WHEREAS, M/s. Indian Oil Corporation Ltd.-Haldia Refinery (hereinafter referred to as the industry) located at P.O.- Haldia Oil Refinery, Dist.- Purba Medinipur, Pin-721 606 is an oil refinery.

AND WHEREAS, an inspection of the industry was carried out by the official of West Bengal Pollution Control Board (hereinafter referred to as the Board) on 22/09/2016 and the following non-compliances were noticed:

- Tank bottom sludge/oil sludge was found to be kept in unlined tanks and open drums. Huge spillage of oily waste was noticed all over the ground.
- Insulation material was found to be dumped haphazardly with other scrap material in the open yard.
- Spent catalyst especially in FCCU area was found to be kept in temporary tanks and containers which had leakages all over and spillage of liquid material was noticed everywhere. Spilled material from the containers was contaminating the storm water drain.
- Designated storage area for waste resin was found empty. Instead, some bags containing the resin were found to be kept in an open area. Spilled resin from the bags was also noticed all over the ground.
- Substantial quantity of water flow was observed from catchpit no.6.
- Overflow of storm water holding tank in ETP area was observed.

AND WHEREAS, a show cause letter was issued to the industry by the Environmental Engineer & In-charge, Haldia Regional Office on 26/09/2016 for the above mentioned gross non-compliance and the industry was directed to submit a time bound action plan for remediation within fifteen days. Accordingly, the industry submitted a time bound action plan on 12/10/2016.

Analysis report of the effluent sample collected during inspection reveals that the industry has failed to meet the effluent discharge standard. The results are tabulated below:

<table>
<thead>
<tr>
<th>Date of sampling</th>
<th>Sampling point</th>
<th>Parameter</th>
<th>Results obtained (mg/l)</th>
<th>Permissible limit (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>22/09/2016</td>
<td>Final plant outlet to river Hooghly</td>
<td>TSS</td>
<td>26.0</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ammoniacal Nitrogen</td>
<td>20.90</td>
<td>15.0</td>
</tr>
</tbody>
</table>

Self-monitored stack gas analysis results submitted by the industry for the months of June 2016 and July 2016 show non-compliance. The results are as follows:

<table>
<thead>
<tr>
<th>Month</th>
<th>Stack connected to</th>
<th>PM value</th>
<th>Permissible limit of PM</th>
<th>SOX value</th>
<th>Permissible limit of SOX</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2016</td>
<td>MSQU</td>
<td>40.0</td>
<td>10</td>
<td>53.0</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>DHDS</td>
<td>44.0</td>
<td>10</td>
<td>166.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HGU #2 PDS</td>
<td>42.0</td>
<td>5</td>
<td>41.0</td>
<td></td>
</tr>
<tr>
<td>July 2016</td>
<td>MSQU</td>
<td>43.0</td>
<td>10</td>
<td>59.0</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>DHDS</td>
<td>40.0</td>
<td>10</td>
<td>149.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HGU #2 PDS</td>
<td>45.0</td>
<td>5</td>
<td>46.0</td>
<td></td>
</tr>
</tbody>
</table>

The Consent to Operate of the industry is valid upto 31/05/2019.
AND WHEREAS, the industry was called for a hearing on 17/112016 for non-compliance of environmental norms as observed during inspection by the Board officials.

AND WHEREAS, the representatives of the industry appeared in the hearing and agreed with the observation of the State Board. The Technical Committee of the Board directed the industry representatives to submit a detailed time bound action plan for proper waste management within seven days. Accordingly, the industry has submitted a letter dt. 02/12/2016 with the following proposals:

- Recent generation of tank bottom sludge have been kept in lined pit and tendering process for disposal of the sludge is under finalisation.
- Insulation materials, spent catalysts and waste resins are being disposed through common TSDF operator on a continuous basis.
- Water flow through catch pit no.6 has been arrested.
- Modification work to avoid overflow of storm water within ETP shall be taken up with short shutdown and shall be completed by March, 2017.
- The equipment and hardware in the refinery are designed to meet the revised standard for stack emission as per Gazette Notification dt. 18/03/2008.

NOW THEREFORE, considering the submission of the industry, M/s. Indian Oil Corporation Ltd.-Haldia Refinery located at P.O.-Haldia Oil Refinery, Dist.-Purba Medinipur, Pin-721 606 is hereby directed to comply with the followings:

1. The industry shall keep the tank bottom sludge/oil sludge in lined pits and take necessary precautionary measures to avoid spillage of oil sludge.
2. The industry shall keep the hazardous waste (category wise segregated manner) under the shed in an environmentally safe manner.
3. The industry shall ensure proper storage and disposal of hazardous wastes as per the provisions of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
4. House-keeping of the plant shall be improved.
5. The industry shall modify the storm water management system in ETP area to arrest overflow of storm water holding tanks within March, 2017.
6. The industry shall take necessary steps to maintain the stack emission level within permissible limits and shall upgrade/modify the APC systems, if required to comply with the standard.
7. The industry shall always operate the plant with efficient functioning of the pollution abatement systems so as to meet the gaseous emission standard as well as the liquid effluent discharge standard in future.
8. The industry shall execute a Bank Guarantee (proforma enclosed) of Rs.10,00,000/- (Rupees ten lakhs) only valid for twelve (12) months within fifteen (15) days from the date of issuance of this direction in favour of the WEST BENGAL POLLUTION CONTROL BOARD (Corporation Bank IFSC Code CORP 0000663) as an assurance to comply with the above direction.

The Senior Environmental Engineer, Haldia Regional Office of the Board is requested keep strict vigil on the industry and shall inspect the industry after March, 2017 and shall submit a report to the State Board.

This direction is issued in exercise of the powers conferred under the Water (Prevention & Control of Pollution) Act, 1974 and the Environment (Protection) Act, 1986 and Rules made thereunder, after being approved by the competent authority.

By Order,

Sd/-
Sr. Environmental Engineer & In-Charge Operation & Execution Cell
West Bengal Pollution Control Board