Plan

A. 5 NOISE:

67. The overall noise level in and around the plant area shall be kept well within the prescribed standards by providing noise control measures including acoustic insulation, hoods, silencers, enclosures vibration dampers etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act and Rules. Workplace noise levels for workers shall be as per the Factories Act and Rules.

A. 6 ENERGY CONSERVATION:

68. The project proponent shall install energy efficient devices and appliances conforming to the Bureau of Energy Efficiency norms.
69. The energy audit shall be conducted at regular intervals and the recommendations of the audit report shall be implemented.
70. The project proponent shall implement the application of solar energy which shall be utilized as solar lighting for illumination of common areas, lighting of internal roads and passages in addition to utilization of solar water heating systems.
71. The transformers and motors shall have minimum efficiency of 85 %.
72. Variable frequency drives shall be installed.
73. Energy conservation measures shall include use of electronic lighting system, use of CFL tubes to minimize energy use, use of programmable timers for pumping system and lighting, water level controllers for water pumps, centralized cooling etc.
74. Energy saving practices as follows shall be practiced:-
- ✓ Constant monitoring of energy consumption and defining targets for energy conservation.
 - ✓ Adjusting the settings and illumination levels to ensure minimum energy used for desired comfort level.
 - ✓ Use of solar cells for lighting.
 - ✓ Use of solar water heater for canteen & washing area.
 - ✓ Proper load factor shall be maintained by the unit.
 - ✓ Provision of day light roof to utilize maximum natural light in the terminal instead of electrical lighting.
 - ✓ Use of electronic ballast to save energy.
 - ✓ Automatic switching system for lighting and water tank pumping system shall be used.
 - ✓ To the maximum extent possible and technically feasible, energy efficient equipment like motors, pumps, air conditioning systems shall be selected.
 - ✓ Gravity flow shall be preferred wherever possible to save pumping energy.
 - ✓ Promoting awareness on energy conservation.
 - ✓ Training to the staff on methods of energy conservation and to be vigilant for the same.

A. 6 WASTE MINIMIZATION

75. The unit shall undertake following waste minimization measures:
- ✓ Use of automated and close filling to minimize spillages.
 - ✓ Venting equipment through vapour recovery system.

A. 6 GREEN BELT:

76. The unit shall develop green belt within premises as per the GPCB guidelines, preferably with local species. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and other suitable open areas at nearby schools, gram panchayat etc. In consultation with the local bodies / GPCB and submit an action plan of plantation for next three years to the GPCB.

B. OTHER CONDITIONS:

77. The project proponent shall adopt best industry standards for environment, occupational health and safety.
78. 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.
79. The unit shall undertake eco-developmental measures including community welfare program most useful in the project area for the overall improvement of the environment.
80. The management shall ensure that the unit complies with all the environment protection measures and risk mitigation measures/safeguards proposed by them.
81. 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.
82. No further expansion or modifications in the plant shall be carried out without obtaining prior Environment Clearance from the concerned authority.

83. Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly.
84. 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.
85. 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.
86. 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/ SEAO/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.
87. The company shall undertake socio-economic developmental / community welfare activities in consultation with the District Development Officer / District Collector.
88. 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.
89. 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.
90. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
91. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
92. 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.
93. 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.
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. 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. 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.
96. This environmental clearance is valid for five years from the date of issue.
97. 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.

With regards,

Yours sincerely,



(DARPANA DHIMMAR)


Member Secretary

Issued to:

Shri S Vinod Kumar
Bharat Petroleum Corporation Ltd
Navagam Top,
NH-8, Village: Kanera
Ta& Dist: Kheda

Copy to:-

1. The Secretary, SEAC, C/O. G.P.C.B. Gandhinagar - 382010.
2. The Chairman, Central Pollution Control Board,
Parivesh Bhavan, CBD -cum-Office Complex, East Arjun Nagar, New Delhi-110032
3. The Chief Conservator of Forests (Central), Ministry of Environment & Forests,
Regional Office (WZ), E-5, Arera Colony, Link Road-3, Bhopal-462016, MP
4. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
5. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10 A, Gandhinagar-382010
6. Select File


(DARPANA DHIMMAR)
Member Secretary