

F. No.J-11011/352/2018-IA-II(I)  
Government of India  
Ministry of Environment, Forest and Climate Change  
(IA-II Section)

Indira Paryavaran Bhawan  
Jor bagh Road, New Delhi - 3  
Dated: 11<sup>th</sup> February, 2019

To  
**M/s Indian Oil Corporation Ltd,**  
Sy. No. 365/4(pt), Asanur village,  
SIDCO Industrial Estate,  
District **Villupuram** (Tamil Nadu)

**Sub: Petroleum Storage Terminal by M/s Indian Oil Corporation Limited at SIDCO Industrial Estate, Village Asanur, Taluka Ulundurpet, District Villupuram (Tamil Nadu) - Environmental Clearance - reg.**

Sir,  
This has reference to your online proposal no.IA/TN/IND2/79760/2016 dated 6<sup>th</sup> October, 2018 along with project documents namely, EIA/EMP report for the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for Greenfield Petroleum Storage Terminal of total capacity of 80,870 m<sup>3</sup> (17 nos of tanks) for storage of petroleum products (MS, HSD), Bio-Diesel and Ethanol by M/s Indian Oil Corporation Limited in an area of 301915.54 sqm located at SIDCO Industrial Estate, village Asanur, Taluka Ulundurpet, District Villupuram (Tamil Nadu).

3. The details of proposed storage facilities are as under:-

S. No.	Product	Class	No of tanks	Type of Tanks	Tank Size (dia x ht/length in m)	Capacity of each tank (m <sup>3</sup> )	Total Tankage (m <sup>3</sup> )
1.	MS	A	3	IFRVT	32 x 15	10,000	30,000
2.	MS (TTD)	A	1	UGHT	3 x 8	50	50
3.	HSD	B	3	CRVT	38 x 15	15,000	45,000
4.	HSD (TTD)	B	1	UGHT	3 x 8	50	50
5.	HSD (own use)	B	1	UGHT	2.5 x 6.5	20	20
6.	BIO-DIESEL	-	1	CRVT	12 x 14	1,500	1500
7.	BIO-DIESEL (TTD)	-	2	UGHT	3 x 10.5	70	140
8.	Ethanol	A	2	IFRVT	14 x 13.5	1,685	3,370
9.	Ethanol (TTD)	A	2	UGHT	3 x 10.5	70	140
10.	Sludge	-	1	AGHT	12 x 9	600	600
<b>GRAND TOTAL</b>							<b>80,870</b>

4. Total land area will be 301915.54 m<sup>2</sup>. Industry will develop green belt in an area of 33% i.e. 99632.13 m<sup>2</sup> out of the total project area. The estimated proposed project cost is Rs.406 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.71.47 crore and the recurring cost (O&M) will be about Rs.2.51 crores per annum.



5. There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, etc within 10 km distance. Manimuktha River flows at a distance of 2.2 km in South and Gomukhi River flows at a distance of 3.18 km in South.

6. Total water requirement is 20 cum/day, of which fresh water requirement of 20 m<sup>3</sup>/day will be met from 3 bore wells. There will be no industrial effluent from the project. Sewage generated from domestic sources will be treated in 10 kLD STP. The water from mechanized oil water separator will be utilized for gardening and dust suppression. The plant will be based on Zero Liquid discharge system.

Power requirement for the proposed project 1250 kW and will be met from TNSEB (Tamil Nadu State Electricity Board). DG sets of capacity 2X750 kVA and 1X500 kVA are proposed for backup power. Stack (height 5.5 m & 4.5 m) will be provided as per CPCB norms to the proposed DG sets.

7. Details of Solid/hazardous waste generation and its management are as under:-

Waste	Quantity	Method of Disposal
Oil Water Sludge	5 MT per year (approximately)	To CHWTSDF through authorized vendors.

8. The project/activity is covered under category B of item 6(b) 'Isolated Storage & Handling of Hazardous Chemicals' of the Schedule to the Environmental Impact Assessment (EIA) Notification, 2006, and requires appraisal at the State level by the concerned SEAC/SEIAA. However, due to non-existence of SEIAA in Tamil Nadu, the proposal was appraised at central level by the sectoral EAC in the Ministry.

9. The ToR for the project was granted by the SEIAA on 27<sup>th</sup> September, 2016. Public hearing for the project was conducted by the Tamil Nadu Pollution Control Board (TNPCB) on 16<sup>th</sup> November, 2016.

10. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 29-31 October, 2018. The project proponent and their accredited consultant M/s Ultra-Tech Environmental Consultancy and Laboratory presented the EIA/EMP report as per the ToR. The Committee found the EIA/EMP report to be satisfactory, complying with the ToR and recommended the project for grant of environmental clearance.

11. 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 **Greenfield Petroleum Storage Terminal of total capacity of 80,870 kL (17 nos of tanks) for storage of petroleum products** by M/s Indian Oil Corporation Limited at SIDCO Industrial Estate, village Asanur, Taluka Ulundurpet, District Villupuram (Tamil Nadu), under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under:-

(i) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.

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

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- (iii) Total fresh water requirement shall not exceed 20 m<sup>3</sup>/day proposed to be met from ground water. Prior permission shall be obtained from the Central Ground Water Authority.
- (iv) 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.
- (v) 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.
- (vi) 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.
- (vii) At least 0.75% 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.
- (viii) 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.
- (ix) 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.
- (x) 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.
- (xi) 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.
- (xii) Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.
- (xiii) 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.
- (xiv) High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.
- (xv) 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.
- (xvi) Water sprinkling has to be undertaken on regular basis to control the polluting particles.

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- (xvii) Approach road shall be made pucca to minimize generation of suspended dust.
- (xviii) The energy sources for lighting purposes shall preferably be LED based.
- (xix) 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.
- (xx) 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.
- (xxi) 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.
- (xxii) 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.
- (xxiii) High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.
- (xxiv) 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.

**11.1** The grant of environmental clearance is subject to compliance of other general 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 of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry 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 each 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 16<sup>th</sup> 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. on all sources of noise generation. The ambient noise levels shall conform to the standards

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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 and storm water drains to recharge the 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.

(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 Parishad/ 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 31<sup>st</sup> 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.

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12. 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.

13. 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.

*SKS*  
11/2/2019

**(S. K. Srivastava)**  
**Scientist E**

**Copy to:-**

1. The Principal Secretary, Department of Environment and Forests, Government of Tamil Nadu, Namakkal Kavignar Maaligai, Fort St. George, **Chennai** - 9
2. The APCCF(C), MoEF&CC, Regional Office (SEZ), 1<sup>st</sup> and 2<sup>nd</sup> Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, **Chennai**-34
3. The Member Secretary, Central Pollution Control Board Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, **Delhi** -32
4. Member Secretary, Tamil Nadu Pollution Control Board, 76, Anna Salai, Guindy Industrial Estate, Race View Colony, Guindy, **Chennai** - 32 (Tamil Nadu)
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Zor bagh road, **New Delhi**
6. Guard File/Monitoring File/Record File

*SKS*  
11/2/2019

**(S. K. Srivastava)**  
**Scientist E**