State Level Environment Impact Assessment Authority Punjab
Ministry of Environment, Forest & Climate Change, New Delhi

O/O Punjab Pollution Control Board,
Vatavaran Bhawan, Nabha Road,
Patiala – 147 001
Telefax:- 0175-2215636

No. SEIAA/2019/55

To:
Sh. H.S Minhas, Chief Terminal Officer,
M/s Indian Oil Corporation Ltd (MD),
Storage Expansion at Jalandhar,
Suchi Pind, Jalandhar-144009
Mob.No.94172-17954

Date: 7/1/2019

Subject: Environmental Clearance under EIA notification dated 14.09.2006 for enhancement in storage capacity of petroleum product at Jalandhar petroleum terminal, Suchi Pind, Jalandhar, Punjab (Proposal No. SIA/PB/IND2/11389/2016)

This has reference to your online Proposal No. SIA/PB/IND2/11389/2016 for enhancement in storage capacity of petroleum product at Jalandhar petroleum terminal, Suchi Pind, Jalandhar, Punjab under category B-1 for activity 6(b) submitted to the SEIAA for grant of Environmental Clearance under EIA notification dated 14.09.2006. The proposal has been appraised as per procedure prescribed under the provisions of said Notification on the basis of the mandatory documents enclosed with the application viz., Form-1, PFR, EIA report and the additional clarifications furnished in response to the observations of the SEAC.

Salient Features of the Project for which EC is considered

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Product</th>
<th>Class</th>
<th>Proposed Capacity (KL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ethanol</td>
<td>A</td>
<td>1200</td>
</tr>
<tr>
<td>2</td>
<td>Ethanol</td>
<td>A</td>
<td>1200</td>
</tr>
<tr>
<td>3</td>
<td>Ethanol</td>
<td>A</td>
<td>1200</td>
</tr>
<tr>
<td>4</td>
<td>Ethanol</td>
<td>A</td>
<td>1200</td>
</tr>
<tr>
<td>5</td>
<td>HSD</td>
<td>B</td>
<td>25,000</td>
</tr>
<tr>
<td>6</td>
<td>HSD</td>
<td>B</td>
<td>25,000</td>
</tr>
<tr>
<td>7</td>
<td>HSD</td>
<td>B</td>
<td>25,000</td>
</tr>
</tbody>
</table>
4. Total Plot area- No new land area is proposed. Enhancement will take in the existing 110 Acre area of terminal.

5. Project Cost Rs. 118.22 Crores

6. Water Requirements & source
   Bore well in the premises for ground water abstraction

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Particulars</th>
<th>Quantity (m³/day)</th>
<th>Existing</th>
<th>Proposed</th>
<th>After Expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Domestic</td>
<td>7.8</td>
<td>7.8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Washing</td>
<td>1.0</td>
<td>-</td>
<td>1.0</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Mock Drill</td>
<td>1.0</td>
<td>-</td>
<td>1.0</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Gardening</td>
<td>2.0</td>
<td>-</td>
<td>2.0</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>11.8</td>
<td>-</td>
<td>11.8</td>
<td>-</td>
</tr>
</tbody>
</table>

7. Waste water generation, treatment and disposal arrangement
   a. No generation of the trade effluent from the existing process as well from the proposed expansion.
   b. Waste water generated during the mock drill after conforming to the prescribed standards shall be used for plantation purpose inside the premises.
   c. Domestic waste water (6.2 m³/day) after treatment through STP shall be disposed onto land for plantation purposes.
   d. Waste Water generation of the plant after expansion remains same as submitted:

<table>
<thead>
<tr>
<th>Sr No.</th>
<th>Particulars</th>
<th>Quantity (m³/day)</th>
<th>Existing</th>
<th>Proposed</th>
<th>After expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sanitary waste water</td>
<td>6.2</td>
<td>-</td>
<td>6.2</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Washing/Water Bath/Misc. plant operation</td>
<td>8.2</td>
<td>-</td>
<td>8.2</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>14.4</td>
<td>-</td>
<td>14.4</td>
<td>-</td>
</tr>
</tbody>
</table>

8. Air pollution control measures
   (i) D. G. Sets shall be installed for backup power in enclosure and confirms to the prescribed standards under EPA rules.
   (ii) The gaseous emissions from the D.G. sets to be confirmed to the standards prescribed by SPCB.
   (iii) There will be no process emission from the receipt, storage and distribution of POL and other ancillary operations.
   (iv) Fugitive emission at workplaces shall be controlled and kept below the limits prescribed by the concerned authorities from time to time.

9. Power requirement and its source
   Power is received from PSPCL.
   No more additional requirement for the proposed expansion.
   5 DG sets has already been installed which shall be used as standby purposes out of which 3 DG Sets are of capacity 1010 KVA each, 1 DG set is of capacity 750 KVA and 1 DG set is of capacity 500 KVA. All the DG sets shall be equipped with canopy.

10. Solid waste generation, and
    Type of Waste | Total Management (approx.)

Table:

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Description</th>
<th>Cost in lakhs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>STP (Pretreatment)/Bioremediation</td>
<td>5.00</td>
</tr>
<tr>
<td>2</td>
<td>Rain Water Harvesting</td>
<td>1.50</td>
</tr>
<tr>
<td>3</td>
<td>Health Care &amp; Plant Safety Safety</td>
<td>26.0</td>
</tr>
<tr>
<td>4</td>
<td>Environmental Monitoring plan</td>
<td>3.50</td>
</tr>
<tr>
<td>5</td>
<td>Peacock Conservation Plan</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>36.4</strong></td>
</tr>
</tbody>
</table>

The case was considered by the SEAC in 172\textsuperscript{nd} meeting held on 31.08.2018, wherein, the Committee observed that the project proponent has provided adequate and satisfactory clarifications of the observations raised by it, therefore, the Committee awarded ‘Silver Grading’ to the project proposal and decided to forward the case to the SEIAA with the recommendation to grant environmental clearance to the project proponent under EIA notification dated 14.09.2006 subject to certain conditions in addition to the proposed measures.

Thereafter, the case was considered by the SEIAA in its 140\textsuperscript{th} meeting held on 21.12.2018. The SEIAA observed that the case stands recommended by SEAC and the Committee awarded ‘Silver Grading’ to the project proposal. The Authority looked into all the aspects of the project proposal in detail and was satisfied with the same.

Therefore, the Authority decided to grant environmental clearance for enhancement in storage capacity of petroleum product at the terminal from 1,91,074 KL to 3,19,874 KL by constructing tanks of 4 X 1,200 KL for ethanol, 4 X 25,000 KL for HSD and 2 X 12,000 KL for MS at Jalandhar petroleum terminal, Suchi Pind, Jalandhar, Punjab subject to the conditions as proposed by the SEAC, in addition to the proposed measures. Accordingly, SEIAA, Punjab hereby accords necessary environmental clearance for the proposal in the provisions of EIA Notification dated 14.09.2006 and its amendments.
Standard EC Conditions for isolated storage and handling of hazardous chemicals sector

I. Statutory compliance:

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of Schedule-I species in the study area).

iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.

v. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-a-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon.

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

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

viii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

ix. The company should obtain all requisite clearances for fire safety and explosives and should comply with the stipulation made by the respective authorities.

x. Necessary approvals from Chief Controller of Explosives must be obtained before commission of project, if applicable.

xi. Necessary permissions from the Central Ground Water Authority (CGWA)/ State Ground Water Authority (SGWA)/ concerned authority for the abstraction of ground water for the existing requirements as well as for the expanded unit. In case of not allowing such permission by the concerned authority for the abstraction of additional ground water for the expanded project, the project proponent shall propose alternative arrangements to meet out the additional water requirements. It shall be ensured that: -

a. In the projects where ground water is proposed as water source, the project
b. Approval /permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities

II. Air quality monitoring and preservation

i. 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.

ii. 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.

iii. Regularly monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data 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.

iv. During storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.

v. The project proponent also to ensure trapping/storing of the CO2 generated, if any, during the process and handling.

vi. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

vii. Water sprinkling has to be undertaken on regular basis to control the polluting particles.

viii. Whole of the vehicle movement area as well as approach road to the gate /weighing bridge shall be paved with pucca / metalled / cement concrete road to control the dust emissions expected from the vehicle movement.

III. Water quality monitoring and preservation

i. The project proponent shall ensure Zero Liquid Discharge and shall treat the domestic effluent in a properly designed septic tank & treated domestic effluent will be utilized for gardening purposes within premises.

ii. The project proponent shall collect waste water generated during the mock drill, spillage / washing of floors etc. and the same shall be treated in mechanical oil separator. Recovered oil shall be re-used and treated waste water conforming to the prescribed standards shall be discharged for plantation purpose inside the premises.

iii. 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.

IV. Noise monitoring and prevention

i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

ii. 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.

iii. 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
VI. Waste management

i. 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/reprocessors/co-processors (like cement kiln) etc. In case of non-disposal of hazardous waste through authorized reprocessor/co-processor due to any scientific reason, same may be given to the authorized Common Storage, Treatment & Disposal Facility (CSTDF).

VII. Green Belt

i. The green belt of 5-10 m width shall be developed in more than 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 in consultation with the State Forest Department.

VIII. Safety, Public hearing and Human health issues

i. 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.

ii. 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.

iii. 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.

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

v. Unit should carry out safety audit and report submitted to the Regional Office.

vi. Provision 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, regarding Corporate Environment Responsibility and shall adhere to the following commitments: -

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Stage of the project</th>
<th>Budgetary allocation</th>
<th>CER activity to be conducted</th>
<th>Completion target period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Before</td>
<td>Rs. 25,000/-</td>
<td>Women</td>
<td>Before</td>
</tr>
</tbody>
</table>

Initiation of activity Before
2. First half after commencement of project. (April – September 2019) 2% of budget spent during project period Health and medical facility Proposals for these activity heads shall be invited from Gram panchayat, and after deliberation and consideration of Corporate policy, same shall be implemented September - April 2019/20

3. Second half after commencement of project. (September - April 2019/20) 2% of budget spent during project period Drinking water facility

4. Third half after commencement of project. (April – September 2020) 2% of budget spent during project period Drainage and Sanitation facility

5. Fourth half after commencement of project. (September - April 2020/21) 2% of budget spent during project period – Rs. 25,000/- (Spent before commencement of project) Education facility

ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

v. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent’s website permanently.

ii. The copies of the environmental clearance shall be submitted by the project
iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of commencing the land development work and completion of the project.

vii. Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office.

viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xv. The above conditions shall 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, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules.

xvi. Any appeal against this EC 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.

**XI. Specific Conditions:**

1. Traffic congestion near the entry and exit points from the roads adjoining the project site must be avoided. Parking should be fully internalized and no public space should be utilized.
REGISTERED

Endst. No. ___________  Dated ___________

A copy of the above is forwarded to the following for information & further necessary action please.

1. The Secretary to Govt. of India, Ministry of Environment and Forest, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.

2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-office Complex, East Arjun Nagar, New Delhi.

3. The Chairman, Punjab State Power Corporation Ltd, the Mall, Patiala.

4. The Deputy Commissioner, Bathinda.

5. The Chairman, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala.

6. The Advisor (Environment), Ministry of Environment and Forest, Northern Regional Office, Bays No.24-25, Sector–31-A, Chandigarh. The detail of the authorized Officer of the project proponent is as under:

   a) Name of the applicant  Sh. H.S. Minhas, Chief Terminal Manager
   b) Mobile/Ph. Number 9417217954
   c) Email ID minhashs@indianoil.in

7. The Chief Town Planner, Department of Town & Country Planning, 6th Floor, PUDA Bhawan, Phase-8, Mohali

8. Monitoring Cell, Ministry of Environment and Forest, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.

Member Secretary (SEIAA)