



**STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY,  
BIHAR**

**Ref No.** 314

**Patna, dated:-** 4/3/16

**From,**

**Prof. R. C. Sinha**  
Chairman,  
SEIAA, Bihar

**To,**

**Bharat Petroleum Corporation Limited,**  
**Bharat Bhawan,**  
**4 & 6, Currimbhoy Road,**  
**Ballard Estate,**  
**Post Box No.-686,**  
**Mumbai - 400 001.**

**Sub: Environmental Clearance for the proposed "Capacity expansion of LPG Bottling Plant, Patna, Fatuha Industrial Area PO & PS Fatuha, District- Patna"**

With reference (received on 01-07-2015 ) for environment clearance as per EIA Notification 2006, and their amendments of Capacity expansion of LPG Bottling Plant, Patna, Fatuha Industrial Area PO & PS Fatuha, District- Patna, Bihar. The Proposal was appraised by SEAC in its meeting held on 21<sup>st</sup> February, 2016 as per EIA Notification, 2006 and its amendment thereof. On the recommendation of SEAC, SEIAA in its meeting held on 24<sup>th</sup> February, 2016 accords Environmental Clearance with the following conditions.

It is noted that the salient features of the project for which Environmental Clearance is accorded by SEAC are as follows:-

<b>Particular</b>	<b>Details</b>
Project Proponent	M/s. Bharat Petroleum Corporation Limited
Project Name	Capacity expansion of LPG Bottling Plant, Patna
Project Location	Fatuha Industrial Area PO & PS Fatuha, District- Patna
Project Description	Installation of 1 Nos. additional Mounted storage vessel of 600 MT capacity & 1 No. additional 24 Station Electronic Carousal.
Land Requirement	21.3 Acres.
Schedule & Category	6 (b) & B category
Total Cost of the Project	₹ 3358 Lakhs
Power Requirement	315 KVA through Bihar State Electricity Board
Water Requirement	Operation Phase – 5 KLD, Source - Bore Well
Total Man Power Requirement	113
DG Set Capacity	1x250 KVA, 1x125 KVA, 1x62.5 KVA.
Fire Fighting Arrangement	As per OSID 144
Green belt area	Existing 3.5 acre and proposed 3.529 acre

**A. SPECIFIC CONDITIONS:**

**WATER**

1. Water demand for expansion, Total fresh water requirement from ground water source shall not exceed 5 KLD, and if applicable prior permission will be obtained from the CFWB/SGWB for any increase in ground water extraction beyond this limit.



2. There shall not be any wastewater generation nor any discharge from the project activities.
3. The storm water drains shall be kept dry and shall not be used for discharge of any kind of waste. The project proponent shall prepare an Action Plan for the monsoon period in which the water quality flowing outside the premises shall be monitored for hydrocarbon and oil & grease parameters and its records shall be maintained & submitted to BPCB.
4. The company shall construct the garland drain all around the project site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated streams. During rainy season, the storm water drains shall be connected to oil water separator and passed through guard pond. Water quality monitoring of guard pond shall be conducted and ensured that monitoring parameters shall not exceed the prescribed standard.
5. Effluent from washing of storage tanks in POL Depot shall be properly treated in oil water separator and treated wastewater shall conform to CPCB standards. No effluent shall be discharged outside the premises and 'zero' effluent discharge principle shall be followed.
6. The company shall harvest rainwater from roof tops of buildings to recharge ground water.

**AIR :**

7. Gaseous emission at workplace shall be controlled and kept below the limits prescribed by the Factories Act and Rules. Their records shall be maintained.
8. The gaseous emissions and particulate matter from various processes shall conform to the standards prescribed by BSPCB. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the prescribed standards.
9. Regular ambient air quality monitoring of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC<sub>s</sub> and HC (Volatile gases) shall be monitored and displayed at a convenient location near the main gate of the company and at important public places. The location and results of existing monitoring stations shall be reviewed in consultation with BSPCB on the occurrence of maximum ground level concentration and downward direction of wind. It shall ensure that at least one monitoring station is set up in up-wind direction along with those in other directions.

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CHAIRMAN  
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(SEIAA) BIHAR

10. The Company shall install automatic leak detection system supported with hooters and alarm system.
11. Arrangement will be made for automatic sprinkling of water along the road, especially in gantry area and also brooming of the internal roads will be done by automatic vacuum cleaner machine.

**SOLID WASTE :**

12. The unit must strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous Waste (Management and Handling) Rules 2003. Authorization from the BSPCB must be obtained from collection/treatment/storage/disposal of hazardous wastes.
13. The project management shall strictly comply with the provisions made in Manufacture, Storage and Impact 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.
14. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act & Rules.
15. Hazardous materials storage shall be at an isolated designated location, bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals.
16. All transportation routes within the factory premise shall have paved roads to minimize splashes and spillages.

**SAFETY :**

17. Mock drills shall be conducted at regular intervals as per statutory requirements and their records shall be maintained.
18. Necessary dyke wall along with spill collection sump shall be provided around the storage tanks to arrest the spillage/leakage.
19. All the storage tanks in the premises shall be provided with sprinkler as per OISD norms.
20. Fire protection system shall be upgraded for the additional storage tanks installation and shall confirm to OISD standards.
21. Necessary flameproof fittings shall be provided in the storage facility.
22. Proper ventilation shall be provided in the whole premises.



23. All venting equipment shall have vapour recovery system. All the pumps and other equipment where there is a likelihood of leakages shall be provided with Lead 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.
24. All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Close handling system for chemicals 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.
25. Personal Protective Equipment shall be provided to workers and its usage shall be ensured and supervised.
26. First Aid Box and required antidotes for the chemicals used in the unit shall be made readily available in adequate quantity at all the times.
27. 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.
28. 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.
29. On site Emergency Control Plan and Off Site Emergency Plan shall be updated and its recommendation shall be implemented.
30. Design of the storage tanks shall be done in accordance with the applicable OISD, IS, API, ASME standards.
31. Necessary permission from the Chief Controller of Explosive-Nagpur, State Department of Safety and Health, and other relevant Government Agencies shall be taken prior commencement of the project.
32. Ambient air quality status with respect of VOC in the area shall be monitored in consultation with Bihar Pollution Control Board and its records shall be submitted to SEIAA, Bihar.

**NOISE :**

33. The overall noise level in and around the plant area shall be kept well within the prescribed standards of CPCB by providing noise control measures including acoustic

insulation, hoods, silencers, enclosures vibration dampers etc. on all sources of noise generation.

**WASTE MINIMIZATION :**

34. The unit shall undertake following waste minimization measures:

A. Use of automated and close filling to minimize spillages.

B. Venting equipment through vapour recovery system.

**GREEN BELT AND OTHER PLANTATION:**

35. The unit shall develop green belt in 33% of the plot area within premises to mitigate the effect of fugitive emission all around the plant in consultation with DFO as per CPCB guidelines. Thick green belt around the POL depot should be ensured.

36. The proponent will create & maintain Green-Belt along the railway line with the consent of Railway Authority.

**B. GENERAL CONDITIONS:**

1. The project proponent shall adopt all measures for better environment, occupational health and safety.
2. The SEIAA, Bihar directly shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) by furnishing the requisite data / information / monitoring reports.
3. All statutory clearances shall be obtained before start of mining operations.
4. The unit shall undertake eco-developmental measures including community welfare program most suited in the project area for the overall development of the area.
5. Fully automated tank farm management system (TFMS) will be provided for accounting of products and reconciliation.
6. Bottom sludge shall be handled, stored and disposed on a regular basis as per CPCB/MoEF&CC guidelines. An action plan in this regard including bioremediation shall be submitted to SEIAA and BSPCB.
7. 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.



8. At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.
9. No further expansion or modifications in the plant shall be carried out without prior approvals of the MoEF&CC/SEIAA, as the case may be. In case of deviations or alterations in the project proposal from those submitted to MoEF&CC/SEIAA/SEAC for clearance, a fresh reference shall be made to the SEIAA/SEAC to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
10. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as BPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
11. Under Corporate Social Responsibility (CSR), sufficient budgetary provision shall be made for health improvement, education, water and electric supply etc. in and around the project site.
12. Provisions shall be made for the housing (Temporary – to be removed after completion of the project) of construction labour within the project site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc.
13. The applicant shall inform the public that the project has been accorded environmental clearance by SEIAA and that the copies of the clearance letter are available with the Website of SEIAA. 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 Hindi language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
14. It shall be mandatory for the Project management to submit 6 monthly compliance report in respect of the stipulated prior environmental Clearance terms and condition in hard and soft copies to the regulatory authority concerned SEIAA, Bihar, Regional Office of MoEF&CC, BSPCB Patna.
15. The project authorities shall also adhere to the stipulation made by the Bihar State Pollution Control Board.
16. The Project authorities shall inform the BSPCB, Regional Office of MoEF&CC, Ranchi and SEIAA, Bihar about the date of final closure and final approval of the Project by the concerned authorities and the date of start of the Project.

17. The SEIAA, may revoke or suspend the clearance, if implementation of any of the above condition is not found satisfactory.
18. 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 Waste (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendment and rules.
19. Any appeal against this Environmental Clearance shall be with National Green Tribunal preferentially within a period of 30 days as prescribed under 16 of the National Green Tribunal

Sd/-  
**(Prof. R.C. SINHA)**  
**Chairman**  
**SEIAA, BIHAR**

**CHAIRMAN**  
**STATE ENVIRONMENT IMPACT**  
**ASSESSMENT AUTHORITY**  
**(SEIAA) BIHAR**



**Memo No: 314**

Copy forwarded to:

Patna, dated:- 4/3/10

1. The Principal Secretary, Environment & Forests, Dept. Govt. of Bihar, Sinchai Bhawan, Patna.
2. The Chairman, Bihar State Pollution Control Board, Patna-23
3. The Chairman, SEAC, Bihar
4. The Chairman, Central Pollution Control Board, Delhi
5. The Advisor, (EIA), Indira Paryavaran Bhawan, JorBagh Road, Aliganj, New Delhi-110003
6. Guard file.

*R. C. Sinha*

(Prof. R.C. SINHA)

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SEIAA, BIHAR  
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