

**State Level Environment Impact Assessment Authority, Rajasthan**  
**4, Institutional Area, Jhalana Doongri, Jaipur-302004**  
**Phone: 0141-2705633, 2711329 Ext. 361**

No. F1 (4)/SEIAA/SEAC-Raj/Sectt/Project / Cat 6 (b) B1/ (442)/ 11-12

Jaipur, Dated: **8 FEB 2013**

**M/s Indian Oil Corporation Ltd.,**  
6 floor, G-9, Ali Yavar Jung Marg,  
Bandra (East),  
Mumbai

**Sub:** EC for Proposed Development of Petroleum Storage Terminal at Village-  
Mohanpura, Tehsil - Phagi, District- Jaipur, Rajasthan.

Sir,

This has reference to your application dt. 24.2.11 seeking environmental Clearance for the above project under EIA Notification 2006 on the basis mandatory documents enclosed with the application viz. the questionnaire, EIA, EMP and additional clarifications furnished in response to the observation of the State Level Expert Committee Rajasthan, in its meeting held on 19.12.12 & 24.1.13

**2. Brief details of the Project:**

1	Item No. in the list of Schedule / Category:	6 (b) B1																																										
2	Location of Project	Khasra No. 725/1 village- Mohanpura, Tehsil- Phagi, District- Jaipur.																																										
3	Total Area	110.53 Acre																																										
4	Product & Capacity	<table><tr><th colspan="4">Petroleum Storage Terminal</th></tr><tr><th>Phase</th><th colspan="2">Products</th><th colspan="2">Proposed Capacity (KL)</th></tr><tr><td>First</td><td colspan="2">MS, HSD, SKO, Ethanol SLOP, MS TRANSMIX, HS TRANSMIX</td><td colspan="2">81,494</td></tr><tr><td>Second</td><td colspan="2">NAPTHA, INTERFACE, Near MS, Near HSD</td><td colspan="2">50,400</td></tr><tr><td colspan="3">Total Tankage Capacity</td><td colspan="2">1,31,894</td></tr></table>				Petroleum Storage Terminal				Phase	Products		Proposed Capacity (KL)		First	MS, HSD, SKO, Ethanol SLOP, MS TRANSMIX, HS TRANSMIX		81,494		Second	NAPTHA, INTERFACE, Near MS, Near HSD		50,400		Total Tankage Capacity			1,31,894																
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5	Expected Cost	Estimated Cost of Phase - 1 = Rs 242 Crores Estimated Cost of Phase - 2 = Rs. 126 Crore Note: - Cost of Land is not included in above cost.																																										
6	Water Requirement & Source:	<table><tr><th>S.N</th><th>Item</th><th>Quantity</th><th>Source</th></tr><tr><td>1</td><td>During Construction Phase</td><td>50 KLD</td><td>Tankers from nearby areas.</td></tr><tr><td>2</td><td>Drinking Water</td><td>41.4 KLD</td><td>(a) Local water tankers (b) Tap off connection from Bisalpur Pipeline.</td></tr><tr><td>3</td><td>During operational phase</td><td>46 KLD</td><td>Ground water through new 4 no. Bore wells.</td></tr></table>	S.N	Item	Quantity	Source	1	During Construction Phase	50 KLD	Tankers from nearby areas.	2	Drinking Water	41.4 KLD	(a) Local water tankers (b) Tap off connection from Bisalpur Pipeline.	3	During operational phase	46 KLD	Ground water through new 4 no. Bore wells.																										
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7	Fuel & Energy	Power Requirement 2,500 KVA HSD Requirement for DG sets :- Not given		Source :- JVVNL																																								
8	Environment Management Plan:	<table><tr><th colspan="4">(Rs. in crore)</th></tr><tr><th>Sn</th><th>Particulars</th><th>Capital Cost</th><th colspan="2">Recurring Cost in per annum</th></tr><tr><td>1</td><td>Firefighting Equipment</td><td>120.0</td><td colspan="2">8.00</td></tr><tr><td>2</td><td>Water Pollution Control</td><td>18.0</td><td colspan="2">1.60</td></tr><tr><td>3</td><td>Environment Monitoring and Management</td><td>18.0</td><td colspan="2">1.60</td></tr><tr><td>4</td><td>Occupational Health</td><td>1.5</td><td colspan="2">0.23</td></tr><tr><td>5</td><td>Green Belt</td><td>7.0</td><td colspan="2">0.74</td></tr><tr><td colspan="2">Total</td><td>164.5</td><td colspan="2">12.17</td></tr></table>				(Rs. in crore)				Sn	Particulars	Capital Cost	Recurring Cost in per annum		1	Firefighting Equipment	120.0	8.00		2	Water Pollution Control	18.0	1.60		3	Environment Monitoring and Management	18.0	1.60		4	Occupational Health	1.5	0.23		5	Green Belt	7.0	0.74		Total		164.5	12.17	
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6	CSR :	Rs. 06.00 Crore.																																										

7	Risk Assessment	Most of the materials are hazardous in nature. The hazardous nature of each product is briefly given below:			
		Item	Physical	Chemical	Impact on Man, Animal & Eco - System
		Motor Spirit UN No. 1203 Flammable Liquid - Class - 3 Hazardous Waste ID no. - 17	BP - 32 - 215 <sup>0</sup> C Vapour Pressure (35 <sup>0</sup> C) - 300 - 600 mm at 20 <sup>0</sup> C Specific Gravity - 0.66 - 0.77 at 15 <sup>0</sup> C	LEL - 1.3% (V/V) UEL - 7.6% (V/V) Flash Point - 43 <sup>0</sup> C Auto ignition Temp - 257 <sup>0</sup> C Stable Compound	Entry through inhalation, ingestion and skin in high concentration causes loss of consciousness, coma and sudden death. In low concentration causes headache, nausea, mental confusion and depression. Moderately toxic by inhalation
		Hazchem Code- 3Y E NFPA Hazards Signals Health - 1  Flammability - 3 Reactivity/ Stability 0  SKO Un no. 1223 Flammable Liquid Class - 3 Hazardous Waste ID no. - 17	Insoluble in water	Incompatible with oxidizing agents.	TLV-300 ppm ; 900 mg/ m3 STEL - 500 ppm ; 1500 mg/ m3
			Vapour Density (Air - 1) - 3 to 4		Contaminated sand, earth or other materials to be moved to safe area
			BP - 145 - 300 <sup>0</sup> C Vapor Pressure (35 <sup>0</sup> C) - 5 mm at 20 <sup>0</sup> C Specific Gravity - 0.8 - 0.85 at 20 <sup>0</sup> C	LEL - 0.7 % (V/V) UEL - 5% (V/V) Flash Point 35 - 50 <sup>0</sup> C Auto ignition Temp- 210 <sup>0</sup> C Stable Compound	Entry through inhalation, and skin; Dizziness and nausea. High concentration causes depression / unaesthetic effect. Continuous inhalation produces visual and auditory hallucinations, delirium and mania. Also symptom of fatigue, somnolence, staggering gait and loss of memory.
		Hazchem Code - 3Y NEPA Hazards Signals Health - 0 Flammability - 2	Solubility in water 0.2 to 0.4 @ 30 <sup>0</sup> C	Incompatible with oxidizing agents.	LD <sub>50</sub> (oral rat)- 2800 mg/kg; LD <sub>50</sub> 200; TLV(ACGIH)- 500 ppm
		Item	Physical		Impact on Man, Animal & Eco-System
		Reactivity/ Stability - 0	Physical	Chemical	
			Vapour Density (Air- 1) 4.1		
		HSD UN no. 1202 Flammable Liquid - Class - 3 Hazardous Waste ID no. - 17 Hazchem Code - 3Y NEPA Hazards Signals Health - 0 Flammability - 2 Reactivity / Stability - 0	BP- 150 -400 <sup>0</sup> C Vapour Pressure (35 <sup>0</sup> C)-<1 mm at 38 <sup>0</sup> C Specific Gravity - 0.81- 0.91 at 20 <sup>0</sup> C	LEL 0.6% (V/V) UEL- 7.5% (V/V) Flash Point > 32 <sup>0</sup> C Auto ignition Temp - 256 <sup>0</sup> C Stable compound	Entry through inhalation, ingestion and skin inhalation Effect: Dizziness and headache, Aspiration - Rapidly developing, potential fatal chemical pneumonitis Ingestion Effect: Nausea and Vomiting; Contact Effect; Irritation Eyes- Irritation Dermatitis may develop on prolonged contact.
			Solubility in water insoluble	Incompatible with oxidizing agents.	LD <sub>50</sub> (oral rat) - 2800 mg/kg; LD <sub>50</sub> 200; TLV (ACGIH) - 5 mg / kg; STEL - 10 mg/kg
			Vapour Density (Air- 1)- 3 to 5		

3. The SEAC Rajasthan after due considerations of the relevant documents submitted by the project proponent and additional clarifications/documents furnished to it have recommended for Environmental Clearance with certain stipulations. The SEIAA Rajasthan after considering the proposal and recommendations of the SEAC Rajasthan hereby accord Environmental Clearance to the project as per the provisions of Environmental Impact Assessment Notification 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:

#### **PART A: SPECIFIC CONDITIONS**

- i This EC is granted for setting up of a Petroleum Storage Terminal phase first capacity 81,494 KL (Kilo Liter) & in second phase capacity of 50, 400 KL (Kilo Liter). The total capacity of the tankage will be 1,31,894 KL (Kilo Liter), Village - Mohanpura, Tehsil - Phagi, District- Jaipur.
- ii The P.P. should ensure that an amount of Rs. 06.00 Crore allocated for CSR should solely be used for CSR and not diverted for any other purpose.
- iii The project proponent shall obtain prior CTE / CTO from RSPCB before implementing the project. All the conditions stipulated by the RPCB in its CTE/CTO shall be effectively implemented.
- iv The project authorities shall strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989, as amended in 2000 and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from Chief Controller of Explosives must be obtained before commission of project. Requisite On-site and Off-site Disaster Management Plans will be prepared and implemented.
- v Regular Ambient Air Quality Monitoring shall be carried out for VOC and HC besides other parameters in ambient air around the Plant. The location and results of existing monitoring stations shall be reviewed in consultation with the Rajasthan State Pollution Control Board based on the occurrence of maximum ground level concentration and downwind direction of wind. Additional Stations shall be set up. If required, it shall be ensured that at least one monitoring station each is set up in up-wind & in down-wind direction along with those in other directions. HC detectors shall be installed at sensitive locations.
- vi The proponent shall upload the status of compliance of the stipulated EC conditions, including monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF at Lucknow, and the Regional Office of RSPCB, Jaipur. The criteria pollutant namely, SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (Ambient levels as well as stack emissions) and VOC shall be monitored and displayed at the convenient location near the main gate of the Company in the public domain.
- vii A detailed time bound of action plan for installation of Petroleum Storage Terminal shall be submitted to the Ministry's Regional Office, Lucknow and RSPCB within 3 months from date of issue of this letter.
- viii The company shall install automatic leak detection system with supported hooters or alarm system.
- ix Occupational health surveillance of workers shall be done on a regular basis and records maintained as per the Factory Act.
- x Greenbelt shall be developed to mitigate the effect of fugitive emissions all around the plant in a minimum 33% plan area in consultation with DFO as per CPCB guidelines.
- xi Regularly monitoring of VOC and HC in the Work Zone Area in the Plant shall be carried and data be submitted to Ministry's Regional Office at Lucknow, and Rajasthan State Pollution Control Board. Quarterly monitoring of fugitive emissions will be carried out as per the Guidelines of CPCB.
- xii The Company shall obtain prior permission for drawl of ground water from the Central Ground Water Authority.
- xiii The company shall harvest surface as well as rainwater from the rooftops of the buildings proposed in the project and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.
- xiv Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

#### **PART - B GENERAL CONDITIONS**

- i The project authorities must strictly adhere to the stipulations made by the Rajasthan State Pollution Control Board (RSPCB), the State Government and any other statutory body.
- ii No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA, Rajasthan / Ministry of Environment and Forests.
- iii The overall noise levels in and around the plant area shall be limited within the prescribed standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of

noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz 75 DBA (day time) and 70 DBA (night time).

- iv The project authorities shall provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the SEIAA, Rajasthan as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.
- v The stipulated conditions shall be monitored by the Regional Office of the MoEF, Lucknow / Central Pollution Control Board / Rajasthan State Pollution Control Board. A six monthly compliance report and the monitored data should be submitted to them regularly. It will also be displayed on the Website of the Company.
- vi The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both on hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the RSPCB.
- vii A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations if any, were received while processing the proposal. The clearance letter shall also be put up on the website of the company by the proponent.
- viii The Project Proponent should inform the public that the project has been accorded environmental clearance by the SEIAA, Rajasthan and copies of the clearance letter are available in the website of the Rajasthan State Pollution Control Board at <http://www.rpcb.nic.in>. This should 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 should be forwarded to the SEIAA, Rajasthan, Regional office of the MoEF, Lucknow and RPCB.
- ix The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the Rajasthan 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 EC conditions and shall also be sent to the Regional Office of the MoEF, Lucknow by e-mail.
- x The date of Financial Closure and final approval of the project by the concerned authorities and the date of commencing the land development work as well as the commissioning of the project, shall be informed to the SEIAA, Rajasthan, Regional Office of MoEF, Lucknow, and RSPCB.
- xi Proper House keeping and adequate occupational health programme shall be taken up. Regular Occupational Health Surveillance Programme for the relevant diseases shall be carried out and the records shall be maintained properly for at least 10 years. Sufficient preventive measures shall be adopted to avoid direct exposure to emission and other Hydrocarbons etc.
- xii A separate environment management cell with full fledged laboratory facilities to carry out various management and monitoring functions shall be set up under the control of a Senior Executive.
- xiii The SEIAA, Rajasthan may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv The SEIAA, Rajasthan reserves the right to stipulate additional conditions if found necessary. The company shall implement these conditions in a time bound manner.
- xv 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 Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability Insurance Act, 1991, Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 and Manufacture, Storage and import of Hazardous Chemicals Rules, 1989/2000 along with their amendments and rules.

Yours faithfully

sd -

(Sankatha Prasad)  
Member Secretary  
SEIAA Rajasthan

Copy to following for information and necessary action:

1. Secretary, Ministry of Environment and Forest, Govt., of India, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi.
2. Addl. Chief Secretary, Environment Department, Rajasthan, Jaipur.
3. Smt. Alka Kala, Chairman, SEIAA, Rajasthan, 69-A Bajaj Nagar Enclave, Jaipur
4. Shri Moti Lal Daima, Member, SEIAA, Rajasthan, 48/9, Moti Path, Mansarovar, Jaipur.
5. Member Secretary, Rajasthan State Pollution Control Board, Jaipur for information & necessary action and to display this sanction on the website of the Rajasthan State Pollution Control Board, Jaipur.
6. Secretary, SEAC Rajasthan.
7. The CCF, Regional Officer, Ministry of Environment & Forests, RO (CZ), Kendriya Bhawan, 5<sup>th</sup> Floor, Sector "H", Aliganj, Lucknow- 226020.
8. IA- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi - 110003
- ✓ 9. Nodal Officer (Department Website), Department of Environment, Government of Rajasthan Jaipur with the request to upload the copy of this environmental clearance on the website.

  
M.S. SEIAA (Rajasthan)