

F. No.J-11011/117/2018-IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA Division)

Indira Paryavaran Bhawan
Jor Bagh Road, N Delhi - 3
Dated: 5th April, 2019

To,

M/s Bharat Petroleum Corporation Limited
Village Radhanagar, Taluk Chas,
District **Bokaro** (Jharkhand)

Sub: Storage of Petroleum, Oil & Lubricants at Village Radhanagar, Taluk Chas, District Bokaro (Jharkhand) by M/s Bharat Petroleum Corporation Limited - Environmental Clearance - reg.

Ref: Online proposal No.IA/JH/IND2/73804/2018 dated 8th January, 2019.

Sir,

This has reference to your online proposal No.IA/JH/IND2/73804/2018 dated 8th January, 2019 along with project documents namely, EIA/EMP report containing the public hearing details for the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for grant of environmental clearance to the project for storage of Petroleum, Oil & Lubricants (POL) of capacity 29170 KL (17 nos of tanks) by M/s Bharat Petroleum Corporation Limited (BPCL) in an area of 313829.34 m² at Village Radhanagar, Taluk Chas, District Bokaro (Jharkhand).

Details of the proposed storage facilities are as under:

Tank No.	Tank Type	Product	Class of Product	Dia (m)	Height/Length (m)	Licensed Capacity (KL)
TK -1	A/G Cone Roof	HSD	B	20	17.5	5290
TK -2	A/G Cone Roof	HSD	B	20	17.5	5290
TK -3	A/G Cone Roof	HSD	B	20	17.5	5290
TK -4	A/G Floating Roof	MS	A	20	15.5	4315
TK -5	A/G Floating Roof	MS	A	20	15.5	4315
TK -6	A/G Cone Roof	ETHANOL	A	9	10	575
TK -7	A/G Cone Roof	ETHANOL	A	9	10	575
TK -8	A/G Cone Roof	SKO	B	9	13.5	800
TK -9	A/G Cone Roof	SKO	B	9	13.5	800
TK -10	A/G Cone Roof	Bio-Diesel	Excluded	9	13.5	800
TK -11	A/G Cone Roof	Bio-Diesel	Excluded	9	13.5	800
TK -14	Under Ground	SKO	B	3.2	12.6	100
TK -15	Under Ground	MS	A	3.2	12.6	100
TK -16	Under Ground	HSD	B	3.2	12.6	100
TK -17	Under Ground	HSD	B	2	6.75	20
Total						29170

3. Total land area is 313829.34 sqm. Industry will develop greenbelt in an area of 33.14% i.e., 87176.10 sqm out of total area of the project. The estimated project cost is Rs.350 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.88 lakhs and the recurring cost (O&M) will be about Rs.15 lakhs per annum.

4. There are No National parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km. Garga Dam is at a distance of 2.4 km in North West.

5. Total fresh water requirement is estimated to be 7 cum/day to be met from the borewell. No industrial effluent will be generated at the project site. Sewage generated from domestic sources will be sent to septic tank followed by soak pit. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

6. The project/activity is covered under category B of item 6(b) 'Isolated storage & handling of hazardous chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006. However, due to applicability of general condition (Interstate boundary of West Bengal at 3.5 km), the project requires appraisal/approval at central level in the Ministry.

7. The Terms of Reference (ToR) was granted by the Ministry on 1st June, 2018. Public hearing has been conducted by the State Pollution Control Board on 23rd October 2018.

8. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 29-31 January, 2019. The project proponent and their accredited consultant M/s ABC Techno Labs India Pvt Ltd presented the EIA/EMP report. The Committee found the EIA/EMP report to be satisfactory, complying with the ToR, and recommended the project for grant of environmental clearance.

9. Based on the proposal submitted by the project proponent and recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for **storage of Petroleum, Oil & Lubricants of capacity 29170 KL** by M/s Bharat Petroleum Corporation Limited at Village Radhanagar, Taluk Chas, District Bokaro (Jharkhand), under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under:-

(a) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board as required.

(b) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.

(c) Total fresh water requirement shall not exceed 7 m³/day proposed to be met from borewell. Prior permission shall be obtained from the concerned regulatory authority/CGWA.

(d) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.

(e) During construction phase, air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.

- (f) The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines and in consultation with the State Forest Department.
- (g) At least 1.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (h) Regular monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data to be submitted to Ministry's Regional Office, CPCB and State Pollution Control Board. Quarterly monitoring for fugitive emissions should be carried out as per the guidelines of CPCB and reports submitted to Ministry's Regional Office.
- (i) Necessary approvals from Chief Controller of Explosives, as applicable, shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans shall be prepared and implemented.
- (j) Emergency Response Plan should be based on the guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once a month.
- (k) Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.
- (l) Road tankers should be equipped to the standard specified in national regulations reputable code. Vehicles should be mobilized during transfer operations and equipped to prevent untimely movement. Loading/unloading bays should be protected against impact. Fire-resistant coatings shall be provided to tanks/vessels.
- (m) High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.
- (n) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (o) Water sprinkling has to be undertaken on regular basis to control the polluting particles.
- (p) Approach road shall be made pucca to minimize generation of suspended dust.
- (q) The energy sources for lighting purposes shall preferably be LED based.
- (r) Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (s) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once in a month. onsite and off-site Disaster Management Plan shall be implemented.

(t) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.

(u) Additional safety measures should be taken by using remote operated shut off valve, double block & bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.

(v) High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.

(w) Unit should carry out safety audit and report submitted to the Regional Office. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

(x) Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.

9.1 The grant of Environmental Clearance is further subject to compliance of other generic conditions as under:-

(i) The project authorities must strictly adhere to the stipulations made by the state Pollution Control Board (SPCB), State Government and/ or any other statutory authority.

(ii) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry. In case of deviations or alterations in the project proposal from those submitted to this Ministry, a fresh reference shall be made to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

(iii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.

(iv) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.

(v) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

(vi) The Company shall harvest rainwater from the roof tops of the buildings to recharge ground water and utilize the same for different industrial operations within the plant.

(vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.

(viii) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing shall be implemented.

(ix) The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for overall improvement of the environment.

(x) A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

(xi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.

(xii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.


(xiii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance 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 SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

(xiv) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted 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 environmental clearance conditions and shall also be sent to the respective Regional offices of MoEF&CC by e-mail.

(xv) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <http://moef.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional office of the Ministry.


10. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

11. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991, read with subsequent amendments therein.


5/4/2019
(S. K. Srivastava)
Scientist E

Copy to:-

1. Additional Chief Secretary, Environment & Forests Department, Government of Jharkhand, Secretariat, Nepal House, Doranda, **Ranchi-834001**
2. The Additional Principal Chief Conservator of Forests (ECZ), Regional Office (ECZ), MoEF&CC, Bunglow No. A-2, Shyamali Colony, Ranchi-834002
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, **New Delhi - 32**
4. The Member Secretary, Jharkhand Pollution Control Board, Town Administrative Building, HEC, Dhurwa, **Ranchi- 824004**
5. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhawan, Jor bagh Road, **New Delhi**
6. Guard File/Monitoring File/Record File


5/4/2019
(S. K. Srivastava)
Scientist E