WHEREAS, M/s. Bakreswar Thermal Power Project (WBPDCL) [hereinafter referred to as the industry] located at P.O.- BKTPP, Dist.- Birbhum, Pin-731 104 is a coal based thermal power plant of total power generation capacity 1050 MW (5X210 MW). Each power generating unit has individual ESP as air pollution control device (APCD) and connected to individual stack of height 220m from G.L.

AND WHEREAS, the industry was earlier called for a hearing by the West Bengal Pollution Control Board (hereinafter referred to as the Board) on 07/10/2015 wherein the representative of the industry submitted that construction of the Clariflocculator for unit 4 and 5 will be completed by 31/12/2015 and new ash pond will be completed by 31/03/2017. The problem of transferring ash to silos of unit 4 & 5 will be taken care of and will be rectified at the earliest. Subsequently the Board issued a direction to the industry on 14/10/2015.

AND WHEREAS, the industry is inspected on regular interval by the Board. During inspection on 09/12/2015 four units (1, 2, 3 & 4) were found in operation generating about 186 MW, 173 MW, 172 MW & 188 MW respectively (total generation 719 MW, i.e. within 750 MW). Visible emission was noticed through the stack of unit #3 although ESP was functional. Dredging of guard pond was found in progress. Partition was given in the guard pond and 1st portion was in use. Ash pond overflow was observed. Work for 2nd ash pond was also going on. The industry has not yet rectified the problem of transferring the generated ash from unit nos. 4 & 5 to the ash silo. Installation of on-line effluent monitoring system for all required parameters are not yet done.

AND WHEREAS, during successive inspections by the Board officials on 27/11/2015 & 09/12/2015, effluent sample was collected and the industry failed to meet the liquid 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>27/11/2015</td>
<td>Ash pond overflow</td>
<td>TSS</td>
<td>140.0</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Guard pond overflow</td>
<td></td>
<td>1620.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Confluence point of river Chandrabhaga</td>
<td></td>
<td>198.0</td>
<td></td>
</tr>
<tr>
<td>09/12/2015</td>
<td>Guard pond overflow</td>
<td></td>
<td>284.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ash pond overflow</td>
<td></td>
<td>110.0</td>
<td></td>
</tr>
</tbody>
</table>

AND WHEREAS, the industry also failed to meet the PM emission standard as observed during inspections on 30/10/2015 and 11/12/2015. The results are tabulated below:-

<table>
<thead>
<tr>
<th>Date of sampling</th>
<th>Sampling point</th>
<th>Parameter</th>
<th>Results obtained (mg/Nm³)</th>
<th>Permissible limit (mg/Nm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/10/2015</td>
<td>Stack connected to Unit-3</td>
<td>PM</td>
<td>1438.33</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Stack connected to Unit-4</td>
<td></td>
<td>337.16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stack connected to Unit-5</td>
<td></td>
<td>631.52</td>
<td></td>
</tr>
<tr>
<td>11/12/2015</td>
<td>Stack connected to Unit-3 (Pass A)</td>
<td></td>
<td>1819.92</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stack connected to Unit-4</td>
<td></td>
<td>211.16</td>
<td></td>
</tr>
</tbody>
</table>
AND WHEREAS, the Board issued show cause notices for the above mentioned non-compliance of environmental norms. The industry submitted a reply to the show cause notices on 30/12/2015 mentioning that poor quality of coal with excessive high ash content often leads to failure to meet the PM emission standard. Unit 5 is under annual overhaul since 30th November, 2015 and starting of captive mines is in progress and procurement of good quality coal likely to start by May/June 2016. They have taken initiative for implementation of direct fly ash collection system from ESP hopper pneumatically through intermediate silo. Guard pond evacuation will be completed within 30 days.

AND WHEREAS, the Consent to Operate of the industry is valid upto 31/12/2016.

AND WHEREAS, the industry was called for a hearing at the Head office of the Board on 19/01/2016 for the non-compliance of environmental norms as was observed during successive inspections. The representatives of the industry appearing in the hearing submitted the following:-

- Construction work of the clariflocculator for unit 4 & 5 will be completed by 31/03/2016.
- Cleaning of ESP fields for unit 3 & 5 has been completed during annual shut down and presently unit 1 is under shut down for cleaning of ESP fields.
- On-line stack monitoring data is available in the WBPDCL website.
- Ambient air quality monitoring data will also be transferred to the WBPCB server within 10 days.
- Flow meter for measurement of effluent has been installed at the guard pond outlet.
- Problems associated with the ash conveying system to silos of unit 4 & 5 for collecting entire fly ash has been identified and it will take about 12 (twelve) months to rectify it.
- They will generate electricity in such a manner prioritizing ash management and utilization so that the TSS level in ash pond overflow effluent remains within permissible standard.
- Monthly ash utilization report will be submitted to the Board on regular basis.

AND WHEREAS, the industry also submitted an application on 27.01.2016 praying to lift the load restriction of 750 MW which was imposed vide order dated 14.10.2015.

NOW THEREFORE, considering the above, M/s. Bakreswar Thermal Power Project (WBPDCL) located at P.O.- BKTPP, Dist.- Birbhum, Pin-731 104 is hereby directed as follows:

1. That, the industry shall complete the construction work of the Clariflocculator for treatment and reuse of ash pond overflow of unit 4 and 5 within 31/03/2016.
2. That, the industry shall take necessary measures to ensure compliance with emission and effluent discharge standards.
3. That, the industry shall immediately arrange for connectivity with WBPCB server for continuous ambient air quality and stack monitoring data transmission.
4. That, the industry shall initiate necessary action to rectify the problems associated with ash conveying system to silos of unit 4 & 5 and make it operational within six months.
5. That, monthly ash utilization report shall be submitted to the Board on regular basis.
6. That, the industry shall maintain power generation within 750 MW (out of total generation capacity of 1050 MW) to reduce load on the existing ash pond till ash disposal/utilization problem is sorted out.
7. That, the industry shall install on-line effluent monitoring system for the required parameters at the earliest in order to comply with CPCB’s direction.
8. That, the industry shall take all possible measures to ensure that polluted effluent does not contaminate the river Chandrabhaga.
9. That, the industry shall execute a Bank Guarantee (proforma enclosed) of Rs. 10,00,000/- (Rupees Ten lakh) 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 as an assurance to comply with the environmental norms as well as Board’s direction.
The Environmental Engineer, Durgapur Regional Office of the Board is requested to oversee the compliance of this direction.

This direction is issued in exercise of the powers conferred under the provision of Section 33A of Water (Prevention & Control of Pollution) Act, 1974, Section 31A of Air (Prevention & Control of Pollution) Act 1981, Section 5 of the Environment (Protection) Act, 1986 and Rules made thereunder after being approved by the Competent Authority.

By Order,

Sd/-
Chief Engineer
Operation & Execution Cell
West Bengal Pollution Control Board