

BEFORE THE NATIONAL GREEN TRIBUNAL

SOUTHERN ZONE, CHENNAI

Original Application No. 74 of 2021 (SZ)

with

IA No 131 of 2023

in

Original Application No. 74 of 2021 (SZ)

IN THE MATTER OF:

K. Saravanan

...Applicant

Verses

The Union of India

.... Respondent

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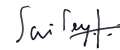
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Place: Chennai

Filed by

Dated: 18.09.2024

Advocate for MoEF&CC



Dr. E. Arockia Lenin
Scientist 'D'
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INTERIM ADDITIONAL AFFIDAVIT ON BEHALF OF MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, RESPONDENT NO. 1

I, E. Arockia Lenin S/o Emanuvel.J , aged about 37 Years working as 'Scientist-D' in the Ministry of Environment, Forest and Climate Change, having Regional office located at Chennai , do hereby solemnly affirm on oath and state as under:



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1. That I am presently working as 'Scientist-D' in the office of the Respondent No.1 and as such am well acquainted with the facts and circumstances of the case on the basis of the records available in my office and am thus duly authorized to file this Affidavit on behalf of the Respondent No. 1 herein, i.e. the Ministry of Environment, Forest & Climate Change. Specifically admitted hereunder:
 2. The instant application has been filed challenging the Office Memorandum (hereinafter referred to as 'O.M.')
- issued by the Ministry of Environment, Forests and Climate Change (hereinafter referred to as "Ministry") vide F.No. J-13012/8/2009-IA, II (T) dated 11.11.2020 that grants exemption from obtaining environmental clearance, while fuel is changed from (i) imported coal to domestic coal, (ii) domestic to imported and (iii) domestic to domestic subject to compliance of certain conditions.

Thereafter, vide IA No 131 of 2023, the applicant amended prayer of the present application seeking to quash the office memorandum dated 11.11.2020 bearing No. F. No J 13012/8/2009-IA. II (T) as amended by OM dated 06.12.2023 bearing number F.No. J-13012/8/2009-1A.II (T) issued by the Ministry.

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3. That the main thrust of the application is that the said O.M. has overlooked the consequences of change in coal source which may result in increase in pollution load on the environment without identifying the impact and its environment management and therefore, the applicant is against the operation of the said O.M.
4. That the Hon'ble Tribunal vide interim order dated 24.05.2023 has directed the MoEF&CC to revisit the Office Memorandum dated 11.11.2020 regarding 'Amendment in Environmental Clearance for change in coal source by Thermal Power Plants' by the Expert Appraisal Committee (hereinafter referred to as 'EAC').
5. That in compliance of the order dated 24.05.2023 passed by the Hon'ble Tribunal, the Ministry decided to refer the matter to the EAC for further examination of the issues. The EAC meeting was conducted on 19.06.2023 and after detailed deliberations, it decided to obtain information from CEA to examine whether there will be any significant change in environmental scenario and impacts due to change in coal source/quality. Further, the EAC also opined to constitute a sub-committee that may conduct a scientific analysis of the emission in different scenarios of coal sources to assess the impact and additional measures required by thermal power plant.



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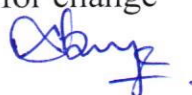
6. That the EAC discussed the issues involved in the matter in its meetings held on 19.06.2023, 01.08.2023, 16.08.2023, 27.08.2023 and 04.09.2023. Accordingly, after thorough examination of the information received on certain aspects from CEA and detailed deliberations on the findings/analysis report of the sub -committee, the EAC finalized its recommendations and the MoEF&CC decided to accept the recommendation of the EAC.

In this regard, a Compliance Affidavit was filed on 20.10.2023 followed by Memo dated 07.11.2023 wherein it was submitted that “...since the EAC, as per the EAC Report, does not recommend for withdrawal of the OM dated 11.11.2020 rather, it has only proposed certain changes in the applicability of OM dated 11.11.2020 .Therefore, in light of the above the MoEF&CC has decided to issue an amendment to the OM dated 11.11.2020.”

Thereafter, the Ministry amended the OM dated 11.11.2020 vide OM amendment dated 06.12.2023.

7. That the Hon’ble Tribunal vide order dated 12.08.2024 directed to submit the aspects to sustain the Office Memorandum dated 11.11.2020 & 06.12.2023 regarding amendment in Environment Clearance for change

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in coal by thermal plants. In this regard, the Ministry vide letter dated 27.08.2024 sought for information on the following technical aspects from the Central Pollution Control Board (hereinafter referred to as 'CPCB') and Central Electricity Authority (hereinafter referred to as 'CEA'):

- a. Region-wise; Fly ash utilization status (%)
- b. Utilization of water before and after change in coal source
- c. FGD Installation status
- d. Ambient air quality before and after change in coal source
- e. Coal characteristics w.r.t change in coal quality (including Mercury)
- f. Details of transportation of coal before and after change in coal source.

The copy of the letter dated 27.08.2024 issued by the Ministry is annexed as **Annexure 1**.

8. That based on the information provided by CPCB and CEA, a special EAC meeting was convened on 06.09.2024. The EAC deliberated on the information received with respect to the technical aspects namely, region

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wise ash utilization, changes in water requirement due to change of coal source and FGD installation status. After deliberations, EAC opined that the OM dated 11.11.2020 and 06.12.2023 have been issued after taking in to consideration of all the environmental impacts arising out of change in coal source. However, after detailed deliberations, the EAC has opined to have another meeting on receipt of information on the other remaining aspects provided hereunder for taking a considered view in the matter:

- a. Ambient air quality of 6 months before and after change in coal source
- b. Coal characteristics w.r.t change in coal quality (including Mercury)
- c. Details of transportation of coal before and after change in coal source

The copy of the record note of discussion dated 06.09.2024 is annexed as **Annexure 2.**

9. That in light of the above, it is submitted that the data for the remaining aspects is yet to be critically examined by the EAC therefore, it is most humbly requested to grant 4 weeks' time to file the observation of the EAC in this regard.

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10. That the present additional affidavit may kindly be taken on record and into consideration and the Hon'ble Tribunal may pass appropriate order(s), direction(s) as deemed fit and proper under the facts and circumstances of the present case.

11. In view of the above mentioned facts, this Hon'ble Tribunal is graciously requested to dismiss the present application of the applicant and pass any orders as may deem fit in the interest of justice.

The Answering Respondent prays accordingly.



DEPONENT

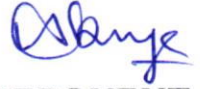
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VERIFICATION

I, the above named deponent, do hereby solemnly affirm and state that the contents of above mentioned are true and correct to the best of my knowledge and based on record and I have not suppressed any material fact.

Verified at Chennai on this 18th day of September, 2024.

**DEPONENT****Dr. E. Arockia Lenin**

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URGENT
NGT MATTER

L-11011/13/2021-IA-I (T)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

3rd Floor, Vayu Wing,
Indira Paryavaran Bhawan
Jor Bagh Road
New Delhi-110003

Dated: 27th August, 2024

To

The Member Secretary
Central Pollution Control Board
Parivesh Bhawan, East Arjun Nagar, Delhi-110032.
Tel. No. - 011-22303655
Email: mscb.cpcb@nic.in

The Chairman,
Central Electricity Authority
Sewa Bhawan, Rama Krishna Puram,
Sector-1, New Delhi-110066
Phone Number: 011- 2673-2701
Email: member.he@cea.nic.in

Subject: Original Application No. 74 of 2021 in the matter of K. Sarvanan vs Union of India pending before the NGT Chennai-reg.

Sir,

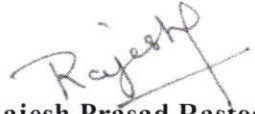
This is with reference to the above captioned subject matter, OA No 74 of 2021 pending before the Hon'ble National Green Tribunal (Southern Zone) Chennai wherein the Office Memorandum no. J-13012/8/2009-IA.II (T) dated 11.11.2020, for change in coal source by Thermal Power Plants under the EIA Notification, 2006, issued by the MoEF&CC has been challenged.

2 The Hon'ble NGT vide order dated 12.08.2024 (copy enclosed) has posted the matter for **final hearing on 23.09.2024**. In light of the submissions made during the course of the hearing, the following information is sought:

S.No	Environmental aspects under consideration	Desired information to be provided by :
1.	Region-wise; Fly ash utilization status (%)	CPCB
2.	Utilization of water before and after change in coal source	CEA
3.	FGD Installation status	CPCB
4.	Details (source, mode of transportation including km) of transportation of coal before and after change in coal source	CPCB
5.	Ambient air quality data of 6 months before and after change in coal source	CPCB
6.	Coal characteristics w.r.t change in coal quality (including Mercury)	CPCB

It is requested to provide the above information latest by 31.08.2024.

Yours faithfully


(Dr. Rajesh Prasad Rastogi)
Scientist-D

Copy To:

1. Shri Nazimuddin, Representative of CPCB; Central Pollution Control Board Parivesh Bhawan, East Arjun Nagar, Delhi-110032; Email: nazim.cpcb@nic.in
2. Sh. M.P Singh, Expert Member EAC (Thermal), CEA Sewa Bhawan, Rama Krishna Puram, Sector-1, New Delhi-110066; Email: mpsingh.cea@nic.in

Minutes of the Special Expert Appraisal Committee (Thermal Sector) meeting held virtually on 06/09/2024, to deliberate on the Office Memorandum dated 11/11/2020 & 06/12/2023 regarding amendment in Environment Clearance for change in coal by thermal plants.

A Special Expert Appraisal Committee (EAC) of Thermal sector was convened virtually on 6/09/2024 to deliberate on the technical aspects pertaining to the Office Memorandum dated 11/11/2020 & 06/12/2023 regarding amendment in Environment Clearance for change in coal by thermal plants arising out of Original Application No. 74 of 2021 (SZ) and I.A. No. 131 of 2023, titled K. Saravanan, Chennai v. Union of India, pending before the Hon'ble National Green Tribunal (Southern Zone), Chennai. The list of participants is annexed.

2. At the outset, the Chairman welcomed all the EAC members and apprised the purpose of the meeting. Thereafter, he asked the Member Secretary to give a brief presentation in the matter. Accordingly, a presentation was made before the EAC covering the following:

- i. MoEF&CC issued an Office Memorandum on 11/11/2020 which provided exemption from obtaining amendment in Environmental Clearance(EC) to all coal based Thermal Power Plants (TPPs), while fuel source is changed from (i) imported coal to domestic coal, (ii) domestic to imported and (iii) domestic to domestic subject to compliance of following conditions thereby making earlier conditions in the EC regarding coal source redundant.

Condi tion No.	Details of the condition	Compliance requirement from Project Proponent(PP)
a)	Details regarding change in source (location of the source, proposed quantity, distance from the power plant and mode of transportation), quality (Ash, Sulphur, Moisture content and Calorific value) shall be informed to the Ministry and its concerned Regional Office. The quantity of coal transported from each source along with the mode of transportation shall be submitted as part of EC compliance report.	PP is required to mandatorily submit the change in coal source and quality including its transportation in their EC compliance report.
b)	The applicable flue gas emissions standards for Particulate Matter (PM), Sulphur Dioxide, Oxides of Nitrogen and Mercury shall be complied inline with Ministry's Notification vide S.O. 3305(E) dated 7.12.2015 and subsequent amendments. A	PP is required to meet the flue gas emissions and water consumption as below and compliance status has to be submitted: <u>Flue gas emissions</u> PM : 30 mg/Nm ³ SO ₂ : 100 mg/Nm ³ NO _x : 100 mg/Nm ³ Mercury : 0.03 mg/Nm ³

Condition No.	Details of the condition	Compliance requirement from Project Proponent(PP)
	<p>progress of implementation and its compliance shall be submitted as part of compliance report.</p>	<p>As per the MoEF&CC Notification dated 05/09/2022, environmental compensation is levied ranging from 0.20 to 0.40 per unit electricity generated if the unit is not complying with the emission norms within the prescribed time frame.</p> <p>Water consumption: Specific water consumption shall not exceed maximum of 3.0 m³/MWh for new plants installed after the 1/1/2017 and these plants shall also achieve zero waste water discharge.</p>
c)	<p>Ash content in the Coal and Coal transportation is governed by the Ministry's Notification vide S.O. 1561(E) dated 21.5.2020. As far as possible, coal transportation shall be done by rail/conveyor or other eco-friendly modes. However, road transportation is allowed with tarpaulin covered trucks till the railway/conveyor belt infrastructure is made available. A progress (physical and financial) of rail connectivity from nearest railway siding or conveyor connectivity to the power plant shall be submitted in the EC compliance report.</p>	<p>This notification specifies that the use of coal by Thermal Power Plants, without restrictions on ash content or distance, shall be permitted under the following conditions:</p> <p>(1) Setting Up Technology Solution for emission norms:</p> <p>(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.</p> <p>(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.</p> <p>(2) Management of Ash Ponds:</p> <p>(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.</p> <p>(ii) Appropriate Technology solutions shall be applied to optimise water consumption for Ash management;</p> <p>(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;</p>

Condition No.	Details of the condition	Compliance requirement from Project Proponent(PP)
		<p>(iv) Subject to 2(i) above, the thermal power plants to dispose fly ash in abandoned or working mines (to be facilitated by mine owner) with environmental safeguards.</p> <p>(3) Transportation:</p> <p>(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.</p> <p>(ii) It shall be ensured by the thermal power plant that</p> <p>a. Rail siding facility or conveyor facility is set up at or near the power plant, for transportation by rail or conveyor; and</p> <p>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.</p> <p>(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.</p> <p>PP is required to mandatorily submit the compliance status on the above in their EC compliance report.</p>
d)	Additional ash pond is not allowed due to increase in ash content in the raw coal as against	No additional ash pond is permitted. All the ash has to be utilized as per extant regulations on fly ash utilization.

Condition No.	Details of the condition	Compliance requirement from Project Proponent(PP)
	the ash pond permitted in the Environmental Clearance. 100% fly ash utilization is to be achieved within four years inline with Fly ash notifications dated 14.09.1999, 27.08.2003, 3.11.2009 & 25.01.2016 and amended from time to time (or) extant regulations on fly ash utilization.	
e)	In case of exceptional circumstances, project proponents may approach the Ministry for seeking permission to use an emergency ash pond with cogent reasons, if any.	Only in exceptional circumstances, emergency ash pond is permitted with prior permission of the Ministry.
f)	Details regarding monthly generation, utilization and disposal of fly ash (including bottom ash) shall be submitted to the Ministry and its Regional Office.	PP is required to submit the compliance status of this condition to the Ministry and its Regional Office.

- ii. An Original Application 74 of 2021 was filed before Hon'ble NGT (SZ), Chennai with a prayer to quash the OM dated 11/11/2020 as the change in coal source would result in inter-alia the following changes:
- a. Impact of stack emissions on air quality
 - b. Increased consumption of coal
 - c. Impact due to coal transportation
 - d. Impact due to storage of coal
 - e. Ash generation and handling
 - f. Size of ash pond
 - g. Water requirements
- iii. The Hon'ble Tribunal vide order dated 24/05/2023 directed the MoEF&CC to revisit the OM dated 11/11/2020. Ministry decided to refer the matter to the EAC for further examination of the issues. EAC opined that a sub-committee, comprising of following members may conduct a scientific analysis of the emission in different scenarios of coal sources to assess the impact and additional measures required by thermal power plant:
- a. Expert Member & Representative of CEA, Ministry of Power- Chairman
 - b. Representative of CPCB
 - c. Representative of CSIR-NEERI
 - d. Representative of CSIR-CIMFR

e. Representative of M/s NTPC Ltd.

The Sub-committee presented the final scientific analysis report to EAC on 04/09/2023. After deliberations, EAC recommended the following:

- a. OM is inapplicable if the coal source is being changed from **100% imported coal to 100% domestic coal** or from **100% domestic coal to 100% imported coal**.
- b. O.M. continues to be applicable if the coal source is being changed from **one domestic source to other domestic source**, partial or full change.
- c. O.M. continues to be applicable if **imported coal is being blended in domestic coal based power projects up to a maximum of 30%**.
- d. O.M. continues to be applicable if **domestic coal is being blended in imported coal based power projects up to a maximum of 10%**.

- iv. EAC Report has recommended for the above changes in the applicability of OM dated 11/11/2020 in place of blanket exemptions. In light of the said EAC Report, the Ministry amended the OM dated 11/11/2020 on 06/12/2023. The key changes as amended OM dated 6/12/2023 is summarized as below:

All the Thermal Power Plants having prior EC and going in for change in coal source, except for TPPs falling in the below mentioned categories of change in coal source, shall seek amendment in EC before the Ministry along with additional EIA and revised EMP.

- a. From domestic to domestic
- b. From domestic to domestic (blended with imported coal up to 30%)
- c. From imported to imported (blended with domestic coal up to 10%)
- d. From imported to domestic (having GCV of the same grade as of imported coal)

- v. Comparison of OM dated 11/11/2020 and 06/12/2023

Provi sion	OM dated 11/11/2020	OM dated 06/12/2023
Para 7	<ol style="list-style-type: none"> (i) imported coal to domestic coal (ii) domestic to imported (iii) domestic to domestic 	<ol style="list-style-type: none"> i. From domestic to domestic ii. From domestic to domestic (blended with imported coal up to 30%) iii. From imported to imported (blended with domestic coal up to 10%) iv. From imported to domestic (having GCV of the same grade as of imported coal)
Para 7 (d)	Additional ash pond is not allowed due to increase in ash content in the raw coal as against the ash pond permitted in the Environmental Clearance. 100% fly ash utilization is to be achieved within four years inline with Fly ash notifications dated	Additional ash pond shall not be permitted on account of increase in ash content in the raw coal due to change in coal source including lignite other than ash pond permitted and specified in the Prior Environmental Clearance. 100% fly ash utilization is to be achieved within 4 years

Provi sion	OM dated 11/11/2020	OM dated 06/12/2023
	14.09.1999, 27.08.2003, 3.11.2009 & 25.01.2016 and amended from time to time (or) extant regulations on fly ash utilization.	in accordance with with the extant provisions laid down in the Fly ash notifications dated 14.09.1999, 27.08.2003, 3.11.2009 & 25.01.2016, 31.12.2021 and 30.12.2022 as amended from time to time.

- vi. The above matter was last listed for hearing on 12/08/2024. The representatives from the CEA, CPCB and Member Secretary from the MoEF&CC were virtually present during the hearing wherein the Hon'ble Tribunal has directed to submit the aspects to sustain the Office Memorandum dated 11/11/2020 & 06/12/2023 regarding amendment in Environment Clearance for change in coal by thermal plants. In this regard, Ministry referred the matter to EAC.
- vii. It was apprised to the EAC that during deliberations the Hon'ble Tribunal sought for information on the following technical aspects of the OM dated 11.11.2020 and 06.12.2023 (amended OM):
- Region-wise; Fly ash utilization status (%)
 - Utilization of water before and after change in coal source
 - FGD Installation status
 - Ambient air quality before and after change in coal source
 - Coal characteristics w.r.t change in coal quality (including Mercury)
 - Details of transportation of coal before and after change in coal source
- viii. In this regard, Ministry sought for information from the Central Pollution Control Board (CPCB) and Central Electricity Authority (CEA). Ministry is in receipt of information with respect to point no (a) to (c) and the same is summarized as below:

a. Region-wise; Fly ash utilization status (%)

S.No.	Name of the Region	Capacity (MW)	Coal / Lignite Consump. (MT) during 2022-23	Total Ash Gen. (MT) during 2022-23	Total Ash Utilization (MT) during 2022-23	Total Ash Utilization % during 2022-23
1.	Southern Region Total	44997.5	156008196.2	51439240.25	48512685.34	94.31%
2.	North-Eastern Region Total	750	2978611	1019281	577152	56.62%
3.	Easter Region Total	40719.5	167835677	66895471.82	64585879	96.55%

S.No.	Name of the Region	Capacity (MW)	Coal / Lignite Consump. (MT) during 2022-23	Total Ash Gen. (MT) during 2022-23	Total Ash Utilization (MT) during 2022-23	Total Ash Utilization % during 2022-23
4.	Western Region Total	86978	317669675.1	111152449.5	99630686.27	89.63%
5.	Northern Region Total	44550	176018536.1	61259405.82	51750759.19	84.48%

b.Utilization of water before and after change in coal source

- **Scenario-1-Domestic to Domestic-** Enough margin in waste water generated is available, for bottom ash handling, in case the ash percentage of coal increases or decreases. Hence there will be no impact on waste water utilization by the plant.
- **Scenario-2- Imported to domestic** - Since domestic coal has 4-5 times higher ash percentage, the bottom ash water requirement will increase. Since imported or domestic coal has no bearing on cooling tower blow down, waste water generated by plant will always be substantially higher than the bottom ash handling requirement and the waste water utilization by plant will increase due to change from Imported to Domestic coal.
- **Scenario-3- Domestic to Imported** - Since imported coal has 4-5 times lesser ash percentage, the bottom ash water requirement will decrease, hence, the waste water utilization will reduce.

However, this is to point out that in no case the fresh water requirement i.e. specific water consumption (water requirement) of plant will reduce or increase for all the three scenarios and it will remain the same.

c.FGD Installation status

S.No	Category	Total No. of units	CFB C	Claims SO2 compliance	Retired	Feasibility study not started	Feasibility study started	Feasibility study completed	Tender specification made	NIT Issued	Bid opened	Bid awarded	FGD
1.	A	66	0	0	1	0	8	14	0	5	6	21	11
2.	B	72	3	0	3	0	3	2	0	23	11	25	2
3.	C	462	50	6	6	2	21	37	28	58	36	192	26

S.No	Category	Total No. of units	CFB C	Claims SO2 compliance	Retired	Feasibility study not started	Feasibility study started	Feasibility study completed	Tender specification made	NIT Issued	Bid opened	Bid awarded	FG D
	Total	600	53	6	10	2	32	53	28	86	53	238	39

Information in respect of point no (d) to (f) is under compilation by CPCB and CEA.

3. During deliberations, it was pointed out by the participants that thermal power plants are falls under utility category. Fuel source for thermal power plants are often changes due to change in fuel linkages/e-auctions and switching over to domestic coal to the extent possible. In order to streamline the process of change in coal source and encourage TPPs to use domestic coal, MoEF&CC issued an Office Memorandum on 11/11/2020 which provided exemption from obtaining amendment in Environmental Clearance(EC) to all coal based Thermal Power Plants (TPPs), while fuel source is changed from (i) imported coal to domestic coal, (ii) domestic to imported and (iii) domestic to domestic subject to compliance of conditions as enumerated at para 2(i) above. The compliance to the conditons being monitored by the respective Regional Offices of MoEF&CC, State Pollution Control Boards, Pollution Control Committees and Regional Directorates of CPCB. The units which are not complying with the conditions, the monitoring authorities can initiate legal action against the project proponent under the relevant provisions of Water (Prevention and Control of Pollution) Act, 1974; Air (Prevention and Control of Pollution) Act, 1981 and Environment (Protection) Act, 1986.

4. The EAC noted that as per extant provisions of Ash utilization notification dated 31/12/2021 & its subsequent amendments, 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

Note: The utilization targets as per the applicable compliance cycle shall commence from 1st April, 2022.

The unutilised accumulated ash i.e. legacy ash, which is stored before 31/12/2021, 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 1st April 2022 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

Environmental compensation for non-compliance.-

- 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 percent 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.
- Environmental compensation collected by the authorities shall be deposited in the designated account of Central Pollution Control Board.
- 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.

5. **Based on the EAC recommendations on the scientific analysis report, amended OM has been issued on 6/12/2023 by specifying the percentage of blending in place of blanket exemptions as provided in the OM dated 11/11/2020.** It is pertinent to mention here that as per the report, there will be decrease in ash generation to the extent of 36% in case of blending of imported coal up to 30%. As per the amended OM, all the Thermal Power Plants having prior EC and going in for change in coal source, except for TPPs falling in the below mentioned categories of change in coal source, shall seek amendment in EC before the Ministry along with additional EIA and revised EMP.

- a. From domestic to domestic
- b. From domestic to domestic (blended with imported coal up to 30%)
- c. From imported to imported (blended with domestic coal up to 10%)

- d. From imported to domestic (having GCV of the same grade as of imported coal)

6. The EAC deliberated on the information received with respect to the technical aspects namely region wise ash utilization, changes in water requirement due to change of coal source and FGD installation status. After deliberations, EAC opined that the OM dated 11/11/2020 and 06/12/2023 have been issued after taking in to consideration of all the environmental impacts arising out of change in coal source. However, the EAC opined to present the information on the following for taking considered view in the matter:

- Ambient air quality of 6 months before and after change in coal source
- Coal characteristics w.r.t change in coal quality (including Mercury)
- Details of transportation of coal before and after change in coal source

7. The representative of CPCB and CEA have been asked to expedite the information on the above points.

8. Recommendations of the EAC

After detailed deliberations, the Committee decided to have another meeting on receipt of information on the above points for taking a considered view in the matter. Further, the Committee also recommended that representative of MoEF&CC, CPCB and CEA may present in the Hon'ble Tribunal in the next hearing for apprising the concerns of Hon'ble Tribunal suitably.

9. The meeting ended with vote of thanks to the Chair.

ANNEXURE-I**LIST OF PARTICIPANTS OF SPECIAL EAC MEETING HELD ON 6TH SEPTEMBER, 2024
THROUGH VIRTUAL MODE**

S. No.	Name & Address	Role	06.09.2024
1.	Dr. Sharad Singh Negi (I.F.S. Retd.)	Chairman	Present
2.	Shri Inder Pal Singh Matharu, IFS (Retd.)	Member	Present
3.	Shri Lalit Kapur	Member	Present
4.	Dr. Umesh Jagannathrao Kahalekar	Member	Present
5.	Dr. Santosh Kumar Hampannavar	Member	Present
6.	Shri Savalge Chandrasekhar	Member	Present
7.	Shri K. B. Biswas	Member	Present
8.	Prof. Shyam Shanker Singh	Member	Present
9.	Dr. Vinod Agrawal	Member	Present
10.	Dr Nazimuddin, Scientist - F	Representative of Central Pollution Control Board	Present
11.	Shri Mahi Pal Singh, Chief Engineer	Representative of Central Electricity Authority (CEA)	Present
12.	Prof. R M Bhattacharjee	Representative of IIT/ISM Dhanbad	Present
13.	Shri Sundar Ramanathan	Member Secretary	Present
14.	Sh. Rajesh Prasad Rastogi	Scientist 'D'	Present
15.	Shri Sahil Ahmed	Legal Associate	Present
