

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL(SZ)
AT CHENNAI**

O.A NO. 105 of 2021

Yanati Srinivasalu Reddy
S/o. Ramachandra Reddy
Nelatur Village & Post
Muthukur Mandal
SPSR Nellore District
A.P. – 524 344.

Phone: 9989773399 and 1 another

... APPLICANTS

VERSUS

The Chief Secretary
Govt. of Andhra Pradesh Secretariat
Velagapudi, Amaravathi
Andhra Pradesh
Ph: 0863 2440631

Email Id: cs@ap.gov.in and 9 others

... RESPONDENTS

REPORT FILED BY THE 8th RESPONDENT APPCB

Date-06-05-2023



**M/s MADHURI DONTI REDDY
ADVOCATE**

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A.P. POLLUTION CONTROL BOARD
T.T.D. SUPREME COURT OF INDIA**

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Counsel for 8th Respondent

**BEFORE NATIONAL GREEN TRIBUNAL
SOUTHERN BENCH, CHENNAI
ORIGINAL APPLICATION No. 105 of 2021**

**REPORT OF THE A.P.POLLUTION CONTROL BOARD IN THE MATTER OF O.A.NO.105
of 2021 SUBMITTED TO THE HON'BLE NATIONAL GREEN TRIBUNAL, SOUTH BENCH,
CHENNAI**

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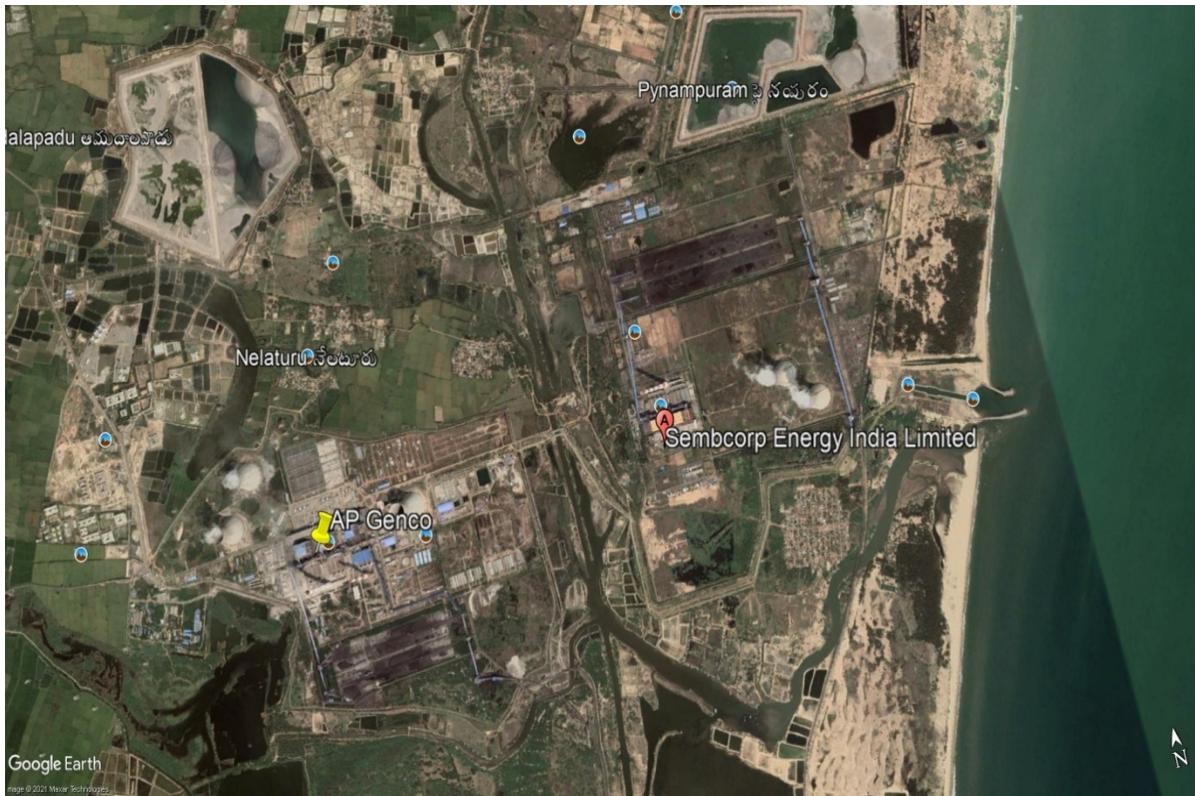
C. Raja Sekhar
6/5/2023

Environmental Engineer,
Andhra Pradesh Pollution Control Board,
Regional Office Nellore

Date: 06.05.2023
Place: Nellore

**ENVIRONMENTAL ENGINEER
A.P. POLLUTION CONTROL BOARD
Regional Office
NELLORE.**

**REPORT OF THE A.P. POLLUTION CONTROL BOARD IN THE MATTER OF
O.A.NO.105 of 2021 SUBMITTED TO HON'BLE NATIONAL GREEN TRIBUNAL,
SOUTH BENCH, CHENNAI**



Submitted to

**Hon'ble National Green Tribunal
South Bench, Chennai**

1. Preamble

Sri Y. Srinivasulu Reddy & Sri Y. Sasidhar Reddy of Nelatur village, Muthukur (M), SPSR Nellore district, filed O.A.105 of 2021 before the Hon'ble National Green Tribunal on the pollution problems arising from the thermal power plants. In the Original application no.105 of 2021, M/s. Sri Damodaram Sanjeevaiah Thermal Power Station, Nelatur&Pynampuram Villages, Muthukur Mandal, SPSR Nellore District and M/s. Thermal Powertech India Pvt Ltd, presently operating in the name & style of M/s. Sembcorp Energy India Limited (Project-1), Pynapuram (V), Muthukur (M), SPSR Nellore District are the respondents.

2. Orders of the Hon'ble Tribunal

The Hon'ble Tribunal heard the case on 09.02.2023 and issued the following orders:

“

1. *The learned Senior Advocate appearing for the 9th respondent would state that as per the report of the Joint Committee, out of 31 conditions imposed, 25 conditions have already been complied with. Even out of the 6 conditions, for complying with 2 of the conditions, they have time till 2024 and 2027. So far as the Ambient Air Quality is concerned, in particular the fugitive emissions, the damages have been assessed jointly and apportioned, which is incorrect.*
2. *As recorded in the earlier order, the Andhra Pradesh Pollution Control Board has issued notice dated 30.01.2023 under Section 33 (A) of the Water (Prevention and Control of Pollution) Act, 1974 and 31 (A) of the Air (Prevention and Control of Pollution) Act, 1981 and the said order was kept in abeyance till today.*
3. *It is vehemently contended by the learned Senior Advocate for the 9th respondent that almost 27 conditions have been complied with and they will demonstrate as to how the other non-compliances also are either not relevant or complied with. Similarly, the 8th respondent also seeks time to present his case.*
4. *The learned counsels are directed to file a tabular column of the conditions which are not complied with as per the Environmental Clearance (EC) and the compliance as per the Joint Committee report and their undertaking for any future compliance.*
5. *The Andhra Pradesh Pollution Control Board is also directed to inspect the units to find out any violations after the report of the Joint Committee and also the report about the compliances by the industries with reference to non-compliances noted by Joint Committee.*
6. *The notices issued by the Andhra Pradesh Pollution Control Board against Respondent Nos.8 & 9 are directed to be kept in abeyance until further orders from this Tribunal.*
7. *With the consent of all the learned counsels, list the matter on 24.03.2023 for final hearing.”*


6/5/2023
ENVIRONMENTAL ENGINEER
A.P. POLLUTION CONTROL BOARD
Regional Office
NELLORE.

3. Action taken by APPCB pursuant to Orders of the Hon'ble NGT:

As per the orders of the Hon'ble NGT order dated. 09.02.2023, the Board officials inspected M/s. Sri Damodaram Sanjeevaiah Thermal Power Station on 21.03.2023 and M/s. Sembcorp Energy India Limited (Project-1) on 17.03.2023 to verify the present compliance status.

3.1. M/s. Sri Damodaram Sanjeevaiah Thermal Power Station:

3.1.1 The Joint Committee made certain observations after inspecting the industry on 21.10.2021. The Board officials inspected the power plant on 21.03.2023, an the present status of the observations is submitted below

Sl.No	Joint Committee Observations	Present Compliance status
1.	The respondent unit M/s Sri Damodaram Sanjeevaiah Thermal Power Station unit was in operation at 2x550 MW against the consented capacity of 2x800MW. The unit is using 100% Indian coal with ash content of about 30% and Sulphur content of about 0.3%. As per the EC condition, the unit is required to use blended coal of Indian washed and Imported coal in the ratio of 70 &30%.	<p>M/s Sri Damodaram Sanjeevaiah Thermal Power Station unit was in operation and is operating with Unit-1 - 600 MW & Unit-2 - 430MW capacity.</p> <p>The Board vide order dt. 08.08.2022 issued CFO for another 800 MW unit, which is supposed to use 100% Indian washed coal with ash content less than 33.83% and Sulphur content less than 0.5%. The unit started commercial operations on 10.03.2023. The power plant is using washed Indian coal and raw Indian coal. Recently, they have used 18,267 Tons of imported coal during March, 2023.</p> <p>The MoEF&CC, Gol issued Environmental Clearance vide order dated.17.07.2007 to use blended coal, i.e. 70 % Indian Coal & 30 % Imported coal. Subsequently, the MoEF&CC, Gol issued a notification vide S.O.1561 (E) dated. 21.05.2020 by amending sub-rule (8) in rule 3 of Environment Protection Rules, which is a regulation on ash content (i.e. <34%) in coal. As per the notification, the</p>

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		power plant can use the coal without stipulations with regard to ash content or distance subject to compliance with the conditions stipulated in the Notification. In view of the above Notification, the regulation on coal sources may not be insisted.
2.	The unit is having requisite permissions /clearances from AP Boiler Inspection Department, Dy. Chief Controller of Explosives, MOEF&CC, Dy. Chief Inspector of Factories and Panchayath raj Department, Andhra Pradesh Pollution Control Board, PESO except for Department of Fire.	The industry applied for clearance from the Fire Department and yet to pay the required fee.
3.	The unit has valid integrated consent under Water & Air and Authorisation under H&OW Rule 2016, however, 26 out of 41 conditions imposed were found complying and the remaining 15 conditions were found non-compliance. The major non-compliance observed are: Non-utilization of 100% fly-ash & bottom ash.	The total utilization of ash for the period April 22 to March 23 is 89.32%.
	In adequate measures taken for controlling fugitive emissions from coal storage yard and Ash pond.	The power plant provided two sheds for coal storage (89m x 117.5m x 2nos). The coal yard is provided with MDSS. The internal roads are required to be cleaned at regular intervals. The industry needs to improve the measures for control of fugitive emissions.
	Poor operation, maintenance & calibration of CAAQM stations and online monitoring system installed to monitor the effluent & emissions.	The industry installed four CAAQM stations and installed emission monitoring systems for unit-I & II. The industry revamped CEMS & CAAQMS after the visit of the Joint Committee. The present status of the

		<p>functioning of CEMS & CAAQMS is submitted below:</p> <p><u>CEMS: Unit-I:</u> PM monitor- Functioning. SO₂ Monitor- Functioning NO_x monitor - Functioning.</p> <p><u>CEMS: Unit-II:</u> PM monitor- Functioning. SO₂ Monitor- Functioning NO_x monitor - Functioning.</p> <p><u>CAAQMS - Switch yard :</u> PM₁₀ - Installed and under repair. (Power plant issued a purchase order for rectification) PM_{2.5} - Functioning SO₂ - Functioning NO_x - Functioning</p> <p><u>CAAQMS - Coal gate:</u> PM₁₀ -Functioning. PM_{2.5} - Functioning SO₂ - Functioning NO_x - Functioning</p> <p><u>CAAQMS - Field Hostel:</u> PM₁₀ -Functioning. PM_{2.5} - Functioning SO₂ - Functioning NO_x - Functioning</p> <p><u>CAAQMS - Ash pond:</u> PM₁₀ -Functioning. PM_{2.5} - Functioning SO₂ - Functioning NO_x - Functioning</p> <p>The power plant provided a pH meter at the outlet of ETP, but not functioning.</p>
	In adequate green development around the plant.	The industry has developed a green belt in an area of 420 Acres, as stipulated in the EC.
4.	As per the source emissions monitoring conducted during the committee visit was found meeting with prescribed standards of APPCB (Table No 2). But Online monitoring system installed found not in operation since one year.	<p>The industry installed emission monitoring system for unit-I & II. The industry revamped CEMS after the visit of the Joint Committee. The present status of the functioning of CEMS is submitted below:</p> <p><u>CEMS: Unit-I:</u></p>

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		<p>PM monitor- Functioning. SO₂ Monitor- Functioning NO_x monitor - Functioning.</p> <p>CEMS: Unit-II: PM monitor- Functioning SO₂ Monitor- Functioning NO_x monitor -Functioning.</p>
5.	As per the analysis results of samples taken from ash pond Seepage water confirms the accumulation of TDS due to using sea water for making ash slurry till March,2021. In spite of using sweet water for making ash slurry accumulated TDS contributing to ash pond seepage water.	At the time of the Joint committee inspection, the industry used to dispose ash slurry into a diversion bund. Now, the industry completed the bund rise works in the ash pond and ash is being disposed into ash pond. The decanted water from the ash pond is totally recycled. The industry is using salt water for ash slurry purpose.
6.	The unit has ETP of capacity 75 KLD but operating at 5 to 45 KLD only which confirms that failure of tapping of all effluent and discharging untreated effluent through storm drain which is passing inside the premises. The analysis results of samples taken from storm water drains indicate that confirms the discharging of untreated effluent into drain.	<p>The ETP is in operation.</p> <p>The stormwater drains are filled with ash, which indicates that there is no proper management of effluent.</p>
7.	As per the conditions of CTO the unit is required to operate 4 CAAQM stations to monitor Ambient Air Quality, out 4 stations two stations were found not working and two stations found partially working.	<p>The industry installed four nos CAAQM stations. The industry revamped CAAQMS after the visit of the Joint Committee. The present status of the functioning of CAAQMS is submitted below:</p> <p>CAAQMS - Switch yard : PM₁₀ - Installed and under repair. (Power plant issued a Purchase order for rectification) PM_{2.5} - Functioning SO₂ - Functioning NO_x - Functioning</p> <p>CAAQMS - Coal gate : PM₁₀ -Functioning. PM_{2.5} - Functioning SO₂ - Functioning NO_x - Functioning</p> <p>CAAQMS - Field Hostel : PM₁₀ -Functioning. PM_{2.5} - Functioning</p>

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		<p>SO₂ - Functioning NO_x - Functioning</p> <p>CAAQMS - Ash pond : PM₁₀ -Functioning. PM_{2.5} - Functioning SO₂ - Functioning NO_x - Functioning</p>
8.	The unit is required to utilize 100 % fly ash but unit is utilizing only 58 % of generated fly-ash and remaining ash is found accumulated in ash pond.	<p>The total utilization of ash for the period April 22 to March 23 is 89.32%.</p> <p>The MoEF&CC, Gol vide S.O.No.5481 (E) dated. 31.12.2021 issued fly ash notification 2021 in suppression of earlier notification. As per this notification, the industry shall achieve 100 % ash disposal in 4 years cycle. Otherwise, the power plant is liable for Environmental Compensation</p>
9.	The unit is required to re-circulate 100% ash pond water for slurry making but huge quantity of discharge of seepage water was observed into the storm water drain. From the storm water drain it is joining the nearby canal which is being used for aquaculture farming.	The decanted water from the ash pond is totally recycled.

Compliance status of the specific conditions stipulated in EC Order No: J-13011/20/2007-IA-II (T) dated.17.07.2007 issued to M/s. Sri Damodaram Sanjeevaiah Thermal Power Station, Nelatur & Pynampuram Villages, Muthukur Mandal, SPSR Nellore District

Sl.No	Conditions	Compliance
1	No activities in CRZ area shall be taken up without obtaining requisite prior clearance under the provisions of the CRZ Notification, 1991.	Complied. The power plant has obtained CRZ clearances to undertake activities such as Sea water intake & outfall facilities in the CRZ area.
2	Supercritical technology shall be adopted.	Complied.
3	The Indian washed coal and imported coal shall be blended in the ratio of 70% and 30%. The blended coal to be used as fuel shall have sulphur content not exceeding 0.62% and ash content not exceeding 28.3%.	<p>The power plant is mostly using Indian coal. The details for the three months are submitted below:</p> <p>January,23 Indian coal - 2,51,205 Tons</p>

		<p>February,23 Indian coal -3,02,865 Tons</p> <p>March,23 Indian coal - 1,34,695 Tons Imported coal -18,267 Tons</p> <p>The MoEF&CC, Gol issued Environmental Clearance vide order dated.17.07.2007 to use blended coal i.e. 70 % Indian Coal & 30 % Imported coal. Subsequently, the MoEF&CC, Gol issued notification vide S.O.1561 (E) dated. 21.05.2020 by amending sub-rule (8) in rule 3 of Environment Protection Rules, which is a regulation on ash content (i.e. <34%) in coal. As per the notification, the power plant can use the coal without stipulations with regard to ash content or distance subject to compliance with the conditions stipulated in the Notification. In view of the above Notification, the regulation on coal sources may not be insisted.</p>
4	Space provision shall be made for installation of FGD of requisite efficiency of removal of SO ₂ , if required at later stage.	Complied.
5	A bi-flue stack of 275 m height with exit velocity of not less than 29.2 m/s shall -be provided with continuous online monitoring system.	Complied.
6	High efficiency Electrostatic Precipitator (ESPs) having efficiency of 99.9% shall be installed so as to ensure that particulate emissions do not exceed 100 mg/Nm ³	Complied.
7	Low NO _x burners shall be provided.	Complied.
8	Desalination plant shall be installed for meeting the. sweet water requirement of the project	Complied.
9	Closed Cycle Cooling system with natural draft cooling towers shall be provided.	Complied.
10	Treated effluents conforming to the prescribed standards shall be re-circulated and reused with in the plant. No effluents shall be discharged outside the plant	Not complied. Effluent discharges were observed in the stormwater drains near the compound

	boundary except during monsoon season.	wall, which joins into Rentamallaiah drain which finally confluence in Buckingham canal.																		
11	The condenser water blow down to be discharged into the sea shall be at ambient temperature from the cold water side.	Complied.																		
12	Rain water harvesting should be adopted. Central Groundwater Authority / Board shall be consulted for finalization of appropriate rain water harvesting technology within a period of three months from the date of clearance.	Complied.																		
13	Fly ash shall be collected in Silos in dry form and bottom ash in hydro bins and its 100% utilization shall be ensured from the day of the commissioning of the plant. In emergency, the unutilized fly ash/ bottom ash shall be disposed off at the proposed ash disposal site through HCSD system. Borrow earth shall not be taken from ash pond area for construction of ash dyke etc.	<p>Partially complied.</p> <p>The industry has provided silos of 2x2000 m³ capacity in the plant and sending the flyash to user units.</p> <p>Bottom ash is being sent to ash pond in slurry form. Part of the bottom ash is being disposed to user units through trucks. Ash disposal details for the period 2015 to 2023 is submitted below:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ash utilization</th> </tr> </thead> <tbody> <tr> <td>2015-16</td> <td>23.61 %</td> </tr> <tr> <td>2016-17</td> <td>34.77 %</td> </tr> <tr> <td>2017-18</td> <td>72.82%</td> </tr> <tr> <td>2018-19</td> <td>64.83 %</td> </tr> <tr> <td>2019-20</td> <td>53.28%</td> </tr> <tr> <td>2020-21</td> <td>91.7%</td> </tr> <tr> <td>2021-22</td> <td>69.4%</td> </tr> <tr> <td>2022- 23 (upto Mar,23)</td> <td>89.32%</td> </tr> </tbody> </table> <p>The industry not yet achieved 100 % ash disposal. The MoEF&CC, Gol vide S.O.No.5481 (E) dated. 31.12.2021 issued fly ash notification 2021 in suppression of earlier notification. As per this notification, the industry shall achieve 100 % ash disposal in 4 years cycle. Otherwise, the power plant is liable for</p>	Year	Ash utilization	2015-16	23.61 %	2016-17	34.77 %	2017-18	72.82%	2018-19	64.83 %	2019-20	53.28%	2020-21	91.7%	2021-22	69.4%	2022- 23 (upto Mar,23)	89.32%
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		Environmental Compensation.
14	Regular monitoring of ground water quality including heavy metals shall be undertaken around ash dyke and the project area to ascertain the change, if any, in the water quality due to leaching of contaminants from ash disposal area.	Partially complied. The power plant is conducting groundwater quality in and around ash pond area for parameters pH, conductivity, TDS, Turbidity, Total hardness, CaH, MgH and Chlorides. The industry needs to monitor heavy metals also.
15	Noise levels shall be limited to 75 dBA. For people working in the high noise area, protective devices such as earplugs etc. shall be provided.	Complied.
16	A greenbelt of 100 m width shall be developed all around the plant boundary and ash dyke covering an area of at least 170 ha.	Complied.
17	Regular monitoring of the air quality shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Six monthly reports shall be submitted to this Ministry.	Complied. The power plant has established 4 nos of CAAQM stations and is connected to the APPCB server. The status of functioning is submitted below: <u>CAAQMS - Switch yard:</u> PM ₁₀ - Installed and under repair. (Power plant issued P.O for rectification) PM _{2.5} - Functioning SO ₂ - Functioning NO _x - Functioning <u>CAAQMS - Coal gate :</u> PM ₁₀ -Functioning. PM _{2.5} - Functioning SO ₂ - Functioning NO _x - Functioning <u>CAAQMS - Field Hostel :</u> PM ₁₀ -Functioning. PM _{2.5} - Functioning SO ₂ - Functioning NO _x - Functioning <u>CAAQMS - Ash pond :</u> PM ₁₀ -Functioning. PM _{2.5} - Functioning SO ₂ - Functioning NO _x - Functioning
18	For controlling fugitive dust, regular sprinkling of water in the coal handling area	Partially complied. The power plant provided two

	and other vulnerable areas of the plant shall be ensured.	sheds for coal storage (89m x 117.5m x 2nos). The coal yard is provided with MDSS. The internal roads are required to be cleaned at regular intervals. The industry needs to improve the measures for control of fugitive emissions
19	The project affected people shall be suitably rehabilitated and compensation paid in accordance with the R&R policy of the State Government.	Complied.
20	The project proponent should advertise in at least two local newspapers widely circulated in the region around the project, one of which should be in the vernacular language of the locality concerned, informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Board/Committee and may also be seen in the Website of the Ministry of Environment and Forests in the http://envfor.nic.in .	Complied.
21	A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.	Complied.
22	Half yearly report on the status of implementation of the conditions and environmental safeguards should be submitted to this Ministry, the Regional Office, CPCB and SPCB.	Complied.
23	Regional Office of the Ministry of Environment & Forests located at Bangalore will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report, Environment Management Plan and the additional information / clarifications submitted subsequently should be forwarded to the Regional Office for their use during monitoring.	Complied.
24	Separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. These cost should be included as part of the project cost. The funds earmarked for the environment protection measures should not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	Partially complied. The representative of the power plant informed that they are allocating annual budget for the implementation of Environmental protection measures as required.

25	Full cooperation should be extended to the Scientists/Officers from the Ministry and its Regional Office at Bangalore / the CPCB / the SPCB during monitoring of the project.	Complied.
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The MoEF&CC, Gol vide EC No. J-13011/20/2007-IA-II (T) dated 03.05.2012 for extension of EC validity and shifting of Ash Pond.

26	The project proponent shall upload the status of compliance of the conditions stipulated in the environmental clearance issued vide this Ministry's letter of even no. Dated 17.07.2007 in its website and updated periodically and also simultaneously send the same by e-mail to the Regional Office of the Ministry of Environment and Forests.	Complied.
27	Criteria pollutants levels including NO _x , RSPM (PM ₁₀ & PM _{2.5}), SO _x (from stack & Ambient air) shall be regularly monitored and results displayed in your website and also at the main gate of the power plant	Partially complied. The power plant provided a display Board at the main gate to display pollutant parameter values but not displayed in their website.
28	A three tier thick green belts on either side of the colony and Ash Pond shall be developed to prevent fugitive emissions and status of implementation shall be reported to the Regional Office of the Ministry regularly.	Partially complied. The power plant provided plantation around the ash pond. But survival/ growth is less. The power plant needs to improve the green belt around the ashpond.

The MoEF&CC, Gol vide EC No. J-13011/20/2007-IA-II (T) pt. dated 03.09.2019 for Amendment in EC.

1	The greenbelt to be development in 420 acres as per the commitment made in the Environment Management Plan in the Phase-II EIA shall be clearly demarcated and developed within a period of two years. The action plan shall clearly demarcate the area & land survey numbers, number of saplings to be planted, budget earmarked, number of persons engaged, maintenance work such as providing water and manure and time bound action plan, which is to be submitted to the Ministry, its regional office and APPCB within 3 months.	Complied.
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2	A bank guarantee of Rs. 10 Crores is to be deposited with the Andhra Pradesh Pollution Control Board for developing green belt in an area of 420 acres within two years, failing which the amount will be forfeited to the APPCB. The APPCB shall conduct a site visit and submit the report on greenbelt development in 420 acres in this regard. The APPCB after submission of site visit report may directly forfeit the amount, in case the greenbelt is not satisfactorily developed.	Partially complied. The power plant has not submitted the Bank Guarantee of Rs.10 Crores. The power plant vide lr. dated.01.04.2020 requested to waive submission Bank Guarantee and also accord permission to complete the total green belt by end of March,2022. Now the Power plant achieved green belt of 420 acres.
3	A committee comprising of members from State Forest Department, State Biodiversity Board, State Wildlife Department and AP Pollution Control Board (Nodal Officer) shall be formed to plan, guide the selection of species & plan of development and to oversee the progress of the greenbelt. Expenditure towards quarterly meetings and functioning of the committee is to be borne by M/s APPDCL (Proponent). The Committee has to submit the six monthly report on progress of the greenbelt to the Ministry and its Regional Office.	Complied.
4	The temporary diversion bund with an area of 30 acres is to be carved out from second ash pond which was already constructed.	Subsequently modified.
5	The remaining area (119 acres) as part of second ash pond shall be restored and thick greenbelt shall be developed. Subsequently, temporary diversion bund of 30 acres shall be abandoned as committed by the Project Proponent	The MoEF&CC, Gol vide amendment lr.no.J-13012/25/2012-IA.II(T) dated.27.02.2020 permitted the power plant to use an additional area 30 acres for disposal of ash.
6	Increasing the dyke height of existing ash pond from 5 m to 10 m is permitted.	Complied. The power plant increased the dyke wall from 5m to 10 m.
7	The greenbelt of 420 acres as part of the EIA/EMP is to be developed. In case, sufficient land is not available, it may acquired at suitable location for developing greenbelt. Funds in this regard shall be allocated and time bound action plan shall be submitted within 3 months.	Complied.
8	The unutilized ash in the domestic market shall be exported as the	Not complied. The unutilized ash is being

	Krishnapatnam port is located at 5 km from the power plant.	stored in ash pond. The industry not yet achieved 100 % ash disposal. The MoEF&CC, Gol vide S.O.No.5481 (E) dated. 31.12.2021 issued fly ash notification 2021 in suppression of earlier notification. As per this notification, the industry shall achieve 100 % ash disposal in 4 years cycle. Otherwise, the power plant is liable for Environmental Compensation.
9	A study on effect of fly ash on surrounding agriculture fields shall be conducted by Acharya N.G. Ranga Agricultural University. Findings of the study along with report shall be submitted to the Ministry and its Regional Office within 6 months.	Complied.
10	The desalination plant with capacity of 60 MLD under construction shall operationalized within six months. Mixing of saline water with flyash for disposal into the ash pond shall not permitted once desalination plant is commissioned is to prevent saline water intrusion into the groundwater.	Yet to be complied. The power plant representative informed that they will use non-saline water for ash handling from 1 st June 2023.
11	Any directions issued by the State Pollution Control Board w.r.t. submission of bank guarantee, etc shall be complied	Agreed to comply.
12	The permission is subjected to the outcome of Civil Appeal No. 4699/2014 which is pending before Hon'ble Supreme Court.	Agreed to comply.

Compliance status of the conditions stipulated in Schedule -B of Consent Order No:APPCB/VJA/NLR/159/HO/CFO/2017 Date:06.05.2022 issued to M/s. Sri Damodaram Sanjeevaiah Thermal Power Station, Nelatur & Pynampuram Villages, Muthukur Mandal, SPSR Nellore District

Sl.No	Condition	Compliance
1	The industry shall comply with the following:	
	The industry shall obtain valid Fire NOC, PLI Policy and PESO License	Partially complied. The power plant has obtained all required licenses except Fire NOC renewal.
	The industry shall comply with following conditions stipulated in the earlier CFO order viz.	

	a. Three tier thick green belt on either side of the colony.	Complied. The power plant has developed 420 acres of the green belt as stipulated in the EC.
	b. Housekeeping at coal stockyard.	Partially complied. The power plant provided two sheds for coal storage (89m x 117.5m x 2nos). The coal yard is provided with MDSS. The internal roads are required to be cleaned at regular intervals. The industry need to improve the measures for control of fugitive emissions.
	c. Regular calibration of online monitoring system.	Complied. The power plant submitted the calibration reports of the online monitoring systems.
	d. providing water sprinkling system to control fugitive dust emissions in the ash pond	Not complied. The power plant has not yet provided water sprinkling system to control fugitive dust emissions in the ash pond.
	The industry shall operate and maintain continuous online stack monitoring systems & 4 CAAQM stations and report the compliance to the Board.	Complied. The power plant has established 4 nos of CAAQM stations and is connected to the APPCB server. The status of functioning is submitted below: <u>CAAQMS - Switch yard :</u> PM ₁₀ - Installed and under repair. (Power plant issued P.O for rectification) PM _{2.5} - Functioning SO ₂ - Functioning NO _x - Functioning <u>CAAQMS - Coal gate :</u> PM ₁₀ -Functioning. PM _{2.5} - Functioning SO ₂ - Functioning NO _x - Functioning <u>CAAQMS - Field Hostel :</u> PM ₁₀ -Functioning. PM _{2.5} - Functioning SO ₂ - Functioning NO _x - Functioning

		<p><u>CAAQMS - Ash pond :</u> PM₁₀ -Functioning. PM_{2.5} - Functioning SO₂ - Functioning NO_x - Functioning</p>
	The industry shall operate the Continuous Emission Monitoring System(CEMS).	<p>The industry installed emission monitoring system for unit-I & II. The industry revamped CEMS after the visit of the Joint Committee. The present status of the functioning of CEMS is submitted below:</p> <p><u>CEMS: Unit-I:</u> PM monitor- Functioning. SO₂ Monitor- Functioning NO_x monitor - Functioning.</p> <p><u>CEMS: Unit-II:</u> PM monitor- Functioning SO₂ Monitor- Functioning NO_x monitor -Functioning</p>
	As per the analysis results of samples taken from ash pond Seepage water confirms the accumulation of TDS due to using sea water for making ash slurry till March, 2021.	<p>Partially complied. The desalination plant has been commissioned and desalinated water is being used for mixing with flash for disposal into the ash pond with effect from 03.02.2021. However, the power plant is using salt water also for slurry purposes.</p>
	The unit has ETP of capacity 75 KLD but operating at 5 to 45 KLD only which confirms that failure of tapping of all effluent and discharging untreated effluent through storm drain which is passing inside the premises. The industry shall not discharge treated or untreated effluents into the drains.	<p>Not complied. Effluent discharges were observed in the stormwater drains near the compound wall, which joins into Rentamallaiah drain, which finally confluence in Buckingham Canal.</p>
	The industry shall achieve 100 % fly ash utilization.	<p>To be achieved in 4 years cycle. The industry not yet achieved 100 % ash disposal. The MoEF&CC, Gol vide S.O.No.5481 (E) dated. 31.12.2021 issued fly ash notification 2021 in suppression of earlier notification. As per this notification, the industry shall achieve 100 % ash disposal in 4 years cycle. Otherwise, the power plant is liable for Environmental Compensation.</p>

	The unit is required to re-circulate 100 % ash pond water for slurry making but significant quantity of discharge of seepage water was observed into the storm water drain. From the storm water drain it is joining the nearby canal which is being used for aquaculture. The industry shall not discharge seepage water into nearby canal.	Complied. The decanted water from the ash pond is totally recycled.																		
	The committee constituted by the Hon'ble NGT recommended environmental compensation of Rs. 1,84,04,567/- to the industry. The unit shall pay environmental compensation as per the directions of Hon'ble NGT.	Shall comply the directions of the Hon'ble NGT.																		
	The committee recommended that the consent be renewed without prejudice to the contention of the Board in Hon'ble Courts /Tribunals.	Agreed to comply.																		
	<u>Water Pollution</u>																			
1	The industry shall treat the effluents so as to conform to the standards stipulated under Environment (Protection) Rules, 1986 for discharge into sea notified by MoEF, GOI in vide G.S.R.422 (E), dated 19.05.1993 and its amendments thereof. The blow down water discharge into sea shall be maintained at ambient temperature from cold water side.	Complied.																		
2	Treated trade and domestic effluents utilized from green belt development shall conform to the following standards of onland for irrigation standards and as stipulated under MoEF, GOI Notification G.S.R.422 (E), dated 19.05.1993 and its amendments thereof.	Complied.																		
3	The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below <table border="1" data-bbox="321 1884 889 2454"> <thead> <tr> <th>Sl. No.</th> <th>Purpose</th> <th>Quantity in KLD</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>For cooling tower make up (saline water)</td> <td>3,13,560</td> </tr> <tr> <td>2.</td> <td>For Desalination plant feed</td> <td>15,874</td> </tr> <tr> <td></td> <td>a) DM Plant</td> <td>1380</td> </tr> <tr> <td></td> <td>b) For dust suppression (coal dust suppression + dry fog systems)</td> <td>1632</td> </tr> <tr> <td></td> <td>c) HVAC make up & auxiliary</td> <td>2454</td> </tr> </tbody> </table>	Sl. No.	Purpose	Quantity in KLD	1.	For cooling tower make up (saline water)	3,13,560	2.	For Desalination plant feed	15,874		a) DM Plant	1380		b) For dust suppression (coal dust suppression + dry fog systems)	1632		c) HVAC make up & auxiliary	2454	Complied.
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4	<p>The Industry shall also comply with water consumption limits and time lines notified by the MoEF&CC, GOI in the G.S.R. 3305 (E), dated 07.12.2015 as applicable.</p> <table border="1"> <thead> <tr> <th>Industry</th> <th>Parameter</th> <th>Standards</th> </tr> </thead> <tbody> <tr> <td>Thermal Power Plant (Water consumption limit)</td> <td>Water consumption</td> <td>All plants with Once Through Cooling (OTC) shall install Cooling Tower (CT) and achieve specific water consumption upto maximum of 3.5 m³/MWh within a period of two years from the date of publication of this notification. All existing CT-based plants reduce specific water consumption upto maximum of 3.5 m³/MWh within a period of two years from the date of publication of this notification.</td> </tr> </tbody> </table>	Industry	Parameter	Standards	Thermal Power Plant (Water consumption limit)	Water consumption	All plants with Once Through Cooling (OTC) shall install Cooling Tower (CT) and achieve specific water consumption upto maximum of 3.5 m ³ /MWh within a period of two years from the date of publication of this notification. All existing CT-based plants reduce specific water consumption upto maximum of 3.5 m ³ /MWh within a period of two years from the date of publication of this notification.	<p>Not applicable.</p> <p>The MoEF&CC, GOI vide notification dated. 28.06.2018 issued an amendment stating that water consumption limits are not applicable to thermal power plants using sea water.</p>			
Industry	Parameter	Standards									
Thermal Power Plant (Water consumption limit)	Water consumption	All plants with Once Through Cooling (OTC) shall install Cooling Tower (CT) and achieve specific water consumption upto maximum of 3.5 m ³ /MWh within a period of two years from the date of publication of this notification. All existing CT-based plants reduce specific water consumption upto maximum of 3.5 m ³ /MWh within a period of two years from the date of publication of this notification.									
	AIR POLLUTION:										
5	<p>The emissions shall not contain constituents in excess of the prescribed limits mentioned below:</p> <table border="1"> <thead> <tr> <th>Chimney No.</th> <th>Parameter</th> <th>Emission Standards</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Particulate Matter</td> <td>100 mg/Nm³</td> </tr> </tbody> </table>	Chimney No.	Parameter	Emission Standards	1	Particulate Matter	100 mg/Nm ³	Complied.			
Chimney No.	Parameter	Emission Standards									
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6	<p>The Industry shall also comply with standards notified by the MoEF&CC, GOI in the G.S.R. 3305 (E), dated 07.12.2015 and G.S.R. 682 (E), dated 07.03.2016 as applicable</p> <table border="1"> <thead> <tr> <th>Chimney</th> <th>Parameter</th> <th>Emission Standards</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Chimney	Parameter	Emission Standards				<p>Shall be complied by 31.12.2026.</p> <p>The MoEF&CC, GOI vide S.O.No.682 (E) dated. 05.09.2022 issued an amendment with regard to compliance date for</p>			
Chimney	Parameter	Emission Standards									

	<p>No. 1 TPPs (units) installed after 1st January, 2004, upto 31st December, 2016*</p> <table border="1" data-bbox="418 317 932 948"> <tr> <td>Particulate Matter</td> <td>50 mg/Nm³</td> </tr> <tr> <td>Sulphur Dioxide (SO₂)</td> <td>600 mg/Nm³ (units smaller than 500 MW capacity units) 200 mg/Nm³ (for units having capacity of 500 MW and above)</td> </tr> <tr> <td>Oxides of Nitrogen(NO_x)</td> <td>300 mg/Nm³</td> </tr> <tr> <td>Mercury (Hg)</td> <td>0.03 mg/Nm³</td> </tr> </table> <p>*TPPs (units) shall meet the limits within two years from the date of publication of the notification G.S.R. 3305 (E), dated 07.12.2015.</p>	Particulate Matter	50 mg/Nm ³	Sulphur Dioxide (SO ₂)	600 mg/Nm ³ (units smaller than 500 MW capacity units) 200 mg/Nm ³ (for units having capacity of 500 MW and above)	Oxides of Nitrogen(NO _x)	300 mg/Nm ³	Mercury (Hg)	0.03 mg/Nm ³	achievement of SO ₂ emission standards by 31.12.2026.
Particulate Matter	50 mg/Nm ³									
Sulphur Dioxide (SO ₂)	600 mg/Nm ³ (units smaller than 500 MW capacity units) 200 mg/Nm ³ (for units having capacity of 500 MW and above)									
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7	<p>The industry shall ensure compliance with ambient air quality standards of PM₁₀ - 100 micro grams/ m³; PM_{2.5} - 60 micro grams/ m³; SO₂ - 80 micro grams/ m³; NO_x - 80 micro grams/m³, (day average standards).</p> <p>The industry shall comply with National Ambient Air Quality Standards stipulated in CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009 and also the Noise standards: Day time (6 AM to 10 PM) - 75 dB (A) Night time (10 PM to 6 AM) - 70 dB (A)</p>	<p>Partially complied.</p> <p>As per the CAAQM data, the industry is occasionally exceeding the particulate matter standards.</p>								
8	<p>The industry shall comply with emission limits for DG sets of capacity upto 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 and G.S.R.448(E), dated 12.07.2004 under the Environment (Protection) Act Rules. In case of DG sets of capacity more than 800 KW shall comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial no.96, under the Environment (Protection) Act, 1986.</p>	Complied.								
	GENERAL:									
9	<p>The industry shall maintain flow meters preferably Electro Magnetic flow meters with totalisers for water and effluent quantity measurements for different streams of effluents and different categories of water usage stipulated in this order</p>	<p>Not complied.</p> <p>The power plant yet to provide Electro Magnetic flow meters with totalisers for water and effluent quantity measurements</p>								

		for different streams of effluents and different categories of water usage
10	The industry shall maintain the following records and the same shall be made available to the inspecting officers of the Board: a) Daily production details (ER-1 Central Excise Returns). b) Quantity of Effluents generated, treated, recycled/reused and disposed to sea. c) Log Books for pollution control systems. d) Characteristics of ambient air, effluents and emissions. e) Hazardous/non hazardous solid waste generated and disposed. f) Inspection book. g) Manifest copies of hazardous waste	Complied.
11	The industry shall operate the STP and report the compliance to RO: Nellore regularly	Complied.
12	A detailed action plan for disposal of bottom ash shall be submitted indicating quantities and disposal areas to RO, Nellore	Partially complied. Bottom ash is being sent to the ash pond in slurry form. Part of the bottom ash is being disposed to user units through trucks.
13	The industry shall comply with Fly Ash Notification dated 03.11.2009 and its amendments thereof, issued by MoEF, GOI and submit monthly reports to the RO: Nellore.	Shall be achieved in 4 years cycle. The industry not yet achieved 100 % ash disposal. The MoEF&CC, GoI vide S.O.No.5481 (E) dated. 31.12.2021 issued fly ash notification 2021 in suppression of earlier notification. As per this notification, the industry shall achieve 100 % ash disposal in 4 years cycle. Otherwise, the power plant is liable for Environmental Compensation.
14	The industry shall not use any fuels other than those permitted in this order without prior consent from the Board. They shall maintain log registers on type of fuels & daily consumption etc., and shall furnish consolidated records to RO: Nellore for every three months.	Partially complied. The power plant is using mostly Indian coal instead of blended coal.

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15	The industry shall provide & maintain interlocking facility between APC equipment (ESP) and fuel feeding system, so as that the feeding of the fuel will be stopped automatically in case of the ESP fails/tripping's are occurred.	Complied.
16	The industry shall operate sufficient water sprinklers at coal handling areas	Complied.
17	Provision shall be maintained for installation of flue gas Desulphurization of requisite efficiency for removal of SO ₂ .	Complied.
18	Dry collection and disposal system shall be provided for disposal of fly ash. 100% of fly ash shall be utilized from day one.	<p>Shall be achieved in 4 years cycle</p> <p>The industry has not yet achieved 100 % ash disposal. The MoEF&CC, GoI vide S.O.No.5481 (E) dated. 31.12.2021 issued fly ash notification 2021 in suppression of earlier notification. As per this notification, the industry shall achieve 100 % ash disposal in 4 years cycle. Otherwise , the power plant is liable for Environmental Compensation.</p>
19	The industry shall store the fly ash in silos only and dispose the same fromtime to time without storing it openly. The industry shall under take loading the fly ash directly into the trucks from ash silo.	<p>Complied.</p> <p>The industry has provided silos of 2x2000 m³ capacity in the plant and sending the fly ash to user units.</p>
20	The industry shall ensure that regular mock drills shall be carried out for checking on-site emergency plan prepared and also to ensure changes / improvements required in the plant.	Complied.
21	A three tier thick green belt on either side of the colony as stipulated in the EC order dated 03.05.2012 and 50m width green belt all along the periphery of ashpond shall be developed to prevent fugitive emissions. Green belt of 50 to 100m around the plant boundary and 100m on eastern side shall be developed. A detailed action plan shall submit to the RO: Nellore with specific time frames and extent/ location of green belt development	<p>Partially complied.</p> <p>The power plant developed a green belt in an area of 420 acres as stipulated in the EC.</p> <p>The power plant needs to improve the green belt around the ash pond.</p>
22	Action plan for development of green belt in an area of 270 acres shall be submitted within one month, so as to comply with condition stipulated in EC order dated 17.07.2007 (A greenbelt of 100m. width shall be developed all around the plant boundary and ash dyke covering an area of	<p>Partially complied.</p> <p>The power plant developed green belt in an area of 420 acres as stipulated in the EC.</p>

	at least 420 acres).	The power plant needs to improve the green belt around the ash pond.
23	The industry shall provide Rain Water Harvesting (RWH) structures within the plant site.	Complied.
24	The industry shall comply with all the conditions stipulated in EC orders dated 17.07.2007 & 03.05.2012 and CRZ clearance order dated 03.09.2013.	Compliance status of EC orders submitted separately.
25	The industry shall comply with all the conditions stipulated in the CFE orders dated 01.10.2007 and 19.12.2012.	Agreed to comply.
26	This order is issued subject to any other order or further orders to be passed by the Board and Hon'ble High Court in the writ petitions pending before the Hon'ble High court.	Agreed to comply.
27	The industry shall improve the house keeping at coal stack yard area.	Partially complied. The power plant provided two sheds for coal storage (89m x 117.5m x 2nos). The coal yard is provided with MDSS. The internal roads are required to be cleaned at regular intervals. The industry needs to improve the measures for control of fugitive emissions
28	The industry shall obtain amendments of EC in respect of water consumption, waste water generation, as stipulated in CFE order dated 20.10.2014.	Agreed to comply.
29	The industry shall regularly calibrate the online monitoring system.	Complied. The power plant submitted the calibration reports of the Online monitoring systems.
30	The industry shall provide water sprinkling system to control fugitive dust emissions in the ash pond area and to wet the ash in the ash pond.	Not complied. The power plant has not yet provided water sprinklers on the ash pond.
31	The Industry shall also comply with water consumption limits and time lines notified by the MoEF&CC, GOI in the G.S.R. 3305 (E), dated 07.12.2015 as applicable.	Not applicable. The MoEF&CC, GOI vide notification dated. 28.06.2018 issued an amendment stating that water consumption limits are not applicable to thermal power plants using seawater.
32	The Industry shall also comply with standards notified by the MoEF&CC, GOI in	To be complied by 31.12.2026. The MoEF&CC, GOI vide

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ENVIRONMENTAL ENGINEER
A.P. POLLUTION CONTROL BOARD
Regional Office
NELLORE.

	the G.S.R. 3305 (E), dated 07.12.2015 and G.S.R. 682 (E), dated 07.03.2016 as applicable.	S.O.No.682 (E) dated. 05.09.2022 issued an amendment with regard to the compliance date for achievement of SO ₂ emission standards by 31.12.2026.
33	The industry shall install online monitoring systems and connect monitoring system to APPCB/CPCB websites as per CPCB directions dated 05.02.2014 & 02.03.2015 and guidelines issued regarding online monitoring systems from time to time.	<p>Complied.</p> <p>The industry installed 4 nos CAAQM stations and installed emission monitoring systems for Unit-I & II. The industry revamped CEMS & CAAQMS after the visit of the Joint Committee. The present status of functioning of CEMS & CAAQMS is submitted below:</p> <p><u>CEMS: Unit-I:</u> PM monitor- Functioning. SO₂ Monitor- Functioning NO_x monitor - Functioning.</p> <p><u>CEMS: Unit-II:</u> PM monitor- Functioning SO₂ Monitor- Functioning NO_x monitor -Functioning.</p> <p><u>CAAQMS - Switch yard:</u> PM₁₀ - Installed and under repair. (Power plant issued P.O for rectification) PM_{2.5} - Functioning SO₂ - Functioning NO_x - Functioning</p> <p><u>CAAQMS - Coal gate :</u> PM₁₀ -Functioning. PM_{2.5} - Functioning SO₂ - Functioning NO_x - Functioning</p> <p><u>CAAQMS - Field Hostel :</u> PM₁₀ -Functioning. PM_{2.5} - Functioning SO₂ - Functioning NO_x - Functioning</p> <p><u>CAAQMS - Ash pond :</u> PM₁₀ -Functioning. PM_{2.5} - Functioning SO₂ - Functioning NO_x - Functioning</p> <p>pH meter at outlet of ETP- Not</p>

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		functioning.
34	The industry shall submit a copy of policy of Public Liability Insurance (PLI) duly indicating the amount contributed towards Environmental Relief Fund (ERF) to the RO once in six months.	Complied.
35	The industry shall comply with the Task Force directions issued from time to time.	Agreed to comply.
36	The industry shall comply with standards and directions issued by CPCB / MoEF & CC as and when notifications are issued.	Agreed to comply.
37	The industry shall submit action plan for use of ordinary water (non-saline) for ash handling within two months to the RO: Nellore.	Yet to be comply. The power plant representative informed that they will use non-saline water for ash handling from 1 st June 2023.
38	The industry shall submit compliance report on the conditions mentioned in the consent order every six months i.e., on 1 st of January and July of every year to the Regional Office/ Zonal Office.	Submitted.
39	The conditions stipulated are without prejudice to the rights and contentions of this Board in any Hon'ble Court of Law.	Agreed to comply.
	<u>Special conditions:</u>	
40	The industry shall possess valid NOC issued by the Andhra Pradesh State Disaster Response and Fire Service Dept., (APSDRFSD) and submit a copy at concerned Regional Office, APPCB.	Not complied. The power plant filed application for NOC from Andhra Pradesh State Disaster Response and Fire Service Dept., (APSDRFSD)
41	The industry shall prepare a safety report and carry out an independent safety audit report of the respective industrial activities including chemical storages / isolated storages by an expert not associated with such industrial activity as required under Rule 10 of MSIHC Rules, 1989 and get it approved by the Factories Dept., and submit the compliance along with copy of the safety report, safety audit report and safety certificate at concerned Regional Office, APPCB	Complied.
42	The industry shall extend training to the working personnel for the prevention of accidents and necessary antidotes to ensure safety, as per the MSIHC Rules, 1989.	Complied.
43	The industry shall carryout calibration of safety equipment and leak detection systems at regular intervals and shall certify the same with the Factories Department. That certified copy shall be submitted to the APPCB, Regional Office.	Complied. The representative of the power plant informed that they are carrying out calibration of

		the safety equipment at regular intervals as per the schedule.
44	The industry shall install fluorescent Wind Vane at the highest point in the industry premises.	Provided.
45	The industry shall submit Risk analysis and risk assessment covering worst scenario clearly describing impact within the industry premises and outside the industry premises and emergency response system	Agreed to comply.
46	The industry shall submit the copy of the safety audit report and On-Site / Off Site Emergency Plans as applicable after being certified by the Factories Department to the APPCB, Regional Office from time to time, if the storage quantity of hazardous chemicals is equal to or, in excess of the threshold quantities specified in schedule 2 & 3 of MSIHC Rules, 1989	Agreed to comply.

3.2. M/s. Sembcorp Energy India Limited (Project-1)

3.2.1 The Joint Committee made certain observations after inspecting the industry during on 22.10.2021. The Board officials inspected the power plant on 17.03.2023 and the present status of the observations is submitted below:

Sl.No	Joint Committee Observations	Present Compliance status
1.	The respondent unit M/s. Sembcorp Energy India Ltd., was in operation at 1x660MW against the consented capacity of 2x660MW. The unit is using blended Indian coal and imported coal in the ratio of 70% &30%.	M/s Sembcorp Energy India Limited (Unit-1) was in operation and is operating with a 2x660 MW capacity. The power plant is using blended coal.
2.	The unit is having all requisite permissions/clearances from AP Boiler Inspection Department, Dy. Chief Controller of Explosives, MOEF&CC, Dy. Chief Inspector of Factories and Panchayath raj Department, Andhra Pradesh Pollution Control Board, PESO and Department of Fire which.	The power plant has obtained requisite permissions /clearances.
3.	The unit has valid integrated consent under Water & Air and Authorisation under H&OW Rule2016, however 25 out 31 conditions imposed were found complying and remaining 6conditions were found non-	The Board omitted the condition

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	<p>compliance The major non-compliance observed are:</p> <p>Non-installation of closed shed</p>	<p>to install a closed shed for coal in the CTO renewal order dated.16.11.2021.</p>
	<p>Wind barrier/ wind breaking wall coal storage yard</p>	<p>The power plant not provided wind barrier/ wind-breaking wall around the coal storage yard. The power plant has developed plantation of 3 rows with a height of about 7 to 10 meters and also provided MDSS in the coal yard.</p> <p>The power plant representative claims that the plantation acts as wind barrier.</p>
	<p>Inadequate measures taken for controlling fugitive emissions from coal storage yard</p>	<p>The power plant has provided Mechanized Dust Suppression System (MDSS) in the coal storage yard.</p>
	<p>Non utilization of 100% fly ash & bottom ash.</p>	<p>The power plant has achieved 100% fly ash utilization.</p>
4.	<p>As per the source emissions monitoring conducted during committee visit was found meeting with prescribed standards of APPCB and the online monitoring system installed found in operation. As per the OCEMS data, the average concentration of PM was 39.98 mg/Nm³ on 22.10.2021. The manual monitoring result 40.8 mg/Nm³ and OCEMS result are found almost in the same range, which confirms the proper operation & calibration of OCEMS system.</p>	<p>The power plant has provided CEMS for boilers 1 & 2 for parameters PM, SO₂ & NO_x and they are functioning.</p>
5.	<p>The industry provided ETP of 1732 KLD capacity. But the industry is generating floor wash of 30 KLD only and the same is taken for treatment in the ETP.</p>	<p>The power plant is getting 30 KLD of effluent for treatment in ETP. The representative of the power plant informed that they have adopted water conservation measures and thereby reduced effluent generation.</p>
6.	<p>The unit is required to utilize 100 % fly ash but the unit failed utilize till 2018, as per the record the unit is achieving 100 % utilization of fly ash and bottom ash since 2020-21 only.</p>	<p>The power plant achieved 100% fly ash disposal.</p>

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7.	The unit is required to do 100 % recirculation of ash pond water for slurry making. The unit has provided ash pond seepage water collection tank and re-circulating back to ash slurry making. In spite of this arrangement committee observed stagnation of water near to ash pond and storm water drain confirms joining of the seepage water from the ash pond is getting leaked.	The decanted water from the ash pond is totally recycled. The industry is using the ash pond decanted water for slurry purposes.
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Compliance status of the specific conditions stipulated in EC Order No: J 13012/02/2009-1A.II(T) dated.04.11.2009 issued to M/s Sembcorp Energy India Limited (Project-1) [Formerly Thermal Powertech Corporation India Limited-TPCIL], Painampuram & Nelaturu Villages, Muthukur Mandal, SPSR Nellore District

Sl. No	Conditions	Compliance
1	Status of implementation of 100% utilisation of Fly Ash generated shall be submitted to the Ministry within six months of operation of the plant.	Complied. The power plant achieved 100 % fly ash utilization.
2	Stacks of 275 m height (Bi-Flue for Stage - 1 and Single Flue for Stage II) shall be provided with continuous online monitoring equipment for SO _x , NO _x and PM. Exit Velocity of flue gases shall not be less than 25 m/sec. Mercury emissions from stack shall also be monitored on periodic basis.	Complied.
3	Possibility for installation of combined intake with neighbouring Power Plants shall be examined and in the event of non-feasibility adequate justification shall be submitted with a period of six months.	Complied. The power plant developed individual intake & outfall facilities as combined facilities are not feasible. The power plant vide lr.no. TPICL/MoEF/007 dated.07.03.2011 submitted compliance to MoEF&CC, Gol.
4	High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50mg/Nm ³ .	Complied.
5	Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas	Complied. The power plant has provided a pipe conveyor from the port to receive coal. Bag filters were provided at transfer points and water sprinklers

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	shall be provided.	were provided at coal handling areas. Dry fly ash is being handled in silos and provided bulker loading facility.
6	Fly ash shall be collected in dry form and storage facility (silos) shall be provided (as applicable). 100% fly ash utilisation shall be ensured from 4th year onwards. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.	Complied. The power plant is handling dry fly ash in silos and bottom ash is being pumped to the ash pond in slurry form. The power plant is monitoring heavy metals in ash and effluents from the ash pond.
7	Ash Pond shall be lined with HDP/LDP lining. Adequate safety measures shall also be implemented to protect the ash dyke from breached.	Complied. The power plant provided with HDPE lining to the ash pond and also provided safety measures to prevent breaching of dyke.
8	Closed cycle cooling system with natural draft cooling towers shall be provided. The Effluents shall be treated as per the prescribed norms.	Complied.
9	No ground water shall be extracted for the project work at any stage.	Complied.
10	Hydrogeological study of the area shall be reviewed annually and results submitted to the Ministry and concerned agency in the State Government. In case adverse impact on ground water quality and quantity is observed, immediate mitigating steps to contain any adverse impact on ground water shall be undertaken.	Complied. The power plant is conducting Hydrogeological studies annually and reports are being submitted to the MoEF&CC, Gol.
11	Minimum required environmental flow suggested by the Competent Authority of the State Government shall be maintained in the Channel/rivers even in lean season.	Not applicable as the power plant is meeting its water requirement from Sea.
12	The treated effluents conforming to the prescribed standards should be only discharged. Arrangement shall be made that effluents and storm water do not get mixed.	Complied.
13	A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.	Complied.
14	Rainwater harvesting should be adopted. Central Groundwater Authority/Board	Complied.

	shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished.	
15	Adequate safety measures shall be provided in the plant area to check /minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.	Complied.
16	Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made in the plant areas in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	Complied.
17	Regular monitoring of ground water in and around the ash pond area including heavy metals (Hg, Cr, As, Pb) shall be carried out, records maintained and six monthly reports shall be furnished to the Regional office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the Project.	Complied.
18	Shelter Belt consisting of 3 tiers of plantation around the plant of 100 m width and adequate tree density shall be developed.	Complied.
19	First Aid and sanitation arrangement shall be made for the drivers and other contract workers during construction phase.	Complied.
20	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area requisite personal protective equipment like earplugs /ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc., shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including	Complied.

	shifting to non-noisy/less noisy areas.	
21	Regular monitoring of ground level concentration of SO _x , NO _x , RSPM and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and the frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional office of this Ministry. The data shall also be put on the website of the company.	Complied.
22	A good action plan for R&R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R&R policy within three months from the date of issue of this letter.	Complied.
23	An amount of Rs 32.0 crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs. 6.4 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with road map for implementation.	Complied. The representative of the power plant informed that they had deposited Rs.20 Cr with District Administration for shifting of Nelaturupalem village and also spent Rs. 51.04 Cr in the surrounding area.
24	As part of CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc., can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.	Complied. The power plant conducted CSR programmes for the benefit of villages i.e. for health, education and skill development.
25	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	Complied.

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	health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project	
26	The Project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may also be seen at the Website of the Ministry of Environment and Forests at http://envfor.nic.in .	Complied.
27	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZillaParishad /Municipal corporation, urban local body and the local NGO, if any from whom suggestions/representations, if any , received while processing the proposal. The Clearance letter shall also be put on the website of the Company by the Proponent.	Complied.
28	A dedicated Environment Management Cell with suitable qualified personnel shall be set up under the control of a Senior executive who will report directly to the head of the organization.	Complied.
29	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely: SPM, RSPM, SOx, NOx (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.	Complied.
30	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored	Complied.

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	data to the respective Regional Office of MOEF, the respective Zonal office of CPCB and SPCB.	
31	The Environment Statement for each financial year ending 31st March in Form V as is mandated to be submitted by the project proponent 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 EC conditions and shall also be sent to the respective Regional Offices of the Ministry.	Complied.
32	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests.	Complied.
33	Regional Office of the Ministry of Environment and Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will upload the compliance status in their website and update the same from time to time at least six monthly basis. Criteria pollutants levels including NOX (from Stack and ambient air) shall be displayed at the main gate of the power plant.	Complied.
34	Separate funds shall be allocated for implementation of environmental protection measures along with item wise break up. These costs shall be included as part of the project cost. The funds	Complied. The representative of the power plant informed that they are allocating the annual budget for the

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	earmarked for the environment protection measures shall not be diverted for other purposes and year wise expenditure should be reported to the Ministry.	implementation of all Environmental protection measures. Further, an additional budget also is being released as and when required.
35	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the Project by the concerned authorities and the dates of start of land development work and commission of Plant.	----
36	Full cooperation shall be extended to the Scientists/Officers from the Ministry /Regional Office of the Ministry at Bangalore/CPCB/SPCB.	Complied.

The MoEF&CC, GoI vide J-13011/02/2009-IA.II(T) dated 02.03.2015 (Extension of EC validity)

37	Harnessing Solar Power within the premises of the plant particularly at available roof tops shall be carried out and status of implementation including actual generation of solar power shall be submitted along with half yearly monitoring reports.	Complied.
38	Long term study of radioactivity and heavy metals contents on coal to be used shall be carried out through a reputed institute and results thereof analysed every two year and reported along with monitoring reports. Thereafter mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	Complied. The power plant is monitoring heavy metals and radioactivity in the coal, fly ash & bottom ash through third party
39	Fugitive emissions shall be controlled to prevent impact on agricultural or non-agricultural land.	Complied.
40	Space for FGD shall be provided for future installation as may be required.	Complied.
41	No ground water shall be extracted for use in operation of the power plant even in lean season. No water bodies including natural drainage system in the area shall be distributed due to activities associated with the setting up / operation of the power plant.	Complied.
42	Fly ash is not to be used for agricultural purpose. No mine void filling will be undertaken as an option for ash utilization without adequate lining of mine with	Complied.

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	suitable media such that no leachate shall take place at any point of the time. In case, the option of mine void filling is to be adopted, prior detailed study of soil characteristics of the mine area shall be undertaken from an institute of repute and adequate clay lining shall be ascertained by the State Pollution Control Board and implementation done in close coordination with the State Pollution Control Board.	
43	Green belt shall also be developed around the ash pond over and above the green belt around the plant boundary.	Complied.
44	A Common Green Endowment Fund shall be created and the interest earned out of it shall be used for the development and management of green cover of the area.	Complied.
45	For proper and periodic monitoring of CSR activities, a CSR committee or a social audit committee or a suitable credible external agency shall be appointed. CSR activities shall also be evaluated by an independent external agency. This evaluation shall be both concurrent and final.	Complied.
46	An Environment Cell comprising of at least one expert in environment science / engineering, ecology, occupational health and social science, shall be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement / mitigation measures.	Complied.
47	The project proponent shall formulate a well laid Corporate Environment Policy and identify and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with the conditions stipulated in this clearance letter and other applicable environmental laws and regulations.	Complied.

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Compliance status of the conditions stipulated in Schedule -B of Consent Order No: APPCB/ VJA/ NLR/ 930/HO/CFO/2016 Date:16.11.2021 issued to M/s Sembcorp Energy India Limited (Project-1), Painampuram & Nelaturu Villages, Muthukur Mandal, SPSR Nellore District

S. No	Conditions	Compliance																																							
	<u>Special Conditions:</u>																																								
1	The industry shall provide FGD system to meet the SO ₂ emission standard of 200 mg/Nm ³ by 31.12.2024, as per MoEF&CC, Govt notification GSR No.243 (E), dt.31.03.2021.	Shall be achieved by 31.12.2026. The MoEF&CC, GOI vide S.O.No.682 (E) dated. 05.09.2022 issued an amendment with regard to the compliance date for achievement of SO ₂ emission standards by 31.12.2026.																																							
2	The industry shall maintain water sprinklers around the ash pond area to control fugitive emissions in the surrounding area within 2 months and report compliance to RO, Nellore.	Complied. The power plant has provided water sprinklers in part of the ash pond and maintained the water level for the remaining area.																																							
	Water Pollution																																								
3	<i>The effluent discharged shall not contain constituents in excess of the tolerance limits mentioned in the CTO order</i>	Complied.																																							
4	<i>The source of water is sea water. The following is the permitted water consumption:</i> <table border="1" data-bbox="300 1446 938 1983"> <thead> <tr> <th>S. N.</th> <th>Purpose</th> <th>Quantity in (M /day) (for</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>For cooling tower make</td> <td>1,98,256.0</td> </tr> <tr> <td>2.</td> <td>Non-cooling water - RO</td> <td></td> </tr> <tr> <td></td> <td>i) Ash handling sealing</td> <td>2240.0</td> </tr> <tr> <td></td> <td>ii) Coal handling plant</td> <td>4768.0</td> </tr> <tr> <td></td> <td>iii) High Vacuum AC make</td> <td>1660.0</td> </tr> <tr> <td></td> <td>iv) Misc. services (for fire</td> <td>512.0</td> </tr> <tr> <td></td> <td>v) RO Reject</td> <td>22224.0</td> </tr> <tr> <td></td> <td>vi) Clarifier blow down</td> <td>1056.0</td> </tr> <tr> <td></td> <td>RO Second pass</td> <td></td> </tr> <tr> <td></td> <td>i. DM Plant</td> <td>2080.0</td> </tr> <tr> <td></td> <td>11. Domestic (Plant)</td> <td>50.0</td> </tr> <tr> <td></td> <td>Total</td> <td>2,32,846.0</td> </tr> </tbody> </table>	S. N.	Purpose	Quantity in (M /day) (for	1.	For cooling tower make	1,98,256.0	2.	Non-cooling water - RO			i) Ash handling sealing	2240.0		ii) Coal handling plant	4768.0		iii) High Vacuum AC make	1660.0		iv) Misc. services (for fire	512.0		v) RO Reject	22224.0		vi) Clarifier blow down	1056.0		RO Second pass			i. DM Plant	2080.0		11. Domestic (Plant)	50.0		Total	2,32,846.0	Complied.
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5	The industry shall maintain Separate digital water meters in the intake point of sea water (i.e. at sea coast) with totalizer facility unit wise with to assess daily water consumption quantity instead of cumulative water consumptions.	Complied.																																							
6	The industry shall maintain flow meter preferably Electro Magnetic Flow Meters with totalizers for water and effluent quantity measurements for different streams of effluents and different categories of water usage stipulated in this order.	Complied.																																							

7	The industry shall maintain leachate collection tank to collect the leachate from garland drain of ash pond.	Complied.															
8	The industry shall maintain provision to collect the excess water from the ash pond into sea to control overflow of saline water from ash pond and to prevent irrigation tanks being polluted.	Complied.															
<u>AIR POLLUTION:</u>																	
9	The emissions shall not contain constituents in excess of the prescribed limits mentioned below: <table border="1" data-bbox="297 701 943 897"> <thead> <tr> <th>Chimney No.</th> <th>Parameter</th> <th>Emission standards in mg/Nm³</th> </tr> </thead> <tbody> <tr> <td>1 - 2</td> <td>Particulate Matter</td> <td>50</td> </tr> </tbody> </table>	Chimney No.	Parameter	Emission standards in mg/Nm ³	1 - 2	Particulate Matter	50	Complied.									
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1 - 2	Particulate Matter	50															
10	The industry shall comply with ambient air quality standards of PM ₁₀ (Particulate Matter size less than 10 μ m) - 100 g/ m ³ ; PM _{2.5} (Particulate Matter size less than 2.5 μ m) - 60 g/ m ³ ; SO ₂ - 80 g/ m ³ ; NO _x - 80 g/m ³ , outside the factory premises at the periphery of the industry. Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009. Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A) Night time (10 PM to 6 AM) - 70 dB (A)	Complied.															
11	The emissions shall not contain constituents in excess of the prescribed limits mentioned below: <table border="1" data-bbox="297 1620 943 1924"> <thead> <tr> <th>Chimney No.</th> <th>Parameter</th> <th>Emission Standards</th> </tr> </thead> <tbody> <tr> <td>1 & 2</td> <td>Particulate matter</td> <td>50 mg/Nm³</td> </tr> <tr> <td></td> <td>SO₂</td> <td>*200 mg/Nm³</td> </tr> <tr> <td></td> <td>NO_x</td> <td>450 mg/Nm³</td> </tr> <tr> <td></td> <td>Mercury (Hg)</td> <td>*0.03 mg/Nm³</td> </tr> </tbody> </table> <p>*The industry shall meet the SO₂ emission standard of 200 mg/Nm³ by 31.12.2024, as per MoEF&CC, GoI notification GSR No.243 (E), dt.31.03.2021</p>	Chimney No.	Parameter	Emission Standards	1 & 2	Particulate matter	50 mg/Nm ³		SO ₂	*200 mg/Nm ³		NO _x	450 mg/Nm ³		Mercury (Hg)	*0.03 mg/Nm ³	Shall be achieved by 31.12.2026. The MoEF&CC, GOI vide S.O.No.682 (E) dated. 05.09.2022 issued an amendment with regard to the compliance date for achievement of SO ₂ emission standards by 31.12.2026.
Chimney No.	Parameter	Emission Standards															
1 & 2	Particulate matter	50 mg/Nm ³															
	SO ₂	*200 mg/Nm ³															
	NO _x	450 mg/Nm ³															
	Mercury (Hg)	*0.03 mg/Nm ³															
12	The industry shall comply with emission limits for DG sets of capacity upto 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 and -S.R.448(E), dated 12.07.2004 under the Environment (Protection) Act Rules. In case of DG sets of capacity more than 800KW shall comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial	Complied.															

	no.96, under the Environment (Protection) Act, 1986.	
13	The industry shall maintain wind barriers/ wind breaking walls to the coal yards as temporary arrangement to control fugitive dust emissions on immediate surroundings	Complied. The power plant not provided a Wind barrier/wind-breaking wall around the coal storage yard. The power plant has developed a plantation of 3 rows with a height of about 7 to 10 meters and also provided MDSS in the coal yard. The power plant representative claims that the plantation acts as a wind barrier.
14	The industry shall regularly operate water sprinklers provided to control stock yard to mitigate fugitive dust on the surroundings from coal handling area.	Complied.
15	The industry shall provide necessary air pollution control systems at coal transfer points in coal conveyer system from port boundary to industry premises within 3 months	Complied. The power plant has provided bag filters at coal transfer points.
16	The industry shall upgrade the air pollution control systems at coal crusher within 3 months	Complied. The power plant has provided bag filters at the coal crusher.
17	The industry shall provide separate energy meters along with totalizer facility for each ESP.	Complied.
18	The industry shall comply with the MoEF&CC Notification S.O.No.3305 dt.07.12.2015 and S.O. 682 (E)dt.07.03.2016 as applicable and report compliance to RO, Nellore.	Not applicable. The MoEF&CC, Gol vide notification dated. 28.06.2018 issued an amendment stating that water consumption limits are not applicable to thermal power plants using seawater
	<u>GENERAL:</u>	
19	The industry shall handover the original consent dated 15.02.2016 to the RO, Nellore after receipt of this order.	Complied.
20	The industry shall maintain the following records and the same shall be made available to the inspecting officers of the Board: a) Daily production details (ER-1 Central Excise Returns). b) Quantity of Effluents generated, treated, recycled/reused and disposed. c) Log Books for pollution control systems. d) Characteristics of effluents and emissions. e) Hazardous/non hazardous solid waste generated and disposed. f) Inspection book. G. Manifest copies of hazardous	Complied.

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21	<p>The industry shall dispose solid waste (Non-Haz) as follows:</p> <table border="1" data-bbox="293 279 943 736"> <thead> <tr> <th data-bbox="293 279 358 387">S. No.</th> <th data-bbox="358 279 521 387">Name of the solid waste</th> <th data-bbox="521 279 699 387">Quantity</th> <th data-bbox="699 279 943 387">Disposal</th> </tr> </thead> <tbody> <tr> <td data-bbox="293 387 358 513">1</td> <td data-bbox="358 387 521 513">Fly ash</td> <td data-bbox="521 387 699 513">0.96 Million Tons/Annum</td> <td data-bbox="699 387 943 513">To cement / brick units</td> </tr> <tr> <td data-bbox="293 513 358 736">2</td> <td data-bbox="358 513 521 736">Bottom Ash</td> <td data-bbox="521 513 699 736">0.24 Million Tons/Annum</td> <td data-bbox="699 513 943 736">To Cement, brick Manufacturing units. Utilized bottom ash to ash pond in slurry mode</td> </tr> </tbody> </table>	S. No.	Name of the solid waste	Quantity	Disposal	1	Fly ash	0.96 Million Tons/Annum	To cement / brick units	2	Bottom Ash	0.24 Million Tons/Annum	To Cement, brick Manufacturing units. Utilized bottom ash to ash pond in slurry mode	Complied.
S. No.	Name of the solid waste	Quantity	Disposal											
1	Fly ash	0.96 Million Tons/Annum	To cement / brick units											
2	Bottom Ash	0.24 Million Tons/Annum	To Cement, brick Manufacturing units. Utilized bottom ash to ash pond in slurry mode											
22	The industry shall relocate the CAAQM stations provided at sea intake point to suitable location in consultation with RO, Nellore.	The CAAQM station located at the seawater intake point is required to capture the AAQ data in upstream of the power plants. Hence, it is not suggested to relocate the CAAQM station.												
23	The industry shall operate CAAQM stations for monitoring SPM, SO ₂ and NO _x with recording facility and maintain connectivity to PCB server.	Complied.												
24	The industry install online effluent and stack monitoring systems for specified parameters as per CPCB directions dated 05.02.2014 & 02.03.2015 and maintain connectivity to APPCB/CPCB websites	Complied.												
25	The industry shall carryout regular calibration for the on-line stack monitoring systems and CAAQM stations with tamper proof mechanism.	Complied.												
26	The industry shall dispose 100% of fly ash generated as per the Fly ash Notification.	Complied.												
27	The industry shall develop the thick green belt in an area of 395 acres all along the periphery of the industry and ash pond area.	Complied.												
28	The industry shall submit a copy of policy of PLI duly indicating the amount contributed towards ERF to the RO once in six month.	Complied.												
29	The industry shall comply with Board directions issued from time to time.	Complied.												
30	The industry shall comply with standards and directions issued by CPCB/ MoEF&CC as and when notifications are issued.	Complied.												
31	The industry shall submit compliance report on the conditions mentioned in the consent order every six months i.e. on 1st of January and July of every year to the RO/ZO.	Complied.												


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Remarks:**A. Sri Damodaram Sanjeevaiah Thermal Power Station:**

1. **Ash disposal:** The power plant has not yet achieved 100 % utilization of fly ash. The MoEF&CC, Gol vide S.O.No.5481 (E) dated. 31.12.2021 issued fly ash notification 2021 in suppression of earlier notification. As per this notification, the industry shall achieve 100 % ash disposal in 4 years cycle. Otherwise, the power plant is liable for Environmental Compensation.
2. **Online Monitors:** The power plant revamped CEMS and CAAQMS after the visit of the joint committee. Now, all online monitors are functioning except one PM₁₀ monitor and pH meter at the outlet of ETP.
3. **Fugitive emissions:** After the visit of the joint committee, the power plant completed two sheds for coal storage (89m x 117.5m x 2 nos). The coal yard is provided with MDSS. The internal roads are required to be cleaned at regular intervals. The power plant needs to improve the measures for control of fugitive emissions. Further, the power plant shall provide water sprinklers on the ash pond.
4. **Installation of Flue Gas De-sulphurization system:** The MoEF&CC, GOI vide S.O.No.682 (E) dated. 05.09.2022 issued an amendment with regard to the compliance date for achievement of SO₂ emission standards by 31.12.2026. Otherwise, the power plant is liable for Environmental Compensation.
5. **Coal Usage:** The MoEF&CC, Gol issued Environmental Clearance vide order dated.17.07.2007 to use blended coal, i.e. 70 % Indian Coal & 30 % Imported coal. Subsequently, the MoEF&CC, Gol issued a notification vide S.O.1561 (E) dated. 21.05.2020 by amending sub-rule (8) in rule 3 of Environment Protection Rules, which is a regulation on ash content (i.e. <34%) in coal. As per the notification, the power plant can use the coal without stipulations with regard to ash content or distance subject to compliance with the conditions stipulated in the Notification. In view of the above Notification, the regulation on coal sources may not be insisted.

B. M/s. Sembcorp Energy India Limited (Project-1), Pynapuram (V), Muthukur (M), SPSR Nellore District:

1. **Ash disposal:** The power plant achieved 100 % utilization of fly ash.


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2. **Online Monitors:** The power plant provided CEQMS, CEMS and CAAQMS and also calibrated them as per schedule.
3. **Fugitive emissions:** The power plant provided MDSS in the coal yard and developed a plantation around the coal yard to act as a wind barrier. The internal roads are being cleaned at regular intervals. The power plant provided water sprinklers on the part of the ash pond & for the remaining area, the water level is being maintained to prevent ash emissions.
4. **Installation of Flue Gas De-Sulphurization system:** The MoEF&CC, GOI vide S.O.No.682 (E) dated. 05.09.2022 issued an amendment with regard to the compliance date for achievement of SO₂ emission standards by 31.12.2026. Otherwise, the power plant is liable for Environmental Compensation.
5. **Coal Usage:** The Board issued CTE vide order dated: 15.05.2010 to use blended coal, i.e. 70 % Indian Coal & 30 % imported coal. Subsequently, the MoEF&CC, Gol issued a notification vide S.O.1561 (E) dated. 21.05.2020 by amending sub-rule (8) in rule 3 of Environment Protection Rules, which is a regulation on ash content (i.e. <34%) in coal. As per the notification, the power plant can use the coal without stipulations with regard to ash content or distance subject to compliance with the conditions stipulated in the Notification. In view of the above Notification, the regulation on coal sources may not be insisted.


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NELLORE.

Item No.05:-**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI***(Through Video Conference)***Original Application No.105 of 2021 (SZ) &
I.A. No. 16 of 2023(SZ)****IN THE MATTER OF:**

Yanati Srinivasulu Reddy,
Muthukur Mandal,
Nellore and Another.

...Applicant(s)

The Chief Secretary,
Govt. of Andhra Pradesh,
Amaravathi and others

...Respondent(s)

Date of hearing: 09.02.2023.**CORAM:****HON'BLE Smt. JUSTICE PUSHPA SATHYANARAYANA, JUDICIAL MEMBER****HON'BLE Dr. SATYAGOPAL KORLAPATI, EXPERT MEMBER**

For Applicant(s): M/s. N. Suneetha.

For Respondent(s): Mrs. Madhuri Donti Reddy for R1, R5 to R7.
Mr. S. Rajasekar for R2.
Ms. N. Nathami for R3.
Mr. Mohan, Senior Advocate along with
Mr. M. Kumaresan for M/s. King & Patridge for R8.
Mr. Satish Parasaran, Senior Advocate along with
Mr. Gautam S Raman for R9.

ORDER

1. The learned Senior Advocate appearing for the 9th respondent would state that as per the report of the Joint Committee, out of 31 conditions imposed, 25 conditions have already been complied with. Even out of the 6 conditions, for complying with 2 of the conditions, they have time till 2024 and 2027. So far as the Ambient Air Quality is concerned in particular the fugitive emissions, the damages have been assessed jointly and apportioned which is incorrect.
2. As recorded in the earlier order, the Andhra Pradesh Pollution Control Board has issued notice dated 30.01.2023 under Section 33 (A) of the Water (Prevention and Control of Pollution) Act, 1974 and 31 (A) of the Air (Prevention and Control of Pollution) Act, 1981 and the said order was kept in abeyance till today.
3. It is vehemently contended by the learned Senior Advocate for the 9th respondent that almost 27 conditions have been complied with and they will demonstrate as to how the other non-compliances also are either not relevant or complied with. Similarly, the 8th respondent also seeks time to present his case.
4. The learned counsels are directed to file a tabular column of the conditions which are not complied with as per the Environmental Clearance (EC) and the compliance as per the Joint Committee report and their undertaking for any future compliance.

5. The Andhra Pradesh Pollution Control Board is also directed to inspect the units to find out any violations after the report of the Joint Committee and also the report about the compliances by the industries with reference to non-compliances noted by Joint Committee.
6. **The notices issued by the Andhra Pradesh Pollution Control Board against Respondent Nos.8 & 9 are directed to be kept in abeyance until further orders from this Tribunal.**
7. With the consent of all the learned counsels, list the matter on 24.03.2023 for final hearing.

Sd/-
Smt. Justice Pushpa Sathyanarayana, JM

Sd/-
Dr. Satyagopal Korlapati, EM

O.A. No.105/2021(SZ) &
I.A. No.16/2023(SZ)
09th February 2023. AD.



भारत का राजपत्र The Gazette of India

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पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 21 मई, 2020

का.आ. 1561(अ).—जबकि केन्द्रीय सरकार ने पर्यावरण (संरक्षण) नियमावली, 1986 के नियम 5 के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3, धारा 6 और धारा 25 के तहत अपनी शक्तियों का प्रयोग करते हुए, ऐश सामग्री (ऐश कंटेंट) को 34% तक की सीमा सहित कोयले का उपयोग करने के लिए ताप विद्युत संयंत्रों की कतिपय श्रेणियों को अधिदेशित करते हुए भारत के राजपत्र, असाधारण में सा.का.नि. 02 (अ), तारीख 2 जनवरी, 2014 द्वारा पर्यावरण (संरक्षण) नियमावली, 1986 के नियम 3 के उपनियम 8 का संशोधन प्रकाशित किया।

और जबकि सा.का.नि. 02 (अ), तारीख 2 जनवरी, 2014 द्वारा उक्त अधिसूचना द्वारा निम्नलिखित समय-सीमा तक कच्चे अथवा मिश्रित अथवा लाभकारी कोयले (बेनिफिसिएटिड कोल), जिसमें ऐश सामग्री चौंतीस प्रतिशत (34%) से अधिक ना हो, का उपयोग करने के लिए त्रैमासिक आधार पर कोयला आधारित ताप विद्युत संयंत्रों को अधिदेशित किया गया है :

क्रम सं.	विद्युत संयंत्र की श्रेणी	गर्तमुख(पिट-हैड)/कोयला खान से ताप विद्युत संयंत्र के अवस्थान की दूरी	समय-सीमा
(क)	एकल ताप विद्युत संयंत्र (किसी भी क्षमता के) और कैटिप्व ताप विद्युत संयंत्र (100 मेगावाट और अधिक क्षमता सहित)	गर्तमुख विद्युत संयंत्रों को छोड़कर गर्तमुख से दूरी पर ध्यान दिए बिना शहरी क्षेत्रों,या परिस्थितिकीय रूप से संवेदनशील क्षेत्रों या अत्यधिक प्रदूषित क्षेत्रों में अवस्थित	2 जून, 2014 से प्रभावी।
(ख)		1000 किमी से अधिक दूर	2 जून, 2014 से प्रभावी।
(ग)		750-1000 किमी के बीच	1 जनवरी, 2015 से प्रभावी।
(घ)		500-749 किमी के बीच	5 जून, 2016 से प्रभावी।

और जबकि, केंद्रीय सरकार ने पर्यावरण (संरक्षण) नियमावली के नियम 5 के उप-नियम (3) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 6 और धारा 25 के अधीन अपनी शक्तियों का प्रयोग करते हुए भारत के राजपत्र, असाधारण में स.का.आ. 3305 (अ), तारीख 7 दिसंबर, 2015 और सा.का.नि.593 (अ), तारीख 28 जून, 2018 द्वारा विद्युत उत्पादन की क्षमता और विद्युत संयंत्र की संस्थापना की तारीख और समय-बद्ध रीति से प्राप्त किए जाने के आधार पर ताप विद्युत संयंत्रों की विभिन्न श्रेणियों के लिए उत्सर्जन मानकों और विनिर्दिष्ट जल उपभोग को प्रकाशित किया था।

और जबकि, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय ने विद्युत मंत्रालय द्वारा दिनांक 13 अक्टूबर, 2017 को प्रस्तुत की गई यथा संशोधित योजना के अनुसार विभिन्न ताप विद्युत संयंत्रों को वर्ष 2022 तक प्रदूषण नियंत्रण उपकरण संस्थापित करने के लिए पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 5 के तहत निर्देश जारी करने के लिए केंद्रीय प्रदूषण नियंत्रण बोर्ड को दिनांक 7 दिसंबर, 2017 के फा.सं. क्यू-15017/40/2007-सीपीडब्ल्यू द्वारा निदेश दिए।

और जबकि, विद्युत मंत्रालय ने अन्य बातों के साथ-साथ यह अभ्यावेदन किया है कि प्रदूषण नियंत्रण प्रौद्योगिकियों के उन्नत होने के साथ ही ताप विद्युत संयंत्र दहन प्रक्रिया से उत्पन्न फ्लाई-ऐश का पता लगाने में बेहतर उपकरणों से सुसज्जित हुए हैं और बिना धुला कोयला अधिक कुशलता और मितव्ययता से प्रयोग किया जा सकता है; ताप विद्युत संयंत्रों को राख अवयवों की विभिन्न किस्मों के साथ कोयले के लिए डिजाइन किया गया है और इनमें सूखी राख (ड्राई ऐश) निकालने, उसका रखरखाव करने और राख के उपयोग के लिए आपूर्ति प्रणालियों को उपलब्ध कराया गया है; धुले कोयले के उपयोग से बिजली उत्पादन महंगा हो जाता है; ताप विद्युत संयंत्रों में उत्पन्न फ्लाई-ऐश सीमेंट निर्माण, ईंटें बनाने, सड़क बिछाने, खनन के उपरांत रिक्त हुए स्थलों और निचले क्षेत्रों को भरने के लिए बैक-फिल सामग्री जैसे कई लाभकारी उपयोगों के लिए प्रयोग की जा रही है; औसतन ऐश की मात्रा 34% तक बनाए रखने की आवश्यकता उद्योगों को कोयले का आयात करने के लिए प्रेरित करती है जिससे विदेशी मुद्रा इत्यादि का बहिर्वाह (आऊटफ्लो) होता है।

और जबकि, कोयला मंत्रालय ने अन्य बातों के साथ-साथ अभ्यावेदन किया है कि कोयला खानों से कच्चे कोयले की गुणवत्ता, आकार और बाहरी सामग्री में सुधार के लिए निरंतर कड़े प्रयास कर रही हैं जिससे सभी संबंधित उपकरणों की टूट-फूट में उल्लेखनीय कमी आई है, कोयला धुलाई प्रक्रिया में कई प्रकार का रखरखाव होता है और कोयला खानों से धुलाई-स्थलों (वाशरीज़) तक कोयले की बड़ी मात्रा को सड़क द्वारा ले जाने और फिर आगे

विद्युत संयंत्रों तक ले जाने के लिए रेल साइडिंग तक ले जाने से बचना; धुलाई की प्रक्रिया केवल कोयले को धुले हुए कोयले और वाशरी अवशिष्ट में बॉटती है जबकि खनित कोयले की राख की मात्रा वही रहती है; निम्न श्रेणी कोयला वाशरी अवशिष्ट कई छोटे उपयोगकर्ता उद्योगों में, अधिक प्रदूषण आदि सृजित करते हैं।

और जबकि, कोयला मंत्रालय और विद्युत मंत्रालय ने इसलिए अनुरोध किया है कि दिनांक 2 जनवरी, 2014 की अधिसूचना पर पुनः विचार द्वारा, विद्युत संयंत्रों को धुले हुए कोयले के प्रयोग के लिए अधिदेशित करने पर गौर किया जाना अपेक्षित है जिससे पर्यावरण पर प्रतिकूल प्रभाव डाले बिना कोयले की लंबी दूरी की धुलाई के लिए बिजली के उत्पादन में आसानी होगी।

और जबकि, नीति आयोग ने अपनी रिपोर्ट में वाशरीज़, कोयला खनन, परिवहन और विद्युत संयंत्रों में कोयले की खपत की दृष्टि से इस विषय का विश्लेषण करने के बाद अन्य बातों के साथ-साथ संक्षिप्त में यह अभ्यावेदन किया है कि समीपवर्ती उद्योगों में वाशरी अवशिष्ट का इस्तेमाल अधिक प्रदूषण पैदा करता है; चूंकि वाशरी अवशिष्ट अनेक छोटे उद्योगों में वितरित होते हैं, इसलिए विद्युत संयंत्र पर उत्पन्न प्रदूषण की तुलना में अनेक स्थलों पर उत्पन्न प्रदूषण को नियंत्रित करना अधिक कठिन होता है; धुलाई प्रक्रिया में उत्पन्न राख (ऐश) कोयला कणों के साथ-साथ पानी को भी प्रदूषित करती है और इसका लाभकारी उपयोग नहीं किया जा सकता, कोयला धुलाई प्रक्रिया में पानी का अधिक प्रयोग होता है, अपशिष्ट सृजन होता है; वाशरी अवशिष्ट के निपटान का पर्यावरण पर प्रतिकूल प्रभाव होता है क्योंकि इसमें बड़ी मात्रा में निम्न श्रेणी कोयला अवशिष्ट, तरल अपशिष्ट प्रवाह, कोयला भण्डारण, कोयला मिट्टी का रखरखाव, अपवाह और उड़ने वाली धूल का रखरखाव और निपटान करना होता है, कोयला धुलाई का स्थलाकृति, जल निकास स्वरूप और गुणवत्ता, जल निकायों, बड़े पैमाने पर प्रतिवेशी वायु गुणवत्ता पर भी प्रतिकूल प्रभाव पड़ता है; धुलाई प्रक्रिया से विद्युत उत्पादन की लागत में भी वृद्धि होती है जिसका कोई पर्यावरणीय लाभ इत्यादि भी नहीं होता।

और जबकि, नीति आयोग ने इसलिए सिफारिश की है कि पर्यावरणीय और प्रदूषण मानकों का निर्धारण करना और उन्हें लागू करना विवेकपूर्ण होगा, जिन्हें कोयले में ऐश की मात्रा प्रतिबंधित किए जाने के बजाए, परिवहन दूरी के आधार पर विद्युत उत्पादकों के साथ जोड़ा जाना चाहिए।

और जबकि, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय ऊर्जा मंत्रालय, कोयला मंत्रालय के अभ्यावेदनों, नीति आयोग और कई हितधारकों की रिपोर्ट पर विवेचन करने तथा सावधानीपूर्वक विचार करने के बाद एवं जनहित में निम्नलिखित निष्कर्ष पर पहुंचा है—

- i) खनित कोयले में ऐश सामग्री की मात्रा समान रहती है। वाशरी से ऐश सामग्री दो स्थानों (वाशरी और विद्युत संयंत्र) में विभाजित हो जाती है जबकि बिना धुला कोयला विद्युत संयंत्र में प्रयोग किया जाता है, ऐश सामग्री का निपटान केवल एक स्थान अर्थात् विद्युत संयंत्र में किया जाता है;
- ii) ताप विद्युत संयंत्र प्रदूषण नियंत्रण, ऐश प्रबंधन के लिए तकनीकी रूप से सुसज्जित होते हैं क्योंकि उनमें फ्लाइ-ऐश का निराकरण करने के लिए उच्च क्षमता वाले उपकरण होते हैं, ड्राई ऐश निष्क्रमण और हैंडलिंग सिस्टम, ऐश उपयोग के लिए सप्लाय सिस्टम और फ्लू गैसों को तितर-बितर करने के लिए बड़े टाल (स्टैक) होते हैं;
- iii) पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय ने उत्सर्जन मानक अधिसूचित किए हैं जिनमें क्रमशः ताप विद्युत संयंत्रों को समयबद्ध रीति से इन मानकों का पालन करने के लिए अधिदेशित किया गया है;

और जबकि, फ्लाई ऐश प्रबंधन और विभिन्न स्तरों पर बिना धुले कोयले के संसाधन के दौरान उत्पन्न अन्य संबंधित पर्यावरणीय पहलुओं सहित बिना धुले कोयले की हैंडलिंग के लिए यथासंभव उत्कृष्ट कार्यवाही को अपनाता समयोचित है।

और जबकि, कोयला मंत्रालय ने अभ्यावेदन किया है कि मौजूदा अप्रत्याशित कोविड-19 महामारी और इसके फलस्वरूप देश में ऊर्जा उत्पादन के लिए कोयला क्षेत्र की मांग को प्रोत्साहित कर घरेलू कोयले के उपयोग की तत्काल आवश्यकता को देखते हुए यह वांछनीय है कि तत्काल अधिसूचना जारी की जाए।

अब, इसलिए, केंद्रीय सरकार पर्यावरण (संरक्षण) नियमावली, 1986 के नियम 5 के उपनियम (4) के साथ पठित पर्यावरण संरक्षण अधिनियम, 1986 (1986 का 29) की धारा 3, धारा 6 और धारा 25 के तहत अपनी शक्तियों का प्रयोग करते हुए, उक्त नियमावली के नियम 5 के उपनियम (3) के भाग (अ) के तहत सूचना देने की अनिवार्यता को हटा देने के उपरांत जनहित में पर्यावरण (संरक्षण) नियमावली, 1986 को आगे संशोधित करते हुए एतद्वारा निम्नलिखित नियम बनाती है, अर्थात्:

1. (1) इन नियमों को पर्यावरण (संरक्षण) संशोधन नियमावली, 2020 कहा जाएगा।
- (2) ये सरकारी गजट में प्रकाशित होने की तारीख से लागू होंगे।
2. पर्यावरण (संरक्षण) नियमावली, 1986 में, नियम 3 में, उपनियम (8) के लिए निम्नलिखित उपनियम प्रतिस्थापित होगा, अर्थात् :-

“(8) ताप विद्युत संयंत्रों को, ऐश सामग्री अथवा दूरी संबंधी अनुबंधों के बिना, निम्नलिखित शर्तों के अध्याधीन कोयले के प्रयोग की अनुमति होगी:

(1) उत्सर्जन मानदण्डों के लिए प्रौद्योगिकीय समाधान निर्धारित करना:

- i. वर्तमान अधिसूचनाओं और केंद्रीय प्रदूषण नियंत्रण बोर्ड द्वारा समय-समय पर जारी अनुदेशों के अनुसार विविक्त सामग्री के लिए विनिर्दिष्ट मानदंडों का अनुपालन करना।
- ii. वाशरी के मामले में मिडलिंग और अवशिष्टों का एफबीसी(तरलीकृत तल दहन) प्रौद्योगिकी आधारित विद्युत संयंत्रों में उपयोग किया जाए। एफबीसी संयंत्रों में मिडलिंग और अवशिष्टों के लिए वाशरी में संयोजन (लिकेज) होना चाहिए।

2. ऐश पॉन्ड का प्रबंधन:

- i. ताप विद्युत संयंत्र धुले हुए कोयले से बिना धुले हुए कोयले पर स्विच करने के कारण फ्लाई-ऐश पॉन्ड(मौजूदा विद्युत उत्पादन क्षमता) की अतिरिक्त क्षमता की पात्रता प्राप्त किए बिना, समय-समय पर जारी की गई अधिसूचनाओं में यथा-अधिसूचित शर्तों का पालन करें।
- ii. ऐश प्रबंधन के लिए जल की खपत को अनुकूल करने हेतु समुचित प्रौद्योगिकी समाधान लागू हों;
- iii. यदि आवश्यक हो तो फ्लाई-ऐश का अधिकतम उपयोग सुनिश्चित करने के लिए स्थल विशिष्ट स्थितियों के आधार पर ऐश का पृथक्करण इलैक्ट्रो-स्टैटिक अवक्षेपक (प्रेसीपिटेटर) स्तर पर किया जाए।
- iv. ताप विद्युत संयंत्र उपर्युक्त 2(i) के अध्याधीन, छोड़ी हुई अथवा चालू खानों (वर्किंग माइन्स) में (खान मालिकों द्वारा सुविधाजनक बनाया जाए) पर्यावरणीय सुरक्षा उपायों के साथ फ्लाई-ऐश का निपटान करें।

3. परिवहन:

- i. ढके हुए रेलवे वैगन (तिरपाल अथवा किसी अन्य माध्यम से ढके हुए रेलवे वैगन) और/अथवा खान-क्षेत्र से परे ढके हुए वाहक (कन्वेयर) द्वारा ही कोयले का परिवहन किया जाए। तथापि, जब तक रेल परिवहन/वाहक इन्फ्रास्ट्रक्चर उपलब्ध नहीं हो जाता, सड़क परिवहन ट्रकों द्वारा किया जाए जो तिरपाल अथवा किसी अन्य माध्यम से ढके हुए हों।
 - ii. ताप विद्युत संयंत्र द्वारा सुनिश्चित किया जाए कि
 - (क) रेल अथवा कन्वेयर द्वारा परिवहन के लिए विद्युत संयंत्र में अथवा इसके समीप रेल साइडिंग सुविधा अथवा कन्वेयर सुविधा स्थापित हो; और
 - (ख) यदि रेल अथवा कन्वेयर सुविधा की अनुपलब्धता के कारण परिवहन न हो पाए, तो यह सुनिश्चित किया जाए कि संबंधित खान के डिलीवरी स्थान से कोयले का परिवहन ढके हुए ट्रकों (तिरपाल अथवा किसी अन्य माध्यम द्वारा), अथवा किसी अन्य यंत्रिकृत बंद ट्रक से सड़क द्वारा हो।
- (4) इसे वित्तीय वर्ष 2020-21 और उसके बाद के लिए संबंधित परियोजनाओं हेतु संगत पर्यावरणीय स्वीकृति की अतिरिक्त शर्तें भी समझा जाएगा। मौजूदा पर्यावरणीय स्वीकृतियों को संशोधित किया जाएगा ताकि संगत क्षेत्रों के लिए उपरोक्त शर्तों को प्रवर्तनशील बनाया जा सके। तदनुसार संबंधित राज्य प्रदूषण नियंत्रण बोर्ड द्वारा प्रचालन की अनुमति जारी की जाएगी।

[फा.सं. 13014/01/2020-आईए-1(टी)]

गीता मेनन, संयुक्त सचिव

टिप्पण—मूल नियम भारत के राजपत्र में सं.का.आ. 844(अ), तारीख 19 नवंबर 1986 द्वारा प्रकाशित किए गए थे और पश्चातवर्ती संशोधन सं.का.आ. 82(अ), तारीख 16 फरवरी, 1987; का.आ. 64(अ), तारीख 18 जनवरी, 1988; सा.का.नि. 931(अ), तारीख 27 अक्टूबर, 1989; का.आ. 23(अ), तारीख 16 जनवरी, 1991; सा.का.नि. 95(अ), तारीख 12 फरवरी, 1992; सा.का.नि. 329(अ), तारीख 13 मार्च, 1992; सा.का.नि. 562(अ), तारीख 27 मई, 1992; सा.का.नि. 884(अ), तारीख 20 नवंबर, 1992; सा.का.नि. 386 (अ), तारीख 22 अप्रैल, 1993; सा.का.नि. 422 (अ), तारीख 19 मई, 1993; सा.का.नि. 801 (अ), तारीख 31 दिसंबर, 1993; सा.का.नि. 320 (अ), तारीख 16 मार्च, 1994; सा.का.नि. 560 (अ), तारीख 19 सितंबर, 1997; सा.का.नि. 378 (अ), तारीख 30 जून, 1998; सा.का.नि. 07 (अ), तारीख 22 दिसंबर, 1998; सा.का.नि. 407 (अ), तारीख 31 मई, 2001; सा.का.नि. 826 (अ), तारीख 16 नवंबर, 2009; सा.का.नि. 513 (अ), तारीख 28 जून, 2012; सा.का.नि. 02 (अ), तारीख 02 जनवरी, 2014; का.आ. 3305 (अ), तारीख 07 दिसंबर, 2015; सा.का.नि. 593 (अ), तारीख 28 जून, 2018; और का.आ. 236 (अ), तारीख 16 जनवरी, 2020 द्वारा किए गए।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 21st May, 2020

S.O. 1561(E).—Whereas the Central Government had, in exercise of its powers under Section 3, Section 6 and Section 25 of Environment (Protection) Act, 1986 (29 of 1986) read with rule 5 of Environment (Protection) Rules, 1986, published draft rules further to amend sub-rule (8) of rule 3 of Environment (Protection) Rules, 1986, in the Gazette of India, Extraordinary, *vide* number G.S.R. 02(E), dated the

2nd January, 2014 mandating certain categories of thermal power plants to use coal with ash content restricted to 34%.

And whereas, the said Notification *vide* number G.S.R. 02(E) dated the 2nd January, 2014, mandated coal based thermal power plants to use raw or blended or beneficiated coal with ash content not exceeding thirty-four percent (34%), on quarterly basis, by the time lines given below:

Sl. No.	Category of Power Plant	Distance of location of Thermal Power Plant from pit-head/coal mine	Time lines
(a)	Stand-alone Thermal Power Plants (any capacity), and Captive Thermal Power Plants (with capacity of 100 MW and above)	Located in urban areas, or ecologically sensitive areas or critically polluted areas, irrespective of distance from pit-head, except pit-head power plants.	With effect from 2 nd June, 2014.
(b)		beyond 1000 km	With effect from 2 nd June, 2014.
(c)		between 750-1000 km	With effect from 1 st January, 2015.
(d)		between 500-749 km	With effect from 5 th June, 2016.

And whereas, the Central Government had, in exercise of its powers under sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986) read with sub-rule (3) of rule 5 of the Environment (Protection) Rules, in the Gazette of India, Extraordinary, *vide* number S.O. 3305 (E), dated the 7th December, 2015 and G.S.R. 593 (E), dated the 28th June, 2018 published the emission standards and specific water consumption for various category of thermal power plants, based on capacity of power generation and date of installation of power plant and to be achieved in time bound manner.

And whereas, the Ministry of Environment, Forest and Climate Change directed the Central Pollution Control Board *vide* F.No.Q-15017/40/2007-CPW dated the 7th December, 2017 to issue Directions under Section 5 of Environment (Protection) Act, 1986, to various Thermal Power Plants to install pollution control equipment as per the revised plan submitted by the Ministry of Power dated the 13th October, 2017 by 2022.

And whereas, the Ministry of Power has, *inter alia*, represented that with advancement in pollution control technologies, thermal power plants are better equipped to capture fly-ash generated in combustion process and unwashed coal can be used more efficiently and economically; thermal power plants are designed for coal with wide variety of ash content and are equipped with dry ash evacuation, handling and supply systems for ash utilisation; using washed coal makes power generation costlier; fly ash generated in thermal power plants is being used in several beneficial uses like cement manufacturing, brick making, road laying, back-fill material for reclamation of mine voids and low lying areas; requirement of maintaining average ash content to 34% prompts industries to undertake import of coal, resulting in outflow of foreign exchange etc.

And Whereas, the Ministry of Coal has, *inter alia*, represented that the coal mines are constantly striving to improve raw coal in terms of quality, size and extraneous material over the years which has considerably reduced wear and tear of all related equipment, coal washing process involves multiple handling and avoidable road transportation of huge quantities of coal from coal mines to washeries and then to rail sidings for onward transport to power plants; the washing process only divides the coal into washed coal and washery rejects while the ash content of mined coal remains the same; use of low grade coal washery rejects, in the multiple small user industries, generates more pollution etc.

And Whereas, the Ministry of Coal and Ministry of Power have, therefore, represented that the mandating power plants to use washed coal requires to be revisited by reconsidering the notification dated the 2nd January, 2014 which will help ease power generation for long distance haulage of coal without adverse impact on the environment.

And Whereas, the NITI Aayog, in its report after analysing the issue from the perspective of washeries, Coal mining, transportation and consumption of coal at power plants has, *inter alia*, summed up that use of washery rejects in nearby industries generates more pollution; since washery rejects are distributed in number of smaller industries, the pollution control at numerous points is more difficult than controlling the

pollution at power plant end; Ash generated in the washing process pollutes water along with coal particles and cannot be gainfully utilised; Coal washing process involves increased water use, effluent generation; Disposal of washery rejects has negative environmental impact as it has to handle and dispose huge quantity of low grade coal washery rejects, liquid effluent streams, coal storage, handling coal dust, runoff and fugitive dust; Coal washing also adversely impacts topography, water drainage pattern and quality, water bodies, surrounding air quality at large scale; Washing process increases the cost of power generation with no commensurate environmental advantages etc.

And Whereas, NITI Aayog has, therefore, recommended that it may be prudent to determine and enforce the environmental and pollution norms, to be complied with by the power generators, rather than restricting the ash content in coal, based on distance of transportation.

And Whereas, the Ministry of Environment, Forest and Climate Change, after deliberating the representations from Ministry of Power, Ministry of Coal, report of NITI Aayog and various stakeholders and after careful considerations & in larger public interest, arrived at the following:

- (i) The extent of ash content in mined coal remains the same. With washeries, the ash content gets divided at two places (washeries and the power plant), whereas if unwashed coal is used in power plant, the ash content is handled at only one place viz. the power plant;
- (ii) Thermal power plants are technologically equipped to address pollution control, ash management as they have high efficiency equipment to capture fly ash, dry ash evacuation and handling systems, ash supply systems for ash utilisation and tall stacks for wider dispersal of flue gases;
- (iii) The Ministry of Environment, Forest and Climate Change has notified emission norms, mandating respective thermal power plants to adhere to such norms in a time bound manner;

And Whereas, it is expedient to adopt best possible framework towards handling of unwashed coal including management of fly ash and other associated environmental aspects arising out of processing of unwashed coal at different stages.

And Whereas, the Ministry of Coal has represented that in view of the existing unprecedented COVID-19 pandemic and the resultant immediate requirement of utilization of domestic coal by stimulating coal sector demand for power generation in the country, it is desirable to issue the notification at the earliest.

Now, therefore, in exercise of the powers conferred by Section 3, Section 6 and Section 25 of the Environment Protection Act, 1986 (29 of 1986) read with sub-rule (4) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government, after having dispensed with the requirement of notice under clause (a) of sub-rule (3) of rule 5 of the said rules, in public interest, hereby makes the following rules to further amend the Environment (Protection) Rules, 1986, namely :-

1. (1) These rules may be called the Environment (Protection) Amendment Rules, 2020
(2) They shall come into force on the date of their publication in the Official Gazette.
2. In the Environment (Protection) Rules, 1986, in rule 3, for sub-rule (8), the following sub-rule shall be substituted, namely :-

“(8) Use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to following conditions:

- (1) **Setting Up Technology Solution for emission norms:**
 - (i) Compliance of specified emission norms for Particulate Matter, as per extant notifications and instructions of Central Pollution Control Board, issued from time to time.
 - (ii) In case of washeries, Middling and rejects to be utilized in FBC (Fluidised Bed Combustion) technology based thermal power plants. Washery to have linkage for middling and rejects in Fluidised Bed Combustion plants.
- (2) **Management of Ash Ponds:**
 - (i) The thermal powers plants shall comply with conditions, as notified in the Fly Ash notification issued from time to time, without being entitled to additional capacity of fly ash pond (for existing power generation capacity) on ground of switching from washed coal to unwashed coal.
 - (ii) Appropriate Technology solutions shall be applied to optimise water consumption for Ash management;

- (iii) The segregation of ash may be done at the Electro-Static Precipitator stage, if required, based on site specific conditions, to ensure maximum utilization of fly ash;
- (iv) Subject to 2(i) above, the thermal power plants to dispose flyash in abandoned or working mines (to be facilitated by mine owner) with environmental safeguards.

(3) **Transportation:**

- (i) Coal transportation may be undertaken by covered Railway wagon (railway wagons covered by tarpaulin or other means) and/or covered conveyer beyond the mine area. However, till such time enabling Rail transport/conveyer infrastructure is not available, road transportation may be undertaken in trucks, covered by tarpaulin or other means.
- (ii) It shall be ensured by the thermal power plant that
 - a. Rail siding facility or conveyor facility is set up at or near the power plant, for transportation by rail or conveyor; and
 - b. If transportation by rail or conveyor facility is not available, ensure that the coal is transported out from the Delivery Point of the respective mine in covered trucks (by tarpaulin or other means), or any mechanized closed trucks by road.
- (4) This shall also be deemed to be additional conditions of the relevant Environmental Clearances for respective projects for financial year 2020-21 and onwards. The existing Environmental Clearances shall stand modified so as to make the above conditions operative for relevant sectors. The Consent to Operate shall be issued by respective State Pollution Control Boards accordingly.”

[F.No.13014/01/2020-IA.I(T)]

GEETA MENON, Jt. Secy.

Note:-The principal rules were published in the Gazette of India *vide* number S.O. 844(E), dated the 19th November, 1986 and subsequently amended *vide* numbers S.O. 82(E), dated 16th February, 1987; S.O. 64(E), dated 18th January, 1988; G.S.R. 931(E), dated 27th October, 1989; S.O. 23(E), dated 16th January, 1991; G.S.R. 95(E), dated 12th February, 1992; G.S.R. 329(E), dated 13th March, 1992; G.S.R. 562(E), dated 27th May, 1992; G.S.R. 884(E), dated 20th November, 1992; G.S.R. 386(E), dated 22nd April, 1993; G.S.R. 422(E), dated 19th May, 1993; G.S.R. 801(E), dated 31st December, 1993; G.S.R. 320(E), dated 16th March, 1994; G.S.R. 560(E), dated 19th September, 1997; G.S.R. 378(E), dated 30th June, 1998; G.S.R. 7(E), dated 22nd December, 1998; G.S.R. 407(E), dated 31st May, 2001; G.S.R. 826(E), dated 16th November, 2009; G.S.R. 513(E), dated 28th June, 2012; G.S.R. 02(E) dated 2nd January, 2014; S.O. 3305 (E), dated 7th December, 2015; G.S.R. 593(E), dated 28th June, 2018 and S.O. 236 (E), dated 16th January, 2020.



सत्यमेव जयते

भारत का राजपत्र

The Gazette of India

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असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)
PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 192]
No. 192]

नई दिल्ली, बृहस्पतिवार, अप्रैल 1, 2021/चैत्र 11, 1943
NEW DELHI, THURSDAY, APRIL 1, 2021/CHAITRA 11, 1943

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 31 मार्च, 2021

सा.का.नि. 243(अ).—केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3, धारा 6 और धारा 25 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, पर्यावरण (संरक्षण) नियम, 1986 का और संशोधन करने के लिए निम्नलिखित नियम बनाती है, अर्थात् :-

1. (1) इन नियमों का संक्षिप्त नाम पर्यावरण (संरक्षण) संशोधन नियम, 2021 है।
- (2) ये नियम राजपत्र में प्रकाशन की तारीख को प्रवृत्त होंगे।
2. पर्यावरण (संरक्षण) नियम, 1986 की अनुसूची-1, के क्रम संख्यांक 25 में, “*टीपीपी (इकाईयां) इस अधिसूचना के प्रकाशन की तारीख से दो वर्ष के भीतर सीमाओं को पूरा करेंगी”, अक्षरों, कोष्ठकों और शब्दों के स्थान पर, निम्नलिखित रखा जाएगा, अर्थात् :-

“(i) पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, विद्युत मंत्रालय, केन्द्रीय विद्युत प्राधिकरण (सीईए) और केन्द्रीय प्रदूषण नियंत्रण बोर्ड के प्रतिनिधियों से मिलकर बने कार्य बल का गठन केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) द्वारा सारणी-1 में यथाविनिर्दिष्ट तीन प्रवर्गों में सारणी-1 के स्तंभ (4) में यथाविनिर्दिष्ट समय सीमा के भीतर उत्सर्जन मानदंडों के अनुरूप होने के लिए उनकी अवस्थिति के आधार पर तापीय विद्युत संयंत्रों के प्रवर्गीकरण हेतु किया जाएगा, अर्थात् :-

सारणी-1

क्र.सं.	प्रवर्ग	अवस्थिति/स्थान	अनुपालन के लिए समय सीमाएं	
			निवृत्त नहीं होने वाली इकाईयां	निवृत्त होने वाली इकाईयां
(1)	(2)	(3)	(4)	(5)
1	प्रवर्ग क	10 लाख से अधिक जनसंख्या वाले राष्ट्रीय राजधानी क्षेत्र या शहरों की 10 किलोमीटर की परिधि के भीतर 1	31 दिसम्बर, 2022 तक	31 दिसम्बर, 2022 तक
2	प्रवर्ग ख	गंभीर रूप से प्रदूषित क्षेत्रों या गैर प्राप्ति शहरों की 10 किलोमीटर की परिधि के भीतर 2	31 दिसम्बर, 2023 तक	31 दिसम्बर, 2025 तक
3	प्रवर्ग ग	प्रवर्ग क और ख में सम्मिलित से भिन्न	31 दिसम्बर, 2024 तक	31 दिसम्बर, 2025 तक

1 भारत की 2011 की जनगणना के अनुसार।

2 सीपीसीबी द्वारा यथापरिभाषित।

(ii) सारणी-1 के स्तंभ (5) में यथाविनिर्दिष्ट तारीख के पूर्व निवृत्त होने के लिए घोषित तापीय विद्युत संयंत्र से, उस स्थिति में जहां ऐसे संयंत्र उनके निवृत्त होने के आधार पर छूट के लिए सीपीसीबी और सीईए को एक प्रतिज्ञान प्रस्तुत करते हैं, विनिर्दिष्ट मानदंडों को पूर्ण करने की अपेक्षा नहीं की जाएगी:

परन्तु ऐसे संयंत्रों से, उस स्थिति में जहां उनका प्रचालन प्रतिज्ञान में यथाविनिर्दिष्ट तारीख से आगे जारी रहता है, जनित विद्युत के प्रति यूनिट पर 0.20 रुपए की दर से पर्यावरण प्रतिकर उद्धृत किया जाएगा;

(iii) निवृत्त नहीं होने वाले तापीय विद्युत संयंत्र से, सारणी-1 के स्तंभ (4) में यथाविनिर्दिष्ट तारीख के पश्चात्, सारणी-2 में विनिर्दिष्ट दरों के अनुसार पर्यावरण प्रतिकर उद्धृत किया जाएगा, अर्थात् :-

सारणी-2

समय-सीमा से आगे गैर अनुपालन प्रचालन	पर्यावरणीय प्रतिकर (रुपए प्रति यूनिट जनित विद्युत)		
	प्रवर्ग क	प्रवर्ग ख	प्रवर्ग ग
0-180 दिवस	0.10	0.07	0.05
181-365 दिवस	0.15	0.10	0.075
366 दिवस और अधिक	0.20	0.15	0.10*

[फा.सं. क्यू-15017/40/2007-सीपीडब्ल्यू]

नरेश पाल गंगवार, संयुक्त सचिव

टिप्पण: मूल नियम, भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपखंड (i) में अधिसूचना संख्या का.आ. 844(अ), तारीख 19 नवम्बर, 1986 द्वारा प्रकाशित किए गए थे और उनका अंतिम संशोधन अधिसूचना संख्या सा.का.नि. 662(अ), तारीख 19 अक्टूबर, 2020 द्वारा किया गया।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 31st March, 2021

G.S.R. 243(E).—In exercise of the powers conferred by sections 3, 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:—

1. (1) These rules may be called the Environment (Protection) Amendment Rules, 2021.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986, in Schedule – I, in serial number 25 for letters, brackets and words “*TPPs (units) shall meet the limits within two years from date of publication of this notification”, the following shall be substituted, namely: -

“* (i) A task force shall be constituted by Central Pollution Control Board (CPCB) comprising of representative from Ministry of Environment and Forest and Climate Change, Ministry of Power, Central Electricity Authority (CEA) and CPCB to categorise thermal power plants in three categories as specified in the Table-I on the basis of their location to comply with the emission norms within the time limit as specified in column (4) of the Table-I, namely: -

Table-I

Sl. No.	Category	Location/area	Timelines for compliance	
			Non retiring units	Retiring units
(1)	(2)	(3)	(4)	(5)
1	Category A	Within 10 km radius of National Capital Region or cities having million plus population ¹ .	Upto 31 st December 2022	Upto 31 st December 2022
2	Category B	Within 10 km radius of Critically Polluted Areas ² or Non-attainment cities ²	Upto 31 st December 2023	Upto 31 st December 2025
3	Category C	Other than those included in category A and B	Upto 31 st December 2024	Upto 31 st December 2025

¹ As per 2011 census of India.

² As defined by CPCB.

(ii) the thermal power plant declared to retire before the date as specified in column (5) of Table-I shall not be required to meet the specified norms in case such plants submit an undertaking to CPCB and CEA for exemption on ground of retirement of such plant:

Provided that such plants shall be levied environment compensation at the rate of rupees 0.20 per unit electricity generated in case their operation is continued beyond the date as specified in the Undertaking;

(iii) there shall be levied environment compensation on the non-retiring thermal power plant, after the date as specified in column (4) of Table-I, as per the rates specified in the Table-II, namely:-

Table-II

Non-Compliant operation beyond the Timeline	Environmental Compensation (Rs. per unit electricity generated)		
	Category A	Category B	Category C
0-180 days	0.10	0.07	0.05
181-365 days	0.15	0.10	0.075
366 days and beyond	0.20	0.15	0.10.”

[F. No. Q-15017/40/2007-CPW]

NARESH PAL GANGAWAR, Jt. Secy.

Note: The principle rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i) vide number S.O. 844(E), dated the 19th November, 1986 and lastly amended vide notification G.S.R. 662(E), dated the 19th October, 2020.



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असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित
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नई दिल्ली, शुक्रवार, दिसम्बर 31, 2021/पौष 10, 1943
NEW DELHI, FRIDAY, DECEMBER 31, 2021/PAUSHA 10, 1943

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 31 दिसम्बर, 2021

का.आ. 5481(अ).—केन्द्रीय सरकार ने भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 763 (अ) तारीख 14 सितम्बर, 1999 द्वारा कोयला या लिग्नाइट आधारित ताप विद्युत संयंत्रों से तीन सौ किलोमीटर के विनिर्दिष्ट व्यास के भीतर ईंटों के विनिर्माण के लिए उपजाऊ मिट्टी के उत्खनन को प्रतिबंधित करने के लिए और भवन निर्माण सामग्री के विनिर्माण में और संनिर्माण क्रियाकलाप में फ्लाई-राख के उपयोग को बढ़ावा देने के लिए निदेश जारी किए हैं;

और, प्रदूषणकर्ता भुगतान सिद्धांत (पीपीपी) के आधार पर, ऐसा करके कोयला या लिग्नाइट आधारित ताप विद्युत संयंत्रों द्वारा फ्लाई-राख का 100 प्रतिशत उपयोग सुनिश्चित करते हुए और फ्लाई-राख प्रबंधन प्रणाली की संधारणीयता के लिए पूर्वोक्त अधिसूचना को और अधिक प्रभावकारी ढंग से कार्यान्वित करने हेतु, केंद्रीय सरकार ने मौजूदा अधिसूचना की समीक्षा की;

और प्रदूषणकर्ता भुगतान सिद्धांत के आधार पर पर्यावरणीय प्रतिकर निर्धारित किए जाने की आवश्यकता है;

और, विनिर्माण को बढ़ावा देकर तथा निर्माण कार्य के क्षेत्र में राख आधारित उत्पादों तथा भवन निर्माण सामग्रियों के प्रयोग को अनिवार्य करके उपजाऊ मिट्टी को संरक्षित करने की आवश्यकता है;

और, सड़क बनाने, सड़क एवं फ्लाई ओवर के रेलिंग बनाने, तटरेखा की सुरक्षा का उपाय करने, अनुमोदित परियोजनाओं के निचले क्षेत्रों को भरने, खनित स्थलों को फिर से भरने में मिट्टी की सामग्रियों से भरने के विकल्प के रूप में राख उपयोग को बढ़ावा देकर उपजाऊ मिट्टी और प्राकृतिक संसाधनों को संरक्षित करने की आवश्यकता है;

और, पर्यावरण को सुरक्षित करना तथा कोयला अथवा लिग्नाइट आधारित ताप विद्युत संयंत्रों से सृजित फ्लाई राख के निक्षेपण तथा निपटान की रोकथाम करना आवश्यक है;

और, उक्त अधिसूचना में जो 'राख' शब्द का प्रयोग किया गया है उसमें कोयला या लिग्नाइट आधारित ताप विद्युत संयंत्रों से सृजित फ्लाई-राख और बॉटम-राख दोनों शामिल हैं;

और, केंद्रीय सरकार प्रदूषणकर्ता भुगतान सिद्धांत के आधार पर, पर्यावरणीय प्रतिकर की प्रणाली सहित राख के उपयोग के लिए एक व्यापक ढांचा लाना चाहती है;

अतः पर्यावरण (संरक्षण) नियम, 1986 के नियम (5) के उप-नियम (3) के खंड (घ) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उप-धारा (1) और उप-धारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, भारत सरकार के पर्यावरण एवं वन मंत्रालय की अधिसूचना जो का.आ. 763 (अ) तारीख 14 सितम्बर, 1999 द्वारा भारत के राजपत्र, असाधारण भाग II, खंड 3, उप खंड (i) में प्रकाशित का अधिक्रमण करते हुए, कोयला या लिग्नाइट आधारित ताप विद्युत संयंत्रों द्वारा राख के उपयोग के संबंध में प्रारूप अधिसूचना जो सा.का.नि. 285 (अ) तारीख 22 अप्रैल, 2021 द्वारा भारत के राजपत्र, असाधारण, भाग-2, धारा 3, उप धारा (i) में प्रकाशित की गई थी जिसमें उन सभी व्यक्तियों से जिनका इससे प्रभावित होना सामान्य है उस तारीख से, जिसको उक्त प्रारूप उपबंधों की शासकीय राजपत्र में अंतर्विष्ट प्रतियां जनता को उपलब्ध करा दी गई थी, साठ दिनों के अवसान से पूर्व आक्षेप और सुझाव आमंत्रित किए गए थे।

और उक्त प्रारूप अधिसूचना के संबंध में उससे संभावित तौर पर प्रभावित होने वाले सभी व्यक्तियों से प्राप्त आक्षेपों और सुझावों पर केंद्रीय सरकार द्वारा सम्यक रूप से विचार कर लिया गया है;

अतः पर्यावरण (संरक्षण) नियम, 1986 के नियम (5) के उप-नियम (3) के खंड (घ) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उप-धारा (1) और उप-धारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए और अधिसूचना का.आ. 763 (अ) तारीख 14 सितम्बर, 1999 का उन बातों के सिवाय अधिकृत करते हुए जिन्हें ऐसे अधिक्रमण से पूर्व किया गया है या करने का लोप किया गया है, केंद्रीय सरकार कोयलों या लिग्नाइट आधारित ताप विद्युत संयंत्रों से राख के उपयोग के संबंध में निम्नलिखित अधिसूचना जारी करती है, जो इस अधिसूचना के प्रकाशन की तिथि से प्रवृत्त होगी, अर्थात्

क. फ्लाई-राख और बॉटम-राख का निपटान करने हेतु ताप विद्युत संयंत्रों (टीपीपी) के उत्तरदायित्व.-

(1) प्रत्येक कोयला या लिग्नाइट आधारित ताप विद्युत संयंत्र (जिनमें कैप्टिव और/या सह-उत्पादन केंद्र शामिल हैं या दोनों) की यह प्राथमिक जिम्मेदारी होगी कि वह अपने द्वारा सृजित राख (फ्लाई-राख और बॉटम-राख) का उप पैरा (2) में दिए गए पारि-अनुकूल तरीके से 100 प्रतिशत उपयोग सुनिश्चित करे;

(2) कोयला या लिग्नाइट आधारित ताप विद्युत संयंत्रों से सृजित राख का उपयोग केवल निम्नलिखित पारि-अनुकूल प्रयोजनों के लिए किया जाएगा, अर्थात्:-

- (i) फ्लाई राख पर आधारित उत्पाद अर्थात्: ईट ब्लॉक टाइल, फाइबर सीमेंट शीट, पाइप, बोर्ड, पैनल का विनिर्माण;
- (ii) सीमेंट विनिर्माण, रेडी-मिक्स कंक्रीट;

- (iii) सड़क निर्माण और फ्लाई-ओवर के रेलिंग का निर्माण, राख और जिओ-पॉलीमर आधारित निर्माण सामग्री;
- (iv) बांध का निर्माण;
- (v) निचले क्षेत्र को भरना;
- (vi) खनन कार्य से रिक्त हुए स्थान को भरना;
- (vii) सिंटेड या शीत-बद्ध राख संचय का विनिर्माण;
- (viii) मृदा परीक्षण के आधार पर नियंत्रित तरीके से कृषि;
- (ix) तटीय जिलों में तटरेखा संरक्षण संरचनाओं का निर्माण;
- (x) अन्य देशों को राख का निर्यात;
- (xi) समय-समय पर यथाधिसूचित किसी अन्य पारि-अनुकूल प्रयोजन के लिए।
- (3) अध्यक्ष, केंद्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) की अध्यक्षता में एक समिति गठित की जाएगी जिसमें पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय (एमओईएफसीसी), विद्युत मंत्रालय, खान मंत्रालय, कोयला मंत्रालय, सड़क परिवहन और राजमार्ग मंत्रालय, कृषि अनुसंधान एवं शिक्षा विभाग, सड़क कांग्रेस संस्थान तथा राष्ट्रीय सीमेंट एवं भवन सामग्री परिषद के प्रतिनिधियों को सदस्यों के रूप में शामिल किया जाएगा, जिसका प्रयोजन राख के उपयोग के पारि-अनुकूल तौर-तरीकों की जांच करना, उनकी समीक्षा एवं अनुशंसा करना तथा प्रौद्योगिकीय विकासों तथा पणधारी से प्राप्त अनुरोधों के आधार पर उप-पैरा (2) में यथोल्लिखित ऐसे तौर-तरीकों की सूची में समिति द्वारा सुझाए गए तौर-तरीकों को शामिल करना या किसी तौर-तरीके को सूची से हटाना या उसमें संशोधन करना है। जब भी इस प्रयोजन के लिए अपेक्षित हो, यह समिति राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति, ताप विद्युत संयंत्र और खानों के प्रचालकों को आमंत्रित कर सकती है। इस समिति सिफारिश के आधार पर, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय ऐसे पारि-अनुकूल प्रयोजन प्रकाशित करेगा।
- (4) प्रत्येक कोयला या लिग्नाइट आधारित ताप विद्युत संयंत्र उस वर्ष के दौरान सृजित राख (फ्लाई-राख और बॉटम-राख) का 100 प्रतिशत उपयोग करने हेतु उत्तरदायी होगा; तथापि, किसी भी स्थिति में, किसी वर्ष में राख का उपयोग 80 प्रतिशत से नीचे नहीं होगा और साथ ही, उस ताप विद्युत संयंत्र को तीन वर्ष की अवधि में 100 प्रतिशत औसत राख के उपयोग का लक्ष्य प्राप्त करना होगा :

परंतु, यह और कि पहली बार के लिए लागू तीन वर्ष के चक्र को ऐसे ताप विद्युत संयंत्रों, जहां राख का उपयोग 60-80 प्रतिशत के बीच होता है, एक वर्ष के लिए और ऐसे संयंत्रों, जहां राख का उपयोग 60 प्रतिशत से कम है, दो वर्ष के लिए बढ़ाया जा सकता है, और राख के उपयोग की प्रतिशतता की गणना के प्रयोजन के लिए वर्ष 2021-2022 में उपयोग की प्रतिशत प्रमात्रा को नीचे दी गई तालिका के अनुसार ध्यान में रखा जाएगा:

तापीय विद्युत संयंत्रों के उपयोग की प्रतिशतता	100 प्रतिशत उपयोगिता प्राप्त करने के लिए प्रथम अनुपालन चक्र	100 प्रतिशत उपयोगिता प्राप्त करने के लिए द्वितीय अनुपालन चक्र
>80 प्रतिशत	3 वर्ष	3 वर्ष
60-80 प्रतिशत	4 वर्ष	3 वर्ष
<60 प्रतिशत	5 वर्ष	3 वर्ष

परन्तु, ताप विद्युत संयंत्रों के लिए 80 प्रतिशत न्यूनतम उपयोग प्रतिशतता, क्रमशः 60-80 प्रतिशत और <60 प्रतिशत की उपयोगिता की श्रेणी के तहत आने वाले ताप विद्युत संयंत्रों के लिए प्रथम अनुपालन चक्र के पहले वर्ष और पहले दो वर्षों पर लागू नहीं होगी।

परन्तु, अनुपालन चक्र के अंतिम वर्ष में सृजित 20 प्रतिशत राख को अगले चक्र में भी ले जाया जाएगा जिसका उपयोग उस अनुपालन चक्र के दौरान सृजित राख के साथ अगले तीन वर्षों में किया जाएगा।

- (5) अप्रयुक्त संचित राख अर्थात् लीगेसी राख, जिसका इस अधिसूचना के प्रकाशन से पहले भंडारण किया गया है, को ताप विद्युत संयंत्र (टीपीपी) द्वारा इस रीति से क्रमिक रूप से उपयोग में लाया जाएगा, कि लीगेसी राख को इस अधिसूचना के प्रकाशन की तिथि से दस वर्षों के भीतर पूरी तरह उपयोग कर लिया जाएगा और यह उस विशिष्ट वर्ष के चालू संचालनों के माध्यम से राख उत्सर्जन के लिए निर्धारित उपयोग लक्ष्यों से अतिरिक्त होगा।

परन्तु, निम्नलिखित प्रतिशतताओं में यथा उल्लिखित लीगेसी राख की न्यूनतम मात्रा का उपयोग तास्थानी वर्ष के दौरान कर लिया जाएगा और लीगेसी राख की न्यूनतम मात्रा की ताप विद्युत संयंत्र की संस्थापित क्षमता के अनुसार वार्षिक राख उत्सर्जन के आधार पर की जानी है।

प्रकाशन की तिथि से वर्ष	पहला	दूसरा	तीसरा-दसवां
लीगेसी राख का उपयोग (वार्षिक राख की प्रतिशतता)	कम से कम 20 प्रतिशत	कम से कम 35 प्रतिशत	कम से कम 50 प्रतिशत

परन्तु, यह और कि लीगेसी राख का उपयोग वहां अपेक्षित नहीं है, जहां राख के तालाब या डाइक स्थिर हो गए हैं और हरित पट्टी के निर्माण या पौध रोपण से पुनरुद्धार किया गया है और संबंधित राज्य प्रदूषण नियंत्रण बोर्ड इस संबंध में प्रमाणित करेगा। किसी राख तालाब या डाइक के स्थिरीकरण और भूमि-उद्धार का कार्य, जिसमें केन्द्रीय प्रदूषण नियंत्रण बोर्ड या राज्य प्रदूषण नियंत्रण बोर्ड द्वारा प्रमाणन शामिल है, इस अधिसूचना के प्रकाशन की तारीख से एक वर्ष के भीतर किया जाएगा। अन्य सभी राख के कुंड या डाइक में शेष बचे राख का उपयोग ऊपर उल्लिखित समय-सीमाओं के अनुसार क्रमिक रूप से किया जाएगा।

टिप्पण: राख के उपयोग के लक्ष्यों को हासिल करने के लिए उप पैरा (4) और (5) के अधीन दायित्व 01 अप्रैल, 2022 की तारीख से लागू होंगे।

- (6) किसी भी नए तापीय विद्युत संयंत्र (टीपीपी) में 0.1 हेक्टेयर प्रति मेगावाट (एमडब्ल्यू) क्षेत्रफल के साथ आपातकालीन या अस्थायी राख कुंड की अनुमति दी जा सकती है। राख के तालाब या डाइकों का तकनीकी विनिर्देश, केन्द्रीय विद्युत प्राधिकरण (सीईए) के परामर्श से केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा बनाए गए दिशानिर्देशों के अनुसार होगा और ये दिशानिर्देश राख के कुंड या डाइक के संबंध में इसकी सुरक्षा, पर्यावरणीय प्रदूषण, उपलब्ध प्रमात्रा, निपटान का तरीका, निपटान में जल की खपत या संरक्षण, राख जल पुनर्चक्रण और ग्रीन बेल्ट आदि के वार्षिक प्रमाणन के लिए कार्यविधि भी निर्धारित करेंगे और इस अधिसूचना के प्रकाशन की तारीख से तीन महीनों के भीतर प्रस्तुत किए जाएंगे।
- (7) प्रत्येक कोयला या लिग्नाइट आधारित ताप विद्युत संयंत्र यह सुनिश्चित करेगा कि राख की लदाई, उतराई, ढुलाई, भंडारण और निपटान पर्यावरणीय दृष्टि से अनुकूल रीति से किया गया है और वायु और जल प्रदूषण की रोकथाम के लिए सभी ऐहियतात किए गए हैं और इस संबंध में स्थिति की सूचना इस अधिसूचना में संलग्न अनुबंध में संबंधित राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) को दी जाएगी।
- (8) प्रत्येक कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्र, संस्थापित क्षमता पर आधारित राख के कम से कम 16 घंटों के भंडारण के लिए समर्पित शुष्क फ्लाई राख साइलोस प्रतिष्ठापित करेगा, जिनके पास पृथक पहुंच मार्ग होंगे, जिससे कि राख पहुंचाने के कार्य को सुगम बनाया जा सके। इसकी सूचना संबंधित राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) को उपाबंध में दी जाएगी और केन्द्रीय प्रदूषण नियंत्रण

बोर्ड (सीपीसीबी) या राज्य केन्द्रीय प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति द्वारा समय-समय पर निरीक्षण किया जाएगा।

- (9) प्रत्येक कोयला या लिग्नाईट आधारित तापीय विद्युत संयंत्र (जिसके अंतर्गत कैप्टिव या सह उत्पादन केन्द्र भी है या दोनों), वास्तविक उपयोगकर्ता (उपयोगकर्ताओं) के हित के लिए केन्द्रीय प्रदूषण नियंत्रण बोर्ड के वेब पोर्टल या मोबाईल फोन एप्प का लिंक उपलब्ध कराकर ताप विद्युत संयंत्र के पास राख की उपलब्धता के वास्तविक आंकड़े प्रदान करेगा।
- (10) राख के 100 प्रतिशत उपयोग का वैधानिक दायित्व, जहां भी लागू हो, विधि में बदलाव के रूप में माना जाएगा।

ख. राख के उपयोग के प्रयोजनार्थ, उत्तरवर्ती उप पैराग्राफ लागू होंगे :-

- (1) ऐसे सभी अभिकरण (सरकारी, अर्द्धसरकारी और निजी), जो सड़क बिछाने, सड़क और फ्लाई ओवर के किनारों, तटीय जिलों में तटरेखा की सुरक्षा संरचनाओं और लिग्नाईट या कोयला आधारित ताप विद्युत संयंत्र से 300 किमी के भीतर बांधों जैसे निर्माण संबंधी कार्यकलापों में लगे हुए हैं, इन कार्यकलापों में अनिवार्य रूप से राख का उपयोग करेंगे :

परंतु इसको परियोजना स्थल पर निशुल्क पहुंचाया जाए और परिवहन लागत, ऐसे कोयला या लिग्नाईट आधारित ताप विद्युत संयंत्रों द्वारा वहन की जाए।

परंतु यह और कि ताप विद्युत संयंत्र पारस्परिक सहमत हुई शर्तों के अनुसार राख की लागत और परिवहन के लिए शुल्क ले सकता है उस मामले में जहां ताप विद्युत संयंत्र अन्य माध्यम से राख का निपटान करने में समर्थ है और ये अभिकरण इसके लिए प्रार्थना कर सकते हैं और बिना लागत और बिना परिवहन शुल्क के राख उपलब्ध कराने के प्रावधान तभी लागू होंगे यदि उसके लिए ताप विद्युत संयंत्र उस निर्माण अभिकरण को नोटिस जारी करता है।

- (2) उक्त कार्यकलापों में राख का उपयोग भारतीय मानक ब्यूरो, भारतीय रोड कांग्रेस, केन्द्रीय भवन अनुसंधान संस्थान, रूडकी, केन्द्रीय सड़क अनुसंधान संस्थान, दिल्ली, केन्द्रीय लोक निर्माण विभाग, राज्य लोक निर्माण विभागों और अन्य केन्द्रीय और राज्य सरकार के अभिकरणों द्वारा निर्धारित किए गए विनिर्देशों और दिशानिर्देशों के अनुसार किया जाएगा।

- (3) तापीय विद्युत संयंत्र की 300 किलोमीटर की परिधि के भीतर अवस्थित सभी खानों के लिए विस्तारित उत्पादक उत्तरदायित्व (ईपीआर) के तहत खुली आवर्त खानों में राख का पृष्ठ भंडारण करना या अधिक भार के ढेरों के साथ राख का मिश्रण करना बाध्यकारी होगा। सभी खान के स्वामी या प्रचालक (चाहे सरकारी, सार्वजनिक और निजी क्षेत्र के हो) कोयला या लिग्नाईट आधारित तापीय विद्युत संयंत्रों से तीन सौ किलोमीटर (सड़क द्वारा) के भीतर, महानिदेशक, खान सुरक्षा (डीजीएमएस) के दिशानिर्देशों के अनुसार ओवर बर्डन के बाह्य निक्षेप खान की बैकफिलिंग अथवा स्टोर्विंग (प्रचालित या छोड़ी गई खानों, जैसा भी मामला हो) के लिए उपयोग की गई सामग्रियों के भार-दर-भार के आधार पर कम से कम 25 प्रतिशत राख को मिश्रित करने के लिए उपाय करेंगे :

परंतु ऐसे तापीय विद्युत केन्द्र निःशुल्क राख प्रदान करके और परिवहन की लागत को वहन करके या पारस्परिक सहमत हुई शर्तों पर लिए गए निर्णय के अनुसार लागत या परिवहन व्यवस्था करके राख की अपेक्षित मात्रा की उपलब्धता को सुकर बनायेंगे और खानों के खाली स्थानों और ढेरों में अधिकभार के साथ राख को मिश्रित करना, सृजित अधिभार के लिए इस अधिसूचना के प्रकाशन की तिथि से लागू होगा और उक्त कार्यकलापों में राख का उपयोग, केन्द्रीय प्रदूषण नियंत्रण बोर्ड, महानिदेशक खान सुरक्षा और भारतीय खदान ब्यूरो द्वारा निर्धारित दिशानिर्देशों के अनुसार किया जाएगा।

स्पष्टीकरण .- इस उप-पैरा के प्रयोजन के लिए यह भी स्पष्ट किया जाता है कि लागत मुक्त राख और निःशुल्क परिवहन के उपबंध केवल तभी लागू होंगे यदि ताप विद्युत संयंत्र इसके लिए खान मालिक को नोटिस देते हैं और अधिभार वाले ढेर के साथ मिश्रित करने और खान में खाली स्थान को भरने के लिए राख के 25 प्रतिशत हिस्से के उपयोग का अधिदेश तब तक लागू नहीं होगा जब तक कि ताप विद्युत संयंत्र द्वारा खान मालिक को नोटिस न दिया गया हो।

- (5) (i) सभी खान मालिकों को खान में खाली स्थानों में राख को समायोजित करने के लिए खान बंद योजना (प्रगामी और अंतिम) तैयार करनी होगी और खान में खाली स्थानों में राख के निपटान और अधिभार वाले ढेर के साथ राख को मिश्रित करने के लिए खान योजनाओं को संबंधित प्राधिकारी अनुमोदित करेगा। पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा ताप विद्युत संयंत्रों और कोयला खदानों की पर्यावरणीय मंजूरी की अपेक्षा से छूट देने के साथ-साथ ऐसे निपटान के लिए अपनाए जाने वाले दिशानिर्देशों के संबंध में तारीख 28 अगस्त, 2019 को दिशानिर्देश जारी किए गए।
- (ii) मंत्रालय, केन्द्रीय प्रदूषण नियंत्रण बोर्ड, महानिदेशक, खान सुरक्षा (डीजीएमएस) और भारतीय खान ब्यूरो (आईबीएम) के साथ परामर्श करके, खानों में खाली स्थानों में राख के निपटान करने तथा अधिभार वाले ढेरों में इसे मिश्रित करना सुगम बनाने के लिए समय-समय पर आगे भी दिशानिर्देश जारी कर सकता है और यह खान मालिकों की जिम्मेदारी होगी कि वे ऐसी खानों को अभिज्ञात करने की तिथि से एक वर्ष के भीतर विभिन्न विनियामक प्राधिकरणों द्वारा जारी की गई अनुमतियों में आवश्यक संशोधन या परिवर्तन प्राप्त करेंगे।
- (6) (i) पर्यावरणीय प्रदूषण के संदर्भ में सुरक्षा, व्यवहार्यता (आर्थिक व्यवहार्यता नहीं) और पहलुओं की जांच सहित राख से खान में खाली स्थान को वापस भरने/अधिभार वाले ढेर के साथ राख को मिश्रित करने के लिए खानों की पहचान करने के लिए पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, विद्युत मंत्रालय, खान मंत्रालय, कोयला मंत्रालय, महानिदेशक खान सुरक्षा और भारतीय खान ब्यूरो से प्रतिनिधियों को शामिल करते हुए अध्यक्ष, केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) की अध्यक्षता में एक समिति का गठन किया जाएगा और यह समिति पणधारी मंत्रालयों या विभागों के लिए अभिज्ञात खानों (भूमिगत और खुली, दोनों) के संबंध में तैयार की गई तिमाही रिपोर्टों को अद्यतन करेगी और यह समिति, इस अधिसूचना के प्रकाशन के तुरंत पश्चात उपयुक्त खानों की पहचान करना आरंभ करेगी।
- (ii) ताप विद्युत संयंत्र या खानें, उपरोक्त अनुसार अधिदेशित उपयोग लक्ष्यों को पूरा करने के लिए उपर्युक्त समिति द्वारा पहचान किए जाने तक राख के निपटान हेतु प्रतीक्षा नहीं करेंगी।
- (7) राख से निचले क्षेत्र को भरने का कार्य, अनुमोदित परियोजनाओं के लिए राज्य प्रदूषण नियंत्रण बोर्ड की पूर्व अनुमति से और केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा निर्धारित दिशा-निर्देशों के अनुसार किया जाएगा और राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति द्वारा अनुमोदित स्थलों, अवस्थान, क्षेत्र और अनुमत मात्रा को अपनी वेबसाइट पर प्रतिवर्ष प्रकाशित किया जाएगा।
- (8) केन्द्रीय प्रदूषण नियंत्रण बोर्ड, संगत पणधारी के साथ मिलकर, राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) द्वारा अनुमति प्रदान करने के लिए समयबद्ध ऑनलाइन आवेदन प्रक्रिया प्रस्तुत करने के साथ-साथ इस अधिसूचना के अधीन परिकल्पित सभी प्रकार के कार्यकलापों के लिए एक वर्ष के भीतर दिशानिर्देश प्रस्तुत करेगा।
- (9) कोयला या लिग्नाइट आधारित तापीय ऊर्जा संयंत्र से तीन सौ किलोमीटर के दायरे में स्थित सभी भवन निर्माण परियोजनाएं (केंद्रीय, राज्य और स्थानीय प्राधिकरणों सरकारी उपक्रमों, अन्य सरकारी अभिकरणों तथा सभी निजी अभिकरणों) राख की ईटों, टाइल्स, धातुमल राख अथवा अन्य राख आधारित उत्पादों का उपयोग करेंगी बशर्ते कि वे वैकल्पिक उत्पादों की कीमत से अधिक कीमत पर उपलब्ध न हो।
- (10) राख आधारित उत्पादों के विनिर्माण और ऐसे उत्पादों में राख के उपयोग में भारतीय मानक ब्यूरो, भारतीय सड़क कांग्रेस और केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा निर्धारित विनिर्देशों और दिशानिर्देशों की अनुपालना होगी।

ग. गैर-अनुपालन के लिए पर्यावरणीय प्रतिकर .-

- (1) तीन वर्ष के चक्र के प्रथम दो वर्षों में, यदि कोयला या लिग्नाइट आधारित तापीय ऊर्जा संयंत्र (कैप्टिव और/ या सह-उत्पादक स्टेशनों या दोनों सहित) ने कम-से-कम 80 प्रतिशत राख (फ्लाइ-राख और बॉटम-राख) उपयोग नहीं की है तो ऐसे गैर-अनुपालन ताप विद्युत संयंत्रों पर प्रस्तुत की गई वार्षिक रिपोर्टों के आधार पर वित्तीय वर्ष के

अंत में अप्रयुक्त राख पर 1000 रुपए प्रति टन की दर से पर्यावरणीय प्रतिकर लगाया जाएगा और यदि यह तीन वर्ष के चक्र के तीसरे वर्ष में 100 प्रतिशत राख का उपयोग करने में असमर्थ रहता है, तो वह अप्रयुक्त मात्रा पर 1000 रुपए प्रति टन की दर से पर्यावरणीय प्रतिकर के भुगतान का पात्र होगा, जिस पर पहले पर्यावरणीय प्रतिकर नहीं लगायी गयी है।

परंतु पर्यावरणीय प्रतिकर को पैरा क के उप-पैरा (4) में उल्लिखित विभिन्न उपयोगी श्रेणियों के अनुसार प्रथम अनुपालन चक्र के अंतिम वर्ष के अंत में अनुमान लगाया जाएगा और अधिरोपित किया जाएगा।

- (2) अधिकारियों द्वारा एकत्रित पर्यावरणीय प्रतिकर को केन्द्रीय प्रदूषण नियंत्रण बोर्ड के निर्दिष्ट खाते में जमा किया जाएगा।
- (3) लैगोसी राख के मामले में, यदि कोयला या लिग्नाइट आधारित तापीय ऊर्जा संयंत्र (कैप्टिव या सह-उत्पादक स्टेशनों या दोनों सहित) ने स्थापित क्षमता पर आधारित उत्पन्न राख का कम-से-कम 20 प्रतिशत (प्रथम वर्ष के लिए), 35 प्रतिशत (द्वितीय वर्ष के लिए), 50 प्रतिशत (तीसरे से दसवें वर्ष तक) उपयोग के बराबर लक्ष्य प्राप्त नहीं किया है तो उस वित्तीय वर्ष के दौरान अप्रयुक्त लैगोसी राख पर 1000 रुपए प्रति टन की दर से पर्यावरणीय प्रतिकर लगाया जाएगा और यदि 10 वर्ष के अंत में लैगोसी राख का उपयोग नहीं किया जाता है तो 1000 रुपए प्रति टन की दर से शेष अप्रयुक्त मात्रा पर पर्यावरणीय प्रतिकर लगाया जाएगा जिस पर पहले पर्यावरणीय प्रतिकर नहीं लगाया गया है।
- (4) अधिकृत खरीददारों या उपभोक्ता अभिकरणों तक राख भेजने की जिम्मेदारी परिवहकों या वाहन मालिक की जिम्मेदारी है और यदि इसका अनुपालन नहीं किया जाता है, तो अनधिकृत उपयोगकर्ताओं अथवा गैर-अधिकृत उपयोगकर्ताओं को ऐसी मात्रा गलत तरीके से वितरित करने पर 1500 रुपए प्रति टन की दर से पर्यावरणीय प्रतिकर लगायी, इसके अतिरिक्त राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) द्वारा गैर अनुपालनकर्ता परिवहकों पर अभियोजन लागू होगा।
- (5) इस अधिसूचना के पैरा ख में विहित पर्यावरण अनुकूल तरीके में राख के उपयोग की जिम्मेदारी खरीददार या उपभोगकर्ता एजेंसियों की है और ऐसा नहीं करने पर केन्द्रीय प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) द्वारा 1500 रुपए प्रति टन की दर से पर्यावरणीय प्रतिकर लगाया जाएगा।
- (6) यदि उपयोगकर्ता अधिकरण पैरा ख के अधीन निर्धारित सीमा तक अथवा पैरा घ के उप-पैरा (1) के अधीन, दिए गए नोटिस के माध्यम से सूचित की गई सीमा, इनमें से जो भी कम हो, तक राख का उपयोग नहीं करती है, वे अतिरिक्त राख की मात्रा का 1500 रुपए प्रति टन की दर से भुगतान करने के लिए उत्तरदायी होंगी।
परंतु भवन निर्माण के संबंध में पर्यावरणीय प्रतिकर निर्मित क्षेत्र के 75 रुपये प्रति वर्ग फीट की दर से वसूल किया जाएगा।
- (7) (i) ताप विद्युत संयंत्रों अन्य बकायादारों से केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा लगायी गई का पर्यावरणीय प्रतिकर उपयोग अप्रयुक्त राख के सुरक्षित निपटान हेतु किया जाएगा और राख आधारित उत्पादों सहित राख के उपयोग के संबंध में और अधिक अनुसंधान करने के लिए भी निधि का उपयोग किया जा सकता है।
(ii) अप्रयुक्त मात्रा पर लगाए गए पर्यावरणीय प्रतिकर के पश्चात भी राख के उपयोग का उत्तरदायित्व ताप विद्युत संयंत्रों की होगी और यदि पश्चातवती चक्रों में पर्यावरणीय प्रतिकर लगाने के पश्चात ताप विद्युत संयंत्र, किसी विशेष चक्र की राख के उपयोग के लक्ष्य को प्राप्त करता है तो अगले चक्र के दौरान अप्रयुक्त मात्रा पर एकत्र की गई पर्यावरणीय प्रतिकर में 10 प्रतिशत कटौती के पश्चात उक्त रकम ताप विद्युत संयंत्र को वापस कर दी जाएगी और पश्चातवती चक्रों में राख के उपयोग के मामले में एकत्र की गई पर्यावरणीय प्रतिकर की 20 प्रतिशत, 30 प्रतिशत और उसी क्रम में कटौती की जानी है।

घ. राख या राख आधारित उत्पादों की आपूर्ति हेतु प्रक्रिया .-

- (1) ताप विद्युत संयंत्रों के स्वामी अथवा राख की ईंटों या टाईल्स या धातुमल आधारित राख के विनिर्माता उन व्यक्तियों या अभिकरणों को लिखित सूचना देंगे जो बिक्री या परिवहन या दोनों के लिए प्रस्तुत राख या राख आधारित उत्पादों के उपयोग के लिए उत्तरदायी हैं।
- (2) ऐसे व्यक्ति या उपयोगकर्ता अभिकरणों जिन्हें ताप विद्युत संयंत्रों के स्वामी द्वारा या राख की ईंटों या टाईल्स या धातुमल आधारित राख के उत्पादकों द्वारा सूचना दी गई है, यदि वे पहले ही राख या राख उत्पादों के उपयोग के प्रयोजन से अन्य अभिकरणों के साथ जुड़े हुए हैं, यदि वे किसी भी राख/राख उत्पादों का उपयोग नहीं कर सकते हैं अथवा कम मात्रा का उपयोग कर सकते हैं, तदनुसार ताप विद्युत संयंत्र को सूचित करेंगे।

ड. प्रवर्तन, निगरानी, लेखा परीक्षा और प्रतिवेदन करना

- (1) केंद्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) और संबंधित राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी), उपबंधों के अनुपालना सुनिश्चित करने के लिए प्रवर्तन और निगरानी प्राधिकरण होंगे। सीपीसीबी या एसपीसीबी या पीसीसी तिमाही आधार पर राख के उपयोग की निगरानी करेंगे और सीपीसीबी इस प्रयोजन के लिए अधिसूचना की प्रकाशन की तारीख से छः माह के भीतर एक पोर्टल विकसित करेगा। संबंधित जिला अधिकारी के पास इस अधिसूचना के उपबंधों को लागू करने और निगरानी करने के लिए समवर्ती अधिकारिता होगी।
- (2) (i) ताप विद्युत संयंत्र, राख उत्सर्जन और उपयोग से संबंधित मासिक सूचना वेब पोर्टल पर अगले महीने की 5 तारीख तक अपलोड करेगा। कोयला या लिग्नाइट आधारित ताप ऊर्जा संयंत्रों द्वारा केंद्रीय प्रदूषण नियंत्रण बोर्ड, संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति (पीसीसी), केंद्रीय विद्युत प्राधिकरण (सीईए) और पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय के संबंधित एकीकृत क्षेत्रीय कार्यालयों को इस अधिसूचना के उपबंधों के अनुपालन संबंधी सूचना उपलब्ध कराते हुए वार्षिक कार्यान्वयन रिपोर्ट प्रत्येक वर्ष (1 अप्रैल से 31 मार्च तक की अवधि के लिए) अप्रैल माह के 30वें दिन तक प्रस्तुत की जाएगी। सीपीसीबी और सीईए द्वारा सभी ताप विद्युत संयंत्रों द्वारा प्रस्तुत वार्षिक रिपोर्टों का समेकन किया जाएगा और उसे पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय को 31 मई तक प्रस्तुत किया जाएगा।
- (ii) सभी अन्य उपयोगकर्ता अधिकरण पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय या राज्य स्तरीय पर्यावरण प्रभाव आकलन प्राधिकरण (एसईआईएए) द्वारा जारी पर्यावरणीय मंजूरी (ईसी) अथवा राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) द्वारा जारी संचालन की सहमति (सीटीओ), जो भी लागू हो, की अनुपालना रिपोर्ट में इस अधिसूचना में आज्ञापकता के अनुसार राख के उपभोग या उपयोग या निस्तारण तथा राख आधारित उत्पादों के उपयोग संबंधी सूचना प्रस्तुत करेंगे। केंद्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) या राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) अधिसूचना के उपबंधों के प्रभावी कार्यान्वयन की समीक्षा करने हेतु ताप विद्युत संयंत्रों के अतिरिक्त अन्य सभी अधिकरणों की राख उपयोग की वार्षिक रिपोर्ट प्रकाशित करेंगे।
- (3) इस अधिसूचना के उपबंधों की निगरानी और कार्यान्वयन के प्रयोजन के लिए केंद्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) की अध्यक्षता में एक समिति का गठन किया जाएगा जिसके सदस्य विद्युत मंत्रालय, कोयला मंत्रालय, खनन मंत्रालय, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, सड़क परिवहन और राजमार्ग मंत्रालय और भारी उद्यम विभाग से होने के साथ-साथ समिति के अध्यक्ष द्वारा नामित किए जाने वाले कोई संबंधित पणधारी होंगे। यह समिति संगत पणधारी को आमंत्रित कर सकती है। यह समिति इस अधिसूचना के उपबंधों के प्रभावी और दक्ष कार्यान्वयन के लिए सिफारिशें कर सकती है। यह समिति छः माह में कम से कम एक बार एक बैठक करेगी और वार्षिक कार्यान्वयन रिपोर्टों की समीक्षा करेगी और यह समिति, इस अधिसूचना द्वारा आज्ञापक किए गए अनुसार छः महीनों में कम से कम एक बार संगत पणधारी (को) को आमंत्रित करके राख के उपयोग की निगरानी करने के लिए पणधारी से साथ परामर्शदात्री बैठकें आयोजित करेगी। यह समिति पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय (एमओईएफसीसी) को छः मासिक रिपोर्ट प्रस्तुत करेगी।

- (4) ताप विद्युत संयंत्रों और राख के उपयोगकर्ताओं या राख आधारित उत्पादों के विनिर्माताओं के बीच के विवाद का समाधान करने के प्रयोजन से राज्य सरकारें या संघ राज्यक्षेत्र की सरकारें इस अधिसूचना के प्रकाशन की तारीख से तीन माह के भीतर राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) की अध्यक्षता में एक समिति का गठन करेंगी जिसमें विद्युत विभाग के प्रतिनिधि और एक प्रतिनिधि उस विभाग का होगा, जो विवाद वाले संबंधित अभिकरण का कार्य देख रहे हैं।
- (5) केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) द्वारा प्राधिकृत लेखा परीक्षकों द्वारा ताप विद्युत संयंत्रों और उपयोगकर्ता अभिकरणों द्वारा किए गए राख के निपटान की अनुपालन लेखा परीक्षा संचालित की जाएगी और लेखा परीक्षा की रिपोर्ट प्रत्येक वर्ष 30 नवम्बर तक केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) और संबंधित राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) को प्रस्तुत की जाएगी। केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) और संबंधित राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) लेखा परीक्षा की रिपोर्ट प्राप्त होने के पंद्रह दिनों के भीतर अनुपालन न करने वाले ताप विद्युत संयंत्रों के विरुद्ध कार्रवाई प्रारंभ करेंगे।

[फा. सं. एचएसएम-9/1/2019-एचएसएम]

नरेश पाल गंगवार, संयुक्त सचिव

उपाबंध

31 मई तक अथवा उससे पहले प्रस्तुत की जाने वाली राख संबंधी उपबंधों की अनुपालन रिपोर्ट (01 अप्रैल से 31 मार्च की अवधि के लिए)।

क्र.सं.	ब्यौरा	
1.	विद्युत संयंत्र का नाम	
2.	कंपनी का नाम	
3.	जिला	
4.	राज्य	
5.	पत्राचार के लिए डाक का पता :	
6.	ई-मेल :	
7.	विद्युत संयंत्र की संस्थापित क्षमता (मेगा वॉट) :	
8.	संयंत्र लोड फैक्टर (पीएलएफ) :	
9.	उत्पादित यूनिटों की संख्या (एमडब्ल्यूएच) :	
10.	विद्युत संयंत्र के अंतर्गत कुल क्षेत्र (हेक्टेयर) (राख कुंडों के अधीन क्षेत्र सहित) :	
11.	रिपोर्टिंग की अवधि के दौरान कोयला खपत की मात्रा (प्रति वर्ष मीट्रिक टन) :	
12.	औसत राख सामग्री प्रतिशतता में (%) :	
13.	रिपोर्टिंग की अवधि के दौरान वर्तमान में उत्पादित राख की मात्रा (प्रति वर्ष मीट्रिक टन) : फ्लाय राख (प्रति वर्ष मीट्रिक टन) : बॉटम राख (प्रति वर्ष मीट्रिक टन) :	
14.	ड्राई फ्लाय राख भंडारण गड्ढा (गड्ढों) की क्षमता (मीट्रिक टन) :	
15.	रिपोर्टिंग की अवधि के दौरान वर्तमान में उत्पादित राख के उपयोग का ब्यौरा: (क) रिपोर्टिंग की अवधि के दौरान वर्तमान में उपयोग की गई राख की	

	<p>कुल मात्रा (एमटीपीए) :</p> <p>(ख) उपयोग की गई फ्लाई राख की मात्रा (एमटीपीए) :</p> <ol style="list-style-type: none"> i. फ्लाई-एश आधारित उत्पाद (ईट या ब्लॉक या टाइल्स या फाइबर सीमेंट शीट या पाइप या बोर्ड/पैनल) : ii. सीमेंट विनिर्माण : iii. रेडी मिक्स कंक्रीट : iv. राख और जीओ-पॉलिमर आधारित निर्माण सामग्री : v. सिंटर्ड या कोल्ड बॉन्डेड राख एग्रीगेट का निर्माण : vi. सड़कों, सड़क और फ्लाई ओवर के पुशतों का निर्माण : vii. बांधों का निर्माण : viii. निम्न भू-क्षेत्र का भराव : ix. खनिज क्षेत्रों का भराव : x. अधिभार वाले डम्पों में उपयोग : xi. कृषि : xii. तटीय जिलों में तटरेखा सुरक्षा संरचनाओं का निर्माण : xiii. अन्य देशों को राख का निर्यात : xiv. अन्य (कृपया विनिर्दिष्ट करें) : <p>(ग) उपयोग किए गए तल के राख की मात्रा (एमटीपीए) :</p> <ol style="list-style-type: none"> i. फ्लाई-एश आधारित उत्पाद (ईट या ब्लॉक या टाइल्स या फाइबर सीमेंट शीट या पाइप या बोर्ड या पैनल) : ii. सीमेंट विनिर्माण : iii. रेडी मिक्स कंक्रीट : iv. राख और जीओ-पॉलिमर आधारित निर्माण सामग्री : v. सिंटर्ड या कोल्ड बॉन्डेड राख एग्रीगेट का निर्माण : vi. सड़कों, सड़क और फ्लाईओवर के पुशतों का निर्माण : vii. बांधों का निर्माण : viii. निम्न भू-क्षेत्र का भराव : ix. खनिज क्षेत्रों का भराव : x. अधिभार वाले डम्पों में उपयोग : xi. कृषि : xii. तटीय जिलों में तटरेखा सुरक्षा संरचनाओं का निर्माण : xiii. अन्य देशों को राख का निर्यात : xiv. अन्य (कृपया विनिर्दिष्ट करें) : <p>रिपोर्टिंग की अवधि के दौरान वर्तमान में अप्रयुक्त राख की कुल मात्रा (एमटीपीए) :</p>	
16.	रिपोर्टिंग की अवधि के दौरान वर्तमान में उत्पादित राख का प्रतिशतता उपयोग (%) :	
17.	<p>राख कुंडों में राख के निपटान का ब्यौरा</p> <p>क) तारीख 31 मार्च तक (रिपोर्टिंग की अवधि को छोड़कर) राख कुण्ड (कुण्डों) में निपटान किए गए राख की कुल मात्रा (मीट्रिक टन):</p>	

	<p>ख) रिपोर्टिंग की अवधि के दौरान राख कुण्ड (कुण्डों) में निपटान किए गए राख की मात्रा (मीट्रिक टन):</p> <p>ग) रिपोर्टिंग की अवधि के दौरान राख कुण्डों में गारा निस्सरण हेतु खपत हुए जल की कुल मात्रा (मी³):</p> <p>घ) राख कुण्डों की कुल संख्या:</p> <p>(i) सक्रिय:</p> <p>(ii) खाली किए गए (पुनः भरा जाना है)</p> <p>(iii) पुनः भरे गए:</p> <p>ड.) राख कुण्डों के अधीन कुल क्षेत्र (हेक्टेयर):</p>	
18.	<p>अलग-अलग राख कुण्ड का ब्यौरा</p> <p>राख कुण्ड 1,2 आदि (यदि राख कुण्डों की संख्या एक से अधिक हो, तो कृपया निम्नलिखित ब्यौरा अलग से उपलब्ध कराएं)</p> <p>क) स्थिति: निर्माणाधीन या सक्रिय या खाली किया गया या पुनः भरा गया</p> <p>ख) राख कुण्ड में राख का निपटान शुरू करने की तारीख/महीना/वर्ष या महीना/वर्ष):</p> <p>ग) राख कुण्ड की क्षमता पूर्ण किए जाने के पश्चात् उसमें राख निपटान रोकने की तारीख</p> <p>(तारीख/महीना/वर्ष या महीना/वर्ष):</p> <p>(सक्रिय राख कुण्डों के लिए लागू नहीं)</p> <p>ग) क्षेत्र (हेक्टेयर):</p> <p>घ) डाइक की ऊंचाई (मी.):</p> <p>घ) आयतन (मी³):</p> <p>ड.) तारीख 31 मार्च तक निपटान किए गए राख की मात्रा (मीट्रिक टन):</p> <p>च) उपलब्ध आयतन का प्रतिशत (%) और आगे निपटान किए जा सकने वाले राख की मात्रा (मीट्रिक टन):</p> <p>छ) राख कुण्ड के भरे जाने की अनुमानित अवधि (वर्षों और महीनों की संख्या):</p> <p>ड.) निर्देशांक (अक्षांश और देशान्तर):</p> <p>(कृपया न्यूनतम 4 निर्देशांकों को विनिर्दिष्ट करें)</p> <p>ज) राख कुण्ड में की गई लाइनिंग का प्रकार: एचडीपीई लाइनिंग या एलडीपीई लाइनिंग या क्ले लाइनिंग या कोई लाइनिंग नहीं</p> <p>छ) निपटान की विधि: शुष्क निपटान या नम गारा (नम गारा के मामले में कृपया विनिर्दिष्ट करें कि क्या एचसीएसडी या एमसीएसडी या एलसीएसडी है)</p> <p>ज) राख का अनुपात: गारा मिश्रण में जल (1:____):</p> <p>झ) संस्थापित और कार्यशील राख जल पुनर्चक्रण प्रणाली (एडब्ल्यूआरएस): हां या नहीं</p> <p>ञ) जमीन के अंदर या जल निकाय में राख कुण्ड से निस्सरित अपशिष्ट जल की मात्रा (मी³):</p> <p>ट) डाइक की स्थिरता का अध्ययन कराए जाने की पिछली तारीख और उस संगठन का नाम जिसने अध्ययन किया:</p> <p>ठ) लेखा-परीक्षा किए जाने की पिछली तारीख और उस संगठन का नाम जिसने लेखा-परीक्षा की:</p>	
19.	<p>उपयोग किए गए पुराने राख की मात्रा (एमटीपीए):</p> <p>i. फ्लाई-एश आधारित उत्पाद (ईट या ब्लॉक या टाइल्स या फाइबर</p>	

	सीमेंट शीट या पाइप या बोर्ड या पैनल):			
	ii. सीमेंट विनिर्माण:			
	iii. रेडी मिक्स कंक्रीट:			
	iv. राख और जीओ-पॉलिमर आधारित निर्माण सामग्री:			
	v. सिंटर्ड या कोल्ड बॉन्डेड राख एग्रीगेट का निर्माण:			
	vi. सड़कों, सड़क और फ्लाई ओवर के पुश्तों का निर्माण:			
	vii. बांधों का निर्माण:			
	viii. निम्न भू-क्षेत्र का भराव:			
	ix. खनिज क्षेत्रों का भराव:			
	x. अधिभार वाले डम्पों में उपयोग:			
	xi. कृषि:			
	xii. तटीय जिलों में तटरेखा सुरक्षा संरचनाओं का निर्माण:			
	xiii. अन्य देशों को राख का निर्यात			
	xiv. अन्य (कृपया विनिर्दिष्ट करें):			
20.	सार :			
	व्यौरा	सृजित मात्रा (एमटीपी)	उपयोग की गई मात्रा (एमटीपी) और (%)	शेष मात्रा (एमटीपी)
	रिपोर्टिंग की अवधि के दौरान राख			
	पुरानी राख			
	कुल			
21.	कोई अन्य सूचना : वार्षिक अनुपालन रिपोर्ट, और विद्युत संयंत्रों और राख कुण्डों की शेष फाइलों की सॉफ्ट कॉपी ई-मेल:- moefcc- coalash@gov.in पर भेजी जाए।			
22.	प्राधिकृत हस्ताक्षरकर्ता के हस्ताक्षर			

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 31st December, 2021

S.O. 5481(E).—Whereas by notification of the Government of India in the erstwhile Ministry of Environment and Forests *vide* S.O.763 (E), dated the 14th September, 1999, as amended from time to time, the Central Government, issued directions for restricting the excavation of top soil for manufacturing of bricks and promoting the utilisation of fly ash in the manufacturing of building materials and in construction activity within a specified radius of three hundred kilometres from the coal or lignite based thermal power plants;

And whereas, to implement the aforesaid notification more effectively based on the polluter pays principle (PPP) thereby ensuring 100 per cent utilisation of fly ash by the coal or lignite based thermal power plants and for the sustainability of the fly ash management system, the Central Government reviewed the existing notification; and whereas environmental compensation needs to be introduced based on the polluter pays principle;

And whereas, there is a need to conserve top soil by promoting manufacture and mandating use of ash based products and building materials in the construction sector;

And whereas, there is a need to conserve top soil and natural resources by promoting utilisation of ash in road laying, road and flyover embankments, shoreline protection measures, low lying areas of approved projects, backfilling of mines, as an alternative for filling of earthen materials;

And whereas, it is necessary to protect the environment and prevent the dumping and disposal of fly ash discharged from coal or lignite based thermal power plants on land;

And whereas, in the said notification the phrase 'ash', has been used which includes both fly ash as well as bottom ash generated from the Coal or Lignite based thermal power plants;

And whereas, the Central Government intends to bring out a comprehensive framework for ash utilisation including system of environmental compensation based on polluter pays principle;

And whereas, a draft notification on ash utilisation by coal or lignite thermal power plants in supersession of the notification of the Government of India, Ministry of Environment and Forests published in the Gazette of India, Extra Ordinary part II, section 3, sub-section (i) *vide* S.O.763 (E), dated the 14th September, 1999, by notification in exercise of the powers conferred under sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule (5) of the Environment (Protection) Rules, 1986, was published in the Gazette of India, Extraordinary, Part II, section 3, sub-section (i), *vide* G.S.R. 285(E), dated the 22nd April, 2021 inviting objections and suggestions from all persons likely to be affected thereby before the expiry of sixty days from the date on which copies of the Gazette containing the said draft provisions were made available to the public;

And, whereas all the objections and suggestions received from all persons likely to be affected thereby in respect of the said draft notification have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule (5) of the Environment (Protection) Rules, 1986, and in supersession of the Notification S.O.763 (E), dated the 14th September, 1999 except as respect things done or omitted to be done before such supersession, the Central Government hereby issues the following notification on ash utilisation from coal or lignite thermal power plants which shall come into force on the date of the publication of this notification, namely:-

A. Responsibilities of thermal power plants to dispose fly ash and bottom ash.—

- (1) Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall be primarily responsible to ensure 100 per cent utilisation of ash (fly ash, and bottom ash) generated by it in an eco-friendly manner as given in sub-paragraph (2);
- (2) The ash generated from coal or lignite based thermal power plants shall be utilised only for the following eco-friendly purposes, namely:-
 - (i) Fly ash based products viz. bricks, blocks, tiles, fibre cement sheets, pipes, boards, panels;
 - (ii) Cement manufacturing, ready mix concrete;
 - (iii) Construction of road and fly over embankment, Ash and Geo-polymer based construction material;
 - (iv) Construction of dam;
 - (v) Filling up of low lying area;
 - (vi) Filling of mine voids;
 - (vii) Manufacturing of sintered or cold bonded ash aggregate;
 - (viii) Agriculture in a controlled manner based on soil testing;
 - (ix) Construction of shoreline protection structures in coastal districts;

- (x) Export of ash to other countries;
- (xi) Any other eco-friendly purpose as notified from time to time.
- (3) A committee shall be constituted under the chairmanship of Chairman, Central Pollution Control Board (CPCB) and having representatives from Ministry of Environment, Forest and Climate Change (MoEFCC), Ministry of Power, Ministry of Mines, Ministry of Coal, Ministry of Road Transport and Highways, Department of Agricultural Research and Education, Institute of Road Congress, National Council for Cement and Building Materials, to examine and review and recommend the eco-friendly ways of utilisation of ash and make inclusion or exclusion or modification in the list of such ways as mentioned in Sub-paragraph (2) based on technological developments and requests received from stakeholders. The committee may invite State Pollution Control Board or Pollution Control Committee, operators of thermal power plants and mines, cement plants and other stakeholders as and when required for this purpose. Based on the recommendations of the Committee, Ministry of Environment, Forest and Climate Change (MoEFCC) may publish such eco-friendly purpose.
- (4) Every coal or lignite based thermal power plant shall be responsible to utilise 100 per cent ash (fly ash and bottom ash) generated during that year, however, in no case shall utilisation fall below 80 per cent in any year, and the thermal power plant shall achieve average ash utilisation of 100 per cent in a three years cycle:

Provided that the three years cycle applicable for the first time is extendable by one year for the thermal power plants where ash utilisation is in the range of 60-80 per cent, and two years where ash utilisation is below 60 per cent and for the purpose of calculation of percentage of ash utilisation, the percentage quantity of utilisation in the year 2021- 2022 shall be taken into account as per the table below:

Utilisation percentages of thermal power plants	First compliance Cycle to meet 100 per cent utilisation	Second compliance cycle onwards, to meet 100 per cent utilisation
>80 per cent	3 years	3 years
60-80 per cent	4 years	3 years
<60 per cent	5 years	3 years

Provided further that the minimum utilisation percentage of 80 per cent shall not be applicable to the first year and first two years of the first compliance cycle for the thermal power plants under the utilisation category of 60-80 per cent and <60 per cent, respectively.

Provided also that 20per cent of ash generated in the final year of compliance cycle may be carried forward to the next cycle which shall be utilised in the next three years cycle along with the ash generated during that cycle.

- (5) The unutilised accumulated ash i.e. legacy ash, which is stored before the publication of this notification, shall be utilised progressively by the thermal power plants in such a manner that the utilization of legacy ash shall be completed fully within ten years from the date of publication of this notification and this will be over and above the utilisation targets prescribed for ash generation through current operations of that particular year:

Provided that the minimum quantity of legacy ash in percentages as mentioned below shall be utilised during the corresponding year and the minimum quantity of legacy ash is to be calculated based on the annual ash generation as per installed capacity of thermal power plant.

Year from date of publication	1 st	2 nd	3 rd -10 th
Utilisation of legacy ash (in percentage of Annual ash)	At least 20 per cent	At least 35 per cent	At least 50 per cent

Provided further that the legacy ash utilisation shall not be required where ash pond or dyke has stabilised and the reclamation has taken place with greenbelt or plantation and the concerned State Pollution Control Board shall certify in this regard. Stabilisation and reclamation of an ash pond or dyke including certification by the Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall be carried out within a year from the date of publication of this notification. The ash remaining in all other ash ponds or dykes shall be utilised in progressive manner as per the above mentioned timelines.

Note: The obligations under sub-paragraph (4) and (5) above for achieving the ash utilisation targets shall be applicable from 1st April, 2022.

- (6) Any new as well as operational thermal power plant may be permitted an emergency or temporary ash pond with an area of 0.1 hectare per Mega Watt (MW). Technical specifications of ash ponds or dykes shall be as per the guidelines of Central Pollution Control Board (CPCB) made in consultation with Central Electricity Authority (CEA) and these guidelines shall also lay down a procedure for annual certification of the ash pond or dyke on its safety, environmental pollution, available volume, mode of disposal, water consumption or conservation in disposal, ash water recycling and greenbelt, etc., and shall be put in place within three months from the date of publication of this notification.
- (7) Every coal or lignite based thermal power plant shall ensure that loading, unloading, transport, storage and disposal of ash is done in an environmentally sound manner and that all precautions to prevent air and water pollution are taken and status in this regard shall be reported to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in Annexure attached to this notification.
- (8) Every coal or lignite based thermal power plant shall install dedicated silos for storage of dry fly ash silos for at least sixteen hours of ash based on installed capacity and it shall be reported upon to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in the Annexure and shall be inspected by Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) from time to time.
- (9) Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall provide real time data on daily basis of availability of ash with Thermal Power Plant (TPP), by providing link to Central Pollution Control Board's web portal or mobile phone App for the benefit of actual user(s).
- (10) Statutory obligation of 100 per cent utilisation of ash shall be treated as a change in law, wherever applicable.

B. For the purpose of utilisation of ash, the subsequent sub-paras shall apply.—

- (1) All agencies (Government, Semi-government and Private) engaged in construction activities such as road laying, road and flyover embankments, shoreline protection structures in coastal districts and dams within 300 kms from the lignite or coal based thermal power plants shall mandatorily utilise ash in these activities:

Provided that it is delivered at the project site free of cost and transportation cost is borne by such coal or lignite based thermal power plants.

Provided further that thermal power plant may charge for ash cost and transportation as per mutually agreed terms, in case thermal power plant is able to dispose the ash through other means and those agencies makes a request for it and the provisions of ash free of cost and free transportation shall be applicable, if thermal power plant serves a notice on the construction agency for the same.

- (2) The utilisation of ash in the said activities shall be carried out in accordance with specifications and guidelines laid down by the Bureau of Indian Standards, Indian Road Congress, Central Building Research Institute, Roorkee, Central Road Research Institute, Delhi, Central Public Works Department, State Public Works Departments and other Central and State Government Agencies.

- (3) It shall be obligatory on all mines located within 300 kilometres radius of thermal power plant, to undertake backfilling of ash in mine voids or mixing of ash with external Overburden dumps, under Extended Producer Responsibility (EPR). All mine owners or operators (Government, Public and Private Sector) within three hundred kilometres (by road) from coal or lignite based thermal power plants, shall undertake measures to mix at least 25 per cent of ash on weight to weight basis of the materials used for external dump of overburden, backfilling or stowing of mine (running or abandoned as the case may be) as per the guidelines of the Director General of Mines Safety (DGMS):

Provided that such thermal power stations shall facilitate the availability of required quantity of ash by delivering ash free of cost and bearing the cost of transportation or cost of transportation arrangement decided on mutually agreed terms and mixing of ash with overburden in mine voids and dumps shall be applicable for the overburden generated from the date of publication of this notification and the utilisation of ash in the said activities shall be carried out in accordance with guidelines laid down by the Central Pollution Control Board, Director General of Mines Safety and Indian Bureau of Mines.

Explanation.- For the purpose of this sub-paragraph, it is also clarified that the provisions of ash free of cost and free transportation shall be applicable, if thermal power plants serve a notice on the mine owner for the same and the mandate of using 25 per cent of ash for mixing with overburden dump and filling up of mine voids shall not be applicable unless a notice is served on the mine owner by thermal power plant.

- (4) (i) All mine owners shall get mine closure plans (progressive and final) to accommodate ash in the mine voids and the concerned authority shall approve mine plans for disposal of ash in mine voids and mixing of ash with overburden dumps. The Ministry of Environment, Forest and Climate Change (MoEFCC) has issued guidelines on 28th August, 2019 regarding exemption of requirement of Environmental Clearance of thermal power plants and coal mines along with the guidelines to be followed for such disposal.
- (ii) The Ministry in consultation with Central Pollution Control Board (CPCB), Director General of Mine Safety (DGMS) and Indian Bureau of Mines (IBM) may issue further guidelines time to time to facilitate ash disposal in mine voids and mixing with overburden dumps and it shall be the responsibility of mine owners to get the necessary amendments or modifications in the permissions issued by various regulatory authorities within one year from the date of identification of such mines.
- (5) (i) There shall be a committee headed by Chairperson, Central Pollution Control Board (CPCB) with representatives from Ministry of Environment, Forest and Climate Change, Ministry of Power, Ministry of Mines, Ministry of Coal, Director General of Mine Safety and Indian Bureau of Mines for identification of mines for backfilling of mine voids with ash or mixing of ash with overburden dump including examination of safety, feasibility (not economic feasibility) and aspects of environmental contamination and the committee shall get updated quarterly reports prepared regarding identified mines (both underground and opencast) for the stakeholder Ministries or Departments and the committee shall start identifying the suitable mines immediately after the publication of this notification.
- (ii) Thermal power plants or mines shall not wait for disposal of ash till the identification is done by the above mentioned committee, to meet the utilisation targets mandated as above.
- (6) Filling of low lying areas with ash shall be carried out with prior permission of the State Pollution Control Board or Pollution Control Committee for approved projects, and in accordance with guidelines laid down by Central Pollution Control Board (CPCB) and the State Pollution Control Board or Pollution Control Committee (PCC) shall publish approved sites, location, area and permitted quantity annually on its website.
- (7) Central Pollution Control Board after engaging relevant stakeholders, shall put in place the guidelines within one year for all types of activities envisaged under this notification including putting in place time bound online application process for the grant permission by State Pollution Control Boards (SPCBs) or Pollution Control Committees (PCCs).

- (8) All building construction projects (Central, State and Local authorities, Govt. undertakings, other Govt. agencies and all private agencies) located within a radius of three hundred kilometres from a coal or lignite based thermal power plant shall use ash bricks, tiles, sintered ash aggregate or other ash based products, provided these are made available at prices not higher than the price of alternative products.
- (9) Manufacturing of ash based products and use of ash in such products shall be in accordance with specifications and guidelines laid down by the Bureau of Indian Standards, Indian Road Congress, and Central Pollution Control Board.

C. Environmental compensation for non-compliance.—

- (1) In the first two years of a three years cycle, if the coal or lignite based thermal power plant (including captive or co-generating stations or both) has not achieved at least 80 per cent ash (fly ash and bottom ash) utilisation, then such non-compliant thermal power plants shall be imposed with an environmental compensation of Rs. 1000 per ton on unutilised ash during the end of financial year based on the annual reports submitted and if it is unable to utilise 100 per cent of ash in the third year of the three years cycle, it shall be liable to pay an environmental compensation of Rs. 1000 per ton on the unutilised quantity on which environmental compensation has not been imposed earlier:

Provided that the environmental compensation shall be estimated and imposed at the end of last year of the first compliance cycle as per the various utilisation categories as mentioned in sub-paragraph (4) of Para A.

- (2) Environmental compensation collected by the authorities shall be deposited in the designated account of Central Pollution Control Board.
- (3) In case of legacy ash, if the coal or lignite based thermal power plant (including captive or co-generating stations or both) has not achieved utilisation equivalent to at least 20 per cent (for the first year), 35 per cent (for the second year), 50 per cent (for third to tenth year) of ash generated based on installed capacity, an environmental compensation of Rs. 1000 per ton of unutilised legacy ash during that financial year shall be imposed and if the utilization of legacy ash is not completed at the end of 10 years, an environmental compensation of Rs.1000 per ton shall be imposed on the remaining unutilised quantity which has not been imposed earlier.
- (4) It shall be the responsibility of the transporters or vehicle owner to deliver ash to authorised purchaser or user agency and if it is not complied, then an environmental compensation of Rs. 1500 per ton on such quantity as mis-delivered to unauthorised users or non- delivered to authorised users will be imposed besides prosecution of such non-compliant transporters by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC).
- (5) It is the responsibility of the purchasers or user agencies to utilise ash in an eco-friendly manner as laid down at para B of this notification and if it is not complied, then an environmental compensation of Rs. 1500 per ton shall be imposed by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC).
- (6) If the user agencies do not utilise ash to the extent obligated under para B or the extent to which they have been intimated through Notice(s) served under sub-paragraph (1) of para D, whichever is lower, they shall be liable to pay Rs. 1500 per ton of ash for the quantity they fall short off:

Provided that the environmental compensation on building constructions shall be levied at Rs.75/- per square feet of built up area of construction.

- (7) (i) The environmental compensation collected by Central Pollution Control Board from the thermal power plants and other defaulters shall be used towards the safe disposal of the unutilised ash and the fund may also be utilised for advancing research on use of ash including ash based products.

(ii) The liability of ash utilisation shall be with thermal power plants even after imposition of environmental compensation on unutilised quantities and in case thermal power plant achieves the ash utilisation of any

particular cycle after imposition of environmental compensation in subsequent cycles, the said amount shall be returned to thermal power plant after deducting 10 per cent of the environmental compensation collected on the unutilised quantity during the next cycle and deduction of 20 per cent, 30 per cent, and so on, of the environmental compensation collected is to be made in case of utilisation of ash in subsequent cycles.

D. Procedure for supply of ash or ash based products.—

- (1) The owner of thermal power plants or manufacturers of ash bricks or tiles or sintered ash aggregate shall serve written notice to persons or agencies who are liable to utilise ash or ash based products, offering for sale, or transport or both.
- (2) Persons or user agencies who have been served notices by owner of thermal power plants or manufacturers of ash bricks or tiles or sintered ash aggregate, if they have already tied up with other agencies for the purpose of utilisation of ash or ash products, shall inform the thermal power plant accordingly, if they cannot use any ash or ash products or use reduced quantity.

E. Enforcement, Monitoring, Audit and Reporting.—

- (1) The Central Pollution Control Board (CPCB) and the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall be the enforcing and monitoring authority for ensuring compliance of the provisions and shall monitor the utilisation of ash on quarterly basis. Central Pollution Control Board shall develop a portal for the purpose within six months of date of publication of the notification. The concerned District Magistrate shall have concurrent jurisdiction for enforcement and monitoring of the provisions of this notification.
- (2) (i) Thermal power plants shall upload monthly information regarding ash generation and utilisation by 5th of the next month on the web portal. Annual implementation report (for the period 1st April to 31st March) providing information about the compliance of provisions in this notification shall be submitted by the 30th day of April, every year to the Central Pollution Control Board, concerned State Pollution Control Board or Pollution Control Committee (PCC), Central Electricity Authority (CEA), and concerned Integrated Regional Office of Ministry of Environment, Forest and Climate Change by the coal or lignite based thermal power plants. Central Pollution Control Board and Central Electricity Authority shall compile the annual reports submitted by all the thermal power plants and submit to Ministry of Environment, Forest and Climate Change by 31st May.
 - (ii) All other user agencies shall submit consumption or utilisation or disposal of ash and use of ash based products as mandated in this notification in the compliance report of Environmental Clearance (EC) issued by Ministry of Environment, Forest and Climate Change or State Level Environment Impact Assessment Authority (SEIAA) or Consent to Operate (CTO) issued by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC), whichever is applicable. The Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall publish annual report of ash utilisation of all other agencies except thermal power plants to review the effective implementation of the provisions of the notification.
- (3) For the purpose of monitoring the implementation of the provisions of this notification, a committee shall be constituted under the Chairperson, Central Pollution Control Board (CPCB), with members from Ministry of Power, Ministry of Coal, Ministry of Mines, Ministry of Environment, Forest and Climate Change, Ministry Road Transportation and Highways, Department of Heavy Industry as well as any concerned stakeholder(s), to be nominated by the Chairman of the committee. The committee may make recommendations for effective and efficient implementation of the provisions of the notification. The committee shall meet at least once in six months and review annual implementation reports and the committee shall also hold stakeholder consultations for monitoring of ash utilisation as mandated by this notification by inviting relevant stakeholder(s) at least once in six months. The committee shall submit the six monthly report to Ministry of Environment, Forest and Climate Change (MoEFCC).

- (4) For the purpose of resolving disputes between thermal power plants and users of ash or manufacturer of ash based products, the State Governments or Union territory administration constitute a Committee within three months from the date of publication of this notification under the Chairman, State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) with representatives from Department of Power, and one representative from the Department which deals with the subject of concerned agency with which dispute is made.
- (5) The compliance audit for ash disposal by the thermal power plants and the user agency shall be conducted by auditors, authorised by Central Pollution Control Board (CPCB) and audit report shall be submitted to Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) by 30th November every year. Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall initiate action against non-compliant thermal power plants within fifteen days of receipt of audit report.

[F. No. HSM-9/1/2019-HSM]

NARESH PAL GANGWAR, Jt. Secy.

AnnexureAsh Compliance Report (for the period 1st April-31st March) to be submitted on or before 31st May.

Sl. No.	Details	
1.	Name of Power Plant	
2.	Name of the company	
3.	District	
4.	State	
5.	Postal address for communication:	
6.	E-mail:	
7.	Power Plant installed capacity (MW):	
8.	Plant Load Factor (PLF):	
9.	No. of units generated (MWh):	
10.	Total area under power plant (ha): (including area under ash ponds)	
11.	Quantity of coal consumption during reporting period (Metric Tons per Annum):	
12.	Average ash content in percentage (per cent):	
13.	Quantity of current ash generation during reporting period (Metric Tons per Annum): Fly ash (Metric Tons per Annum): Bottom ash (Metric Tons per Annum):	
14.	Capacity of dry fly ash storage silo(s) (Metric Tons) :	
15.	Details of utilisation of current ash generated during reporting period (a) Total quantity of current ash utilised (MTPA) during reporting period: (b) Quantity of fly ash utilised (MTPA): (i) Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels) (ii) Cement manufacturing:	

	<ul style="list-style-type: none"> (iii) Ready mix concrete: (iv) Ash and Geo-polymer based construction material: (v) Manufacturing of sintered or cold bonded ash aggregate: (vi) Construction of roads, road and fly over embankment: (vii) Construction of dams: (viii) Filling up of low lying area: (ix) Filling of mine voids: (x) Use in overburden dumps: (xi) Agriculture: (xii) Construction of shoreline protection structures in coastal districts; (xiii) Export of ash to other countries: (xiv) Others (please specify): <p>(c) Quantity of bottom ash utilised (MTPA):</p> <ul style="list-style-type: none"> (i) Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels): (ii) Cement manufacturing: (iii) Ready mix concrete: (iv) Ash and Geo-polymer based construction material: (v) Manufacturing of sintered or cold bonded ash aggregate: (vi) Construction of roads, road and flyover embankment: (vii) Construction of dams: (viii) Filling up of low lying area: (ix) Filling of mine voids: (x) Use in overburden dumps: (xi) Agriculture: (xii) Construction of shoreline protection structures in coastal districts: (xiii) Export of ash to other countries: (xiv) Others (please specify): <p>Total quantity of current ash unutilised (MTPA) during reporting period:</p>	
16.	Percentage utilisation of current ash generated during reporting period (per cent):	
17.	<p>Details of disposal of ash in ash ponds</p> <p>(a) Total quantity of ash disposed in ash pond(s) (Metric Tons) as on 31st March (excluding reporting period):</p> <p>(b) Quantity of ash disposed in ash pond(s) during reporting period (Metric Tons):</p> <p>(c) Total quantity of water consumption for slurry discharge into ash ponds during reporting period (m³):</p> <p>(d) Total number of ash ponds:</p> <ul style="list-style-type: none"> (i) Active: (ii) Exhausted (yet to be reclaimed): (iii) Reclaimed: <p>(e) total area under ash ponds (ha):</p>	
18.	<p>Individual ash pond details</p> <p><i>Ash pond-1,2, etc (please provide below mentioned details separately, if number of ash ponds is more than one)</i></p> <p>(a) Status: Under construction or Active or Exhausted or</p>	

	<p>Reclaimed</p> <p>(b) Date of start of ash disposal in ash pond (DD/MM/YYYY or MMYYYY):</p> <p>(c) Date of stoppage of ash disposal in ash pond after completing its capacity (DD/MM/YYYY or MM/YYYY): (Not applicable for active ash ponds)</p> <p>(c) area (hectares):</p> <p>(d) dyke height (m):</p> <p>(d) volume (m³):</p> <p>(e) quantity of ash disposed as on 31st March (Metric Tons):</p> <p>(f) available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons):</p> <p>(g) expected life of ash pond (number of years and months):</p> <p>(e) co-ordinates (Lat and Long): (please specify minimum 4 co-ordinates)</p> <p>(f) type of lining carried in ash pond: HDPE lining or LDPE lining or clay lining or No lining</p> <p>g) mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)</p> <p>(h) Ratio of ash: water in slurry mix (1:___):</p> <p>(i) Ash water recycling system (AWRS) installed and functioning: Yes or No</p> <p>(j) Quantity of wastewater from ash pond discharged into land or water body (m³):</p> <p>(k) Last date when the dyke stability study was conducted and name of the organisation who conducted the study:</p> <p>(l) Last date when the audit was conducted and name of the organisation who conducted the audit:</p>									
19.	<p>Quantity of legacy ash utilised (MTPA):</p> <ol style="list-style-type: none"> i. Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels): ii. Cement manufacturing: iii. Ready mix concrete: iv. Ash and Geo-polymer based construction material: v. Manufacturing of sintered or cold bonded ash aggregate: vi. Construction of roads, road and flyover embankment: vii. Construction of dams: viii. Filling up of low lying area: ix. Filling of mine voids: x. Use in overburden dumps: xi. Agriculture: xii. Construction of shoreline protection structures in coastal districts; xiii. Export of ash to other countries: xiv. Others (please specify): 									
20.	<table border="1"> <tr> <td colspan="4" data-bbox="268 1935 1433 1980">Summary:</td> </tr> <tr> <td data-bbox="268 1980 568 2054">Details</td> <td data-bbox="568 1980 868 2054">Quantity generated (MTP)</td> <td data-bbox="868 1980 1155 2054">Quantity utilised (MTP) and (per cent)</td> <td data-bbox="1155 1980 1433 2054">Balance quantity (MTP)</td> </tr> </table>	Summary:				Details	Quantity generated (MTP)	Quantity utilised (MTP) and (per cent)	Balance quantity (MTP)	
Summary:										
Details	Quantity generated (MTP)	Quantity utilised (MTP) and (per cent)	Balance quantity (MTP)							

	Current ash during reporting period			
	Legacy ash			
	Total			
21.	Any other information: Soft copy of the annual compliance report, and shape files of power plant and ash ponds may be e-mailed to:- moefcc-coalash@gov.in			
22.	Signature of Authorised Signatory			



भारत का राजपत्र The Gazette of India

सी.जी.-डी.एल.-अ.-05092022-238614
CG-DL-E-05092022-238614

असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)
PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 603]

नई दिल्ली, सोमवार, सितम्बर 5, 2022/भाद्र 14, 1944

No. 603]

NEW DELHI, MONDAY, SEPTEMBER 5, 2022/BHADRA 14, 1944

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 5 सितम्बर, 2022

सा.का.नि. 682(अ).—केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3, धारा 6 और धारा 25 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, पर्यावरण (संरक्षण) नियम, 1986 का और संशोधन करने के लिए निम्नलिखित नियम बनाती है, अर्थात् :-

1. (1) इन नियमों का संक्षिप्त नाम पर्यावरण (संरक्षण) दूसरा संशोधन नियम, 2022 है।

(2) ये राजपत्र में उनके प्रकाशन की तारीख को प्रवृत्त होंगे।

2. पर्यावरण (संरक्षण) नियम, 1986 की अनुसूची 1 के क्रम सं. 25 में, “*(i) सारणी 1” के स्थान पर निम्नलिखित रखा जाएगा, अर्थात् :-

सारणी-1

क्रम सं.	प्रवर्ग	अवस्थान/क्षेत्र	अनुपालन के लिए समय-सीमा (निवृत्त न होने वाली इकाईयां)		अनुपालन से छूट के लिए इकाईयों को निवृत्त करने की अंतिम तारीख	
			SO ₂ उत्सर्जन से भिन्न पैरामीटर	SO ₂ उत्सर्जन	SO ₂ उत्सर्जन से भिन्न पैरामीटर	SO ₂ उत्सर्जन
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	प्रवर्ग क	राष्ट्रीय राजधानी क्षेत्र या 10 लाख से	31 दिसंबर,	31 दिसंबर,	31 दिसंबर,	

		अधिक जनसंख्या वाले शहरों ¹ की दस किलोमीटर की परिधि के भीतर।	2022 तक	2024 तक	2022 तक	31 दिसंबर, 2027 तक
2.	प्रवर्ग ख	गंभीर रूप से प्रदूषित क्षेत्रों ¹ की या गैर-प्राप्ति शहरों ² की दस किलोमीटर के अर्धव्यास के भीतर	31 दिसंबर, 2023 तक	31 दिसंबर, 2025 तक	31 दिसंबर, 2025 तक	
3.	प्रवर्ग ग	प्रवर्ग क और ख में सम्मिलित से भिन्न	31 दिसंबर, 2024 तक	31 दिसंबर, 2026 तक	31 दिसंबर, 2025 तक	

1 भारत की 2011 की जनगणना के अनुसार

2 केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा यथा-परिभाषित।

3. “(ii)” के स्थान पर निम्नलिखित रखा जाएगा, अर्थात् :-

‘(ii)(क) सारणी 1 के स्तंभ (6) में यथा-विनिर्दिष्ट तारीख से पूर्व निवृत्त होने के लिए घोषित तापीय विद्युत संयंत्र से, ऐसे संयंत्रों द्वारा केन्द्रीय प्रदूषण नियंत्रण बोर्ड और केन्द्रीय विद्युत प्राधिकरण को ऐसे संयंत्र द्वारा निवृत्त होने के आधार पर छूट के लिए वचनबंध प्रस्तुत करने की दशा में SO₂ उत्सर्जन से भिन्न पैरामीटर के लिए विनिर्दिष्ट मानकों को पूरा करने की अपेक्षा नहीं होगी:

परंतु ऐसे संयंत्रों पर सारणी 1 के स्तंभ (4) में यथा-विनिर्दिष्ट तारीख से उनके द्वारा वचनबंध में यथा-विनिर्दिष्ट तारीख से आगे जारी रहता है, उनके प्रचालन की दशा में जनित विद्युत की प्रति इकाई पर 0.40 रुपए की दर से पर्यावरण प्रतिकर उदग्रहित किया जाएगा;

(ii)(ख) सारणी 1 के स्तंभ (7) में यथा-विनिर्दिष्ट तारीख से पूर्व निवृत्त होने के लिए घोषित तापीय विद्युत संयंत्र से, ऐसे संयंत्रों द्वारा केन्द्रीय प्रदूषण नियंत्रण बोर्ड और केन्द्रीय विद्युत प्राधिकरण को ऐसे संयंत्र द्वारा निवृत्त होने के आधार पर छूट के लिए वचनबंध प्रस्तुत करने की दशा में SO₂ उत्सर्जनों से भिन्न विनिर्दिष्ट मानकों को पूरा करने की अपेक्षा नहीं होगी:

परंतु ऐसे संयंत्रों पर सारणी 1 के स्तंभ (5) में यथा-विनिर्दिष्ट तारीख से उनके द्वारा वचनबंध में यथा विनिर्दिष्ट तारीख से आगे जारी रहता है, उनके प्रचालन की दशा में जनित विद्युत की प्रति इकाई पर 0.40 रुपए की दर से पर्यावरण प्रतिकर उदग्रहित किया जाएगा;’

4. “(iii)” के स्थान पर निम्नलिखित रखा जाएगा, अर्थात्:-

“(iii) सारणी 1 के स्तंभ (4) और स्तंभ (5) में यथा-विनिर्दिष्ट तारीख के पश्चात् निवृत्त न होने वाले तापीय विद्युत संयंत्रों पर सारणी-2 में विनिर्दिष्ट दरों के अनुसार, पर्यावरण प्रतिकर उदग्रहित किया जाएगा, अर्थात्:-

सारणी-2

समय-सीमा से आगे अननुपालन प्रचालन	पर्यावरण प्रतिकर (प्रति इकाई जनित विद्युत)
0-180 दिन	0.20
181-365 दिन	0.30
366 दिन और उससे आगे	0.40”

[फा. सं. क्यू-15017/40/2007-सीपीडब्ल्यू]
नरेश पाल गंगवार, अपर सचिव

टिप्पण : मूल नियम, भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपखंड (i) में संख्यांक का.आ. 844(अ), तारीख 19 नवंबर, 1986 द्वारा प्रकाशित किए गए थे और उनका अंतिम संशोधन अधिसूचना संख्यांक सा.का.नि. 143(अ), तारीख 22 फरवरी, 2022 द्वारा किया गया।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 5th September, 2022

G.S.R. 682(E).—In exercise of the powers conferred by sections 3, 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:—

1. (1) These rules may be called the Environment (Protection) Second Amendment Rules, 2022.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986, in Schedule – I, in serial number 25 for “* (i) Table 1” the following shall be substituted, namely: -

Table-I

Sl. No.	Category	Location/area	Timelines for compliance (Non-retiring units)		Last date for retirement of units for exemption from compliance	
			parameters other than SO ₂ emissions	SO ₂ emissions	parameters other than SO ₂ emissions	SO ₂ emissions
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Category A	With 10 km radius of National Capital Region or cities having million plus population ¹ .	Up to 31 st December 2022	Up to 31 st December 2024	Up to 31 st December 2022	Up to 31 st December 2027
2	Category B	With 10 km radius of Critically Polluted Areas ² or Non-attainment cities ²	Up to 31 st December 2023	Up to 31 st December 2025	Up to 31 st December 2025	
3	Category C	Other than those included in category A and B	Up to 31 st December 2024	Up to 31 st December 2026	Up to 31 st December 2025	

¹ As per 2011 census of India.

² as defined by CPCB.

3. For “* (ii)” the following shall be substituted, namely: -

‘(ii) (a) The thermal power plant declared to retire before the date as specified in column (6) of Table-I shall not be required to meet the specified norms for parameters other than SO₂ emissions in case such plants submit an undertaking to CPCB and CEA for exemption on ground of retirement of such plant:

Provided that such plants shall be levied environment compensation from the dates as specified in column (4) of table –I, at the rate of rupees 0.40 per unit electricity generated in case their operation is continued beyond the date as specified in the undertaking;

(ii) (b) The thermal power plant declared to retire before the date as specified in column (7) of Table-I shall not be required to meet the specified norms for SO₂ emissions in case such plants submit an undertaking to CPCB and CEA for exemption on ground of retirement of such plant:

Provided that such plants shall be levied environment compensation from the dates as specified in column (5) of table –I, at the rate of rupees 0.40 per unit electricity generated in case their operation is continued beyond the date as specified in the undertaking;’

4. For “* (iii)” the following shall be substituted, namely: -

“(iii) there shall be levied environment compensation on the non-retiring thermal power plants, after the date as specified in column (4) and (5) of Table-I, as per the rates specified in the Table-II, namely: -

Table-II

Non-Compliant operation beyond the Timeline	Environmental Compensation (Rs. per unit electricity generated)
0-180 days	0.20
181-365 days	0.30
366 days and beyond	0.40”

[F. No. Q-15017/40/2007-CPW]

NARESH PAL GANGWAR, Addl. Secy.

Note : The principle rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i) vide number S.O. 844(E), dated the 19th November, 1986 and lastly amended vide notification G.S.R. 143(E), dated the 22nd February, 2022.