

F. No. 11/03/2018-HSMD
Government of India
Ministry of Environment, Forest and Climate Change
Hazardous Substances Management Division

Indira Paryavaran Bhawan,
Aliganj, Jorbagh Road,
New Delhi-110 003

Dated: 12th August, 2026

OFFICE MEMORANDUM

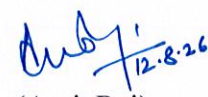
Sub.: Minutes of the Ninth meeting of 'Fly Ash Management and Utilization Mission' held on 16.07.2026 - reg.

The undersigned is directed to refer to the Ninth meeting of 'Fly Ash Management and Utilization Mission' held on 16.07.2026 at Indira Paryavaran Bhawan, New Delhi.

2. The approved minutes of the ninth meeting of 'Fly Ash Management and Utilization Mission' are enclosed herewith.
3. It is requested to kindly furnish the action taken report to the Ministry and to the Central Pollution Control Board.

This issues with the approval of the Competent Authority

Encl.: As stated


(Amit Raj)
Director

To

1. The Secretary, Ministry of Coal, Govt. of India, New Delhi
2. The Secretary, Ministry of Power, Govt. of India, New Delhi
3. The Secretary, Ministry of Mines, Govt. of India, New Delhi
4. Chairman, Ministry of Railways, Govt. of India, New Delhi

5. Chief Secretary, Govt.of Uttar Pradesh
6. Chief Secretary, Govt. of Madhya Pradesh
7. Chairman, Central Pollution Control Board, New Delhi
8. Director General, Directorate General of Mines Safety, Dhanbad, Jharkhand
9. Deputy Director General of Forests (C), MoEFCC, Regional Office, Bhopal
10. Deputy Director General of Forests (C), MoEFCC, Regional Office, Lucknow
11. Chairman, UPPCB, Uttar Pradesh
12. Chairman, MPPCB, Madhya Pradesh
13. General Manager, East Central Railway
14. General Manager, West Central Railway
15. Member Secretary, Central Pollution Control Board, New Delhi
16. Member Secretary, UPPCB, Uttar Pradesh
17. Member Secretary, MPPCB, Madhya Pradesh
18. Director, Central Electricity Authority, GoI
19. District Magistrate, Sonbhadra, U.P.
20. District Magistrate, Singrauli, M.P.
21. CMD, M/s Coal India Limited
22. CMD, M/s NTPC Limited
23. CMD, M/s NCL
24. CMD, M/s Lanco Anpara Power Pvt. Ltd.
25. CMD, M/s Hindalco Industries Ltd.
26. CMD, M/s UPRVUNL
27. CMD, M/s Grasim Industries Limited, Chemical Division, Renukoot, Sonbhadra
28. CMD, M/s Birla Carbon India Pvt. Ltd., Renukoot, Sonbhadra

29. CMD, M/s Aditya Birla Group, Sonbhadra Uttar Pradesh.
30. CMD, M/s. Suliyari Opencast Coal Mines Project, APMDC Ltd.
31. CMD, THDC India Ltd.
32. President & Plant Head, Jaypee Nigrie STPP, Singrauli, M.P.
33. Director, M/s Mahan Energen Ltd., Singrauli, M.P.
34. Head Env. ESG. Forest, Adani Power Ltd.
35. Chief Technical Officer, JPVZ
36. Additional Vice President, Sasan Power Ltd.
37. Divisional Environmental & Housekeeping Manager, Dhanbad, Jharkhand.
38. Joint President, JPVL, NIGRIE/Delhi Office

Copy to:-

1. Additional Chief Secretary/Principal Secretary, Energy, Government of Uttar Pradesh
2. Additional Chief Secretary/Principal Secretary, Energy, Government of Madhya Pradesh
3. Additional Chief Secretary/Principal Secretary, Industries, Government of Uttar Pradesh
4. Additional Chief Secretary/Principal Secretary, Industries, Government of Madhya Pradesh
5. Additional Chief Secretary/Principal Secretary, Environment Department, Government of Madhya Pradesh
6. Additional Chief Secretary/Principal Secretary, Environment Department, Government of Uttar Pradesh
7. Principal Secretary, Mines Department, Government of Uttar Pradesh
8. Principal Secretary, Mines Department, Government of Madhya Pradesh
9. PSO to Secretary (MoEFCC)
10. PPS to AS(AG) / JS(UC)
11. SO, HSMD

Minutes of the 9th meeting of Fly Ash Management and Utilization Mission held on 16.07.2026

The ninth meeting of 'Fly Ash Management and Utilization Mission' was convened on 16th July, 2026 at 11:30 AM under the chairpersonship of Secretary, MoEFCC at Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi to review the status of actions taken based on the recommendations/decisions made by the Mission in the meeting held on 23.12.2024. The list of participants is enclosed as **Annexure I**.

2. At the outset, Secretary, EFCC welcomed all the participants. Joint Secretary, HSM Division, MoEF&CC presented brief background about the 'Fly Ash Management and Utilization Mission'. It was informed that in compliance of Hon'ble NGT (Principal Bench) Order dated 18.01.2022 in Original Application No. 164 of 2018 in the matter of Ashwani Kumar Dubey vs Union of India & Ors. (tagged along with other connected matters), the MoEF&CC vide OM dated 09.03.2022 constituted 'Fly Ash Management and Utilisation Mission. Joint Secretary, HSM Division), MoEFCC gave brief information about Thermal Power Plants (TPPs), Captive TPPs, Coal Mines, Stone Crushers in Singrauli and Sonebhadra region.

3. Further during the presentation, it was informed that, a total 08 number of meetings of the Mission have been conveyed so far. In the last i.e. 8th meeting, held on 23.12.2024 it was observed that some activities pertaining to concerned organizations/departments/Boards have not been completed or were progressing slower than envisaged. Some of the important gaps related to different organizations as observed during last i.e. 8th meeting were discussed/informed as given below:

- i. Anpara TPS and UPPCB to address the issue of fly ash utilization during FY 2024-25 and send the report to the Ministry.
- ii. SOP may be developed for implementation of NEERI technologies for stabilizing the abandoned ash dyke through bamboo plantation.
- iii. East Central Railway (ECR) and Western Central Railway (WCR) shall share geotagged photos with CPCB, of the air pollution control measures taken at railway sidings/ Goods Sheds
- iv. Railway Board shall prepare action plan regarding the installation of automated coal handling mechanism at railway sidings.
- v. CPCB shall create provisions on the online portal for uploading the locations, geotagged photos and short videos of the legacy ash dumpsites by TPPs and air pollution control measures taken at railway sidings by ECR and WCR.
- vi. CPCB, Ministry of Coal and Ministry of Mines shall work together to develop a GIS based online system for identification and allocation of mine voids, incorporating geotagged locations of both TPPs and mine voids,
- vii. CSIR-NEERI shall prepare SOPs on (i) stabilization of ash ponds through plantation of bamboo species to improve biodiversity, (ii) control of pollution around operational ash

- ponds through plantation of bamboo species, and (iii) stabilization of mine voids filled with fly ash.
- viii. Stone crushers of all capacities shall take measures to prevent/ suppress fugitive dust emissions from their operation in line with 'Environmental Guidelines for Stone Crushing Units' issued by CPCB. Status of implementation shall be submitted.
 - ix. Action plan to be prepared, outlining the allocation of responsibilities for construction of different sections of the roads for coal/ash transportation, control of air pollution during coal/ash transportation, components related to DPR preparation and funding.

4. It was also informed in the meeting that Action taken Report (ATRs) were sought from the concerned organisations/ departments/ boards requesting their expeditious submission. It was observed that ATRs have been received from the Ministries /organizations such as Ministry of Mines, Ministry of Coal, Western Central Railway, Madhya Pradesh Power Generating Company Limited (MPPGCL), Northern Coalfields Limited, M/s Sasan Power Limited, M/s Anpara TPP, CSIR-NEERI, Central Electricity Authority, Central Pollution Control Board. etc. Besides submissions made by Ministries /organizations, MPPCB and UPPCB made detailed presentations during the meeting.

[A] Presentation by Madhya Pradesh Pollution Control Board (MPPCB)

The Madhya Pradesh Pollution Control Board (MPPCB) presented the progress achieved against the decisions taken in earlier meetings. MPPCB informed that fly ash utilization in Madhya Pradesh has shown continuous improvement over the last five years, reaching about 94% during FY 2025-26 as against 80% during FY 2024-25 in the Singrauli region. Fly ash has been utilized in cement manufacturing, road construction, low-lying area filling, brick manufacturing and other approved applications. Total 10 no. of thermal power plants have achieved or exceeded the utilization targets prescribed under the Ash Utilization Notification, 2021. However, 05 no. of TPPs continue to require focused attention for achieving full compliance.

Further, MPPCB informed that TPPs (5), Coal Mines (NCL:8, Private: 5), Railway siding (East Central Railway: 03, West Central Railway: 03, Northern Coal Fields: 02) and Stone crushers (41) have submitted Action plans. It was informed that reviews of implementation of the Action Plans was carried out at the level of the Member Secretary, MPPCB, Principal Secretary, Dept. of Environment and also at the level of Chief Secretary, Govt. of Madhya Pradesh. In addition, an Oversight Committee also carried out site inspections, while the Member Secretary, MPPCB, along with officers carried out visit of Singrauli area.

In the previous meeting held on 23.12.2024, several action points were assigned to MPPCB. Status of implementation of action points pertaining to MPPCB presented during meeting are as follows:

Issue 1: NOC from DM, Singrauli and CTO by MPPCB for transportation of fly ash from Anpara TPS to Gorbi Mines.

- MPPCB informed that the District Magistrate, Singrauli has issued the required No Objection Certificate (NoC) vide letter dated 26.12.2024.

- MPPCB has granted Consent to Operate (CTO) vide letter dated 05/02/2025 and renewal granted vide letter dated 24/12/2025, for transportation of fly ash from Anpara Thermal Power Station to Gorbi Mines.

Issue 2: Technical feasibility and impact study for disposal of fly ash in low-lying areas by Sasan Power Limited

- It was informed that M/s Sasan Power Limited through IIT (BHU) Varanasi has submitted Report on Technical Feasibility of Filling Low-Lying Areas with Coal Ash. Sasan Power limited has two low-lying areas within their plant premises and appear to a safe option for the disposal of coal ash.

Issue 3: Status of Implementation of CPCB Guidelines for Stone Crushing Units for Control of air pollution

- In this regard it was informed that number of operational stone crushers has reduced from 56 (as on 04.07.2025) to 41 (as on 16.07.2026). All 41 operational stone crushers have been issued instructions to implement the CPCB guidelines. Further, it was informed that the number of stone crushers served with closure notices under Section 31 of the Air (Prevention and Control of Pollution) Act, 1981 was 31 as on 04.07.2025 and 5 as on 16.07.2026 and Closure orders have been issued to 08 crushers as on 04.07.2025 and 2 crushers as on 16.07.2026 and. 06 no. of stone crushers have deployed static Mist Fogger as on 04.07.2025 and also as on 16.07.2026.

Issue 4: Ministry, in coordination with CPCB, MPPCB, shall hold a meeting with the TPPs, coal mines and East/ West Central Railway regarding the status of implementation of the action plans, conditions of EC & CTO within one month.

- MPPCB informed the status of compliance by NTPC Vindhyachal Super Thermal Power Plant, Singrauli with respect to the pending action points viz. the status of Flue Gas Desulphurization (FGD) system, NOx emission control measures, fly ash utilization in accordance with the Fly Ash Notification, action taken for Fly ash transportation, Construction of Check dam, static foggers at coal stock yard, Construction of sensor-based vehicle washing system, ash desilting of nallahs, upgradation of all Ash Silo with HMDC system, etc. The compliance status of the action points w.r.to NTPC Vindhyachal Super Thermal Power Plant, Singrauli are provided in table 1 in Annexure- II.
- For implementation of the pending action points by M/s Sasan Power Limited, with respect to the pending action points viz. the status of Flue Gas Desulphurization (FGD) system, permanent water sprinkling system, long term and short term plan for Fly ash transportation, cleaning of fly ash, deposit of environmental compensation as assessed by NEERI, construction of a high wind-breaking barrier and construction of the semi-automatic tarpaulin stand were presented. The compliance status of the action points w.r.to M/s Sasan Power Limited are provided in table 2 in Annexure- II.

- The status of compliance related to M/s. Mahan Energen Limited, with respect to the pending action points viz. the present status of FGD system, coal transportation by rail/belt conveyor system, maintenance of roads, development of railway siding, Fly ash transportation and deployment of mobile mist foggers were presented. The compliance status of the action points w.r.to M/s. Mahan Energen Limited, are provided in table 3 in Annexure- II.
- The status of compliance related to M/s. Hindalco Industries Ltd., Bhargwan, Singrauli with respect to the pending action points viz. FGD system, RCC road to Ash dyke, Installation of Pneumatic Conveyor System, Deployment of static mist fogger and Erection of permanent water sprinklers/rain gun at ash dyke were presented. The compliance status of the action points w.r.to M/s. Hindalco Industries Ltd, Bhargwan, Singrauli are provided in table 4 in Annexure- II.
- The status of compliance related to M/s Jaypee Nigrie Super Thermal Power Plant, Singrauli with respect to the pending action points viz. FGD system, Packing and stemming of Blast hole by Locking cap, Installation of Pneumatic conveyor system, Deployment of static mist fogger, Erection of sensor based automatic wheel washing system, installation of Semi-Automatic Mechanized Tarpaulin Cover system and Deployment of mobile mist fogger for plying in public road were presented. The compliance status of the action points w.r.to M/s Jaypee Nigrie Super Thermal Power Plant, Singrauli are provided in table 5 in Annexure- II.
- Status of actions points pertaining to Coal mines in Singrauli region such as M/s NCL, Khadia Project, M/s NCL, Amlori Project, M/s NCL, Nigahi Project, M/s NCL, Jayant Project, M/s NCL, Block-B Project, M/s NCL, Dudhichua Project, M/s NCL, Bina Extension, M/s NCL, Jhingurda, M/s Jaiprakash Power Ventures Ltd., Amelia (North) Coal Mine, M/s Sasan Power Limited (Moher & Moher Amlohri extension coal mine), M/s APMDC Ltd.-Sulyari Open Cast Project and M/s THDC India Ltd., Amelia Coal Block (New Mine), Singrauli related to Fly ash utilization, Handling and transportation of coal, Maintenance of roads, Automatic wheel washing system, Installation of Fog cannons, deployment of road sweeping machines, Plantation, construction of wind breaking barrier around coal stock yard, Carrying capacity of Mine & traffic study, Construction of Semi Automatic Tarpaulin Cover Stand, etc. were presented. The compliance status of the action points w.r.to aforementioned Coal mines, are provided from table 6 to 17 in Annexure- II
- MPPCB also presented about the current status of action points pertaining to M/s East Central Railway, Spur III & X, M/s East Central Railway, Mahedaiya, Singrauli, M/s West Central Railway, Gajra Bahra, Singrauli, M/s West Central Railway, Gondawali, Singrauli, M/s West Central Railway, Bargawan, Singrauli and M/s Trimula Industries Ltd. Bhargwan, Singrauli related to installation of Coal Handling System, Wind breaking wall, deployment of foggers, Water sprinkling system, Drainage facility, Green belt around the coal siding area, etc. . The compliance status of the action points w.r.to aforementioned Coal sidings, are provided from table 18 to 23 in Annexure- II.

Issue 5: Allocation of responsibilities for construction of different sections of the roads for coal/ash transportation, control of air pollution during coal/ash transportation.

- MPPCB informed that stakeholder meetings have been organized by MPPCB on 13.01.2025 & 14.01.2025. Eleven transportation routes have been identified. NCL has issued workorder to CSIR NEERI for source apportionment study of Singrauli region which is expected to be received by August 2026.
- It was also informed that Collector Singrauli has also issued direction in District level Review meeting for deployment of dust suppression systems on transportation routes and structural upgradation.
- MPPCB also presented a list of responsible agencies for water spraying on public roads and use of mist cannons for pollution control. The List has been provided in table 24 in Annexure- II.

Discussion held during the meeting on issues related to Singrauli region:

- i. It was noted that the No Objection Certificate (NOC) for transportation of fly ash from Anpara TPS to Gorbi Mines was issued by the District Magistrate, Singrauli on 26.12.2024. However, the NOC expired on 01.07.2026 and has not yet been renewed. It was advised to Anpara TPS to immediately take up the matter with the District Magistrate, Singrauli, and expedite the renewal of the NOC to ensure uninterrupted transportation and utilization of fly ash.
- ii. It was noted during meeting that two low-lying areas within the M/s Sasan Power Limited plant premises appear to be a safe option for disposal of ash. In this regard it has been advised that a time bound action plan with environmental safeguards shall be prepared and same shall be shared with SPCB for consideration and appropriate decision with respect to disposal of ash in the above two low lying areas.
- iii. The Chairman enquired whether compliance with the CPCB “Environmental Guidelines for Stone Crushing Units” had been ensured by the 41 stone crushers operational in Singrauli district. The representative of MPPCB was unable to provide a satisfactory response regarding the compliance status of the remaining crusher units. It was directed to MPPCB to undertake inspections of the remaining stone crushing units and to take appropriate action against non-compliant units, wherever necessary. It was further directed to MPPCB to ensure complete implementation of CPCB guidelines (Environmental Guidelines for Stone Crushing Units issued by CPCB in July, 2023) and to continue actions against non-compliant units. It was instructed to have random inspections by Senior officers of Pollution control Board including MS, MPPCB for verification of compliances in stone crushing units.

- iv. During the deliberation it was informed by the representative of MPPCB that no progress has been made regarding the laying of a pipeline for the transportation of fly ash from Vindhyachal Super Thermal Power Plant, NTPC, to the Gorbi Mine. It was further emphasized that vehicles transporting fly ash should be adequately covered to prevent fugitive dust emissions and associated environmental pollution. Chairman instructed that steps should be taken to ensure that there is no spillage of ash from the transportation trucks from any side, including that from bottom and top of trucks. CCTV cameras should be deployed at check posts to verify the condition of tarpaulin covering. Project proponents/ TPPs should keep Geotagged photographs of tarpaulin covering for different dates for verification of condition of tarpaulin covering.
- v. As informed by the representative of MPPCB during the meeting, the road used for the transportation of fly ash by Sasan Power Limited is currently under maintenance. It was further informed that no progress has been made on the proposal for the installation of a pipeline for the transportation of fly ash to the mine. In response to it, it was informed by the representative of Sasan Power Limited the matter is pending before the Central Electricity Regulatory Commission (CERC). The Chair advised the Ministry of Power to examine the matter and expedite the process. The representative of Sasan Power Limited also stated that the conveyor system used for the transportation of coal is fully covered, thereby aiding in control of air pollution. Sasan Power Limited has also informed that the same road is also being used for the transportation of fly ash by NTPC, Vindhyanchal, hence, they may also be requested to share the cost of the road maintenance.
- vi. On the issues related to the condition of road, DM, Singrauli, stated that the road used by Sasan Power Limited is in a damaged condition and has not been adequately repaired resulting in air pollution. He further informed that there was noise pollution due to the conveyor system used by Sasan Power Limited and steps should be taken to control the noise pollution. Chair instructed to complete the maintenance of road at the earliest and submit the completion report thereof to MPPCB and DM Singrauli.
- vii. Representative of MPPCB highlighted that there was a capacity gap of 5 MTPA in the Coal Handling Plant (CHP) of the M/s NCL Khadia Project i.e 10 MTPA capacity CHP completed as against 15 MTPA required. Representative of NCL informed that the capacity gap has been addressed in July 2026. It was instructed to MPPCB to check the compliance after a site visit of NCL Khadia Mine Project.
- viii. Representative of MPPCB highlighted that East Central Railway (ECR) has not submitted action plan related to Installation of Coal Handling System and has not complied with the prescribed action points related to Fixed Water sprinkling system or water tankers, Pucca circulating handling area with drainage facility and Green belt around the coal siding area. Chair instructed to communicate the non-compliances to Chairman, Railway board. Representative for ECR informed that they have taken action against the non-compliances. It was further instructed that there can be a presentation by Railway w.t. to compliances in August or September, 2026.

- ix. With respect to the action point pertaining to the West Central Railway (WCR), MPPCB informed that WCR has submitted their Action Points pertaining to them. The action plan for the installation of the Coal Handling System and timeline was yet to be submitted. Further, green belt around the coal siding area and installation of the Coal Handling System w.r to M/s WCR, gajra Bahra, Singrauli are yet to be complied. The Chair instructed to communicate to Chairman, Railway board that necessary action shall be taken for implementation of the pending activities pertaining to ECR and WCR in a time-bound manner. A detailed action taken report indicating the status of each activity, revised timelines for completion, shall be furnished to MPPCB and MoEFCC at the earliest.
- x. With regard to the allocation of responsibilities for the construction of different road sections used for coal and fly ash transportation, as well as measures for controlling air pollution during such transportation, the representative of MPPCB informed that NCL has issued a work order to CSIR-NEERI to undertake a source apportionment study for the Singrauli region. The representative of CSIR-NEERI informed that the study is expected to be completed within one month.
- xi. Additionally, during the meeting, DM, Singrauli informed that NCL has been directed to make sure that the wheels of the trucks should be washed properly before the trucks enter the main/ public road. Chair suggested that there can be some IT enabled system, with CCTV cameras, etc. to check that no truck comes out of the project without wheel washing.

[B] Presentation by Uttar Pradesh Pollution Control Board (UPPCB)

The Uttar Pradesh Pollution Control Board (UPPCB) presented the status of compliance of the decisions taken during the 8th Meeting of the Fly Ash Management and Utilization Mission held on 23.12.2024, particularly with respect to Sonbhadra district. During the presentation, UPPCB informed the following:

- Anpara Thermal Power Station (TPS) has been utilizing fly ash in the cement industry, low-lying areas and Gorbi mine filling. It was further informed that while the Dry Fly Ash Extraction System (DFAES) is yet to be installed in 3 × 210 MW (Unit A-TPS). DFAES has been installed but is not functional in 2 × 500 MW (Unit B-TPS) and has been installed & operational at 2 × 500 MW (Unit D-TPS). The request for proposal for development, operation & maintenance of DFAES and ash loading terminal for UPRVUNL, Anpara has been invited on UP e-tender portal and L1 bidder is under Approval.
- With respect to the recommendation regarding preparation of Standard Operating Procedures (SOPs), it was informed that the detailed Standard Operating Procedure (SOP) has been prepared by CSIR-NEERI covering following aspects:

- Stabilization of ash ponds through plantation of bamboo species to improve biodiversity,
- Control of pollution around operational ash ponds through plantation of bamboo species, and
- Stabilization of mine voids filled with fly ash.

The model is currently being developed and demonstrating at the ANPARA site. Upon successful establishment and validation, the same model will be replicated and extended to other dump areas and dust-prone zones of similar nature by ANPARA in their premises.

- Regarding compliance of CPCB Environmental Guidelines for Stone Crushers, UPPCB informed that, out of 313 identified stone crushers, 291 operational units have installed adequate air pollution control systems (APCS), while 22 units have been closed. UPPCB further informed that a Joint committee comprising officials from District Administration, DIP&EDC and UPPCB, Sonbhadra has been constituted by DM Sonbhadra to conduct periodic inspection of Stone Crushers. Latest inspection has been carried out on 06.04.2026 & 13.04.2026. UPPCB also informed that in case violations are found, actions are initiated against the crusher units.
- On the action plan for control of air pollution during coal and fly ash transportation, it was informed that Auri Mod–Shaktinagar Road and Anpara–Renukoot Road are maintained and in good condition. NCL mines have informed that following measures are being taken for control of air pollution during transportation -
 - Through fully covered tarpaulin vehicles. Vehicles wheel washing at the exit of mine.
 - Road dust sweeping by sweeping machines.
 - Truck mounted with fog cannons deployed.
 - CCTV cameras installed at entry & exit of Mines.

TPPs have informed that following measures are being taken for control of air pollution during transportation -

- Water sprinkling on road.
- Road dust sweeping by sweeping machines.
- Conditioned fly ash (moisture >15%) transported through covered with tarpaulin.
- Transportation of Dry ash in Bulker & Bottom Ash through covered vehicles.

It was also informed that the direction for regular water sprinkling to control dust emission from Stone Crushers & vehicular movement has been issued by DM, Sonbhadra vide OM dated 20.05.2026 to Nagar Panchayat, Obra, Dala, Anpara and Nagar Palika Parishad, Robertsganj.

- UPPCB further presented the status of Fly Ash Utilization in District Sonbhadra by seven major TPPs generating Fly Ash i.e. M/s UPRVUNL, Anpara TPS, M/s UPRVUNL, Obra TPS, M/s NTPC Shaktinagar TPS, M/s NTPC Rihand Nagar, M/s Hindalco Industries Ltd. (Renusagar Power Division), Renusagar, Sonbhadra, M/s MEIL Anpara Energy limited

(Formerly M/s Lanco Anpara Power Ltd., Anpara, Sonbhadra) and M/s Grasim Industries Ltd. (Captive Power Plant), Renukoot, Sonbhadra.

- The status of fly ash generation and utilization by thermal power plants in District Sonbhadra for the period FY 2022–23 to FY 2025–26 was presented. It was informed that fly ash utilization in FY 2024–25 was 67.99% and in FY 2025–26 it was 63.91%.
- UPPCB presented the status of 05 Years Action Plan for Fly Ash Utilization by TPPs. It was informed that, during FY 2025–26, the TPPs achieved fly ash utilization of 106.428 LMT against the target of 247.989 LMT. Details of status of 05 Years Action Plan for Fly Ash Utilization by TPPs in Sonbhadra, UP is attached in table 1 at Annexure- III.
- UPPCB also presented about the status of Implementation of Action Plans pertaining to M/s NTPC SSTPS, Shaktinagar, Sonbhadra, M/s NTPC Rihandnagar, SSTP, Rihandnagar, Sonbhadra, M/s U.P. Rajya Vidyut Utpadan Nigam Ltd. (Anpara A, B & D TPS), Anpara, Sonbhadra, M/s MEIL Anpara Energy limited (formerly M/s Lanco Anpara Power Limited, Anpara, Sonbhadra), M/s Hindalco Industries Limited, Renusagar Power Division, Renusagar and M/s U.P. Rajya Vidyut Utpadan Nigam Ltd. (Obra A, B - TPS), Obra, Sonbhadra, related to Fly ash utilization, Ash Water Recirculation System (AWRS) & Dry Ash Extraction System (DAES), CEMS & CAAQMS, PM and NOx, Sprinkling system at the Ash Dyke, Ash dyke stability report, etc.. The compliance status of the implementation of action points w.r.to aforementioned TPPs, are provided in table 2 at Annexure- III.
- The measures adopted by TPPs for control of Air Pollution viz. Water sprinkling on road, Road dust sweeping by sweeping machines, Conditioned fly ash (moisture >15%) transported through covered with tarpaulin, Transportation of Dry ash in Bulker & Bottom Ash through covered vehicles, Miyawaki Afforestation, Water sprinkling system at CHP, Ash Water Recirculation System (AWRS) and Dry Ash Extraction System (DAES) in Ash handling were presented by the Board.
- Further, UPPCB presented the status of implementation of action plan along with timeline by Coal Mines of M/s Northern Coal Fields Limited (NCL), Bina Project, Bina , Sonbhadra, M/s Northern Coal Fields Limited, Dudhichua Project, Dudhichua, Sonbhadra, M/s Northern Coal Fields Limited, Kakri Project, Kakri, Sonbhadra, M/s Northern Coal Fields Limited, Khadia Project, Khadia, Sonbhadra and M/s Northern Coal Fields Limited, Krishnashila Project, Bina, Sonbhadra related to fog cannons, Installation of Automatic wheel washing system, Road sweeping machines, Installation of fog cannons, mist spray systems, ZLD, CAAQMS, Air pollution control measures during transportation of coal , Rain Water Harvesting, Plantation, etc.. The compliance status of the implementation of action points w.r.to aforementioned Coal Mines, are provided in table 3 at Annexure- III.
- UPPCB also summarised the measures adopted by M/s NCL Mines for control of Air Pollution such as Road dust sweeping by sweeping machines, Truck mounted with fog cannons deployed, CCTV cameras installed at entry & exit of Mines, Water sprinkling via

truck mounted mist spray gun, Transportation of coal via railway wagon and tarpulin covered trucks, Wheel washing system, Plantation activity along 1.2 Km Auri –Shaktinagar highway and reduction in transportation of coal via road. UPPCB also presented about the status of implementation of Action Plans of other Industries pertaining to M/s Grasim Industries Limited Chemical Division, Renukoot, Sonbhadra, M/s Birla Carbon India Pvt. Ltd., Renukoot, Sonbhadra and M/s Hindalco Industries Ltd (Aluminum Smelter), Renukoot, Sonbhadra related to ZLD, APCS with online monitoring system, Ash disposal site reclaimed, installation of Water sprinklers, Green belt development, Miyawaki Plantation, Fly Ash Utilization, etc.. The compliance status of implementation of the action points w.r.to aforementioned other Industries, are provided in table 4 at Annexure- III.

- UPPCB presented the status of Air Quality at Sonbhadra-NAMP Station. It was informed that the annual Air Quality Index (AQI) recorded at the station was 142 during FY 2022–23, 144 during FY 2023–24, 138 during FY 2024–25, and 126 during FY 2025–26.
- The status of ambient air quality at Anpara, Sonbhadra were presented by the board. It was informed that the annual average concentration of PM₁₀, SO₂, NO₂, and the Air Quality Index (AQI) during FY 2022–23 were 162.79 µg/m³, 17.97 µg/m³, 24.84 µg/m³, and 142, respectively. During FY 2023–24, the corresponding values were 165.58 µg/m³, 17.02 µg/m³, 24.09 µg/m³, and 144. During FY 2024–25, the values were 156.55 µg/m³, 19.79 µg/m³, 23.41 µg/m³, and 138, respectively. During FY 2025–26, the values of PM₁₀, SO₂, NO₂, and the AQI were 138.97 µg/m³, 15.48 µg/m³, 19.29 µg/m³, and 126, respectively.

Discussion held during the meeting with respect to issues related to Sonbhadra District, Uttar Pradesh:

- i. It was noted during the meeting that ash utilization of Anpara TPS for FY 2026-27 is 23.7 LMT till June 2026. Chair instructed Anpara TPS to improve their fly ash utilization. It was also cautioned that non-compliance w.r.to ash utilization may result in environmental compensation as per the Ash Utilization Notification, 2021. Representative of Anpara informed that by March 2027, utilization of ash will reach around 160 LMT.
- ii. It was noted with concern that, since the last meeting, the progress made by UPRVUNL, Anpara towards the establishment of the Dry Fly Ash Extraction System (DFAES) and ash loading terminal has remained limited to the tendering stage, which was considered unsatisfactory. It was directed to UPRVUNL, Anpara to expedite the remaining processes and ensure completion of the activities at the earliest. It was also instructed that the UPRVUNL, Anpara shall submit a bimonthly progress report w.r.to the DFAES, ash loading terminal, to UPPCB. It was further stated that, in the event of failure to achieve the stipulated timelines, UPPCB shall initiate appropriate regulatory action against the UPRVUNL in accordance with the Ash Utilization Notification, 2021 and the applicable environmental regulations.

- iii. During the meeting it was appraised that SOP prepared by NEERI, a demonstration model involving the plantation of approximately 6,700 bamboo saplings has been carried (out of 10,000 bamboo saplings envisaged) and is presently being implemented at Anpara TPS for subsequent replication at other suitable locations. Representative of CSIR-NEERI further informed that while the NEERI team is monitoring the maintenance of the plantation, the day-to-day maintenance activities are being undertaken by the Anpara team. The Chair suggested that some local knowledge partners and representatives of the State Forest Department may also be associated with the initiative to provide technical guidance and facilitate its effective implementation and replication. The Chair also suggested preparing videos documenting the implementation and outcomes of the bamboo plantation initiative for wider dissemination and replication.
- iv. Representative of Obra TPP informed that installation of DFAES (Dry Fly Ash Evacuation System) is being reconsidered for Obra A and B although it is expensive. The Chair opined that the measures to control pollution cannot be compromised and has to be implemented as per rules and regulations.
- v. It was noted that a dedicated tyre washing facility is not available at M/s NCL Kakri. The representative of M/s NCL Kakri informed that, since the Kakri and Bina projects are adjacent, vehicles operating from NCL Kakri are utilizing the tyre washing facility available at NCL Bina. The Chair directed UPPCB to conduct a site inspection to verify the arrangement and ensure compliance with the prescribed environmental norms. It was instructed that all measures should be taken to control dust generation, propagation on transportation roads.
- vi. It was noted with concern that the overall fly ash utilization in Sonbhadra has declined from 67.99% during FY 2024–25 to 63.91% during FY 2025–26. It was directed to all Thermal Power Plants in Sonbhadra District and UPPCB to identify the reasons for the decline and undertake necessary measures to improve fly ash utilization so as to achieve the targets prescribed under the Ash Utilization Notification, 2021.
- vii. The ADM, Sonbhadra informed that physical verification of the Air Pollution Control Systems (APCS) installed at the stone crusher units was carried out. It was instructed that the verification/ inspection reports be forwarded to UPPCB for review. It was further advised to UPPCB to conduct random inspections of the stone crusher units to independently verify compliance with the CPCB Environmental Guidelines and take appropriate action against units found violating the prescribed norms.
- viii. With respect to allocation of responsibilities for construction of different sections of the roads for coal/ash transportation and control of air pollution during the transportation, it was opined that Central Road Research Institute (CRRI) can be requested to conduct an inspection and submit a report to DM Singrauli & Sonbhadra and MoEFCC regarding efficient and environmentally friendly transportation so that air and noise pollution is minimised. Cost is to be borne by the concerned mines and TPPs.

- ix. DM, Singrauli, informed that the Gorbi mine void has been allocated by the Ministry of Coal to thermal power plants of M/s NTPC Ltd. (Vindhyachal, Singrauli and Anpara TPPs) for the disposal of ash, and three compartments have been developed for this purpose. However, at the current rate of ash disposal, it is estimated that the mine void will take another 7–8 years to be completely filled. It was further informed that fugitive fly ash emissions from the site are causing environmental pollution. In this regard, the DM, Singrauli, suggested that private TPPs may also be permitted to dispose of fly ash in the Gorbi mine void so as to expedite its early filling and enable its early reclamation/closure. Representative of M/s NTPC Ltd. Stated that the Gorbi mine has been allocated to M/s NTPC TPPs by Ministry of Coal and if the mine is allowed for other TPPs it shall be filled early and it would be difficult for their TPPs to dispose the flyash after 3-4 years.
- x. The Chair advised to the Ministry of Coal to take up the matter in the next meeting of the Central Level Working Group (CLWG). The Chair further emphasized that a long-term strategy for fly ash disposal beyond the permitted avenue of filling of the Gorbi mine void should be developed. The Ministry of Power, M/s NTPC and other TPPs were advised to explore and identify suitable alternative fly ash utilisation options well in advance. The Chair further directed that a joint inspection of the Gorbi mine void be carried out to assess its present condition, available capacity, and suitability for fly ash disposal, and that the findings be submitted to Ministry of Coal, Power and MoEFCC.
- xi. Chair suggested meeting with the Chairman, Railway Board and representatives of Eastern Central Railway (ECR) and Western Central Railway (WCR) regarding the compliance of action points by ECR and WCR during the month of August- September, 2026. A presentation by ECR and WCR shall be done in the aforementioned meeting.
- xii. Chair suggested that a committee comprising Central Road Research Institute (CRR), PWD, District authorities, Concerned SPCBs, Project proponents (TPPs, Coal Mines, stone crushers) may visit the transportation roads. M/s NTPC Ltd. and M/s Northern Coalfield Ltd. were requested to facilitate and sponsor the site visit for the concerned experts and stakeholders. Report regarding the site visit of above roads shall be submitted to respective DMs, and SPCBs. Based on the aforementioned report a plan can be chalked out for efficient and environmentally road transportation with minimal air and noise pollution. DMs, Singrauli, Sonbhadra and Member Secretaries, UPPCB and MPPCB shall coordinate for the aforementioned site visit and the plan regarding the compliance of implementation of the action points.

[C] CPCB submitted following information to the Ministry:

The issue of variation in CEPI score assessed by CPCB and MPPCB was discussed in the last meeting. In this regard CPCB provided the details of CEPI assessment. CEPI score during 2018 for Singrauli (UP and MP) was found as 62.59 in assessment done by CPCB. Whereas, CEPI

score based on monitoring carried out during February, 2024 by CPCB was found to be 67.86 and 60.49 respectively for Sonbhadra and Singrauli areas. The probable reasons for difference in CEPI assessment done by CPCB and MPPCB were examined and the differences are depicted in following Table:

Singrauli (MP)	CPCB	MPPCB
Time-Period	Feb 2024 (Post-Monsoon)	May 2024 (Pre-Monsoon)
Air EPI	CO, PM10, PM2.5	PM10, PM2.5, NO2
Surface Water EPI	Mercury, Total Phosphorus as P, BOD	BOD, Total Phosphorus as P, Total Kjeldahl Nitrogen
Groundwater EPI	Iron as Fe, Manganese as Mn, Total Chromium as Cr	Total Hardness as CaCO ₃ , Total Phosphorus as P, Total Kjeldahl Nitrogen
CEPI Score	60.49	43.2452

Further, CPCB convened a meeting on 16.08.2024 with MPPCB, UPPCB and respective RDs of CPCB to review the pre-monsoon CEPI score assessment of Singrauli (M.P.) and Sonbhadra (U.P.), the status of implementation of action plans, and further actions required to improve CEPI scores. Subsequent to the meeting, letter dated 25.10.2024 and email dated 12.12.2024 was sent to concerned SPCBs to provide action taken with reference to the deliberations made during the meeting. The progress is being updated by SPCBs on the CEPI portal.

As per the information provided by the concerned SPCBs on the CEPI portal, percentage progress of implementation of action plan is 90% for Singrauli and 84% for Sonbhadra. 54 out of 71, and 26 out of 38 activities of action plans have been fully completed in Singrauli and Sonbhadra SPAs, respectively.

The MoP and CEA were asked to share the details of number of TPPs in the country, number of TPPs in requirement of stabilization of legacy dumpsites and number of TPPs that have submitted the action plan for stabilization of legacy dumpsites. In this regard, CPCB shared the details available with them. As per the Ash Notification, 2021 (as subsequently amended), the time limit prescribed for the stabilization and reclamation of legacy ash ponds/dykes followed by certification by the concerned SPCBs was up to 31.03.2025. As per details available with CPCB, 34 legacy ash pond/lagoons/dykes stabilized in 26 TPPs. However, only 14 have been certified by SPCBs. The status of stabilization and certification of ash ponds in Sonbhadra and Singrauli areas are depicted in following Table:

Name of TPP	District	No. of Ash Pond Stabilized	Remark
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Mahan Energen, Adani Power	Singrauli	3	
Obra B, UPVUNL	Sonbhadra	5	Request for Certification from SPCB
Anpara C, Lanco Power	Sonbhadra	2	Request for Certification from SPCB
	Total	10	

- The status of Ash utilization Status of Thermal Power Plants located in Singrauli (MP) and Sonbhadra (UP) is annexed at Annexure – IV.

[D] After detailed deliberations, the following decisions were made:

- i. UPRVUNL, Anpara TPS shall coordinate with the District Magistrate, Singrauli and obtain renewal of the NOC for transportation of fly ash to Gorbi Mines at the earliest. The compliance status shall also be submitted to the Ministry and UPPCB at the earliest.

(Action: Anpara TPS)

- ii. The Sasan Power Limited shall prepare and submit a time-bound action plan, incorporating necessary environmental safeguards, to the concerned SPCB to obtain concurrence for disposal of ash generated by plant in the two identified low-lying areas before commencement of disposal activities.

(Action: Sasan Power Limited)

- iii. MPPCB to undertake inspections of the remaining stone crushing units and to take appropriate action against non-compliant units, wherever necessary. MPPCB to ensure complete implementation of CPCB guidelines (Environmental Guidelines for Stone Crushing Units issued by CPCB in July, 2023) and to continue actions against non-compliant units. Random inspections by Senior officers of Pollution control Board including MS, MPPCB need to be done for verification of compliances in stone crushing units.

(Action: MPPCB)

- iv. Steps should be taken to ensure that there is no spillage of ash from the transportation trucks from any side, including that from bottom and top of trucks. CCTV cameras should be deployed at check posts to verify the condition of tarpaulin covering. Project proponents/ TPPs should keep Geotagged photographs of tarpaulin covering for different dates for verification of condition of tarpaulin covering.

(Action: TPPs of Singrauli and Sonbhadra district)

- v. Steps should be taken to ensure that there is no spillage of coal and coal dust from the transportation trucks from any side, including that from bottom and top of trucks. CCTV cameras should be deployed at check posts to verify the condition of tarpaulin covering. Project proponents/ TPPs should keep Geotagged photographs of tarpaulin covering for different dates for verification of condition of tarpaulin covering.

(Action: Coal mines of Singrauli and Sonbhadra district)

- vi. MPPCB to issue directions to M/s NTPC, Vindhyachal TPP to ensure compliance with the prescribed measures for the prevention of dust pollution during the transportation of fly ash. MPPCB shall also ensure compliance of the various provisions of Ash Notification by all the TPPs in the area.

(Action: MPPCB)

- vii. MPPCB to inspect and check non-compliance of the stone crushers as per the directions of the NGT and the CPCB guidelines.

(Action: MPPCB)

- viii. Ministry of Power to examine the matter of Sasan Power Limited related to installation of a pipeline for the transportation of fly ash to the mine, pending before the Central Electricity Regulatory Commission (CERC) and expedite the process.

(Action: Ministry of Power)

- ix. M/s Sasan Power Limited and M/s NTPC to jointly undertake the repair and maintenance of the road in a time-bound manner and implement appropriate measures to effectively curb air and noise pollution arising from transportation activities and submit the completion report thereof to MPPCB and DM Singrauli.

(Action: M/s Sasan Power Limited and M/s NTPC)

- x. Directions to be sent from concerned SPCBs to Thermal Power Plants of Sonbhadra and Singrauli districts regarding the gaps in the compliance of the action plans and status of implementation of the action plans.

(Action: MPPCB and UPPCB)

- xi. A committee comprising Central Road Research Institute (CRRI), PWD, District authorities, Concerned SPCBs, Project proponents (TPPs, Coal Mines, stone crushers) may visit the transportation roads. Report regarding the site visit of above roads shall be submitted to respective DMs, and SPCBs. Based on the aforementioned report a plan can be chalked out for efficient and environmentally road transportation with minimal air and noise pollution. DMs, Singrauli, Sonbhadra and Member Secretaries, UPPCB

and MPPCB shall coordinate for the aforementioned site visit and the plan regarding the compliance of implementation of the action points.

(Action: CRRI, PWD, MPPCB, UPPCB, TPPs and DM, Singrauli, Sonebhadra)

- xii. MoEF&CC shall communicate to Chairman, Railway Board to review the status of implementation of the pending activities pertaining to ECR and WCR and take necessary action for their completion in a time-bound manner. A detailed action taken report indicating the status of each activity, revised timelines for completion, shall be furnished to MPPCB and MoEFCC.

(Action: MoEFCC, Railway Board, WCR and ECR)

- xiii. A meeting of Secretary MoEFCC with the Chairman, Railway Board and representatives of Eastern Central Railway (ECR) and Western Central Railway (WCR) regarding the compliance of action points by ECR and WCR shall be convened during the month of August- September, 2026. MoEFCC may issue a communication regarding the aforementioned meeting. A presentation by ECR and WCR shall be done in the aforementioned meeting.

(Action: MoEFCC, Railway Board, WCR and ECR)

- xiii. CSIR-NEERI to complete the source apportionment study within one month and submit its report to MPPCB. The report should include the source apportionment analysis, recommended mitigation measures, and allocation of responsibilities among the concerned stakeholders for implementation of the recommended measures. The MPPCB to ensure actions based on outcome of the study.

(Action: CSIR-NEERI, MPPCB)

- xiv. Ministry of Coal to take up the matter of filling of void in Gorbi Mine in the next meeting of the Central Level Working Group (CLWG). A long-term strategy for fly ash disposal beyond the permitted avenue of filling of the Gorbi mine void should be developed. The Ministry of Power, M/s NTPC and other TPPs to explore and identify suitable alternative fly ash utilisation options well in advance. A joint inspection of the Gorbi mine void be carried out to assess its present condition, available capacity, and suitability for fly ash disposal, and that the findings be submitted to Ministry of Coal, Power and MoEFCC.

(Action: M/o Coal, M/o Power and concerned TPPs)

- xv. CPCB, in coordination with the concerned SPCBs/PCCs, shall issue letters to all Thermal Power Plants in Sonbhadra and Singrauli districts (whose compliance period for achieving 100% fly ash utilisation is nearing completion) directing them to achieve full compliance within the stipulated timeline. The communication shall also indicate

that Environmental Compensation shall be levied in case of failure to comply, in accordance with the Ash utilization Notification, 2021.

(Action: CPCB, MPPCB and UPPCB)

- xvi. UPRVUNL, Anpara to expedite the remaining processes of establishment of the Dry Fly Ash Extraction System (DFAES) and ash loading terminal and ensure completion of the activities at the earliest. UPRVUNL, Anpara shall submit a bimonthly progress report w.r.to the DFAES, ash loading terminal, to UPPCB. In the event of failure to achieve the stipulated timelines, UPPCB shall initiate appropriate regulatory action against the UPRVUNL in accordance with the Ash Utilization Notification, 2021 and the applicable environmental regulations.

(Action: UPRVUNL, Anpara)

- xvii. CSIR-NEERI and Anpara TPS shall associate some local knowledge partners and representatives of the State Forest Department to provide technical guidance and facilitate its effective implementation and replication with regard to bamboo plantation. Videos should be prepared documenting the implementation and outcomes of the bamboo plantation initiative for wider dissemination and replication. The SoP developed by NEERI may be shared by MoEF&CC with MoP/CEA for wider circulation among TPPs.

(Action: Anpara TPS, CSIR-NEERI, MoP/CEA and MoEF&CC)

- xviii. UPRVUNL, Obra TPS shall proceed with the installation of the Dry Fly Ash Evacuation System (DFAES) for Obra A and B units and submit the implementation schedule and progress report to the UPPCB.

(Action: UPRVUNL)

- xix. UPPCB shall undertake a site inspection of M/s NCL Kakri and NCL Bina mines to verify the arrangement of tyre washing facility and ensure compliance with the prescribed environmental norms. All measures should be taken to control dust generation, propagation on transportation roads.

(Action: UPPCB and NCL)

- xx. All Thermal Power Plants in Sonbhadra District and UPPCB to identify the reasons for the decline and undertake necessary measures to improve fly ash utilization so as to achieve the targets prescribed under the Ash Utilization Notification, 2021.

(Action: TPPs, Sonbhadra District and UPPCB)

- xxi. The ADM, Sonbhadra shall forward the inspection reports regarding physical verification of the Air Pollution Control Systems (APCS) installed at the stone crusher units to UPPCB for review. Senior officers of Pollution control Board including MS, UPPCB to conduct random inspections of the stone crusher units to independently verify compliance with the 'Environmental Guidelines for Stone Crushing Units issued by CPCB in July, 2023' and take appropriate action against units found violating the prescribed norms.

(Action: ADM, Sonbhadra and UPPCB)

- xxii. Directions to be sent from concerned SPCBs to Coal mines of NCL regarding the gaps in the compliance of the action plans and status of implementation of the action plans.

(Action: MPPCB and UPPCB)

- xxiii. M/s NCL shall submit the status of coal transportation and installation of CHP/ conveyer belts with original, extended and committed timelines for all the coal mines with the said EC/CTO conditions within six months to MoEFCC and concerned SPCBs.

(Action: M/s NCL)

- xxiv. All the pending/ ongoing activities in respect of implementation of decisions made during 1st, 2nd, 3rd, 4th, 5th, 6th, 7th and 8th meeting of the Mission shall be undertaken and action taken report shall be furnished.

(Action: Concerned Ministry/ CPCB/ State Govts./ SPCBs/ Organisations)

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

List of Participants

1. Shri Tanmay Kumar, Secretary, MoEFCC
2. Shri Amandeep Garg, Additional Secretary, MoEFCC and Chairman, CPCB
3. Shri Uday Chaudhari, Joint Secretary, MoEFCC
4. Shri Aadhar Raj, Joint Secretary, Ministry of Power, New Delhi.
5. Mr. Gaurav Benal, Collector & District Magistrate, Singrauli, Madhya Pradesh
6. Dr. K. Hango, Chief Conservator of Forests (CCF), Meerut Circle, Uttar Pradesh
7. Shri Amit Raj, Director, MoEFCC
8. Shri Deepak Goel, Director, Ministry of Coal, New Delhi.
9. Ms. Preeti Choudhary, Director, Ministry of Power, New Delhi.
10. Shri Ajay Jha, Director, Ministry of Railways (Railway Board), New Delhi.
11. Smt. Pratibha Paul, Director, Ministry of Railways (Railway Board), New Delhi.
12. Shri Anuj Kanwal, Chief Engineer, CEA, Ministry of Power, New Delhi.
13. Shri Sanjeev Kumar Singh, Member Secretary, UPPCB, Uttar Pradesh
14. Shri Prasoon Gargava, Scientist F, Central Pollution Control Board, New Delhi.
15. Shri Bharat Kumar Sharma, Member Secretary Central Pollution Control Board, New Delhi.
16. Shri Rajeev Ranjan, Scientist E, MoEFCC
17. Shri V.J.K. Babu, Chief Controller of Mines, Indian Bureau of Mines, Ministry of Mines, Maharashtra.
18. Shri Uttam Pal Singh Negi, Under Secretary, Ministry of coal, New Delhi
19. Shri Abhishek Singh, Executive Engineer, Ministry of Coal, New Delhi.
20. Shri Manoj Kumar Singh, Assistant Director, CEA, Ministry of Power, New Delhi.
21. Shri Naveen Kumar, Scientist C, Central Pollution Control Board, New Delhi.
22. Shri Saransh Bamanian, Scientist 'B', Central Pollution Control Board, New Delhi.
23. Shri Rohit Kumar, Senior Section Engineer (SSE), Indian Railways, Dhanbad, Jharkhand.
24. Dr. Naveen Kumar Das, Additional Director, Directorate of Geology & Mining, Government of Uttar Pradesh.
25. Ms. Sakrish Chaturvedi, Mines Officer, Directorate of Geology & Mining, Uttar Pradesh.
26. Shri Ratipal Thakur, Executive Engineer, Regional Office, MPPCB
27. Shri Vinay Ramaiya, Assistant Engineer, MPPCB Singrauli, Madhya Pradesh
28. Shri Ramesh Kumar Singh, Regional Officer, Uttar Pradesh Pollution Control Board (UPPCB), Sonbhadra, Uttar Pradesh.
29. Shri Ratipal Thakur, Assistant Engineer Madhya Pradesh Pollution Control.
30. Mr. Zafar Azam, General Manager (Commercial) Indian Railways, East Central Railways
31. Shri Janardan Prasad, Environment & Housekeeping Management Officer, East Central Railway, Hazipur, Bihar.
32. Shri Shubham Singh, Senior Assistant Associates, Regional Office, UPPCB, Sonbhadra, New Delhi.

33. Shri Shailendra Singh, Executive Engineer, UPPWD
34. Shri Dhawal Tailang, Deputy Manager (Environment), Coal India Limited (CIL), West Bengal.
35. Shri Ashwani Tyagi, Additional General Manager (AGM), M/s NTPC, New Delhi.
36. Shri Anand Singh, Chief Operating Officer, MEIL Anpara Energy-ANPARA
37. Shri Er. Sameer Bhatnagar, Chief Engineer (Environment), UPRVUNL, Uttar Pradesh
38. Shri R.N. Shukla, Head-ESG Environment, Forest, Mahan Energen Ltd. Singrauli, Adani Power Ltd. Madhya Pradesh.
39. Shri Manoj Pandey, Head-Ash Management, Hindalco Industries Ltd. Mahan
40. Shri Sanjay Selot, Superintending Engineer, Madhya Pradesh Power Generating Company Limited, Madhya Pradesh
41. Shri Ashutosh Dwivedi, Director, Northern Coalfields Limited, Singrauli, Madhya Pradesh.
42. Shri Swarup Kumar Dutta, General Manager, M/s Coal India Limited (CIL), West Bengal.
43. Dr. Vinay Kumar Yadav, General Manager, M/s Grasim India Ltd. Sonbhadra Uttar Pradesh.
44. Shri Abhishek kumar, Deputy General Manager, M/s Aditya Birla Group, Sonbhadra Uttar Pradesh.
45. Shri Jitendra Prasad, Additional Vice President, M/s Sasan Power Limited, Singrauli, Madhya Pradesh.
46. Shri Uday Kumar, Divisional Environmental & Housekeeping Manager, Dhanbad, Jharkhand.
47. Shri Kamaljeet Rai, DGM, M/s Anpara Energy Ltd.
48. Shri Himanshu Verma, Assistant General Manager, M/s Anpara Energy Ltd.
49. Shri Rakesh Kumar, General Manager, M/s NCL, Singrauli, Madhya Pradesh
50. Ms. Ranu Juyal, Senior Consultant, KPMG.
51. Shri K. Karthikeyan, Assistant General Manager, M/s NTPC, New Delhi.
52. Shri Subhash S. Gokhale, General Manager, M/s NTPC, Raipur.

Table.1			
M/s. Vindhyachal Super Thermal Power Plant, NTPC limited Singrauli 13 units (05 stages)			
S.no	Action Points, which are yet to be completed	Status as on 16.07.2026	Timeline/Remarks
1.	Flue gas desulfurization System (FGD) (Notification issued by MoEF &CC : The time limit is 31.12.2029)	Under progress in 11 units (no. 1 to 11) 25-75%	Old- Sep 2024 Rev- April 2025
2	Nox Control (Notification issued by MoEF &CC: The time limit is 31.12.2024)	Not complied in 06 units (1 to 6)	Dec 2024 Revised – Dec 2026
3	Fly ash utilization (As per notification 31.12.2021)	About 68.40 % utilized	100 % required for FY 2025-26
4	Study about the industries operating around the Rihand reservoir & discharge of fly ash (EC Condition Stage 2)	Under progress (NEERI)	Contract awarded- Feb 2024 (for 02 years study)
5	Fly ash transportation (Included in action plan as per Direction of Fly ash mission) Short term: ➤ Construction of 4 lane road from Ash dyke to Gorbi Long Term: ➤ Transportation of fly ash from dyke to Gorbi pit Through Rail mode ➤ Laying of pipeline from Plant to dyke	Under consideration EOI issued No progress	Timeline not submitted - -
6	Construction of Check dam at Surya Nalla to prevent the ash disposal into Rihand Sagar dam	Two check dam constructed	Completed
7	Deployment of 04 static foggers at coal stock yard for Stage – I ,III & V (CTO Condition)	Completed	-
8	Two PTZ camera in coal stock yard of Stage – I ,III & V	Credential not provided	completed

9	Deployment of four static fogger along coal track inside the plant. (CTO Condition)	Action plan submitted	completed
10	Construction of sensor based vehicle washing system	Completed	-
11	Total ash Desilting of Surya Nalla (2 km)	Completed	-
12	Conversion of Ash slurry pipeline made by Cast Iron material to cast basalt material	Under progress	Regular work
13	Semi Automatic Tarpolin Cover stand at Shahpur & Baliyari Ash Dyke	Completed	
14	Construction of ETP at Gorbi Pit	Under Progress	Timeline not submitted
15	Upgradation of all Ash silo with HMDC System	Completed	-

Table 2.			
M/s. Sasan Power Limited			
S.no	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Flue gas desulfurization System (FGD) in 06 units (Notification issued by MoEF &CC : The time limit is 31.12.2029)	Vendor finalization	Dec 2026 Dec 2029
2	Permanent Sprinkling system for 04 Ash dykes (Action plan Jan 2023 & CTO condition)	Completed	-
3	Fly ash transportation (Included in action plan as per Direction of Fly ash mission) Short Term : Maintenance of Roads used by Sasan Power Ltd . For transportation of fly ash. Long Term: Pipeline for fly ash transportation to its mine (As per notification 31.12.2021 & Action plan Jan 2023)	Under construction No progress, Proposal dropped	Dec 2023 - -
4	Cleaning of fly ash from Gawaiya (2 km)/Garra nallah (in Patches)- Over sight committee observation	Completed	-

5	Environmental Compensation of Rs. 21.36 Crs within 03 months time (Assessed by NEERI)	Deposited	-
6	Erection of 36 feet high wind breaking Barrier around coal stock yard in 02 side towards Residential Area (Total 1000 m)	Under Construction	First Phase – 31.12.2025 Second Phase- 06.12.2026
7	Construction of Semi automatic Tarpaulin Stand for vehicle engaged in ash transportation	Completed	-

Table 3.			
M/s. Mahan Energen limited			
S.no	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Flue gas desulfurization System (FGD) in 06 units (Notification issued by MoEF &CC : The time limit is 31.12.2029)	Work is in initial stage	Dec 2026 Dec 2029
2	Coal transportation by Rail/Belt Conveyor- EC Condition	Civil work is not started, Forest clearance final approval received	Jun- 2026 Revised- Dec 26
3	Fly ash transportation (Included in action plan as per Direction of Fly ash mission) Short Term : Maintenance of Roads used by Sasan Power Ltd . For transportation of fly ash. Long Term: Development work of railway siding for fly ash (Action plan Jan 2023)	The roads are being maintained on regular basis and maintenance details of Roads which are used by MEL for Ash transportation: A. From Plant Gate to Gadakhan B. From Gadakhan to Parsauna Proposal dropped	Continuous process -
4	Deployment of 02 mobile mist fogger (additionally for road route)	Completed	-

Table 4.			
M/s Hindalco Industries Ltd. Bhargwan, Singrauli			
S.no	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Flue gas desulfurization System (FGD) in 06 units (Notification issued by MoEF &CC : The time limit is 31.12.2029)	Unit-1,2,3,4,5 not installed	Dec 2026 Dec 2029
2	RCC road to Ash dyke (Action plan Jan 2023)	Completed	-
3	Installation Pneumatic Conveyor System for direct wagon loading of Ash (CTO Condition)	Completed	-
4	Deployment of two static mist fogger in wagon tippler section	Completed	-
5	Erection of permanent water sprinklers/rain gun at ash dyke	Action Plan Required	Timeline yet to get

Table 5.			
M/s Jaypee Nigrie Super Thermal Power Plant, Singrauli			
S.no	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Flue gas desulfurization System (FGD) in 06 units (Notification issued by MoEF &CC : The time limit is 31.12.2029)	Civil work not started	Dec 2026
2	Packing and stemming of Blast hole by Locking cap	Completed	-
3	Installation of Pneumatic conveyor system for direct wagon loading of ash	Under Consideration	31.12.2026
4	Deployment of 02 static mist fogger at wagon Tripler and BOBRS	Completed	-
5	Erection of sensor based automatic wheel washing system	Completed	-
6	Installation of Semi Automatic Mechanized Tarpaulin Cover system	Completed	-
7	Deployment of 1 no. mobile mist fogger for plying in public road	Completed	

Table 6.			
M/s NCL, Khadia Project , Singrauli			
S.no	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Fly ash utilization in Over Burden Dump (As per Fly ash notification)	Not complied	-
2	Handling & Transportation of coal (Included in action plan as per Direction of Fly ash mission) Short term : Maintenance of Roads used for transportation of Coal Long Term: Coal Handling Plant required for 15 MTPA	Completed : 10 MTPA Gap of 5 MTPA	Gap of 1 MTPA Wharf wall under construction- 04 MTPA
3	Installation of Automatic wheel washing system (CTO Condition)	Completed	-
4	Carrying capacity of Mine & traffic study (EC Condition)	Completed	Report Awaited
5	Construction of toe wall/retaining wall along with Garland drain at OB Dump (CTO Condition)	Completed	-
6	Fixed sprinklers along the Permanent Road and Coal Transportation Road (CTO Condition)	Completed	-
7	Construction of Semi Automatic Tarpaulin Cover Stand	Completed	-
8	Packing and Stemming of Blast Hole by Locking Cap	Under Consideration	31.12.2025
9	Gap Plantation in non active over burden dump existed in mine (through seed ball etc)	Completed	-

Table 7.			
M/s NCL, Amlori Project, Singrauli			
S.no	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Fly ash utilization in Over Burden Dump (As per Fly ash notification)	Not complied	-

2	Handling & Transportation of coal (Included in action plan as per Direction of Fly ash mission) Short term : Maintenance of Roads used for transportation of Coal Long Term: Coal Handling Plant required for 15 MTPA	Action plan required Completed : 12 MTPA Gap of 3 MTPA	Gap of 3MTPA
3	Installation of Automatic wheel washing system (CTO Condition)	Completed	-
4	Wind breaking barrier around the coal stock yard (CTO Condition)	Completed	
5	Development of Eco-park with separate area of 5 Ha for herbal and medicinal species (EC Condition)	Completed	
6	Carrying capacity of Mine & traffic study (EC Condition)	Completed	Report Awaited
7	Construction of Semi Automatic Tarpaulin Cover Stand	Under Consideration	31.12.2026
8	Packing and Stemming of Blast Hole by Locking Cap	Completed	-
9	Gap Plantation in non active over burden dump existed in mine (through seed ball etc)	Completed	-

Table 8.			
M/s NCL, Nigahi Project, Singrauli			
S.no	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Fly ash utilization in Over Burden Dump (As per Fly ash notification)	Not complied	-
2	Handling & Transportation of coal (Included in action plan as per Direction of Fly ash mission) Short term : Maintenance of Roads used for transportation of Coal Long Term: Coal Handling Plant required for 15 MTPA	Action Plan Required Completed : 20.0 MTPA	Y 15 Aug 2026

		Gap of 5.0 MTPA Under construction – 5.0 MTPA	
3	Construction of Pakka roads of 3.0 Kms (Action Plan Jan 2023)	Completed	
4	Installation of Automatic wheel washing system (CTO Condition)	Completed	
5	Deployment of trucks based on Hybrid Fuel Technology/ CNG/ EVs (EC Cond.)	Not deployed yet	Dec 2024 Rev- March 2025
6	Carrying capacity of Mine & traffic study (EC Condition)	Completed	Report Awaited
7	Construction of Semi Automatic Tarpaulin Cover Stand	Completed	30.09.2025
8	Conversion of about 1 km Kachha/damner road to RCC Road	Completed	30.06.2026
9	Installation of wheel washing system/vehicle washing system	Completed	31.12.2025
10	Packing and Stemming of Blast Hole by Locking Cap	Completed	31.12.2025
11	Gap Plantation in non active over burden dump existed in mine (through seed ball etc)	Completed	30.09.2025

Table 9.			
M/s NCL, Jayant Project, Singrauli			
S.no	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Fly ash utilization in Over Burden Dump	Not complied	-
2	Handling & Transportation of coal (Included in action plan as per Direction of Fly ash mission) Short term : Maintenance of Roads used for transportation of Coal Long Term:	Action Plan Required Completed : 25.0 MTPA Gap of 5.0 MTPA (27 MTPA by Train & 3 MPTA by road)	Gap of 3.0 MTPA

	Coal Handling Plant required for 30.0 MTPA		
3	Deployment of 08 Nos. of fixed type fog canon & (EC Condition	Completed	
	Fixed type water sprinkler along haul road till CHP, Rly siding & OB dump area (EC Condition)	Erection work not started	Old: Aug 2024 Revised: Dec 2026
4	Development of Eco park (EC Condition)	Completed	
5	Deployment of trucks based on Hybrid Fuel Technology/ CNG/ Evs (EC Condition)	Not Done	Timeline yet to get
6	Action plan for cleaning of balliya nallah (Oversight Committee)	Completed	
7	Carrying capacity of Mine & traffic study (EC Condition)	Completed	Report Awaited
8	Construction of Semi Automatic Tarpaulin Cover Stand	Completed	-
9	Installation of wheel washing system/vehicle washing system	Completed	-
10	Packing and Stemming of Blast Hole by Locking Cap	Study under progress	31.12.2026
11	Gap Plantation in non active over burden dump existed in mine (through seed ball etc)	Under Consideration	31.12.2026

Table 10.			
M/s NCL, Block-B Project, Singrauli			
S.no	Action Points, which are yet to be completed	Status as on 16.07.2026	Timeline/Remarks
1.	Fly ash utilization in Over Burden Dump	Not complied	-
2	Carrying capacity of Mine & traffic study (EC Condition)	Completed	Report Awaited
3	Maintenance of Roads used for transportation of Coal (As per mission direction)	Completed	-
4	Construction of Semi Automatic Tarpaulin Cover Stand	Completed	-
5	Installation of wheel washing system/vehicle washing system	Completed	-

6	Packing and Stemming of Blast Hole by Locking Cap	Completed	-
7	Gap Plantation in non active over burden dump existed in mine (through seed ball etc)	Completed	-

Table 11.

M/s NCL, Dudhichua Project, Singrauli

S.no	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Fly ash utilization in Over Burden Dump (As per notification 31.12.2021)	Not complied	
2	Prevent discharge of untreated water - Construction of 02 New RCC Bunds (Over sight committee observation)	Tender Awarded	However the present arrangements are not enough to arrest coaldust
3	Installation of Automatic wheel washing system (CTO Condition)	Completed	
4	Carrying capacity of Mine & traffic study (EC Condition)	Completed	Report Awaited
5	Study of existing ETP (Oversight committee observation)	Visit Completed report awaited	
6	Construction of Semi Automatic Tarpaulin Cover Stand	Completed	
7	De-silting/cleaning of affected bout 6 km km of balliya nalla.	Work Order Awarded	31.07.2025 Revi Dec 2026
8	Packing and Stemming of Blast Hole by Locking Cap	Completed	
9	Gap Plantation in non active over burden dump existed in mine (through seed ball etc)	Completed	
10	Repair/construction of toe wall/reatining wall along outer periphery of OB Dump close to Balliya nalla	Work Order Awarded	31.07.2025 Revi Dec 2026

Table 12.

M/s NCL, Bina Extension. Singrauli

S.no	Action Points, which are yet to be completed	Status as on 16.07.2026	Timeline/Remarks
1.	Fly ash utilization in Over Burden Dump (As per fly ash notification)	Not complied	
2	Construction of wind breaking wall along the coal stock yard (CTO Conditions)	Completed	
3	Stone pitching/lining in Garland drains (CTO Conditions)	Completed	
4	Deployment of 1 No. of Road sweeping Machine(CTO Conditions)	Completed	
5	Carrying capacity of Mine & traffic study (EC Condition)	Completed	Report awaited
6	Construction of Semi Automatic Tarpaulin Cover Stand	Completed	
7	Installation of stationary water sprinklers/ran gun along the haul road/transport road	Under Consideration	31.12.2026
8	Packing and Stemming of Blast Hole by Locking Cap	Completed	31.12.2025
9	Gap Plantation in non active over burden dump existed in mine (through seed ball etc)	Completed	30.09.2025
10	Operationalization of new CHP of 9.5 MTPA	Completed	30.09.2025

Table 13.

M/s NCL, Jhingurda, Singrauli

S.no	Action Points, which are yet to be completed	Status as on 16.07.2026	Timeline/Remarks
1.	Fly ash utilization in Over Burden Dump (As per fly ash notification)	Not complied	
2	Handling & Transportation of coal (Included in action plan as per Direction of Fly ash mission) Short term : Maintenance of Roads used for transportation of Coal Long Term: Coal Handling Plant required for 4.0 MTPA	Action Plan Required Gap of 4.0 MTPA	Gap of 4.0 MTPA
3	Installation of Automatic wheel washing system (01.06.2024)	Completed	

4	Installation of 02 Nos. additional Fixed fog canons (CTO Condition)	Completed	
5	Installation of Automatic Stationery Water Sprinklers on stretch of around 750 m along the CC Road (CTO Condition)	Completed	
6	Carrying capacity of Mine & traffic study (EC Condition)	Completed	Report awaited
7	Packing and Stemming of Blast Hole by Locking Cap	Completed	31.12.2025
8	Gap Plantation in non active over burden dump existed in mine (through seed ball etc)	Completed	30.09.2025
9	Construction of Semi Automatic Tarpaulin Cover Stand	Completed	30.06.2026

Table 14.			
M/s Jaiprakash Power Ventures Ltd., Amelia (North) Coal Mine, Singrauli			
S.no	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Fly ash utilization in Over Burden Dump (As per fly ash notification)	Not complied	
2	Plantation on dump area towards kanchan river (EC Cond.)	Partially complied 50% remained	
3	Mining activities at least about 100 meter away from Kachan river. (CTO Condition & Civil Appeal no. 6233/2019 10.10.2023)	Not complied	
4	4 stationary mist gun are required to be placed at Wharf wall (RO Observation)	Completed	
5	Construction of Road from mine up to CHP (RO Observation)	Constructed	
6	One more mist fogger is required to be deployed (RO Observation)	Completed	
7	Automatic road sweeping machine & sensor based vehicle/wheel washing system (RO Observation)	Completed	
8	Packing and Stemming of Blast Hole by Locking Cap	Completed	

9	Gap Plantation in non active over burden dump existed in mine (through seed ball etc)	completed	
10	Construction of Semi Automatic Tarpaulin Cover Stand	Completed	

Table 15.

M/s Sasan Power Limited (Moher & Moher Amlohri extension coal mine), Singrauli

S.no	Action Points, which are yet to be completed	Status as on 16.07.2026	Timeline/Remarks
1.	Deployment of Mist canons to control air pollution (Action Plan Jan 2023)	Deployed	
2	Removal of OB slide in the nearby agriculture area of village Amlori and rehabilitation of affected persons. ehabilitation & resettlement of affected people (Action Plan Jan 2023	Not started yet	15 Aug. 2026
3	Construction of garland drain/ toe wall around outer pheriphery (To be incorporated in CTO Condition)	Completed	
4	Installation of sensor based automatic wheel washing system (To be incorporated in CTO Condition)	Completed	
5	Plantation in non active OB dump area and empty part of slop area of non active OB dump (To be incorporated in CTO Condition)	Completed	
6	Packing and Stemming of Blast Hole by Locking Cap	Completed	
7	Construction of Semi Automatic Tarpaulin Cover Stand	Completed	

Table 16.

M/s APMDC Ltd.-Sulyari Open Cast Project , Singrauli

S.no	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Fly ash utilization in Over Burden Dump (As per notification)	Not complied	

2	Handling & Transportation of coal (Included in action plan as per Direction of Fly ash mission) Short term : Maintenance of Roads used for transportation of Coal Long Term: Coal Handling Plant required for 5.0 MTPA (EC & CTO Condition)	Construction work started 45% Under progress	Old:March 25 Rev- Dec 2026 April 2027
3	Transportation of coal through Rail mode - Construction of Railway siding (EC Cond.)	Not complied	Old:March25 Revi:Dec2026
4	Crusher and in-pit belt conveyor with mist type sprinkler (EC Condition)	Not complied	Old:March25 Revised:Dec 26
5	Sewage treatment plant for colony (CTO Condition)	Completed	
6	Installation of Sensor based automatic wheel washing system	Completed	
7	Packing and Stemming of Blast Hole by Locking Cap	Complied	
8	Construction of Grabian check dan across Hardul nalla	Action plan required	-
9	Deployment of 02 mobile mist fogger(Additionally) to be used in coal transportation road	Completed	-
10	Erection of permanent type of rain funs/stationary sprinklers along haul road	Completed	-

Table.17

M/s. THDC India Ltd., Amelia Coal Block (New mine) Singrauli

S.no	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Fly ash utilization in Over Burden Dump	Not Complied	

2	Handling & Transportation of coal (Included in action plan as per Direction of Fly ash mission) Short term :- Maintenance of Roads used for transportation of Coal Long Term: Coal Handling Plant required for 5.60 MTPA with RLS in 02 years (EC & CTO Condition)	THDC Amelia coal mine to Deoragram railway siding - 8 Km completed	Oct 2026
3	Construction of Permanent railway siding & Silos(CTO Condition	90% Under progress.	April 26 Rev- Dec 26
4	10 no. of Mist fogger (CTO Condition)	Completed	
5	New Coal stock yard Equipped with wind breaking wall, water sprinklers & mist foggers (CTO Condition	Not started	Jan 2025
6	Check bund to arrest the silt load in Kanchanmuda stream (CTO Condition)	Completed	
7	2 No. of Fog Canons(CTO Condition)	Completed	
8	Sewage Treatment Plant for the Township (CTO Condition	Not required	
9	Locking Caps to Technology for Controlled blasting (CTO Condition	Not required	
10	Installation of CEQMS in Effluent Treatment Plant (CTO Condition)	Not complied	Dec 2026
11	CEQMS in Effluent Treatment Plant (CTO Condition)	Not complied	
12	Erection of Semi Automatic Tarpaulin Cover System	completed	
13	Transportation Roads are not concreted /asphalted (as done by NCL)	completed	
14	Erection of Permanent type of rain gun/stationary sprinklers along on haul road.	Not completed (Mobile Fogger deployed	

Table 18.			
M/s East Central Railway, Spur III & X, Singrauli			
S. No.	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Installation of Coal Handling System	Action Plan not submitted	-
2.	Fixed Water sprinkling system or tankers	Not Complied	Not submitted
3.	Pucca circulating handling area with drainage facility	Not Complied	Not submitted
4.	Green belt around the coal siding area	Not Complied	Not Submitted

Table 19.			
M/s East Central Railway, Mahedaiya, Singrauli			
S. No.	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Installation of Coal Handling System	Action Plan to be submitted	
2.	Fixed Water sprinkling system or tankers	Not Complied	Not submitted
3.	Pucca circulating handling area with drainage facility	Not Complied	Not submitted
4.	Green belt around the coal siding area	Partially Complied	

Table 20.			
M/s West Central Railway, Gajra Bahra, Singrauli			
S. No.	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Installation of Coal Handling System	Not Complied	
2.	Pucca circulating handling area with drainage facility	Completed	

3.	Green belt around the coal siding area	Partially Complied	
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Table 21.

M/s West Central Railway, Gondawali, Singrauli

S. No.	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Installation of Coal Handling System	Action Plan to be submitted	
2.	Wind breaking wall- 1000 m	Wind breaking wall- 1000 m	June 2023 Rev- Dec 2024
3.	Water sprinkling system or tankers	Action plan submitted	Aug 2024 Rev- Dec 2024
4.	Drainage facility		
5	Pucca circulating handling area with drainage facility		
6	Green belt around the coal siding area		Sept 2023 Sept 2024

Table 22.

M/s West Central Railway, Bargawan, Singrauli

S. No.	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Installation of Coal Handling System	Action Plan to be submitted	
2.	Wind breaking wall- 1000 m	Completed	June 2023 Rev- Dec 2024
3.	Wind breaking wall- 1000 m	Action plan submitted	31.03.2027
4	Drainage facility		31.03.2027
5	Pucca circulating handling area with drainage facility		31.03.2027

6	Green belt around the coal siding area		31.03.2027
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Table 23.

M/s Trimula Industries Ltd. Bhargwan, Singrauli

S. No.	Action Points	Status as on 16.07.2026	Timeline/Remarks
1.	Construction of Covered Shed for Storage of Dolochar (Proposal submitted by industry vide dated 29.10.2024)	completed	
2.	Wind breaking wall to control the fugitive dust emission from coal stock yard (Proposal submitted by industry vide dated 29.10.2024)	completed	
3.	02 no. of Static Fogger for coal storage area (CTO Condition)	completed	
4.	02 no. of Mobile fogger for internal roads	completed	
5	Road sweeping machine for internal Roads	Not completed	Dec2024 Revi: Dec 2026
6	Static Fogger for raw material Storage	Completed	
7	Rain gun in 200 m area for 20 meter interval	Not completed	

Table 24.

Responsible agency for Water spraying on public roads and the use of mist cannons for pollution control, in the context of instructions issued on 29.11.2025 and 04.12.2025.

S.No.	Area Assigned Road	Responsible Agency
1	Majan Mod to Nigahi–Jayant–Morba;	NCL
2	Majan Mod to Vindhyanagar	NTPC
3	Parsauna Mod to Sasan Power Plant	Sasan Power Ltd.
4	Parsauna Mod to Moher & Moher Amlori Extension Coal Mines	Moher & Moher Amlori Extension Coal Mine
5	Bandhaura to Gajara Bahra	Mahan Energen Ltd.

6	Majan mod to Nigahi	NCL Nigahi
7	Nigahi to Jayant Bus Stand	NCL Dudhichua
8	Jayant Bus Stand to Shukla Mod to Kanta Mod	NCL Jayant
9	Shukla Mod to Gorbi	NCL Block B
10	Bargawan to Hindalco Power Plant	Hindalco Industries
11	Bhalyatola to Suliyari Coal Mine	APMDC suliyari
12	Nigire Niwas to JP power Plant	JP Nigire Power Plant

Table 1: Status of 05 Years Action Plan for Fly Ash Utilization by TPPs

TPPs	2022-23		2023-24		2024-25		2025-26	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual
UPRVUNL Obra TPP	3.55	2.71	21.47	13.705	43.55	6.23	45.35	19.9113
UPRVUNL Anpara TPP	166	0.82	31.05	21.5	44.05	5.6	61.05	20.768
NTPC Rihand	21.36	21.36	24.8	33.96	37.25	46.55	45	24.863
NTPC Singrauli	16.7	10.91	22.7	12.212	42.24	30.53	50.26	17.44
MEIL Anpara Energy	17	1.99	17.5	4.25	26.91	11.9215	28.6	5.7171
Grasim Industries Ltd, (Captive Power Plant)	-	-	0.1358	0.1358	0.1395	0.1395	1.4425	1.4425
Hindalco Industries Ltd Renusagar Power Division	17.86	17.86	16.16	16.16	15.16	15.16	16.286	16.286
Total (LMT)	242.470	55.650	133.816	101.923	209.300	116.131	247.989	106.428

Table 2: Status of Implementation of Action Plans

S.No.	TPPS	Completed	Under progress/ remaining works	Timeline/ Remarks
1.	M/s NTPC SSTPS, Shaktinagar, Sonbhadra	➤ Fly ash utilization 60.59.95 % As on March, 2026	➤ FGD installation work in all 7 units.	➤ FGD is expected to be Commissioned by Dec.-2026

Table 2: Status of Implementation of Action Plans

S.No.	TPPS	Completed	Under progress/ remaining works	Timeline/ Remarks
		➤ S1 & S2 Ash Dykes are in running condition ➤ AWRS installed DAES available ➤ CEMS & CAAQMS installed and complied ➤ Sprinkling system at the Ash Dyke installed ➤ Ash dyke stability report submitted, Bio-methanation plant available, PM and NO Regularly monitored and complied	➤ Expansion of AWRS capacity ➤ DAES# Stage 1 and U#7 is under commissioning	➤ Dec.-2026 ➤ March-2027
2.	M/s NTPC Rihandnagar, SSTP, Rihandnagar, Sonbhadra	➤ Fly ash utilization 60.51% as on March, 2026, Ash dyke stability report is submitted. ➤ DAES available & Operational in Stage - II & Stage III ➤ CEMS & CAAQMS installed and complied ➤ PM and NO Regularly monitored and complied ➤ Sprinkling system at the Ash Dyke installed, Dry fog dust suppression system in Stage - III. Cold Fog dust suppression system (CFDS) is commissioned & is	➤ FGD installation work in all units ➤ DAES in Stage - I	➤ FGD is expected to be commissioned by 31.07.2027 ➤ DAES Stage-I - Commissioned by 31.10.2026

Table 2: Status of Implementation of Action Plans

S.No.	TPPS	Completed	Under progress/ remaining works	Timeline/ Remarks
		operational in Stage – I & Stage – II. ➤ 3 Bio-methanation plant available		
3.	M/s U.P. Rajya Vidyut Utpadan Nigam Ltd. (Anpara A, B & D TPS), Anpara, Sonbhadra	➤ Fly utilization 44.78 % As on March, 2026 ➤ AWRS installed ➤ ash DAES available ➤ CEMS & 03 CAAQMS installed and complied ➤ Ash dyke stability report submitted ➤ NO regularly monitored and complied in all units. ➤ MSW Facility installed and operational.	➤ Re-tendering for ESPs installation at ATPS ➤ Renovation work almost completed at BTPS ➤ Anpara TPS applied for FGD exemption for A, B & D TPS.	December-2026
4.	M/s MEIL Anpara Energy limited (formerly M/s Lanco Anpara Power Limited, Anpara, Sonbhadra)	➤ Fly ash utilization 32.81 % As March, 2026 ➤ AWRS installed ➤ DAES available ➤ CEMS & CAAQMS installed and complied ➤ PM and NOX Regularly monitored and complied ➤ Sprinkling system at the coal yard installed ➤ Dust extraction and dust suppression system provided.	As per MoEF & CC issued a Notification No. G.S.R.465(E) dated 11th July 2025 the plant has filed the amendment Application for exemption of applicability of sulphur dioxide standards MoEF&CC, New Delhi on 10 th January 2026.	December-2028

Table 2: Status of Implementation of Action Plans

S.No.	TPPS	Completed	Under progress/ remaining works	Timeline/ Remarks
5.	M/s Hindalco Industries Limited, Renusagar Power Division, Renusagar	➤ Fly ash utilization 109.21% As on March, 2026 ➤ Bichhari ash dyke operational so no legacy ash present ➤ Ash dyke stability report submitted ➤ AWRS installed and operational ➤ ZLD achieved ➤ DAES available ➤ CEMS & 03 CAAQMS installed and complied ➤ Sprinkling system at the Ash Dyke installed PM & NOX regularly monitored and complied	➤ FGD installation work in progress in Boiler 5	➤ Completed by Aug-2026, FGD Erection work is in progress
6	M/s U.P. Rajya Vidyut Utpadan Nigam Ltd. (Obra A, B TPS), Obra, Sonbhadra	➤ Fly ash utilization 123.13% As on March, 2026 ➤ Ash dyke stability report submitted ➤ ZLD achieved ➤ Ash dyke stability report submitted ➤ DAES available, CEMS & CAAQMS installed and complied Under progress/ remaining works ➤ PM and NOX Regularly monitored and complied	➤ FDG installation ➤ Recommendation report for award to work of installation of DFAES for transportation of Fly Ash through Railway has been submitted by M/s RITES. Obra TPS has sent the negotiation report to HQ for further course of action. The will	➤ Terminated in December 2024. ➤ DFAES through railway will be installed by 2028.

Table 2: Status of Implementation of Action Plans

S.No.	TPPS	Completed	Under progress/ remaining works	Timeline/ Remarks
		➤ Sprinkling system at the Ash Dyke installed - All old deposited ash has been removed and Desilted ash has been disposed in Low Lying area in Orba Sector 2 & 3 and stabilized with soil with Miyawaki Plantation	be awarded by June 2026	

Table 3: Status of Implementation of Action Plans (Coal Mines)

S.No.	Name	Completed	Under progress/remaining works	Timeline/Remarks
1	M/s Northern Coal Fields Limited, Bina Project, Bina, Sonbhadra	➤ 05 fog cannons. 02 nos. of truck mounted mist spray ➤ Installation of Automatic wheel washing system. ➤ Fire hydrant pipeline provided ➤ High capacity pressurised water tankers, 20 nos. water sprinklers ➤ 1 no road sweeping machine ➤ 2 nos. truck mounted mist spray gun ➤ ZLD achieved ➤ 1 no CAAQMS installed ➤ Transportation of coal through Railway Wagon and tarpaulin covered trucks	➤ Construction of new CHP of 9.5 MTPA ➤ ETP & STP under upgradation by filter press, MGF, ACF etc. ➤ Carrying Capacity of Mine & ➤ Traffic study (EC cond.)	➤ Commissioned & Operational from September 2025. ➤ 100 % work has been complete ➤ Carrying Capacity Study Completed. Report is awaited. ➤ Traffic Study completed.

		➤ Rain Water Harvesting at 4 places. ➤ Plantation activity along 1.2 km Auri-Shaktinagar highway ➤ 1 additional CAAQMS		
2	M/s Northern Coal Fields Limited, Dudhichua Project, Dudhichua Sonbhadra	➤ Maximum Coal transportation through MGR rest through Rail and covered trucks ➤ Closed Belt Conveyor System ➤ 08 Fixed type mist fog cannon ➤ 02 Truck Mounted Mist Spray System ➤ 02 no road sweeping machine ➤ 04 no rain water harvesting ➤ 01 CAAQMS installed ➤ Rain Water Harvesting at 4 places. ➤ 02 Nos. truck mounted mist spray system are deployed. ➤ Construction of new CHP of 10 MTPA ➤ 02 RCC Bunds constructed to prevent the entry of silt and discharge to Balia nala from mines. ➤ Construction of siltation ponds at 03 locations done ➤ Tyre washing system/mechanism completed Coal transporting vehicles on Road	➤ Semi Automatic Tarpaulin Covering System ➤ Hiring of two additional Truck mounted fog cannons ➤ Up gradation of existing ETP	➤ Tendering under process. ➤ Final approval under process. ➤ Under process. To be completed by December 2027.

3	M/s Northern Coal Fields Limited, Kakri Project, Kakri, Sonbhadra	➤ Maximum Coal transportation through MGR rest through Rail and covered trucks ➤ High capacity pressurised water tankers ➤ 02 water tankers for sprinkling ➤ 04 nos. of truck mounted fog cannon individual. ➤ 01 truck mounted mist spray guns ➤ 02 rain water harvesting system ➤ 01 CAAQMS installed ➤ Fire hydrant system installed ➤ ZLD achieved, ETP upgradation ➤ Plantation along road sides	➤ Tyre washing system/ mechanism for Coal transporting vehicles on Road.	➤ under process
4	M/s Northern Coal Fields Limited, Khadia Project, Khadia, Sonbhadra	➤ Maximum Coal transportation through MGR rest through Rail and covered trucks. ➤ All approach road are metalled Fixed fog cannons are installed, 02 Road sweeping machines, Plantation on overburden dumps, 01 CAAQMS installed, 07 Rain water harvesting system, ZLD achieved, Fire hydrant system installed	➤ ETP under up-gradation. ➤ Tyre washing system/ mechanism for Coal transporting vehicles on Road. ➤ Construction of Wharf wall / Railway Siding	➤ Completed ➤ Completed ➤ Construction of Wharf wall work completed. A Rapid Loading System (RLS) of 04 MTPA for dispatch of coal transportation through rail has been completed in June 2026.
5	M/s Northern Coal Fields Limited,	➤ Maximum Coal transportation through belt pipe conveyer rest	➤ Green belt	➤ There is no make of mine water. The run-off water is

	Krishnashila Project, Bina, Sonbhadra	through Rail and covered trucks ➤ All CC roads completed ➤ CC road of 6.7 km for coal transportation ➤ 12 water sprinklers installed ➤ 01 Fixed fog cannon ➤ 02 Road sweeping machines ➤ 01 CAAQMS installed ➤ ZLD Achieved ➤ Rain water harvesting system at 07 places ➤ Fire hydrant provided ➤ Wheel washing facility for Bina & Krishnashilla at Bina Entry Gate Sedimentation ponds		collected in the sumps of capacity 460000 CuM and 55000 CuM, with additional intermediate sump of Capacity 360000 CuM. ➤ Afforestation and Green Belt developed as per EMP & Mine Closure Plan. Total 6.55 Lacs trees has been planted on 209 Ha. Land including Miyawaki Plantaion on 2.5 Ha. area
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Table 4: Status of Implementation of Action Plans (Other Industries)

S.No .	Name	Completed	Under progress/ remaining works	Timeline/Remarks
1	M/s Grasim Industries Limited Chemical Division, Renukoot, Sonbhadra	➤ ZLD Achieved ➤ APCS with online monitoring system ➤ Brine sludge is completely disposed through TSDF Kanpur Dehat. ➤ Ash disposal site reclaimed completely along with Miyawaki plantation ➤ 63% of land area developed as green belt. ➤ Captive SLF for disposal of mercury sludge is fully capped.	Miyawaki Plantation outside plant premises will be done	Industry has informed that it has done Miyawaki Plantation inside its premises & at present Grasimhas developed Approx. 63% Green Belt, inside the premises

		➤ Process changed to membrane technology ➤ Water sprinklers installed for dust suppression. ➤ Miyawaki Plantation has been done inside the premises ➤ Fly Ash Utilization 100 %		
2	M/s Birla Carbon India Pvt. Ltd., Renukoot, Sonbhadra	➤ ZLD Achieved ➤ APCS with online monitoring system installed. ➤ PTZ camera installed for continuous monitoring of ZLD. ➤ Green belt developed. ➤ Water sprinklers installed for dust suppression. ➤ Miyawaki Plantation has been done inside the premises.	Miyawaki Plantation outside plant premises will be done.	Completed. As per target they have completed the miyawaki project in 150 Sqm
3.	Aluminum Smelter : M/s HINDALCO Industries Ltd, Renukoot, Sonbhadra	➤ ZLD Achieved ➤ 4.87 Lakh MT Bottom ash utilized for developing low lying area ➤ MSW processing facility operational ➤ APCS installed for process plant and fugitive emission. ➤ Water sprinklers installed for dust suppression. ➤ OCEMS installed on all stacks ➤ Red Mud is properly disposed. ➤ 100 % utilization of Ash of Ash	➤ Red mud mixing with fly ash and disposal in abandoned mines proposed ➤ Feasibility study awarded to IIFM Bhopal.	➤ Red mud dumping at site has been started from first week of Feb, 2026 and about 131753 MT Red mud and 11000 MT pond ash/bottom ash has been shifted at site and compacted as per approved design. ➤ Native soil spreading at top as well slope job is going on. ➤ Grass land drain work

				construction is under progress. ➤ Plantation will be done during the monsoon season as per scheme finalized by IIFM and UPFD.
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Annexure- IV

Ash Utilization Status of Thermal Power Plant for FY 2024-25 and 2025-26

S. N .	Name of Thermal Power Plant	District	1st compliance cycle (3 /4 /5 year)	Capacity	2024-25				2025-26			
					Coal / Lignite Consump. (MT) during 2024-25	Total Ash Gen. (MT) during 2024-25	Total Ash Utilization (MT) during 2024-25	Total Ash Utilization % during 2024-25	Coal / Lignite Consump. (MT) during 2025-26	Total Ash Gen. (MT) during 2025-26	Total Ash Utilization (MT) during 2025-26 [#]	Total Ash Utilization % during 2025-26
1	Vindhyachal, NTPC	Singrauli	5	4760	22775233.00	6506320.00	5195000*	79.85	22942258.00	6496155.00	6516590	100.31
2	Sasan UMP, RPL	Singrauli	5	3960	18201500.00	5370279.00	3055653*	56.90	17592209.00	5215385.00	4018062	77.04
3	Mahan Energy, Adani Power	Singrauli	5	1200	5041245.00	1649441.00	1737298.00	105.33	4948181.00	1567761.00	1651438	105.34
4	Nigrie, J. P. Associates	Singrauli	3	1320	5376625.43	1697123.00	1893351.61	111.56	5848900.15	1840008.00	1907712.29	103.68
5	Singrauli,	Sonbhadra	5	2000	10433230.00	3469825.00	3053662.235*	88.01	9704340.00	2908390.70	1743981.55	59.96

	NTP C											
6	Rihand, NTP C	Son bhadra	5	300 0	1444 0189. 00	4186 201. 00	46551 38.2*	111. 20	1366 0148. 00	4109 008. 00	2483 278. 1	60.4 3
7	Obra B, UPR VUN L	Son bhadra	5	100 0	4249 239.0 0	1711 799. 10	44395 4.26*	25.9 3	3791 643.0 0	1617 043. 47	1991 106. 8	123. 13
8	Anpara A, B & D, UPV UNL	Son bhadra	5	263 0	1190 7021. 00	4494 974. 55	57062 3.82*	12.6 9	-	-	-	-
9	Anpara C, Lanco Power	Son bhadra	5	120 0	5279 939.0 0	1794 970. 00	11921 49.00	66.4 2	5284 482.2 1	1742 305. 00	5717 13.6 4	32.8 1

*Annual Audit Report of FY 2024-25 has not been submitted by TPPs (the last date of submitting the audit report was 30 November 2025)

#Annual audit report of FY 2025-26 yet to be submit by TPPs as last date of submitting the audit report is 30 November 2026