





केन्द्रीय प्रदूषण नियंत्रण बोर्ड CENTRAL POLLUTION CONTROL BOARD

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार MINISTRY OF ENVIRONMENT FOREST & CLIMATE CHANGE GOVT OF INDIA

IPC-II/TPP/CP-11/76/2022/ 6042-6067

November 07, 2024

Minutes of the 4th (joint) meeting of the two committees—the Committee for monitoring the implementation of provisions of the Ash Notification 31.12.2021 - Para E(3), and the Committee for identification of mines for backfilling of mine voids with ash or mixing of ash with overburden dump - Para B(5)(i), held on 11.10.2024 at 04.00 PM

Sir.

Minutes of the 4th (joint) meeting of the two committees - (i) the Committee for monitoring the implementation of provisions of the Ash Notification 31.12.2021 - Para E(3) and (ii) the Committee for identification of mines for backfilling of mine voids with ash or mixing of ash with overburden dump - Para B(5)(i), held under the chairmanship of Shri Tanmay Kumar, Chairman, CPCB on 11.10.2024 at 04.00 PM through video conference, are enclosed for information and necessary action.

For ensuring effective implementation and monitoring of the Ash Notification No. S.O. 5481 (E) dated 31.12.2021 (subsequently amended on 30.12.2022 and 01.01.2024) CPCB has also issued directions dated 14.10.2024 to concerned SPCBs under Section 18(1)(b) of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, a copy of which is attached for information/necessary action.

Yours faithfully,

Sc. F & DH-IPC-II

To,

Members of the Committees (As per the lists enclosed)

Copy to:

1. Chairman of the Committees

for information.

2. Member Secretary, CPCB

for information.

3. Other participants of the meeting

for information.

(as per the list enclosed)

for information/necessary action.

4. The Member Secretary State Pollution Control Boards (as per the list enclosed)

5. Authorized Auditors

for information/necessary action

(as per CPCB's O.M. dated 09.09.2024)

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली-110032

Parivesh Bhawan, East Arjun Nagar, Delhi-110032

दूरभाष/Tel: 43102030, 22305792,वेबसाईट/Website: www.cpcb.nic.in

Members of the Committee for monitoring the implementation of provisions of the Notification No. 5481(E) dated 31.12.2021 (Para E(3))

 Shri N. Subrahmanyam, Sc.-E (HSM Division), Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj, New Delhi - 110 003

Shri Satish Kumar,
 Director (Thermal),
 Ministry of Power,
 Shram Shakti Bhawan, Rafi Marg, New Delhi

Shri Anandji Prasad - Advisor (Project)
 Ministry of Coal,
 Room No. 303-B, Shastri Bhawan,
 Dr. Rajendra Prasad Road, New Delhi – 110 001

3 (a) Shri B. Veera Reddy - Director (Technical) (Second representative of Ministry of Coal), Coal India Limited,
Coal Bhawan, Premise No. 04 Mar,
Plot No. AF-III, Action Area-1A,
New Town, Rajarhat, Kolkata – 700 156

 Shri P.N. Sharma, Chief Controller of Mines, (Representative of Ministry of Mines), Indian Bureau of Mines, Indira Bhawan, Civil Lines, Nagpur – 440 001, Maharashtra

 Shri Paresh Kumar Goel - Director (Transport), Ministry of Road Transport & Highways, Transport Bhawan, 1, Parliament Street, New Delhi – 110 001

6. Shri Vikas Dogra, Director,
(Representative of Department of Heavy Industry),
Ministry of Heavy Industries,
Room No. 124, Udyog Bhawan,
New Delhi-110011

Members of the Committee for identification of mines for backfilling of mine voids with ash or mixing of ash with overburden dump, as per the Notification No. 5481(E) dated 31.12.2021

 Shri Munna Kumar Shah, Sc.-E (IA Division), Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj, New Delhi - 110 003

Shri Satish Kumar,
 Director (Thermal),
 Ministry of Power,
 Shram Shakti Bhawan, Rafi Marg, New Delhi

- 2 (a) Representative of Ministry of Power from Central Electricity Authority
- 2 (b) Representative of Ministry of Power from NTPC Ltd.
- Shri Anandji Prasad Advisor (Project)
 Ministry of Coal,
 Room No. 303-B, Shastri Bhawan,
 Dr. Rajendra Prasad Road, New Delhi 110 001
- 3 (a) Shri B. Veera Reddy Director (Technical) (Second representative of Ministry of Coal), Coal India Limited,
 Coal Bhawan, Premise No. 04 Mar,
 Plot No. AF-III, Action Area-1A,
 New Town, Rajarhat, **Kolkata 700 156**
- Shri P.N. Sharma, Chief Controller of Mines, (Common representative of Ministry of Mines and IBM), Indian Bureau of Mines, Indira Bhawan, Civil Lines, Nagpur – 440 001, Maharashtra
- Shri Saifullah Ansari, Director Mine Safety (S&T),
 Director General of Mine Safety,
 DGMS Head Office, Sardar Patel Nagar,
 Dhanbad 826 001, Jharkhand

List of State Pollution Control Boards

- The Member Secretary,
 Andhra Pradesh Pollution Control Board
 D. No. 33-26-14 D/2, Near Sunrise Hospital,
 Pushpa Hotel Centre, Chalamalavari Street,
 Kasturibaipet, Vijayawada 520 010
- The Member Secretary,
 Pollution Control Board- Assam,
 Bamunimaidam, Guwahati 781 021, Assam
- 3. The Member Secretary,
 Bihar State Pollution Control Board
 Parivesh Bhawan, Plot No. NS-B/2,
 Paliputra Industrial Area, Patliputra,
 Patna 800 023, Bihar
- 4. The Member Secretary,
 Chhattisgarh Environment Conservation Board,
 Paryavas Bhavan, North Block Sector-19,
 Atal Nagar, **Raipur 492 002**, Chhattisgarh
- The Member Secretary, Gujarat Pollution Control Board Paryavaran Bhavan, Sector 10-A, Gandhi Nagar - 382 010, Gujarat
- The Member Secretary,
 Goa State Pollution Control Board
 Nr. Pilerne Industrial Estate, Opp. Saligao
 Seminary, Saligao Bardez, Goa 403 511
- 7. The Member Secretary, Haryana State Pollution Control Board C-11, Sector-6, **Panchkula-134109**, Haryana
- 8. The Member Secretary,
 Jharkhand State Pollution Control Board,
 T.A. Bldg., HEC, P. O. Dhurwa,
 Ranchi 834 004, Jharkhand
- 9. The Member Secretary, Karnataka State Pollution Control Board "Parisara Bhavan", #49,4th & 5th Floor, Church Street, **Bangalore 560 001**
- The Member Secretary,
 Madhya Pradesh Pollution Control Board,
 Paryavaran Parisar, E-5, Arera Colony,
 Bhopal 462 016, Madhya Pradesh

The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Points, 3rd & 4th Floor, Road No. 8, Sion Circle, Opp. PVR Theatre, Mumbai – 400 022, Maharashtra

- The Member Secretary,
 Meghalaya State Pollution Control Board,
 "ARDEN", Lumpyngngad,
 Shillong 793 014, Meghalaya
- The Member Secretary,
 Odisha State Pollution Control Board,
 Paribesh Bhawan, A-118, Nilakantha Nagar,
 Unit VIII, Bhubaneswar 751 012, Odisha
- 14. The Member Secretary,
 Punjab Pollution Control Board
 Vatavaran Bhawan, Nabha Road
 Patiala 147 001, Punjab
- 15. The Member Secretary,Rajasthan Pollution Control Board,A-4, Institutional Area, Jalana Dungri,Jaipur 302 004, Rajasthan
- The Member Secretary,
 Tamil Nadu Pollution Control Board
 76, Anna Salai, Guindy Industrial Estate,
 Race View Colony, Guindy,
 Chennai 600 032, Tamil Nadu
- The Member Secretary,
 Telangana State Pollution Control Board,
 Paryavaran Bhawan, A-III, Industrial Estate,
 Sanathnagar, Hyderabad 500 018
- The Member Secretary,
 Uttar Pradesh Pollution Control Board,
 H. No. TC-12 V, Vibhuti Khand, Gomti Nagar,
 Lucknow 226 010, Uttar Pradesh
- The Member Secretary,
 Uttarakhand Pollution Control Board,
 Gaura Devi Bhawan, 46 B, IT Park,
 Sahastradhara, **Dehradun 248 001**, Uttarakhand
- The Member Secretary,
 West Bengal Pollution Control Board,
 Paribesh Bhawan, 10A, Block-LA, Sector-III,
 Bidhannagar, Kolkata-700 106, West Bengal

Minutes of the 4th (joint) meeting of the two committees— the Committee for monitoring the implementation of provisions of the Ash Notification 31.12.2021 - Para E(3), and the Committee for identification of mines for backfilling of mine voids with ash or mixing of ash with overburden dump - Para B(5)(i), held on 11.10.2024 at 04.00 PM

The 4th (joint) meeting of the two committees - the Committee for monitoring the implementation of provisions of the Ash Notification 31.12.2021 - Para E(3), and the Committee for identification of mines for backfilling of mine voids with ash or mixing of ash with overburden dump - Para B(5)(i), was held on 11.10.2024 at 04.00 PM through VC. The meeting was chaired by the Chairman of the Committees Shri Tanmay Kumar, Chairman CPCB. The list of participants is attached. Committees' members from MoRTH and DHI were not present in the meeting.

- 2. Representative of CPCB made a presentation before the Committees about the progress on implementation of the ash notification since 3rd (joint) meeting of the Committees held on 06.10.2023, as below:
- I. Annual implementation report: Status of compliance of various provisions of the Ash Notification dated 31.12.2021 (and subsequent amendments) by the independent thermal power plants (TPPs) across the country during the first FY of the first compliance cycle i.e. FY 2022-23 was provided by CPCB vide letter dated 20.02.2024 to MoEF&CC. The same was also shared with CEA for information and to all concerned SPCBs for information and appropriate action in respect of the non-compliance of various provisions of the Ash Notification by the TPPs in their States.

Brief details of ash generation and utilization by the independent TPPs (IPPs) across the country during the FYs 2022-23 (updated) as well as 2023-24 (interim) are given as below:

Description	FY 2022-23	FY 2023-24
Coal Consumed (MMT)	820.5	897.5
Total Ash Generation (MMT)	291.8	316.1
Total Ash Utilisation (MMT)	263.6	303.8
Percentage Ash Utilisation (%)	90.36%	96.11%

The major non-compliance points requiring action taken by the TPPs are as below:

- a. 09 TPPs during FY 2022-23 and 17 TPPs during FY 2023-24 (05 common) have failed to comply with their minimum annual target of 80% ash utilization (lists enclosed), and are liable to be imposed with environmental compensation @ Rs. 1000 per ton on unutilised ash at the end of their first compliance cycle.
- b. 22 TPPs are exceeding the permitted area limit (0.1 hectare/MW) of operational ash pond or dyke for temporary storage of ash (list enclosed). The area of the ash ponds/dykes exceeding the prescribed limit needs to be stabilized and reclaimed with greenbelt/plantation and certified through the concerned SPCBs by 31.03.2025.
- c. 90 TPPs have not installed dedicated silos for storage of dry fly ash for at least 16 hours of ash based on installed capacity (list enclosed).

- d. Some thermal power plants have incorrectly reported/claimed ash utilization in i) disposal of ash into the operational ash ponds/dykes claiming it as low lying area, ii) stabilization of old un-operational (legacy) ash ponds/dykes as current ash utilization, iii) ash dyke raising activities, which are not considered as ash utilization as per the Ash Notification, 2021.
- e. Some thermal power plants are merely depending upon allocation of abandoned mine voids for disposal of ash to meet the utilisation targets, which is inconsistent with the Para B(5)(ii) of the Ash Notification, 2021 i.e. "Thermal power plants or mines shall not wait for disposal of ash till the identification is done by the above mentioned committee [under Para B(5)(i)], to meet the utilisation targets mandated as above [under Para A(4) and A(5)]".
- II. Ash utilization status of TPPs located nearby/around various million-plus cities (MPCs)/ non-attainment cities (NACs) and critically polluted areas (CPAs):
 - a. 27 TPPs are having 3-year first compliance cycle, out which 03 TPPs (1. Vizag TPP, HNPCL, 2. Koradi TPS, MAHAGENCO, 3. Mettur TPS-II, TANGEDCO) during FY 2022-23 and 02 TPPs (1. Koradi TPS, MAHAGENCO, 2. North Chennai TPS-I, TANGEDCO) during FY 2023-24 failed to comply with their minimum annual target of 80% ash utilization.
 - b. 04 TPPs are having 4-year first compliance cycle, which have more than minimum annual target of 80% ash utilization during FY 2023-24.
- III. **Authorization of Auditors**: Updated list of authorised auditors to carry out compliance audit of ash utilization by TPPs issued by CPCB vide O.M. dated 09.09.2024 (earlier O.M dated 17.07.2023). The number of authorised auditors have been increased from **77 to 124**. A uniform report format for carrying out the annual compliance audit of TPPs and the users is to be provided by CPCB to the authorised auditors by convening a workshop.
- IV. CPCB and CEA have issued "Guidelines on Design, Construction, O&M and Annual Certification of Coal Ash Ponds, June 2023" as per the Ash Notification, 2021. However, the Ash Notification, 2021 doesn't prescribe the timeline to submit the certification report to the concerned SPCB, due to which the status of implementation of the guidelines is not reported by the TPPs on regular basis/timely manner.
- V. CPCB is conducting a study project through Jadavpur University for the **evaluation of coal bottom ash** samples of 10 TPPs using coal from various coal sources **to confirm its suitability as partial sand replacement material in the production of concrete**. MoU was signed in March 2024. Bottom ash samples from all 10 identified TPPs have been collected by Sept 2024 and analysis is under progress.

VI. Status of Ash Portal:

a. All 192 IPPs are registered over the Ash Portal and uploading ash data and 287 Captive Power Plants (CPPs) have been registered over the Ash Portal (increased from 116 as compared to the status presented during the 3rd meeting of the committee). SPCBs have informed to have issued instructions/directions to the CPPs in their States.

- b. CPCB vide letters dated 19.01.2024 and 29.08.2024 instructed SPCBs to:
 - Update and confirm the list of CPPs in the State and ensure registration of all CPPs on the Fly Ash Portal. List of all registered CPPs again shared with SPCBs, along with list of CPPs which are yet to be connected as per the list provided by SPCBs in 2018.
 - Review and ensure regular data uploading by all TPPs in the State on the Ash Portal by monitoring the same on regular basis for effective enforcement of compliance of the Ash Notification.
- c. Status of ash utilization during FY 2023-24 (interim) by all TPPs (IPPs and CPPs) in the country as per the Ash Portal:

Description	FY 2023-24
Coal Consumed (MMT)	956.0
Total Ash Generation (MMT)	340.0
Total Ash Utilisation (MMT)	322.5
Percentage Ash Utilisation (%)	94.86%

d. The suggestions given by CEA for updation of the Ash Portal which were possible have been addressed through NTPC-IT team. Some features which are not possible to be addressed in the existing software framework and some new requirements as per MoP's policy dated 15.03.2024 are to be addressed on the new portal which is being developed on the updated software framework by the CPCB IT-Division. CEA has been requested to provide comments on the draft formats for requirements related to compliance of MoP's advisory dated 15.03.2024.

VII. Identification and allocation of abandoned coal mines for disposal of fly ash by thermal power plants:

- a. 07 meetings of the Central Level Working Group (CLWG), Ministry of Coal (MoC) for allotment of coal mine pits have been convened. Requests received for allocation of abandoned mine voids till the 7th meeting of CLWG on 02.08.2024 have been taken up and discussed by the CLWG. The representative of MoC informed about the status of allocation mine voids by the CLWG (57 mine voids allocated so far to TPPs).
- b. Chairperson, CLWG advised that all the pending MoUs (except Krishnashila, NCL allotment to NTPC Singrauli) shall be concluded at the earliest.
- c. Chairperson, CLWG advised CIL to look into the feasibility of the large no. of abandoned/ discontinued mines available with CIL for disposal of the fly ash and to share a list of such mines to MoC.
- d. As per the decision of the Fly Ash Management and Utilization Mission, the **SOPs** have been framed and circulated among concerned for:
 - Allocation of mines in respect of safety and administrative related matters (both underground and opencast mines, working as well as abandoned).
 - Signing of MoU between identified mines and TPPs.
 - Carrying out feasibility studies for mixing of ash with overburden/ backfilling in operational mines in case of opencast/underground mines, as the case may be.

- e. Secretary, Ministry of Coal vide D.O. letter dated 06.08.2024 has requested Secretary, MoEF&CC to review and amend the provisions of the Ash Notification, 2021 regarding mandatory mixing of at least 25% of ash in external overburden (OB) dumps of coal mines with OB on the weight-to-weight basis under the "Polluter Pays Principle". MoC has submitted that the issue of mixing fly ash with OB has been examined by different coal companies in consultation with CMPDIL, CIMFR, DGMS, etc., and further deliberated in the CLWG, based on which it has been observed that mixing of ash with OB as per the Ash Notification may pose the problems related to compromising factor of safety and increase in land and rehabilitation & resettlement (R&R) requirements.
- f. Coordinates of abandoned coal mines available for ash disposal to nearby power plants may be provided by MoC to CPCB for mapping on the upgraded Ash Portal.

VIII. Identification and allocation of abandoned non-coal mines for disposal of fly ash by thermal power plants:

- a. The list of 207 non-coal mines shared by the Ministry of Mines which are available for backfilling with fly ash have been circulated to all concerned. District Level Working Group (DLWG) under State Govt. is to consider requests for allocation of non-coal mines.
- b. Requests received in CPCB in this matter have been forwarded to concerned SPCBs with appropriate instructions to the requesting TPPs.
- c. Regional Controllers of Mines have been instructed by the Ministry of Mines to identify more feasible mines, and to facilitate TPPs in identification of leases, signing MoU, taking State Govt. on board.
- 3. The representative of MoEF&CC informed that the MoC's D.O. letter 06.08.2024 to review and amend the provisions of the Ash Notification, 2021 regarding mandatory mixing of at least 25% of ash with overburden (OB) in external OB dumps of coal mines, has been received in MoEF&CC and is under review.

The Chairman of the committees advised MoC to make a detailed presentation before the MoEF&CC about the findings of the studies carried out by different coal companies regarding complexity in mixing of ash with OB dumbs in operational mines.

4. The MoEF&CC's representative also informed that the Ministry has received multiple representations from brick manufacturing units/associations about non-supply of certain fixed quantum of ash to such units on subsidized rates, which is non-compliance of the MoP's guidelines dated 15.03.2024 framed in compliance with the Ash Notification, 2021. In this regard MoP in the matter has responded that the guidelines are to be enforced by the concerned SPCBs.

The CPCB's representatives informed that as per the Para E(4) of the Ash Notification, 2021, the State Governments are required to constitute a state level dispute resolution committee under Chairman, SPCB for the purpose of resolving disputes between thermal power plants and users of

ash or manufacturer of ash based products. The Chairman of the committees instructed CPCB to obtain the status of constitution of the aforesaid committees from the concerned SPCBs.

- 5. After deliberations on the above points, the following decisions were taken:
 - a. CPCB to provide a uniform report format for carrying out the annual compliance audit of TPPs and the users to the authorised auditors by convening a workshop. The auditors shall also verify the condition of ash handling and storage, and modes of ash utilization/disposal by TPPs to check if the ash handling, storage, and utilization/disposal is being carried out in an environmentally sound manner (CPCB, Authorised Auditors)
 - b. CPCB shall take action to ensure issuance of notices to the TPPs non-compliant with various provisions of the Ash Notification, 2021 to caution them for further course of action by SPCBs/CPCB, including imposition of environmental compensation on TPPs failed to comply minimum 80% annual ash utilization targets, in near future (CPCB, SPCBs)
 - c. 05 TPPs non-compliant with the provision of minimum 80% annual ash utilization targets during both the FYs 2022-23 and 2023-24 shall be inspected to check their overall status of compliance w.r.t. Ash Notification (**CPCB, SPCBs**)
 - d. MoP/CEA and concerned SPCBs shall take action to ensure installation of dedicated silos by TPPs for storage of dry fly ash for at least 16 hours of ash based on installed capacity (SPCBs, MoP/CEA)
 - e. Implementation of "Guidelines on Design, Construction, O&M and Annual Certification of Coal Ash Ponds, June 2023" shall be ensured by all TPPs and the annual certification report shall be submitted annually by TPPs to concerned authorities (i.e. SPCBs, CPCB, CEA, MoEF&CC-IRO) by 30th November every year. The annual compliance audit report shall also include the status of submission of the annual certification report by the TPPs (All TPPs, Auditors, SPCBs, CPCB, MoP/CEA)
 - f. TPPs shall ensure that the ash is utilized only in the areas/avenues of usage prescribed in the Ash Notification, 2021. The area of the ash ponds/dykes exceeding the prescribed limit shall be stabilized and reclaimed with greenbelt/plantation and certified through the concerned SPCBs by 31.03.2025 (All TPPs, SPCBs) (All TPPs, SPCBs)
 - g. Coordinates of abandoned coal mines available for ash disposal to nearby power plants to be provided by MoC to CPCB for mapping on the upgraded Ash Portal (**MoC**)
 - h. The Ash Portal shall be upgraded to incorporate compliance aspects of various provisions of the Ash Notification, 2021 as amended and MoP's advisory dated 15.03.2024 (**CPCB**)
 - i. The allocation of identified mine voids (coal and non-coal) shall be continued in a time bound manner as per the developed procedures (**MoC**, **MoM**).

The meeting ended with a vote of thank to the chair.

List of participants of the 4^{th} (joint) meeting of the two committees— the Committee for monitoring the implementation of provisions of the Ash Notification 31.12.2021 - Para E(3), and the Committee for identification of mines for backfilling of mine voids with ash or mixing of ash with overburden dump - Para B(5)(i), held on 11.10.2024 at 04.00 PM

A. Central Pollution Control Board

- 1. Shri Tanmay Kumar, IAS, Chairman (Chairman of the Committees)
- 2. Shri Bharat Kumar Sharma, Member Secretary
- 3. Shri Nazimuddin, Sc. 'F' & DH-IPC-II
- 4. Shri Durga Nand Jha, SRF, IPC-II

B. Ministry of Environment, Forest and Climate Change

- 1. Shri N. Subrahmanyam, Scientist-E, HSM Division (Member of the Committee under Para E(3))
- 2. Shri R. P. Rastogi, Scientist-D, IA Division (Representative of the Member of the Committee under Para B(5)(i)

C. Ministry of Power

- 1. Sh. P.S. Mohan Kumar, Additional Director (CDD), Central Electricity Authority (Representative of Ministry of Power in the Committee under Para B(5)(i))
- 2. Executive Director, SSEA, NTPC (Representative of Ministry of Power in the Committee under Para B(5)(i))
- 3. Shri H. K. Dash, Executive Director, NTPC
- 4. Shri Mukesh Kumar, Additional Director (CDD), Central Electricity Authority
- 5. Shri Rohit Bhardwaj, Section Officer, Ministry of Power

D. Ministry of Coal

1. Director, Ministry of Coal (Representative of the Member of the Committees)

E. Ministry of Mines and Indian Bureau of Mines

1. Shri P.N. Sharma, Chief Controller of Mines, IBM (Member of the Committees)

F. Director General of Mine Safety

1. Shri Saifullah Ansari, Director - Mine Safety (S&T), DGMS (Member of the Committee under Para B(5)(i))

List-I: TPPs non-compliant with their minimum annual target of 80% ash utilization during FY 2022-23 and FY 2023-24

FY 2022-23 FY 2023-24

S.No.	Name of TPP	S.No.	Name of TPP	S.No.	Name of TPP
1.	Bhavnagar Lignite TPP, GSECL, Gujarat	1.	Bhavnagar Lignite TPP, GSECL, Gujarat	10.	Chhabra TPP RRVUNL, Rajasthan
2.	Koradi TPP, MAHAGENCO, Maharashtra	2.	Koradi TPP, MAHAGENCO, Maharashtra	11.	North Chennai TPS-I TANGEDCO, Tamilnadu
3.	Bela TPP, Ideal Energy Ltd., Maharashtra	3.	Bela TPP, Ideal Energy Ltd., Maharashtra	12.	North Chennai TPS-II TANGEDCO, Tamilnadu
4.	Chhabra SCTPP, RRVUNL, Rajasthan	4.	Chhabra SCTPP, RRVUNL, Rajasthan	13.	TAQA Neyveli TPS, Tamilnadu
5.	Ramagundam-B TPP, TSGENCO, Telangana	5.	Ramagundam-B TPP, TSGENCO, Telangana	14.	Kothagudem Stage VI TPS, TSGENCO, Telangana
6.	Vizag TPP, HNPCL, Andhra Pradesh	6.	Rayalseema TPS, APGENCO, Andhra Pradesh	15.	Meja TPS NTPC, Uttar Pradesh
7.	Guru Gobind Singh TPS, PSPCL, Punjab	7.	Bellari TPS, KPCL, Karnataka	16.	Harduaganj TPS UPRVUNL, Uttar Pradesh
8.	Kalisindh TPP RRVUNL, Rajasthan	8.	Raichur TPS, KPCL, Karnataka	17.	Parichha TPS UPRVUNL, Uttar Pradesh
9.	Mettur TPS-II, TANGEDCO, Tamilnadu	9.	Yermarus TPS, KPCL, Karnataka		

State-wise no. of TPPs: Gujarat (1), Maharashtra

(2), Rajasthan (2), Telangana (1), Andhra Pradesh

<u>State-wise no. of TPPs:</u> Gujarat (1), Maharashtra (2), Rajasthan (2), Telangana (2), Andhra Pradesh (1), Karnataka (3), Tamilnadu (3), Uttar Pradesh (3)

(1), Tamilnadu (1), Punjab (1)

List-II: TPPs exceeding the permitted area limit (0.1 hectare/MW) of operational ash pond or dyke for temporary storage of ash

S.No.	Name of TPP	S.No.	Name of TPP	S.No.	Name of TPP
1.	Bongaigaon TPP, NTPC, Assam	9.	Nawapara TPS, TRN Energy, Chhattisgarh	17.	Mouda TPS, NTPC, Maharashtra
2.	Barh, STPS NTPC, Bihar	10.	Sikka TPS, GSECL, Gujarat	18.	Darlipalli STPP, NTPC, Odisha
3.	Nabi Nagar TPS, BRBCL, NTPC, Bihar	11.	Indira Gandhi STPS, NTPC, Haryana	19.	Goindwal Sahib TPS, GVK Power, Punjab
4.	Sipat TPS, NTPC, Chhattisgarh	12.	Bokaro TPS, DVC, Jharkhand	20.	Bhadradri TPS, TSGENCO, Telangana
5.	Marwa TPS, CSPGCL, Chhattisgarh	13.	Koderma TPS, DVC, Jharkhand	21.	NTPC Meja TPS, MUNL, Uttar Pradesh
6.	Raigarh TPP, Adani Power, Chhattisgarh	14.	Kudgi STPS, NTPC, Karnataka	22.	Raghunathpur TPS, DVC, West Bengal
7.	Bandhakhar TPP, MCCPL, Chhattisgarh	15.	Shree Singaji TPS, MPPGCL, M.P.		
8.	SCPL Ratija TPS, Chhattisgarh	16.	Solapur TPS, NTPC, Maharashtra	1	

<u>List-III: TPPs which have not installed dedicated silos for storage of dry fly ash for at least</u> <u>16 hours of ash based on installed capacity</u>

Sl. No.	Name of Thermal Power Plant	State	Capacity (MW)	Capacity of dry fly ash silos (MT)		
1.	Dr. Narla Tata Rao TPS, APGENCO	A.P.	1760	3500	5	
2.	Rayalseema TPS, APGENCO	A.P.	1650	7506	14	
3.	Damodaram Sanjeeviah Stage-I, APGENCO	A.P.	1600	4000	12	
4.	Simhadri, NTPC	A.P.	2000	8000	15	
5.	Bongaigaon Thermal Power Project, NTPC	Assam	750	2250	13 to 14	
6.	Kahalgaon, NTPC	Bihar	2340	5200	8 to 9	
7.	Muzaffarpur TPS, NTPC KBUNL	Bihar	390	1800	15.73	
8.	Barh STPS, NTPC	Bihar	1980	5020	9 to 10	
9.	Nabi Nagar TPS, BRBCL	Bihar	1000	1500	5.50	
10.	Nabi Nagar Power G.C. (NPGCL), NTPC	Bihar	1980	2100	5 to 5.5	
11.	Barauni TPS, NTPC	Bihar	720	2600	12.00	
12.	Korba STPS, NTPC	Chhattisgarh	2600	2200	3.00	
13.	Lara STPP, NTPC	Chhattisgarh	1600	2100	4.50	
14.	Dr. Shyama Prasad Mukherjee TPS, CSPGCL	Chhattisgarh	500	2200	13 to 14	
15.	Tamnar TPP, OP Jindal Power STPP Stage-1	Chhattisgarh	1000	3200	9 to 10	
16.	Tamnar TPP, OP Jindal Power STPP Stage-2	Chhattisgarh	2400	9200	10.5 to 11.5	
17.	Lanco Amarkantak TPS	Chhattisgarh	600	3000	15.62	
18.	Uchpinda TPS, RKM Power	Chhattisgarh		8480	15.49	
19.	Raipur Energen, Adani Power	Chhattisgarh	1370	3600	9 to 10	
20.	ACBIL Chakabura TPP	Chhattisgarh	60	375	6.50	
21.	Ratija TPP, Spectrum Coal & Power	Chhattisgarh	100	1150	14.00	
22.	Nawapara TPS, TRN Energy	Chhattisgarh	600	2560	12 to 14	
23.	Balco TPS. Korba	Chhattisgarh	1200	4000	12.00	
24.	Gandhinagar TPS, GSECL	Gujarat	630	500	3.00	
25.	Wanakbori TPS, GSECL	Gujarat	2270	7100	12.50	
26.	Kutch Lignite TPS, GSECL	Gujarat	150	0	0.00	
27.	Panipat TPS, HPGCL	Haryana	710	1700	8.00	
28.	Yamunanagar TPS, DCRTPP, HPGCL	Haryana	600	2000	10.00	
29.	Chandrapura TPS, DVC	Jharkhand	500	1200	7 to 9	
30.	Koderma TPS, DVC	Jharkhand	1000	3000	11.00	
31.	Maithon TPP, DVC	Jharkhand	1050	4000	15.00	
32.	North Karanpura TPP, NTPC	Jharkhand	1320	1500	7.89	
33.	Bellari TPS, KPCL	Karnataka	1700	8700	15.64	
34.	Yermarus TPP, KPCL	Karnataka	1600	6000	13 to 14	
35.	Vindhyachal STPS, NTPC	M.P	4760	9600	11.25	
36.	Gadarwara STPP, NTPC	M.P	1600	0	0.00	
37.	Khargone STPS, NTPC	M.P	1320	1500	4.92	
38.	Birsingpur, Sanjay Gandhi TPS, MPPGCL	M.P	1340	5000	15.00	
39.	Satpura TPS, MPPGCL	M.P	1330	2400	7.50	
40.	M. B Power Annupur TPS	M.P	1200	5000	15.00	
41.	Khaperkheda TPS, MAHAGENCO	Maharashtra	1340	3000	6 to 7	
42.	Nasik TPS, MAHAGENCO	Maharashtra	630	0	0.00	
43.	Koradi TPS, MAHAGENCO	Maharashtra	2190	3375	5 to 6	
44.	Bhusawal TPS, MAHAGENCO	Maharashtra	1210	2250	5 to 6	

45.	Chandrapur Super TPS, MAHAGENCO	Maharashtra	2920	5630	5.00
46.	Dahanu TPS, Adani Power	Maharashtra	500	690	5.5 to 6.5
47.	Solapur STPS, NTPC	Maharashtra	1320	0	0.00
48.	Mouda STPS, NTPC	Maharashtra	2320	8800	14.37
49.	Amarawati TPP, RattanIndia	Maharashtra	1350	1800	5.00
50.	Vedanta TPP, Jharsuguda	Odisha	2400	8000	10.00
51.	Talcher Kaniha STPS, NTPC	Odisha	3000	9760	10.5 to 11.5
52.	Darlipalli STPP, NTPC	Odisha	1600	6000 (UC)	10 (Constructing)
53.	IB Valley TPP, Jharsuguda, Stage-I	Odisha	420	480	3 to 4
54.	Guru Gobind Singh TPS, Ropar, PSPCL	Punjab	840	450	2.00
55.	Lehra Mohabbat TPS, PSPCL	Punjab	920	2000	8 to 11
56.	Rajpura TPP, Nabha Power	Punjab	1400	5595	15.44
57.	Talwandi Sabo TPS, Vedanta	Punjab	1980	7950	14.00
58.	Goindwal Sahib TPS, GVK Power	Punjab	540	2000	15.50
59.	Kota STPS, RRVUNL	Rajasthan	1240	3500	10 to 11
60.	Chhabra TPS, RRVUNL	Rajasthan	1000	3500	12 to 14
61.	Shree Cement Ltd. IPP	Rajasthan	300	600	12 to 14.5
62.	Tuticorin TPS, TANGEDCO	Tamilnadu	1050	600	1.70
63.	North-Chennai-I TPS, TANGEDCO	Tamilnadu	630	3000	14.50
64.	Mettur TPS, TANGEDCO	Tamilnadu	840	3500	13.50
65.	Neyveli Lignite TPS-2, NLC	Tamilnadu	1470	2400	12.54
66.	Vallur TPP, NTPC	Tamilnadu	1500	5100	11 to 12
67.	Ramagundem STPS, NTPC	Telangana	2600	500	7.00
68.	Rammagundam-B TPS, TSGENCO	Telangana	62.5	200	8 to 10
69.	Kothagudem V Stage TPS, TSGENCO	Telangana	500	900	4.50
70.	Kothagudem VII Stage TPS, TSGENCO	Telangana	800	2000	13 to 15
71.	Kakatiya TPS, TSGENCO (Stage-I, II)	Telangana	1100	3300	14.00
72.	SINGARENI TPP, SCCL	Telangana	1200	3600	13.00
73.	Bhadradri TPS, TSGENCO	Telangana	1080	2000	5 to 6
74.	Singrauli STPS, NTPC	U.P.	2000	1500	3 to 4
75.	Rihand STPS, NTPC	U.P.	3000	7000	13.00
76.	Unchahar STPS, NTPC	U.P.	1550	3500	9 to 10
77.	Tanda TPS, NTPC	U.P.	1760	3025	6 to 7
78.	NTPC Meja TPS, MUNL	U.P.	1320	1575	5.50
79.	Paricha TPS, UPRVUNL	U.P.	920	3200	11 to 12
80.	Obra B TPS, UPRVUNL	U.P.	1000	700	2.00
81.	Anpara A, B & D TPS, UPRVUNL	U.P.	2630	3000	5.50
82.	Rosa TPP, Power Supply RPL	U.P.	1200	4000	14 to 15
83.	Anpara C TPP, Lanco Power	U.P.	1200	2000	7 to 8
84.	Lalitpur TPP, Bajaj Energy	U.P.	1980	6000	12 to 13
85.	Farakka STPS, NTPC	W.B.	2100	2700	5 to 6
86.	Mejia TPS, Bankura, DVC	W.B.	2340	5340	6 to 7
87.	Durgapur Steel TPS, DVC	W.B.	1000	3000	11 to 12
88.	Raghunathpur TPS, DVC	W.B.	1200	3000	7 to 8
89.	Santaldih TPS, WBPDCL	W.B.	500	2000	11 to 12
90.	Bakreswar TPS, WBPDCL	W.B.	1050	2900	13 to 15