NATIONAL GREEN TRIBUNAL, EASTERN BENCH

AT KOLKATA

ORIGINAL APPLICATION (O.A.) No. _____OF 2025

(U/S.14,15 R/W S.18 OF NGT ACT, 2010)

IN THE MATTER OF:

SATYA PRAKASH NAYAK ... APPLICANTS

VRS

STATE OF ODISHA & OTHERS .....RESPONDENTS

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Through

Biswaranjan Paramguru

BISWARANJAN PARAMGURU

ADVOCATE

Advocate for Petitioner

PLACE:- KOLKATA

Date: 23.7.2025

SYNOPSIS

That the Present Original Application is filed against Vedanta Ltd (Respondent No.6) to comply the direction of OSPCB against violations with regards to the guideline for disposal/utilisation of Fly Ash for reclamation of Low Lying Areas and Abandoned Quarries, 2017 wrt the unauthorized, unscientific dumping of ash at Siriapali (Jharsuguda T.U. No.4) in the district of Jharsuguda. **(Please Vide ANNEXURE-1).** That Siriapali is a village located in **Kolabira** tehsil of **Jharsuguda** district in **Odisha, India. It** is situated 8km away from sub-district headquarter Kolabira (tehsildar office) and 13km away from district headquarter Jharsuguda. The village spans a total geographical area of 1131 hectares. Due to the unauthorized, unscientific disposal of fly ash by Respondent No. 6 Vedanta Ltd, this area has been completely affected badly basically during rainy season. People face a lot of health problem due to this. **(Please Vide the Map at ANNEXURE-7). As per the OSPCB Inspection Report dated 26/09/2024**

"That With reference to the above cited subject, it is to intimate that a public complaint was received telephonically from the Hon'ble MLA of Jharsuguda on dated:-21.09.2024, concerning the dumping of ash at Siriapali (Jharsuguda T.U. No.4) in the district of Jharsuguda with respect to the grievance petition given by Sri Surati Oram, a resident of Orampada, ward no-15 of Kurebaga village. In this regard, a

field visit was conducted by the official of Regional Office, Jharsuguda, SPCB, Odisha to the alleged site on dated:- 22.09.2024. During the enquiry, she stated that significant fugitive emissions are generated from the low-lying area of Siriapali due to wind action, particularly in adverse weather conditions. In the meantime another complaint has been received by Sri Rabindra Pradhan a member of Vedvyas Seva Sangathan with regards to illegal dumping of ash at Siriapali.

OBSERVATION

From the visit it was observed that, ash dumping activity was under progress and from the records it was found that Consent to Operate obtained for filling of low-lying at Jharsuguda T.0 No.4 in the area Ac 9.00 dec, Ac 6.87 dec & Ac 5.48 dec was valid upto 31.03.2023. It was further observed that ash has been dumped at height of about 15 m, in contrast to the adjacent high-level land which is in violation to the guideline for disposal/utilisation of Fly Ash for reclamation of Low Lying Areas and Abandoned Quarries, 2017 of SPCB, Odisha.

DIRECTIONS

That Therefore, you are hereby directed to immediately stop illegal dumping of ash in the above-mentioned alleged site and submit a compliance report to the Board with photographs otherwise fine shall be imposed for illegal dumping of fly ash as per the guidelines of Fly Ash for reclamation of Low Lying Areas. As per the Fly Ash

Notification, 2021 vide S.0.5481(E), dtd:-31.12.2021 filling of low-lying areas with ash shall be carried out with prior permission of the State Pollution Control Board for filling of the low-lying areas and in accordance with guidelines laid down by the Central Pollution Control Board (CPCB) and State Pollution Control Board (SPCB). Please note that violation of the notification will lead to payment of environmental compensation as laid down in the notification as well as punitive action against your unit."

There is no change in the situation. Inspite of directions, Respondent No. 6 Vedanta Ltd is unauthorizedly dumping fly ash inside the same site in question i.e. siriapali (jharsuguda t.u. no.4) in the district of jharsuguda. Till now, without the Consent Order from OSPCB, it has been unauthorizedly dumping Fly Ash in that Area in more than 60 cres. **(Please Vide The images at ANNEXURE-2)**. This Area is required to be restored and Environmental Compensation on the basis of Polluter Pay Principle should be imposed upon the Respondent No.6.

The Applicant prays hereunder to direct Vedanta Ltd not to dump Fly Ash in the Site in question i.e Siriapali (Jharsuguda T.U. No.4) in the district of Jharsuguda, To direct the OSPCB to assess the Environmental Compensation towards unauthorized dump of fly ash at the site in question i.e Siriapali (Jharsuguda T.U. No.4)., To direct the Vedanta Ltd to pay Environmental Compensation on the basis

of Polluter Pay Principle towards unauthorized dump of fly ash at the site in question i.e Siriapali (Jharsuguda T.U. No.4)

Hence, this Present Original Application preferred.

LIST OF DATES &EVENTS

21/09/2024 That With reference to the above cited subject, it is to intimate that a public complaint was received telephonically from the Hon'ble MLA of Jharsuguda on dated:-21.09.2024, concerning the dumping of ash at Siriapali (Jharsuguda T.U. No.4) in the district of Jharsuguda with respect to the grievance petition given by Sri Surati Oram, a resident of Orampada, ward no-15 of Kurebaga village.

22.09.2024 In this regard, a field visit was conducted by the official of Regional Office, Jharsuguda, SPCB, Odisha to the alleged site on dated:-22.09.2024. During the enquiry, she stated that significant fugitive emissions are generated from the low-lying area of Siriapali due to wind action, particularly in adverse weather conditions. In the meantime another complaint has been received by Sri Rabindra Pradhan a member of Vedvyas Seva Sangathan with regards to illegal dumping of ash at Siriapali.

26.09.2024 OSPCB in its inspection report made the following observation & direction

"From the visit it was observed that, ash dumping activity was under progress and from the records it

was found that Consent to Operate obtained for filling of low-lying at Jharsuguda T.0 No.4 in the area Ac 9.00 dec, Ac 6.87 dec & Ac 5.48 dec was valid upto 31.03.2023. It was further observed that ash has been dumped at height of about 15 m, in contrast to the adjacent high-level land which is in violation to the guideline for disposal/utilisation of Fly Ash for reclamation of Low Lying Areas and Abandoned Quarries, 2017 of SPCB, Odisha.

DIRECTIONS

That Therefore, you are hereby directed to immediately stop illegal dumping of ash in the above-mentioned alleged site and submit a compliance report to the Board with photographs otherwise fine shall be imposed for illegal dumping of fly ash as per the guidelines of Fly Ash for reclamation of Low Lying Areas. As per the Fly Ash Notification, 2021 vide S.0.5481(E), dtd:-31.12.2021 filling of low-lying areas with ash shall be carried out with prior permission of the State Pollution Control Board for filling of the low-lying areas and in accordance with guidelines laid down by the Central Pollution Control Board (CPCB) and State Pollution Control Board (SPCB). Please note that violation of the notification will lead to payment of environmental compensation as laid down in the notification as well as punitive action against your unit."

BEFORE THE NATIONAL GREEN TRIBUNAL

EASTERN ZONE BENCH, KOLKATA

Original Application No._____ of 2025

(Under Section 14, 15 r/w S.18 of the NGT Act, 2010)

IN THE MATTER OF:

Satya Prakash Nayak, aged about 24 Years,
S/o: Adikanda Nayak At/Po:Babar,
Dist: Kendrapara, Pin: 754245 . . . **A P P L I C A N T**

VERSUS

1. State of Odisha,
Through Chief Secretary,
General Administration Department,
Odisha Secretariat, Bhubaneswar,
Pin 751001,
Email:- csori@ori.nic.in Tel;- 0674 2536700

2. Ministry of Environment, Forest
and Climate Change,
Through Member Secretary
Eastern Regional Office, Residential Quarters, A/3,
Chandrsekharpur, Bhubaneswar 751023,
Email:- roez.bsr-mef@nic.in Tel:- 06742301213

3. Odisha State Pollution Control Board (Head Office)
Through Member Secretary
Paribesh Bhawan, A/118, Nilakantha Nagar,Unit – VIII,
Bhubaneswar– 751012, Odisha
Email:- paribesh1@ospcboard.org
Tel:- 0674-3510881

4. Central Pollution Control Board ,Through Regional Director,
REGIONAL DIRECTORATE – KOLKATA
'South end Conclave' Block-502, 5th & 6th Floor, 1582,
Razidanga, Main Road, Kolkata- 700107 Landline

Number: 033-2441 6634 / 4289 / 4677 / 6003, Fax No. 033-2441 8725, Direct: 033 24416632
mkbiswas.cpcb@nic.in

5. Collector and District Magistrate, Jharsuguda,
Office of the Collector and District Magistrate,
Dist: Jharsuguda,
Email:- dm-jharsuguda@nic.in
Tel:- 06645 -270070

6. Vedanta Limited, Jharsuguda represented through its Chief Executive Officer
At- Bhurkahamunda, PO-Kalimandir, Dist- Jharsuguda, Orissa, Pin-768202, E-mail: communication@vedanta.co.in

...RESPONDENTS

I. The address of the Applicant is given above for the service of notices of this Original Application.

II. The addresses of the Respondents are given above for the service of notices of this Application.

BRIEF FACTS

1. That the Petitioner is a public spirited person who presently resides in Jharsuguda, who faced a lot of problem like other communities due to the unscientific unauthorized disposal of fly ash in the name of filling the Low Lying Area in District Jharsuguda. For a permanent solution of this issue, he filed this present Original Application.

2. That the Rerspondent No.6 M/s. Vedanta Ltd. Bhurkhamunda, Jharsuguda has two thermal power plants i.e; Captive Power Plant of capacity 1215 MW and Thermal Power Plant of capacity 2400 MW. Coal consumption of the unit is about 18 Million Tonne per Annum and Ash generation is about 7 Million Tonne per Annum. It has three nos of Ash Pond at Kurebaga, Katikela and Siriapali for disposing high concentration ash slurry. It claims that it uses

fly ash for various purposes like ash pond dyke raising, cement industries, brick units, reclamation of low-lying areas, road and fly over constructions, abandoned quarry filling etc. for achieving 100% utilization as per the Fly ash notification. It also claims that it has been doing reclamation of low-lying area by utilizing fly ash and is obtaining separate Consent to Establish (CTE) and Consent to Operate (CTO) as per the guidelines of SPCB Odisha.

3. That the Present Original Application is filed against Vedanta Ltd to comply the direction of OSPCB against violations with regards to the guideline for disposal/utilisation of Fly Ash for reclamation of Low Lying Areas and Abandoned Quarries, 2017 wrt the unauthorized, unscientific dumping of ash at Siriapali (Jharsuguda T.U. No.4) in the district of Jharsuguda. **(Please Vide ANNEXURE-1).**

4. That Siriapali is a village located in **Kolabira** tehsil of **Jharsuguda** district in **Odisha, India. It** is situated 8km away from sub-district headquarter Kolabira (tehsildar office) and 13km away from district headquarter Jharsuguda. The village spans a total geographical area of 1131 hectares. Due to the unauthorized, unscientific disposal of fly ash by Respondent No. 6 Vedanta Ltd, this area has been completely affected badly basically during rainy season. People face a lot of health problem due to this. **(Please Vide the Map at ANNEXURE-7).**

INSPECTION REPORT OF OSPCB DATED 26/09/2024 WRT VIOLATIONS WITH REGARDS TO THE GUIDELINE FOR DISPOSAL/UTILISATION OF FLY ASH FOR RECLAMATION OF LOW LYING AREAS AND ABANDONED QUARRIES, 2017 WRT THE UNAUTHORIZED, UNSCIENTIFIC DUMPING OF ASH AT SIRIAPALI (JHARSUGUDA T.U. NO.4) IN THE DISTRICT OF JHARSUGUDA. **(Please Vide ANNEXURE-1).** The Inspection Report reads as under:

5. "That With reference to the above cited subject, it is to intimate that a public complaint was received telephonically from the Hon'ble MLA of Jharsuguda on dated:-21.09.2024, concerning the dumping of ash at Siriapali (Jharsuguda T.U. No.4) in the district of Jharsuguda with respect to the grievance petition given by Sri Surati Oram, a resident of Orampada, ward no-15 of Kurebaga village. In this regard, a field visit was conducted by the official of Regional Office, Jharsuguda, SPCB, Odisha to the alleged site on dated:-22.09.2024. During the enquiry, she stated that significant fugitive emissions are generated from the low-lying area of Siriapali due to wind action, particularly in adverse weather conditions. In the meantime another complaint has been received by Sri Rabindra Pradhan a member of Vedvyas Seva Sangathan with regards to illegal dumping of ash at Siriapali.

OBSERVATION

From the visit it was observed that, ash dumping activity was under progress and from the records it was found that

Consent to Operate obtained for filling of low-lying at Jharsuguda T.0 No.4 in the area Ac 9.00 dec, Ac 6.87 dec & Ac 5.48 dec was valid upto 31.03.2023. It was further observed that ash has been dumped at height of about 15 m, in contrast to the adjacent high-level land which is in violation to the guideline for disposal/utilisation of Fly Ash for reclamation of Low Lying Areas and Abandoned Quarries, 2017 of SPCB, Odisha.

DIRECTIONS

That Therefore, you are hereby directed to immediately stop illegal dumping of ash in the above-mentioned alleged site and submit a compliance report to the Board with photographs otherwise fine shall be imposed for illegal dumping of fly ash as per the guidelines of Fly Ash for reclamation of Low Lying Areas. As per the Fly Ash Notification, 2021 vide S.0.5481(E), dtd:-31.12.2021 filling of low-lying areas with ash shall be carried out with prior permission of the State Pollution Control Board for filling of the low-lying areas and in accordance with guidelines laid down by the Central Pollution Control Board (CPCB) and State Pollution Control Board (SPCB). Please note that violation of the notification will lead to payment of environmental compensation as laid down in the notification as well as punitive action against your unit.

6. There is no change in the situation. Inspite of directions, Respondent No. 6 Vedanta Ltd is unauthorizedly dumping fly

ash inside the same site in question i.e. siriapali (jharsuguda t.u. no.4) in the district of jharsuguda. Till now, without the Consent Order from OSPCB, it has been unauthorizedly dumping Fly Ash in that Area in more than 60 Acres. **(Please Vide The images at ANNEXURE-2).** This Area is required to be restored and Environmental Compensation on the basis of Polluter Pay Principle should be imposed upon the Respondent No.6.

7. That The Ministry of Environment and Forests and Climate Change (MoEF&CC) in its Notification, 2021 with subsequent amendments directs that, no agency, person or organization shall within a radius of three hundred kilometres of a coal or lignite based thermal power plant undertake or approve or allow reclamation and compaction of low-lying areas with soil; only ash shall be used for compaction and reclamation. **(Please Vide Annexure-4)**

8. That per the Guidelines for Reclamation of Low-Lying Areas and Abandoned Quarries with Fly Ash 2017. Reclamation of low-lying areas with fly ash in the district of Jharsuguda was regulated & monitored through Consent Administration of the SPCB, Odisha. Where water resources like seasonal nallah or any specific waterbody / surface features exists near to the reclamation site provision of specific safety measures protection bonds is being ensured through consent administration and regulatory mechanisms in case of non compliances to stipulated consent conditions

and guidelines for reclamation of low lying areas and abandoned queries 2017 observed action is being taken against the defaulting units and the application and directions is being issued for taking remedial measures. **(Please Vide Annexure-3)**

GROUNDS

a. Because failure of 100% utilization of fly ash which has admitted adverse impact on public health and to give effect to the 'Precautionary Principle' and the 'Polluter Pays' Principle to be applied under Section 20 the National Green Tribunal Act, 2010. Since non-utilization of 100% fly ash, especially after 31.12.2017, the date fixed in the Notification of the MoEF&CC dated 25.01.2016, invites penal consequences under the provisions of the Environment Protection Act, 1986, liability in this regard is not only of the persons responsible for non-utilization but also for generators of the fly ash. The generator cannot avoid responsibility for due disposal of any residue pollutants on account of its activity. The principle of 'extended producer's liability' is well recognized as part of 'Sustainable Development'. Applying the 'Precautionary Principle', the permission to dump fly ash in the low lying Area has to be subject to all precautionary measures necessary for environment protection. Area of utilization of fly ash

has been extended to 300 kms, which may call for more stringent conditions to avoid damage to the environment.

b. Because The Environmental carrying capacity in Siriapali area must be worked out to devise an environment friendly strategy on pollution control.

a. Because the Vedanta Ltd failed to comply the directions 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 for ensuring effective implementation and monitoring of the Ash Notification No. S.O. 5481 (E) dated 31.12.2021 by the coal or lignite-based thermal power plants (including captive or co-generating stations or both). The OSPCB failed to ensure the compliance of the same by Vedanta Ltd.

c. Because in super-session of the aforesaid notification the Central Government has issued Notification No. S.O. 5481 (E) dated 31.12.2021, which has been subsequently amended on 30.12.2022 and 01.01.2024, to ensure more effective implementation of 100 percent fly ash utilisation/disposal by the coal or lignite-based thermal power plants in various permitted avenues/uses. In this regard, Central Pollution Control Board (CPCB) vide **letter dated 09.11.2022** requested all SPCBs to take necessary action for enforcement of the provisions of the Ash Notification by the coal or lignite based thermal power plants

and monitoring of compliance by the SPCBs. The OSPCB failed to ensure the compliance of the same by Vedanta Ltd.

d. Because as per Para A(1) of the Ash Notification dated 31.12.2021, "Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall be primarily responsible to ensure 100 per cent utilisation of ash (fly ash, and bottom ash) generated by it in an eco-friendly manner.

e. Because as per Para A(2) of the Ash Notification dated 31.12.2021, the ash generated from coal or lignite based thermal power plants shall be utilised only for the eco-friendly purposes prescribed at A(2) (i) to (xi) (it doesn't include "ash dyke raising" or "disposal of ash into the operational ash ponds/dykes"). Further, the utilization avenue mentioned under Para A(2)(xi) of the notification i.e. "Any other eco-friendly purpose as notified from time to time" is not applicable as of now, as any additional avenue has not been notified by the Central Government; and

f. Because as per Para A(4) of the Ash Notification dated 31.12,2021, "Every coal or lignite based thermal power plant shall he responsible to utilise 100 per cent ash (fly ash and bottom ash) generated during that year, however, in no case shall utilisation fall below SO per cent in any year, and the thermal power plant shall achieve average ash utilisation of 100 per cent in a three years cycle (first compliance cycle of four/five year is prescribed for specific

cases with exemption from minimum 80 per cent annual ash utilization target for initial 1/2 years). In this regard, CPCB vide letter dated 20.02.2024 circulated the status of compliance of the Ash Notification dated 31.12.2021 by the independent thermal power plants across the country during the first compliance cycle i.e. FY 2022-23 to the concerned SPCBs requesting to take appropriate action in the and disposal of ash is done in an environmentally sound manner and that all precautions to prevent air and water pollution are taken and status in this regard shall be reported to the concerned State Pollution Control Board (SPCB) . The OSPCB failed to ensure the compliance of the same by Vedanta Ltd.

g. Because as per Paras A(9) and E(2) of the Ash Notification dated 31.12.2021, all coal or lignite-based thermal power plants shall upload monthly information regarding ash generation and **utilisation by 5th** of the next month and ash pond details on yearly basis on the web portal developed by the CPCB for the benefit of actual user(s). The OSPCB failed to ensure the compliance of the same by Vedanta Ltd.

h. Because CPCB **vide letters dated 18.07.2023, 02.08.2023 and 25.08.2023** requested all concerned SPCBs to obtain the SPCB's login credentials for **the Ash Portal and** to issue necessary directions/instructions to all Captive Power Plants (CPPs) in the State to ensure immediate registration and regular

uploading of ash data on the **Ash Portal,** along with ensuring regular uploading of ash data on the **Ash Portal** by all coal or lignite-based thermal power plants (including captive or co-generating plants or both) in **the State;** The OSPCB failed to ensure the compliance of the same by Vedanta Ltd.

i. Because CPCB issued **directions under Section 18(1)(b) of the** Water (Prevention and Control of Pollution) Act, [974, and the Air (Prevention and Control of Pollution) Act, 1981, to all concerned SPCBs vide **dated 13.09.2023** *a)* To issue necessary directions/instructions to coal or lignite-based CPPs (including co-generating plants) in the State to ensure registration on the Ash Portal developed by CPCB (https://coalash.cpcb.gov.in/) immediately and uploading monthly information regarding ash generation and utilisation by 5th of the next month, and ash pond details on yearly basis, and b) To ensure regular uploading of ash data on the Ash Portal by all coal or lignite-based thermal power plants (including captive or co-generating stations or both) in the State;

j. Because as per Para B(6) of the Ash Notification dated 31.12.2021, "Filling of low lying areas with ash shall be carried out with prior permission of the State Pollution Control Board or Pollution Control Committee for approved projects, and in accordance with guidelines laid down by

Central Pollution Control Board (CPCB) and the State Pollution Control Board or Pollution Control Committee (PCC) shall publish approved sites, location, area and permitted quantity annually on its website". In this regard, CPCB has laid down **"Guidelines for disposal/utilisation of Fly Ash for reclamation of Low Lying Areas and in stowing of Abandoned mines/Quarries, 2019"** which were issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India vide **D.M. dated 28.08.2019;** The OSPCB failed to ensure the compliance of the same by Vedanta Ltd.

k. Because as per Para C(4) of the Ash Notification dated 31.12.2021, "It shall be the responsibility of the transporters or vehicle owner to deliver ash to authorised purchaser or user agency and if it is not complied, then an environmental compensation of Rs. 1500 per ton on such quantity as mis-delivered to unauthorised users or non-delivered to authorised users will be imposed besides prosecution of such non-compliant transporters by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC)" The Respondent No. 6 failed to comply the Condition.

l. Because the OSPCB failed to ensure the compliance of following directions by the present Project Proponent i.e. Vedanta Ltd.

a) "To ensure effective enforcement and monitoring of compliance of the various provisions of the Ash Notification by all coal or lignite-based thermal power plants (including captive or co-generating stations or both) in the State on quarterly basis,

b) To ensure immediate registration and regular uploading of monthly ash generation and utilisation data by 5th of the next month, and ash pond details on yearly basis ont the Ash Portal by all coal or lignite-based thermal power plants (including captive or co-generating stations or both) in the State,

c) To ensure that the ash generated from coal or lignite based thermal power plants (including captive or co-generating stations or both) shall be utilised only for the ecofriendly purposes prescribed at A(2) (i) to (x) of the Ash Notification,

d) To ensure that the loading, unloading, transport, storage and disposal of ash is done in an environmentally sound manner and that all precautions to prevent air and water pollution are taken by all coal or lignite-based thermal power plants (including captive or co-generating stations or both) in the State.

e. To ensure that the filling of low lying areas with ash shall be carried out only with prior permission of the SPCB and for approved projects complying with the CPCB's guidelines and the SPCB shall publish approved sites, location, area and permitted quantity annually on its website,

f. To ensure compliance of the guidelines dated 15.03.2024 issued by the Ministry of Power, Government of India regarding reserving certain percentage of ash for supply to all micro and small enterprises engaged in ash-based product manufacturing namely, bricks, blocks, tiles, sintered or cold bonded ash aggregates, fibre cement sheets, pipes, boards, panels for sale at concessional price or through limited auction,

g. To ensure submission of the annual implementation report and annual compliance audit report by 3O" April and 30th November every year, respectively, by the coal or lignite based thermal power plants in the State to the concerned authorities and take appropriate action against the non-compliant thermal power plants as per the provisions of the Ash Notification dated 31.12.2021.

9. Because the Present Thermal Power Plant failed to dispose only ash for filling the low lying area. This present Thermal Power Plant also failed to provide garland drain around the present site in question at Siriapali.

10. The environmental quality monitoring of air, surface and ground water shall be carried out every month at the boundary of the disposal area for the following parameters and the monitoring report shall be submitted to the Board every quarter. a. Ambient Air- PM10, PM 2.5 b. Surface runoff - SS, F, Cd, As 24 14. Water quality monitoring shall be done from start of the work till six months beyond completion

of work. Air monitoring shall be done till completion of the reclamation work. The area shall be properly fenced to prevent any entry of cattle / Livestock inside the quarry area. After complete reclaiming the site, signboard shall be put up showing that the land was reclaimed by filling low lying area. Attempt shall be made to avoid any kind of public nuisance due to proposed activities. On completion of the reclamation, the TPP shall submit a certificate to the effect that all the above stipulated conditions have been duly complied. Board reserves the right to revoke this permission if conditions stipulated are not implemented to the satisfaction of the Board. Because OSPCB fails to ensure the Compliance of this Condition by Respondent No.6, Vedanta Ltd."

Limitation

The Present Original Application is filed for restoration of the site in question i.e. dumping of ash at Siriapali (Jharsuguda T.U. No.4) in the district of Jharsuguda and for assessment & imposition of Environmental Compensation for Violating the guideline for unscientific disposal/utilisation of Fly Ash for reclamation of Low Lying Areas and Abandoned Quarries. The present Original Application is within period of Limitation as for this Period of Limitation is 5 Years.

PRAYER

In the facts and circumstances stated hereunder, Hon'ble Tribunal may kindly be requested

a. To direct Vedanta Ltd not to dump Fly Ash in the Site in question i.e Siriapali (Jharsuguda T.U. No.4) in the district of Jharsuguda.

b. To direct the OSPCB to assess the Environmental Compensation towards unauthorized dump of fly ash at the site in question i.e Siriapali (Jharsuguda T.U. No.4).

c. To direct the Vedanta Ltd to pay Environmental Compensation on the basis of Polluter Pay Principle towards unauthorized dump of fly ash at the site in question i.e Siriapali (Jharsuguda T.U. No.4)

d. To direct the Vedanta Ltd to restore the site in question by removing all Fly Ash, dumped unauthorizedly by Vedanta Ltd and to ensure 100% Fly Ash Utilisation.

e. To constitute a committee comprising of MOEF&CC, OSPCB, CPCB to conduct Environmental carrying capacity in Siriapali area to devise an environment friendly strategy on pollution control due to the unauthorized use of Fly Ash.

f. And Pass such and further order, as this Hon'ble Tribunal may deem think fit and proper.

Biswaranjan Paramguru

BISWARANJAN PARAMGURU

ADVOCATE

Dated 23/07/2025

BEFORE THE NATIONAL GREEN TRIBUNAL, EASTERN ZONE BENCH AT KOLKATA

O.A. N0. _____ OF 2025

IN THE MATTER OF:

Satya Prakash Nayak ....APPLICANT

Vrs

Union of India & Others ....RESPONDENTS

AFFIDAVIT

BEFORE U.P. SINGH, NOTARY

I, Satya Prakash Nayak, aged about 24 Years, S/o. Adikanda Nayak At/Po:Babar, Dist: Kendrapara, Pin: 754245 do hereby solemnly affirm and declare as under:

1. That I am the Applicant in this above-named Original Application and I am fully conversant with the facts and circumstances of the Original Application.

2. That, I state that, I have read and understood the contents of the Original Application which has been drafted under my instruction

NOTARY U. P. SINGH ROURKELA Regn. On 2 of 2006 Exp. on 03.07.2026 GOVT. OF ODISHA (INDIA)

U. P. Singh, Notary Rourkela, Govt. of Odisha Regn No ON-2 of 2006

and I state that the contents of the same are true to the best of my knowledge and belief, and have been read over and explained to me in my vernacular language.

NOTARY U. P. SINGH ROURKELA Regd. On 2 of 2008 Exp. on 03.07.2028 GOVT. OF ODISHA (INDIA)

Deponent (S) being identified by Sri/Smt./Ku.....
Advocate Solemnly Affirmed and Declared of truthfulness of the Contents

U. P. Singh, Notary
Rourkela Govt. of Odisha
Regd. No. ON-2 of 2008

Satya Prakash Nayak
DEPONENT

ARJUNJAY SAHAY MEMORIAL ... SERVICE R.B.A Rs. 390/-

ROURKELA BAR ASSOCIATION A.S.M.M Scheme ROURKELA

VERIFICATION

Verified on 21/07/2025 that the contents of the above present affidavit are true and correct to my knowledge and belief. No part of it is false and nothing material has been concealed there from.

21/7/25

Satya Prakash Nayak
DEPONENT

ANNEXURE- 1

Tel No.06645 – 273284/273294
E-mail: rospcb.jharsuguda@ospcboard.org
rospcbjharsuguda@gmail.com

ODISHA

REGIONAL OFFICE
STATE POLLUTION CONTROL BOARD, ODISHA

(DEPARTMENT OF FOREST & ENVIRONMENT, GOVT. OF ODISHA)
Plot No. 370/5971, At –Babubagicha (Cox Colony), St. Marry Hospital Road,
Post – Industrial Estate, Jharsuguda- 768 203

"By Email"

No. 1401 /IND-VII-Misc-51 Date: 26/09/2024/

From

Er. H.K. Nayak,
Regional Officer

To,

The Chief Executive Officer,
M/s Vedanta Ltd,
At-Burkhamunda,
Dist-Jharsuguda.

Sub: **Violation with regards to the guideline for disposal/utilisation of Fly Ash for reclamation of Low Lying Areas and Abandoned Quarries, 2017-Reg.**

Sir,

With reference to the above cited subject, it is to intimate that a public complaint was received telephonically from the Hon'ble MLA of Jharsuguda on dated:-21.09.2024, concerning the dumping of ash at Siriapali (Jharsuguda T.U. No.4) in the district of Jharsuguda with respect to the grievance petition given by Sri Surati Oram, a resident of Orampada, ward no-15 of Kurebaga village. In this regard, a field visit was conducted by the official of Regional Office, Jharsuguda, SPCB, Odisha to the alleged site on dated:-22.09.2024. During the enquiry, she stated that significant fugitive emissions are generated from the low-lying area of Siriapali due to wind action, particularly in adverse weather conditions. In the meantime another complaint has been received by Sri Rabindra Pradhan a member of Vedvyas Seva Sangathan with regards to illegal dumping of ash at Siriapali (copy of complaint enclosed).

From the visit it was observed that, ash dumping activity was under progress and from the records it was found that Consent to Operate obtained for filling of low lying at Jharsuguda T.U No.4 in the area Ac 9.00 dec, Ac 6.87 dec & Ac 5.48 dec was valid upto 31.03.2023. It was further observed that ash has been dumped at height of about 15 m, in contrast to the adjacent high-level land which is in violation to the guideline for disposal/utilisation of Fly Ash for reclamation of Low Lying Areas and Abandoned Quarries, 2017 of SPCB, Odisha.

Therefore, you are hereby directed to immediately stop illegal dumping of ash in the above-mentioned alleged site and submit a compliance report to the Board with photographs otherwise fine shall be imposed for illegal dumping of fly ash as per the guidelines of Fly Ash for reclamation of Low Lying Areas.

As per the Fly Ash Notification, 2021 vide S.O.5481(E), dtd.-31.12.2021 filling of low-lying areas with ash shall be carried out with prior permission of the State Pollution Control Board for filling of the low-lying areas and in accordance with guidelines laid down by the Central Pollution Control Board (CPCB) and State Pollution Control Board (SPCB). Please note that violation of the notification will lead to payment of environmental compensation as laid down in the notification as well as punitive action against your unit.

Yours faithfully,

Regional Officer

Memo No. 1402 /Dt. 26/09/2024

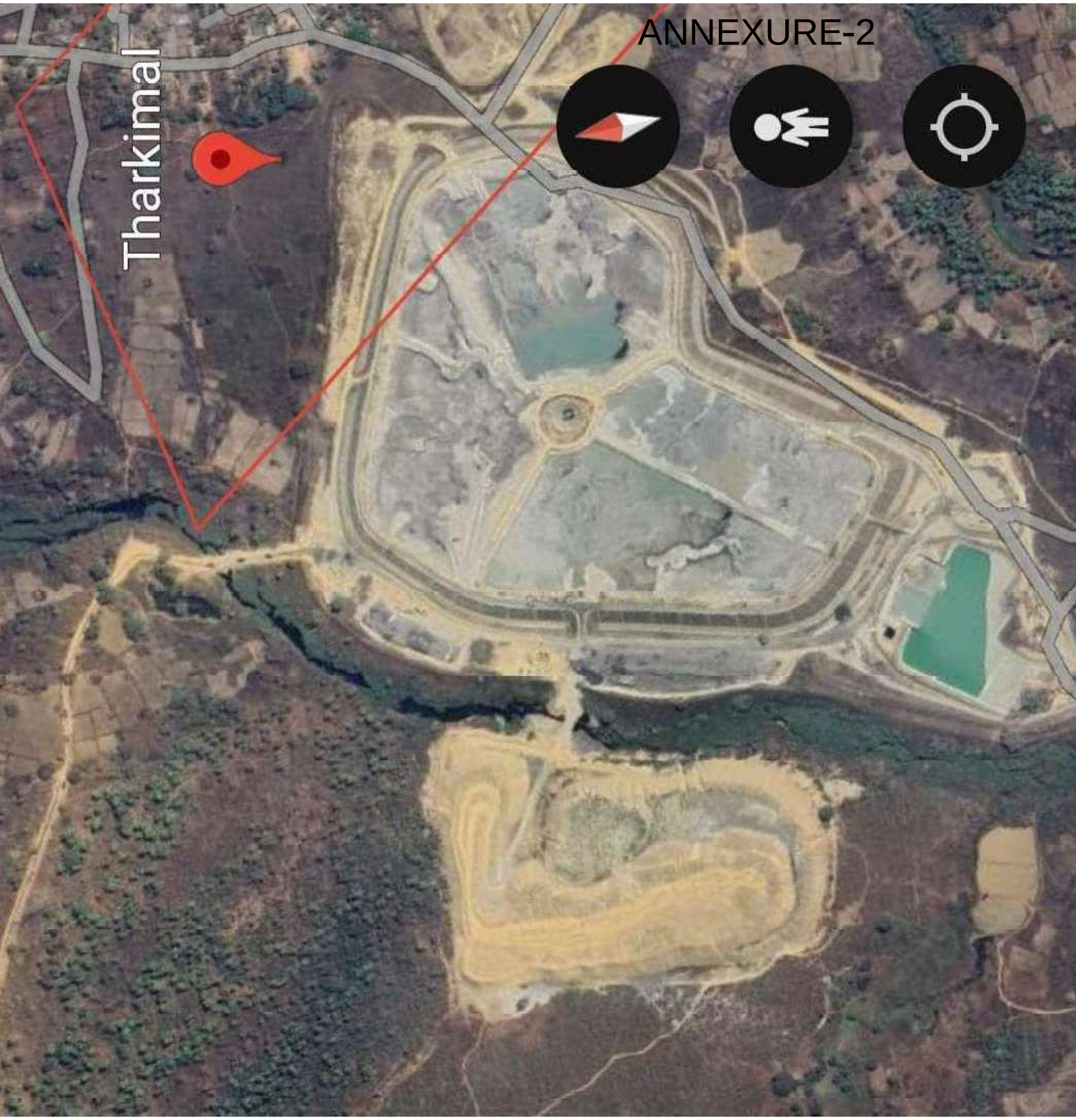
Copy forwarded to the Member Secretary, State Pollution Control Board, Odisha Bhubaneswar for kind information and necessary action.

Regional Officer

Memo No. 1403 /Dt. 26/09/2024

Copy forwarded to the Chief Environmental Engineer(C), State Pollution Control Board, Odisha Bhubaneswar for kind information and necessary action. M/s Vedanta Ltd may be directed not to dump ash illegally here and there causing environment nuisance in the district of Jharsuguda.

Regional Officer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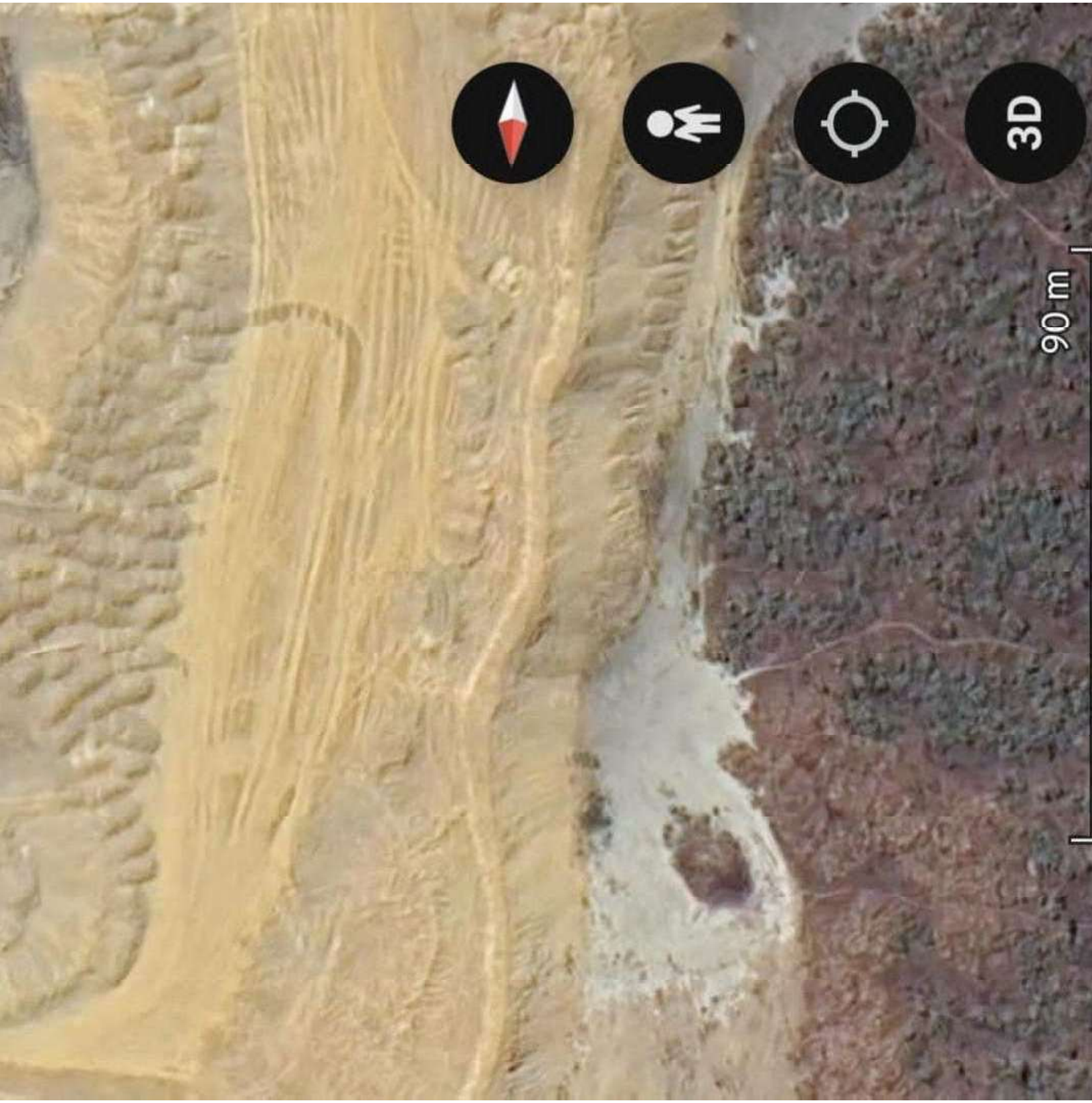
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ANNEXURE-3

EPABX : 2561909/2562847
Tel : 2562822/2560955
E-mail:paribesh1@ospcboard.org
Website: www.ospcboard.org

STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST & ENVIRONMENT, GOVERNMENT OF ODISHA]
Paribesh Bhawan, A/118, Nilakantha Nagar, Unit – VIII
Bhubaneswar – 751 012, INDIA

No. 11047 / IND-IV-PCP-FARC-120 Date: 21.08.2017 /

RESOLUTION

Reclamation of low lying area and abandoned quarries with Ash generated from Thermal Power Plants is an acceptable method of utilization under Fly Ash notification of Ministry of Environment & Forests & CC, Govt. of India. The SPC Board, Odisha has been following the Manual on Technology and Methodology prepared by Centre for Fly Ash Research and Management (C-FARM) in association with State Pollution Control Board, Odisha since 27.09.10 for the purpose.

Over the period, utilization of Fly Ash in various sectors has gained momentum. Reclamation of low lying area and quarries is a major area of utilization. It is, therefore, felt imperative to put in place a set of new guidelines to ease the procedure, standardize and simplify processing of the applications as well as introducing a monitoring protocol for minimizing adverse impact on the environment.

After due deliberation, a revised Guideline for reclamation of low lying areas and abandoned quarries with ash, prepared by Fly Ash Resource Centre (FARC), SPC Board is brought out. Copy of the revised Guidelinesis enclosed for reference. Here after, the revised Guideline shall be followed by all concern.

This resolution supersedes the earlier resolution no. 15934 dated 27.09.10 and will come into force with immediate effect.

By order of the Chairman,

Encl: As above

18/8/17

Member Secretary

Contd..

Memo No. 11048 / Dt. 21.08.2017 /

Copy forwarded to the Additional Chief Secretary., Forest & Env. Deptt., Govt. of Odisha, Bhubaneswar for information and necessary action.

Encl: As above

Member Secretary

Memo No. 11049 / Dt. 21.08.2017 /

Copy forwarded to the Principal Secretary. Industries Department. Govt. of Odisha, Bhubaneswar for kind information.

Encl: As above

Member Secretary

Memo No. 11050 / Dt. 21.08.2017 /

Copy forwarded to the Dirctor (Env.)-cum-Spl. Secretary to Govt., Forest and Env. Deptt., Govt. of Odisha, Bhubaneswar for favour of information.

Encl: As above

Member Secretary

Memo No. 11051 / Dt. 21.08.2017 /

Copy forwarded to All District Magistrates & Collectors for favour of information and necessary action.

Encl: As above

Member Secretary

Memo No. 11052 / Dt. 21.08.2017 /

Copy forwarded to the Sr. Env. Engineer (N) / Sr. Env. Engineer (C) / Sr. Env. Scientist (I.) / All Regional Officers / A.O. / All Env. Engineers / All Env. Scientists / Sr. Law Officer / All AEEs / All AESs, SPC Board, Bhubaneswar for information and necessary action.

Encl: As above

Member Secretary

Memo No. 11053 / Dt. 21.08.2017 /

Copy forwarded to the System Administrator, State Pollution Control Board, Odisha with a request to publish the Resolution Guidelines for Reclamation of low lying areas and Abandoned Quarries with Ash in the official website of the Board immediately.

SR.ENV.SCIENTIST, L-I (PCP)

Guidelines for Reclamation of Low Lying Areas and Abandoned Quarries with Ash

August, 2017

FLY ASH RESOURCE CENTRE (FARC)

STATE POLLUTION CONTROL BOARD, ODISHA
Paribesh Bhawan, A/118, Nilakantha Nagar, Unit - VIII
Bhubaneswar - 751 012
E-mail-farc.spcb@rediffmail.com

PREFACE

Huge quantity of ash is generated from the Boilers of Coal fired Thermal Power Plants. At present Odisha is generating about 32.5 Million Tons (MT) of Ash per annum. This is likely to increase further if the Thermal Power Plants in pipeline are established in the State. The management of ash is one of the largest environmental challenges for the State. Utilisation of the ash generated in various sectors such as construction material (bricks, blocks, tile, cement etc.), road construction, reclamation of low laying area and abandoned quarries, agriculture, mine void filling etc. has been encouraged to increase the percentage of use. In order to facilitate ash utilisation in the State, Fly Ash Resource Centre (FARC) has been set up in the State Pollution Control Board, Odisha. Reclamation of low lying area and abandoned quarries are potential area for bulk utilization of ash. Various studies have been undertaken by the Thermal Power Plants which reveal its safe to use in the activities as stated above. The present guidelines have been prepared to ease the procedure for reclamation of low lying area and abandoned quarries with ash. I place on record my appreciation for the effort made by Centre for Fly Ash Research & Management (C-FARM), New Delhi, in providing the technology and methodology for preparing the guidelines for reclamation of low lying area and abandoned quarries with ash. I also appreciate the efforts of the committee members headed by Dr. D. K. Behera, SES, in preparing the said guidelines. These guidelines will help all the stake holders i.e. Thermal Power Plants / individuals / different users in smooth supply and safe use of ash for reclamation of low lying areas and abandoned quarries.

Member Secretary

-: CONTRIBUTORS :-

Overview	:	Shri Debidutta Biswal, IFS, Member Secretary
Coordination and Supervision	:	Dr. D. K. Behera, Sr. Env. Scientist
Report Preparation	:	Er. S. K. Sahu, Env. Engineer Shri S. K. Mishra, Consultant, FARC Shri B. Mallick, Consultant, FARC
Review of Report	:	Dr. P.K. Prusty, Sr. Env. Scientist Dr. A.K. Swar, Sr. Env. Engineer Er. R.N. Prusty, Sr. Env. Engineer Er. B.K. Behera Sr. Env. Engineer
Computer Type-Setting	:	Shri Prakash Chandra Jena, DEO Shri Pramod Kumar Behera, DEO

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Guidelines for Reclamation of Low Lying Areas and Abandoned Quarries with Ash Generated from Coal Fired Thermal Power Plants

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1.0 Introduction:

Management of huge quantity of ash (fly ash, bottom ash and pond ash) generated from coal fired Thermal Power Plants (TPPs) is a serious environmental concern. Ash generation from coal or lignite based thermal power plants in our country, has increased from 40 Million tonne per year in 1993-94, to more than 200 Million tonne per year at present and is projected to increase to 275 Million Tons / year by end of this decade. In Odisha, around 32.50 Million tonne of ash was generated in the year 2016-17 from 40 thermal power plants of more than 10 MW capacity, out of which around 22 Million Tonne is being utilised in different sectors.

The ash generated in a thermal power plant has various forms such as dry ash, bottom ash, pond ash and mound ash that are required to be managed in such a manner that, it does not affect the environment. Gainful utilisation of ash is recognised as an attractive ash management option and therefore, MoEF&CC has also issued a notification to address this specific-subject.

SPCB's experience, in the past years, has shown that, a substantial fraction of ash utilisation has taken place for reclamation of low-lying area. Reclamation of low-lying area has many advantages such as, conservation of top soil, prevention of water logging besides utilisation of ash.

1.1 Need of the Guideline :

It has become necessary to protect the environment, conserve top soil, prevent dumping and regulate indiscriminate disposal of ash generated from coal-based thermal power plants. Ever since the Ministry of Environment Forest and Climate Change (MoEF&CC) emphasised on utilisation of ash, the SPC Board, Odisha realised the gravity of the issue and effective steps are being taken to ensure increase of Ash utilisation in

all possible sectors. Considering the huge quantity of ash generation in the State, continued efforts are being made for its gainful utilisation in accordance with the provisions of Fly ash Notification 1999, 2003, 2009 and 2016. One of the potential areas for gainful utilisation of ash has been recognised to be reclamation of low lying area. For reclaiming low lying area and abandoned quarries with ash, a guideline was formulated by Odisha State Pollution Control Board in July' 2010 in association with C-FARM, New Delhi. Over the years, several technical and administrative issues have been encountered while permitting reclamation of low lying areas with ash and very often those are observed as hindrance in the process. It was, therefore, felt necessary to review the Guideline and make it consistent.

A committee of SeniorTechnical Officers of the State Pollution Control Board, Odisha was constituted to review the existing guideline for necessary modification. The committee reviewed the contents relating to technical and environmental aspects and suggestions of the Committee have been incorporated in this guideline.

1.2 Objective of the Guideline :

This Guideline has been prepared with an objective to guide, facilitate and ensure filling and reclaiming the low lying area with ash in an environmentally sound manner. These guidelines have been prepared keeping in view the provisions of Fly Ash Notification and use of Ash as a substitute of soil for Geotechnical Applications.

1.3 Legal Provision :

The Ministry of Environment and Forests and Climate Change (MoEF&CC) in its Notification No. S.O. 763 (E) dated 14th September 1999, last amended on 25th January, 2016 mandates the following on reclamation ;

i. No agency, person or organization shall within a radius of three hundred kilometres of a coal or lignite based thermal power plant undertake or approve or allow reclamation and compaction of low-lying areas with soil; only ash shall be used for compaction and reclamation.

ii. Soil required for top or side covers of embankments of roads or flyovers shall be excavated from the embankment site and if it is not possible to do so, only the minimum quantity of soil required for the purpose shall be excavated from soil borrow area. In either case, the topsoil should be kept or stored separately. Voids created at soil borrow area shall be filled up with fly ash with proper compaction and covered with topsoil kept separately as above and this would be done as an integral part of embankment project.

iii. No person or agency shall within fifty kilometers (by road) from coal or lignite based Thermal Power Plants, undertake or approve stowing of mine without using at least 25 % of fly ash on weight to weight basis, of the total stowing materials used and this shall be done under the guidance of the Director General of Mines Safety (DGMS).

iv. No person or agency shall within fifty kilometers (by road) from coal or lignite based Thermal Power Plants, undertake or approve without using at least 25 % of ash on volume to volume basis of the total materials used for external dump of overburden and same percentage in upper benches of back filling of opencast mines and this shall be done under the guidance of the Director General of Mines Safety (DGMS);

v. All agencies undertaking construction of roads of flyover bridges and reclamation and compaction of low lying areas, including Department of Road Transport and Highways (DORTH), National Highways Authority of India (NHAI), Central Public Works Department (CPWD), State Public Works Department and other State Government Agencies, shall within a period of four months from the publication of this Notification " make provisions in their tender documents, schedules of approved materials and rates as well as technical documents for implementation of this Notification, including those relating to soil borrow area or pit ".

2.0 Properties of Fly Ash :

Dry Fly Ash (DFA), collected in air pollution control equipment and the Bottom Ash (BA) are fine particles with particle size ranging from few microns to about 150 micron. The percentage of +100 micron size

particles is generally around 5 and that of particles finer than 25 micron is around 15. Bottom Ash generally consists of particles of 200 to 2000 micron size. A small proportion of +2000 micron and some percentage of -200 micron size particles are also present. Bottom Ash (BA) is a granular material like coarse sand. Coarser material with good particle size distribution is generally the best material for geotechnical applications. However Dry Fly Ash is also a good material for this purpose as it gives very good compaction by virtue of excellent packaging due to good range of particle size distribution. The compaction is to be done maintaining optimum moisture content and procedure as detailed in this document.

The comparative physical and Geotechnical properties of ash and soil are given in **Table 1** and Chemical properties are given in **Table 2.** Fly ash is easier to consolidate and settles much faster without any subsequent settlement. It is lighter in weight and thus can be conveniently used on weak soils. It has higher angle of internal friction and thus is more stable even with steeper slopes.

Table-1
Physical and Geotechnical Properties of Fly Ash and Soil

Properties	Fly Ash	Natural Soil
Bulk Density (gm/cc)	0.9 – 1.5	1.3 – 1.8
Specific Gravity	1.6 – 2.6	2.50 – 2.80
Maximum Dry Density (gm/cc)	0.9 – 1.6	1.6 – 2.0
Optimum Moisture Content (per cent)	18.0 – 40.0	12 – 22
Cohesion (kN/m^2)	Negligible	0 – 50
Angle of Internal Friction (degrees)	28 – 42	26 – 36
Coefficient of Consolidation C_v (cm^2/sec)	1.80 x 10^{-5}-2.00x10^{-3}	10^{-5} – 10^{-3}
Compression index C_c	0.05 – 0.40	0.05 – 1.0
Permeability (cm/sec)	8x10^{-6} – 7x10^{-4}	1 – 10^{-7}
Coefficient of Uniformity	3.1 – 10.7	1 – 20
Plasticity	Non – Plastic	Low to High
Shrinkage Limit	Very Low	Low to High
Grain size	Silty / Sandy	Varies according to type of soil
Clay content	Negligible	Depend on type of soil
Free Swell Index	Very Low	Variable
Classification	Sandy silt to silty sand	Variable

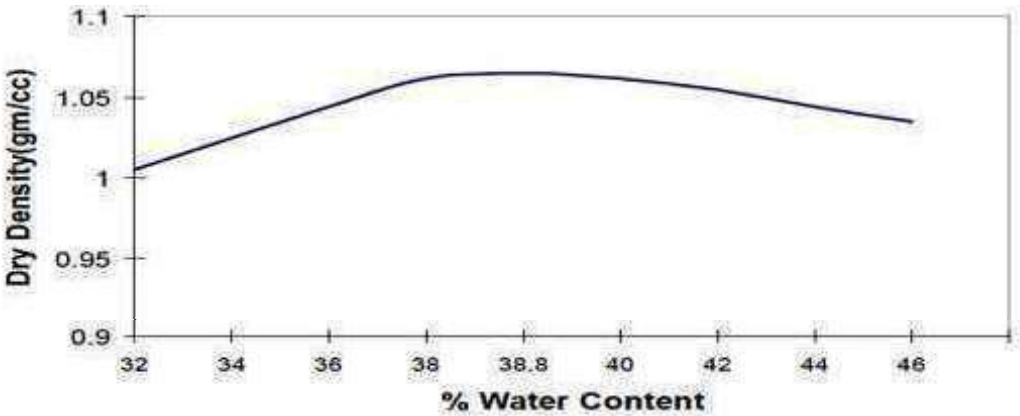
Table-2

Chemical Properties of Fly Ash and Soil

Constituents (in %)	Fly Ash	Natural Soil
Sio2	35 – 70	40 – 65
Al_2O_3	10 – 35	10 – 30
TiO_2	0.2 – 2.0	0.2 – 2.0
Fe_2O_3	2.0 – 7.0	1 – 14
MnO	0.1 – 0.5	0 – 0.1
MgO	0.01 – 4.5	0.2 – 3.0
CaO	0.2 – 20	0 – 7.0
K_2O	0.05 – 0.9	0.2 – 0.4
Na_2O	0.05 – 2.0	0.2 – 2.5
LOI	0.1 – 8.0	5 - 15

2.1 Fly Ash a Substitute of Soil for Geotechnical Applications :

Fly Ash, by virtue of its physical and geotechnical properties, is a better or at least a competing material to soil for geotechnical applications. Proctor compaction test curve for ash is flatter than that for soil **(Figure 1 & 2).** Thus, desired compaction can be achieved on ash over a wide range of moisture. Further, fly ash being a free draining material, work can be restarted much faster than on soils in rainy season. In case, fly ash compaction is complete in the initial stages itself, subsequent settlement is practically nil.



Typical Proctor Test on Pond Ash

Figure-1

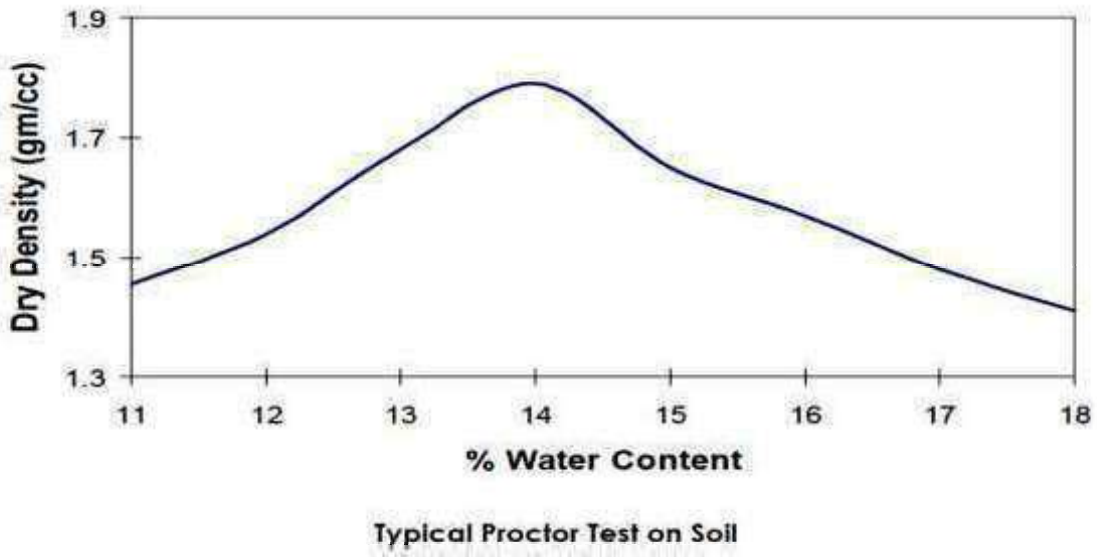


Figure-2

3.0 Transportation and Handling of Ash :

Transportation of ash to the site of low lying area or abandoned quarry for reclamation is to be done in an environmentally friendly manner without polluting the environment en-route. The trucks, trolleys and dumpers carrying the ash should be closed or be properly covered with tarpaulin which is tied properly and the carriers shall be filled with ash only to the extent that it does not spill over en-route. Alternatively, bulkers can be used for transportation of ash. The ash before transportation shall be adequately moistened with water, so that a minimum of 15% moisture is maintained on arrival at the destination. At the worksite, ash is to be managed in such a manner that it does not get airborne even in dry season and should not get carried away with runoff water during rain. It should be placed / stockpiled in well- drained area during rainy season and be kept wet or covered with tarpaulin or two inch layer of soil during summer season, as may be practicable.

The following precautionary measures be adhered to :

(i) In case of any accidental spillage en-route in transporting ash, the agency shall ensure that the spilled ash is lifted immediately and transported to the disposal / usage site.

(ii) All the carriers shall be fitted with speed governor so that in no case the speed exceeds 40 km/hr.

(iii) Transportation of ash during day time in residential areas is to be minimised.

3.1 Excavation and Supply of Ash from Ash Pond:

Before supply, the existing vegetation in Ash pond / Mound shall be cleared. The pond ash shall be excavated in layers of maximum 4-5 meters and not by scrapping. The excavation of ash should be carried out in a safe manner so that the safety and stability of the ash pond is ensured. The area from which, ash is to be excavated, shall be properly conditioned by water sprinkling. The agency shall develop proper haulage road and provide adequate water sprinkling facility to avoid any fugitive dust emission during loading, unloading, transportation and excavation activities.

3.2 Management of Ash Pond Area/ Silo Area

The ash pond area from where the ash is excavated, shall be kept moist to avoid air pollution. The silo area, (if the ash is taken from silo) to be maintained in dust free condition with facilities of humidifiers and mechanised system for dispensing ash with minimum 15 percent moisture content. Mechanised road sweepers would be preferred to sweep the spilled ash form the silo area.

4.0 Execution of Reclamation work :

4.1 Pre Disposal :

(i) Stripping and grading:

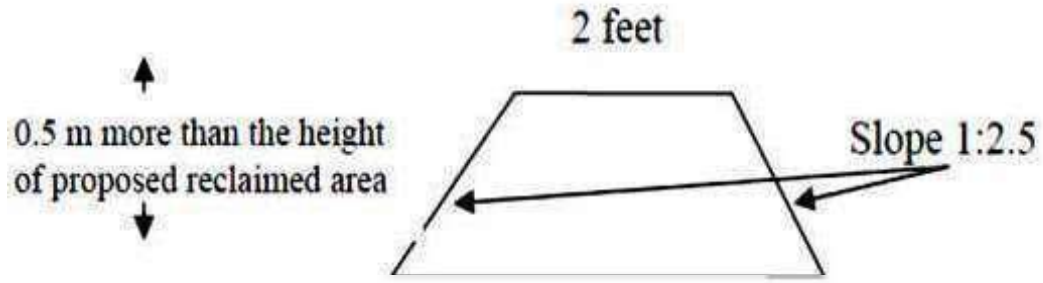
The site selected for reclamation of land shall be suitably stripped and the area should be properly levelled.

(ii) Water logged area:

If the entire area or a part of it, for reclamation is water logged or slushy, dewatering may be done first, followed by removal of slushy layer of soil and/ or filling and compacting the area with gravel and boulders.

(iii) Protection of pond or water body adjoining or within the working site:

If any pond or water body exists within or adjoining the low lying area / quarry then an earthen embankment of the cross-section as given in **Figure 3** be constructed around the pond or water body to protect it from spilling of ash or ingress of surface runoff into it.



Cross-section of water body protection embankment

Figure-3

The soil used for the embankment should neither be granular nor black cotton soil. It should be of good quality for geo-technical application. Soil should be compacted to 95% proctor by Vibratory Roller of 15 T minimum capacity, in the layers of 25-30 cm and the optimum moisture content determined before execution of work. After attaining the desired height, the disposal area should be thoroughly compacted, graded followed by soil cover at least 15 cm thickness for proper reclamation of the land by grass turfing or appropriate plantation.

4.2 Spreading and Compaction (Disposal of Ash)

Ash should be spread uniformly by means of earth moving equipment like dozers, tractors, spreader etc. having capacity commensurate to the size/ configuration of work site. Uniform spreading be done in layers of 250-300 mm thickness in the entire area or in strips of about 10-15 meters width whichever is less **(Figure 4).** The length of each strip may also be restricted up to maximum 150 meters. The compaction be done with vibratory rollers of at least 15 tonne capacity and to 95 % proctor.

Optimum moisture content maybe maintained during compaction. The moisture content may vary in the Ash and especially during dry season. Addition of water with sprinklers may be required to adjust the moisture content to achieve best results.

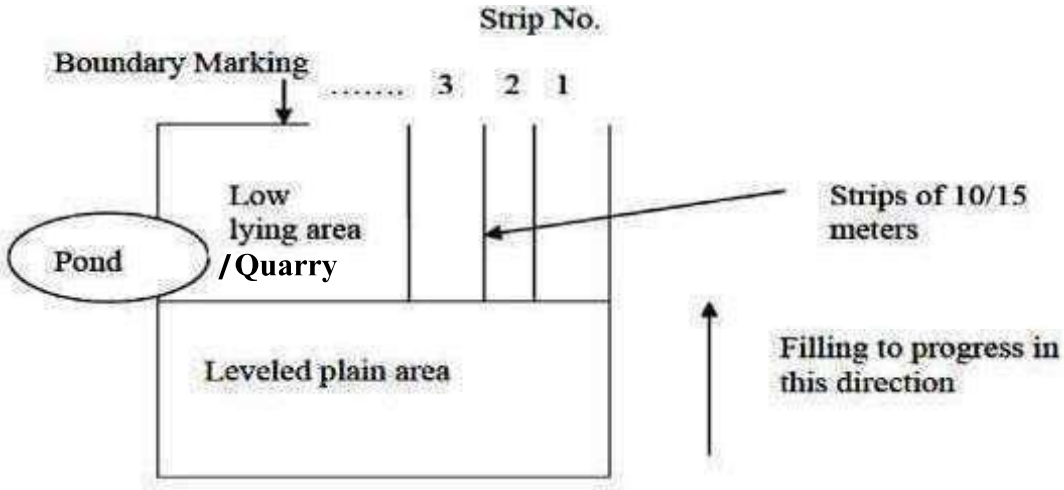


Figure-4

Spreading of Ash in Low Lying Area

Precaution :

The following precautionary measures are required for safe working during the reclamation activity :

(i) Appropriate measures should be taken to prevent entry of cattle/livestock inside the disposal area during execution period.

(ii) Care shall be taken to avoid any kind of nuisance / inconvenience to the public due to such dumping / filling activities.

(iii) Water sprinkling for dust suppression during handling of Ash shall be ensured to prevent it from being air borne.

(iv) After complete reclamation of the site, sign board shall be put up showing that the low lying land / abandoned quarry was reclaimed with ash. This will propagate the message of land reclamation by use of ash.

4.3 Schematic arrangement of reclamation of low lying area / abandoned quarries

For reclamation low lying area / abandoned quarries with ash, the following schematic arrangement is to be followed :

i. Spreading and compaction to move from strip (1) to (2) to (3) and so on and from levelled land to the boundary marking as indicated by the arrow in **Figure-4.**

ii. Two or three layers be laid on strip (1) and then one or two layers can be laid on strip no (2) and progressively subsequent strips can be taken up while raising the height of preceding strips. Overlap of 2m be maintained between two adjacent stripsin different layers as shown in **Figure- 5**

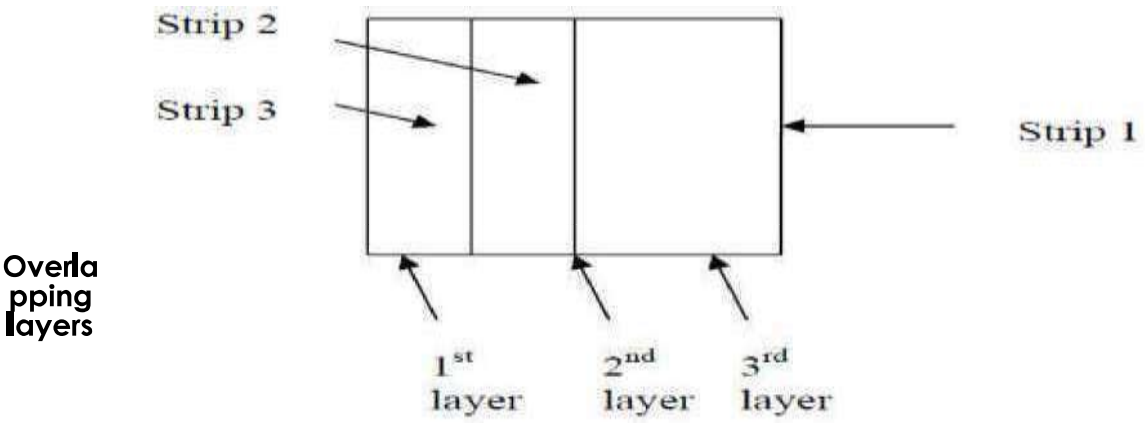
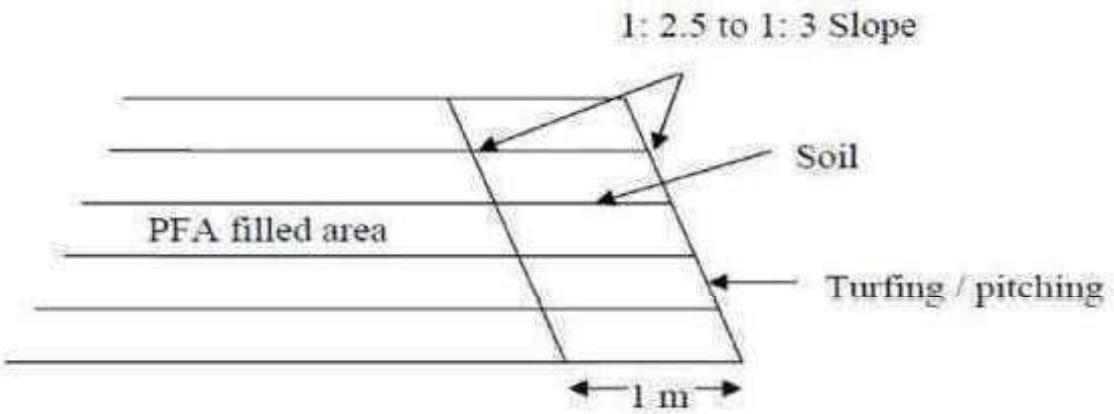


Figure-5

iii. Similarly, 5 to 10 meter longitudinal overlap may also be maintained between two adjacent layers when the length of the area is more than 150 m.

iv. At the boundary limits, where the fill material is likely to be exposed to air and water, it needs to be protected / confined with soil and pitching / turfing on the soil layer as for soil embankments. Soil cover of one meter thickness be provided and be compacted along with ash in each layer as shown in **Figure-6**



Exposed boundary configuration

Figure-6

v. Vibratory rollers are generally not to be operated within 1 meter of concrete and masonry structure as well as at the edges. Compaction be done by hand held compactors or small rollers at locations near to concrete/ masonry structure. For exposed boundary conditions of filled material, spreading, rolling and compaction of soil layer be done for 1 meter extra length (total 2 meters) and the extra last 1 meter which is not properly compacted be removed by cutting and scrapping. Thereafter, the slope surface be compacted with hand compactor or other means.

4.4 Soil Cover:

The area reclaimed with ash along with its side slopes all around should be provided with soil cover of 200 mm, which shall either be excavated from the site itself before reclamation (if good earth is available there and be stored aside) or excavated from a borrow pit which has to be filled up/ reclaimed with ash as per the procedure laid in this document.

4.5 Restriction :

Reclamation of area by ash shall not be permitted in the following areas :

i. Flood plain area.

ii. Agriculture land / area.

iii. Reclamation of Forest land / area is permissible only if clearance from MoEF&CC as per Forest Conservation Act, 1980 is available.

iv. Gochar Kisam Land.

4.6 Environment Protection:

Adequate measures have to be taken for environment protection so that it may not result in adverse impact on human health and environment.

i) Ambient Air Quality monitoring and water quality test shall be carried out both inside and outside the site before start of work to record the environmental quality of the site and the surrounding. Air quality monitoring is to be done till completion of the work.

ii) Thereafter, the environmental quality monitoring (of air and surface water) shall be carried out once in a month at the boundary of disposal area and reported to the Board.

iii) Surface water quality at up- stream&down- stream of site is to be carried out once in a month from start of work and six months beyond completion of work if natural water bodies exist in the vicinity.

iv) Further, the side slopes of the completed site should be so maintained that there is no accumulation of water at garland drain, guard pond / connecting pit etc. at the site or at its immediate vicinity and ensure that there is noerosion or collapse of the slopes at least up to end of one monsoon after completion of work.

v) Monitoring of ground water quality in a radius of 0.5 km shall be carried out prior to execution of work and at quarterly interval up to one year post closure of the site.

vi) Water sprinkling shall be madeduring loading, unloading and spreading of Ash to minimise fugitive emission.

5.0 Quality Control:

The procedure prescribed in the foregoing paragraphs shall be adhered to while borrowing, transporting, spreading and compacting ash in the low lying area/ abandoned quarries/ laterite mine. The following aspects may specifically be monitored / controlled and recorded daily at the respective point of activity.

i. Ash filling, spreading and compaction shall be done in layers of not more than 30 cm and compaction shall be done at optimum moisture content with vibratory roller of at least 15 tonne to 95% proctor.

ii. Filling shall be done strip by strip and with recommended overlap side by side as well as length wise.

iii. Two numbers of core should be cut of the compacted material, to check the quality of compaction and immediate corrective action should be taken, as may be required, in terms of maintaining optimum moisture content or number of passes of roller to get the required proctor compaction.

iv. While the filling job is in progress, the ash surface at the reclaimed/ filled area should be kept moist to avoid ash getting airborne.

v. Constant vigil shall be kept at the ash loading point. Ash carriers shall be covered to ensure that no dust nuisance due to spilling of ash takes place during its handling and transportation.

vi. During summer months, extra measures for water sprinkling shall be provided to control fugitive dust.

vii. The quarry pits are to be filled up by following the progressive land filling method from bottom to top with proper compaction and water sprinkling instead of haphazard dumping.

viii. Filling of the low lying land (including borrow pits) without following the procedure stipulated in this guideline shall render the activity as noncompliant and liable for appropriate action under Consent Administration.

6.0 Regulatory Procedure for Processing the Application for consideration of grant of permission for Reclamation of Low Lying Areas / Abandoned Quarries :

The stipulations specified in this guideline is consistent with the provisions of Fly Ash Notification, 1999 and amended thereafter which is a special condition mentioned in Consent Order issued under the Water (PCP) Act,1974 and the Air (PCP) Act, 1981. Hence, the activity will be regulated

under the provisions of Water Act, 1974 and Air Act, 1981. Any violation to the guideline shall be treated as violation of Water (PCP) Act,1974 and Air (PCP) Act, 1981 and action as deemed proper shall be taken under Consent Administration by the Board.

6.1 Procedure for Processing of Application for reclamation of low lying area / abandoned quarry of area less than equal to 10 acres:

The procedure for reclamation of low lying area / abandoned quarries with ash, within or outside the plant premises, for land measuring 10 Acres and below is further simplified. In such cases, the thermal power plants are required to obtain Consent to Establish (CTE) & Consent to Operate (CTO) from the concerned Regional Officer, State Pollution Control Board, Odisha.

i. Application in the prescribed format in (**Annexure-I)** shall be submitted to concerned Regional Officer online by the applicant (Thermal Power Plant) intending to reclaim the area, accompanied with requisite documents as mentioned in the application form.

ii. The proponent (TPP) shall pay the minimum fees under orange category as per the fee structure Notified by F&E Dept.. vide No. 13123&13127, Dt. 16.07.2012. The amount shall be paid online through Payment Gateway of the State Pollution Control Board, Odisha.

iii. On receipt of complete application, concerned Regional Office shall conduct a site visit to examine the proposal by verifying the local environmental conditions within ½ km. radius including habitation, Water bodies, Schools, Hospitals, transportation route etc. to assess the possible impact.

iv. Findings of the site visit shall be appropriately reflected in the inspection report in the format (**Annexure-II).** Based on the findings of the inspection report, the Regional Officer shall take necessary decision in the matter.

v. The application shall be disposed by Regional Office within 30 days from the date of receipt of complete proposal. Permission if granted, shall be communicated to the Applicant in the prescribed format at **Annexure-III**

with copies to CTE Branch and Fly Ash Resource Centre (FARC) at Head Office. While according permission, suitable conditions shall be stipulated by Regional Office force. Such permission shall only be granted if the applicant (TPP / Industry) has a valid Consent to Operate (CTO).

vi. In case Regional Office is of the opinion that the site is not suitable for undertaking such activity, the same shall be communicated to the applicant in writing assigning reasons of refusal with intimation to CTO branch and FARC at Head Office.

vii. In case, the applicant (TPP) is not satisfied with the refusal made by Regional Office, they can appeal before the Member Secretary, SPC Board with proper justification for reconsideration on merit.

6.2 Procedure for Processing of Application for reclamation of low lying area / abandoned quarry of area more than 10 acres:

For reclamation of land / abandoned quarry in excess of 10 Acres, the application shall be processed under Consent Administration at Head Office. The procedure adopted to obtain Consent to Establish (CTE) and Consent to Operate (CTO) shall be followed.

i. Application in the prescribed format in (**Annexure-I)** shall be submitted to concerned Regional Officer online by the applicant (Thermal Power Plant) intending to reclaim the area, accompanied with requisite documents as mentioned in the application form with a copy to CTE branch at head office.

ii. The proponent (TPP) shall pay the fees under Orange category as per the fee structure Notified by F&E Dept. vide No. 13123 & 13127, Dt. 16.07.2012. The amount shall be paid online through Payment Gateway of the State Pollution Control Board, Odisha.

iii. On receipt of application, concerned Regional Office shall conduct a site visit to examine the proposal by verifying the local environmental conditions within ½ km. radius including habitation, Water bodies, Schools, Hospitals, transportation route etc. to assess the possible impact.

iv. Findings of the site visit shall be appropriately reflected in the inspection report in the format (**Annexure-II)** and the Regional Office shall submit the report along with online application of the proponent within 15 days to Head Office for consideration of the CTE.

v. The CTE cell at Head Office shall scrutinise the application and if found complete, shall grant / refuse CTE on approval of the Member Secretary within next 15 days. Grant / refusal of CTE shall be placed in Consent Committee for ratification.

6.3 Inspection / Monitoring procedure.

i. On receipt of the application and before granting permission, Regional Office shall conduct ambient air quality monitoring within the site and also habitation area (if existing within 500 meters) from the boundary of the land to be reclaimed with ash.

ii. Regional Office shall collect water samples from ponds, bore wells, dug wells and from surface water bodies at upstream and downstream of the site, analyse it to maintain the background environmental status of the area and compare with the data furnished by the applicant. This data will be considered in evaluating the impact of reclamation activity in future.

iii. Regional Office shall make routine inspection of the site during the period of execution of the work to verify adherence to the guidelines.

iv. Regional Office shall verify the compliance status to the conditions stipulated in the permission letter and furnish the report to CTO Branch and FARC at Head Office confirming about the compliance. In case of any non-compliance, Regional Office shall issue necessary direction to the applicant (TPP) for immediate compliance in a time bound manner.

v. Leachate test of ash to be used for reclamation of low lying area should be carried out by the TPP through NABL accredited laboratory and the report shall be submitted to the Board along with the application. The ash for which leaching test results are found to be in conformity to prevailing norms for discharge in to inland surface water, such ash can be permitted

for reclamation of low lying areas / abandoned quarries.

vi. If the leachate test result of the ash is found to be in conformity and the underneath strata of the area for reclamation has permeability value less than 10^{-7} cm/sec, then the ash can be used for filling without requiring any protection measures against leaching.

vii. In case the permeability is more than 10^{-7} cm/sec, appropriate lining like HDPE, Bentonite, clay or any other suitable liner shall be provided at the base layer of the low lying areas / quarries to prevent leaching and risk of ground water contamination. Permeability test should be carried out from NABL accredited laboratory only. The report shall be submitted to the Board as an enclosure while submitting the application.

viii. After completion of the permitted reclamation, the applicant (TPP) shall submit a certificate to the Regional Office to the effect that all the conditions stipulated in the permission letter as well as guideline have been adhered to in the process of execution of reclamation works.

ix. The applicant (TPP) shall be solely responsible for adverse environmental impact if any, observed or established to be a consequence of such reclamation activity and shall be duty bound to take appropriate remedial measures to minimise the adverse impact and also liable for appropriate action in case of persistent lapses.

7.0 Usage of Reclaimed Area:

The land reclaimed with ash in a manner as described in this document can be safely used for habitat construction, parking lots, play-grounds, recreation centre, agriculture, floriculture, horticulture, forestry etc. Wherever plantation is done, preferably local species be selected and 80 percent survival rate ensured. However, proper technical investigations and foundation design should be done before heavy construction/ usage. After complete reclamation of the site, signboard shall be put up showing that it was a low lying land reclaimed by filling with ash to popularize this practice.

Annexure-I

Application Form

(For Reclamation of Low Lying areas/ Abandoned Quarries with Ash)

To be submitted by Thermal Power Plants

1	Name and address of the Thermal Power Plant (Applicant)	:	
2	Name and address of the owner of land to be reclaimed.	:	
3	Land for reclamation with Ash	:	
	a) Ownership (substantiate with documents)	:	
	b) Area in Ac. (with supporting documents)	:	
	c) Mutual agreement for reclamation indicating end use. (If the land is not owned by the TPP)	:	
4	Site description :	:	
	a) Plot No and Kisam		
	b) Khata No.		
	c) Village / Mouza		
	d) Tahasil		
	e) District	:	
	f) Whether falls within eco-sensitive zone	:	
5	Results of test carried out (for all sites)	:	
	a) Leachability of Ash b) Permeability of Site	: :	
	c) Source of water for ash filling and dust suppression (Permission from local authority to be obtained if water to be drawn from public ponds / wells)	:	
	d) Transportation route from source to disposal site (Map showing the route)	:	

6	Vicinity Information **(within ½ km from boundary of the plot)**	:	
	a) Water body (Pond / Dam / Reservoir / lake / River etc.)	:	
	b) Distance from nearest Railway line / NH /SH / Major District Road (MDR)	:	
	c) Water in-take points / LI points (Public & Private)	:	
	d) Does the natural topography lead the run off from disposal site to get discharged at upstream of intake points	:	
	e) Distance from nearest river / embankment. (Whether natural topography permits surface runoff flow in to the river)	:	
	f) Distance from nearest Archaeological site if any.	:	
	g) Nearest habitation. (village / Basti with population and distance from boundary of site.)	:	
	h) Nearest Hospital / Education Institute / Place of worship	:	
7	Quantity of Ash estimated to be used (Supported with sectional contour map)	:	
9	Mode of Ash transportation	:	
10	Source of Soil (to be used as soil cover)	:	
11	Usage of Reclaimed area	:	

Signature of Authorised representative of TPP

List of document to be attached

1. Land documents in support at title / Ownership, Khata , Plot No., Mouza & Kisam
2. Mouza Map (scale 32" : 1 mile) of the area
3. Analysis report on soil permeability and leachability test of ash
4. Village Map / SOI Map showing transportation route from source to destination
5. Sectoral contour map to justify estimated quantity of ash disposal
6. Copy of the Agreement with the land owner to take up the activity (if land is not owned by TPP)
7. Permission from revenue authority for reclamation of abandoned quarry / Govt. Land.

Annexure-II

Inspection Format

(For Reclamation of Low Lying area / Abandoned Quarries with Ash)

To be submitted by the Inspecting Officer of SPCB

1	Name and address of the Applicant	:	
2	Date of receipt of Application	:	
3	Date of Inspection	:	
4	Site details :	:	
	a) Plot No. &Kisam		
	b) Khata No.		
	c) Village / Mouza		
	d) Tahasil		
	e) District		
	f) Owner of site		
5	Source of Water for sprinkling arrangement :	:	
6	Available bore wells / ponds / nullah or other water bodies for monitoring:	:	
7	Back ground data to be generated by Regional Office :	:	
	a) On site AAQ b) Water quality in surrounding area (Locations are to be defined and marked on mouza map)	:	
8	Source of supply of Fly Ash :	:	
	a) On road distance from TPP	:	
	b) Route Map of Transportation (Sketched on a Mouza Map or SOI Map in 1 : 25,000 scale)	:	
9	Vicinity Information : Within ½ km from boundary of the plot both natural and manmade	:	

	a) Presence of any water body (Pond / Dam / Reservoir / lake etc.	:	
	b) Type of top soil at the site (Sand / Murram / Clay etc.)	:	
	c) Details of borrow pit (Location, distance & permissibility from owner)		
	d) Distance from nearest Railway line / NH / SH /MDR	:	
	e) Nearest Archaeological site if any along with its details	:	
	f) Habitation area within ½ km surrounding the boundary of the site : (Village / Basti with population and clear distance from site)	:	
	g) Nearest Hospital / Educational Institute / Place of Worship	:	
10	End Use of Reclaimed Land	:	
11	Date of submission of report	:	
12	Views of Inspecting Officer (Recommended / Not Recommended & Conditions suggested specific to the site)	:	
13	Decision of R.O. (Permitted / Rejected)	:	
13	If rejected, reasons thereof.	:	

Signature of Inspecting Officer **Signature of Regional Officer**

List of documents attached

(In case the proposal is for morethan 10 acres and referred to Head Office.)

Annexure-III

(Format for Grant of Permission)

STATE POLLUTION CONTROL BOARD, ODISHA

(Address – Regional Office)

No. _____/ **Date_____/**

OFFICE MEMORANDUM

In consideration of the application dt _____ of M/s (Name of TPP), the State Pollution Control Board is pleased to convey permission forreclamation (with Fly Ash) of the low lying area / abandoned quarries at Mouza _____ over an area of _____ Acres in Plot No _____), under Khata No _____, Kisam _____ as mentioned in the application, in the district of _____ with the following conditions :

This permission is an addendum to the consent order granted to the applicant under water (PCP) Act, 1974 & Air Act, 1981 and the conditions stipulated here-in are a part of conditions of the above said consent order for strict compliance.

General Conditions

1. This Permission is valid for _____ months from the date of issue and the quantity as mentioned in the application.
2. Reclamation of low lying area shall be carried out as per the guideline prepared by the State Pollution Control Board for the purpose. (copy enclosed)
3. The Thermal Power Plant shall dispose only ash for filling the low lying area. Under no circumstances, the industry shall dispose any other industrial solid waste in the low lying area other than ash without prior permission of the Board.
4. The Thermal Power Plants shall provide garland drain around the proposed site if fly ash is filled is above the contour of the surrounding land so that surface run off during rainy season shall not enter to the nearby human habitation and adjacent agricultural land.

5. The ash shall be dumped into low lying area / abandoned quarries and spread uniformly by engaging earth moving equipment. The spreading of ash shall be done in layers and compacted followed by concurrent top soil capping before rainy season, so that there shall not be any chance of mixing of the fly ash in nearby water body through rain water.

6. The Thermal Power Plants / Industry shall develop the approach road and shall provide adequate water spraying arrangement on the roads when ash is taken from the silo/plant to suppress any fugitive dust generated during working period.

7. Protective action to be ensured if the ash to be disposed at immediate vicinity of NH/SH.

8. The TPP / industry has to provide dust suppression like water sprinkling in and around the dump site. During summer extra care shall be taken to control fugitive dust.

9. For reclamation of land, irrespective of size located within administrative limit of any Municipality / Corporation or if the transportation route passes through its administrative limit,extra care to ensure non spillage of ash and non-congestion of traffic need to be exercised to prevent any pollution during transportation of fly ash.

10. **The following two condition are applicable if the permeability of the site is > 10^{-7} cm/sec :**

11. If the permeability is more than 10^{-7} cm/sec, theTPP shall provide appropriate lining as mentioned in the guideline at the base layer at the low lying area in order to prevent leaching and risk of ground water contamination.

12. Commencement of fly ash filling shall be made after provision of the lining is verified by the Pollution Control Board's Official and on obtaining necessary permission in this regard.

13. The environmental quality monitoring of air, surface and ground water shall be carried out every month at the boundary of the disposal area for the following parameters and the monitoring report shall be submitted to the Board every quarter.

a. Ambient Air- PM_{10}, $PM_{2.5}$

b. Surface runoff - SS, F, Cd, As

14. Water quality monitoring shall be done from start of the work till six months beyond completion of work. Air monitoring shall be done till completion of the reclamation work.
15. The area shall be properly fenced to prevent any entry of cattle / Livestock inside the quarry area.
16. After complete reclaiming the site, signboard shall be put up showing that the land was reclaimed by filling low lying area.
17. Attempt shall be made to avoid any kind of public nuisance due to proposed activities.
18. On completion of the reclamation, the TPPshall submit a certificate to the effect that all the above stipulated conditions have been duely complied.
19. Board reserves the right to revoke this permission if conditions stipulated are not implemented to the satisfaction of the Board.

Regional Officer

To,

Address of TPP

Memo No. _____/ Dt. _____/

Copy forwarded to :

1. The Member Secretary, SPC Board, Odisha
2. The District Magistrate and Collector, _____
3. FARC, SPC Board, Bhubaneswar
4. Copy to Guard file

Regional Officer

रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

भारत का राजपत्र
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असाधारण
EXTRAORDINARY

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

प्राधिकार से प्रकाशित
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पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 31 दिसम्बर, 2021

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(i) फ्लाई राख पर आधारित उत्पाद अर्थात्: ईंट ब्लॉक टाइल, फाइबर सीमेंट शीट, पाइप, बोर्ड, पैनल का विनिर्माण;

(ii) सीमेंट विनिर्माण, रेडी-मिक्स कंक्रीट;

(iii) सड़क निर्माण और फ्लाई-ओवर के रेलिंग का निर्माण, राख और जिओ-पॉलीमर आधारित निर्माण सामग्री;

(iv) बांध का निर्माण;

(v) निचले क्षेत्र को भरना;

(vi) खनन कार्य से रिक्त हुए स्थान को भरना;

(vii) सिंटर्ड या शीत–बद्ध राख संचय का विनिर्माण;

(viii) मृदा परीक्षण के आधार पर नियंत्रित तरीके से कृषि;

(ix) तटीय जिलों में तटरेखा संरक्षण संरचनाओं का निर्माण;

(x) अन्य देशों को राख का निर्यात;

(xi) समय-समय पर यथाधिसूचित किसी अन्य पारि-अनुकूल प्रयोजन के लिए।

(3) अध्यक्ष, केंद्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) की अध्यक्षता में एक समिति गठित की जाएगी जिसमें पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय (एमओईएफसीसी), विद्युत मंत्रालय, खान मंत्रालय, कोयला मंत्रालय, सड़क परिवहन और राजमार्ग मंत्रालय, कृषि अनुसंधान एवं शिक्षा विभाग, सड़क कांग्रेस संस्थान तथा राष्ट्रीय सीमेंट एवं भवन सामग्री परिषद के प्रतिनिधियों को सदस्यों के रूप में शामिल किया जाएगा, जिसका प्रयोजन राख के उपयोग के पारि-अनुकूल तौर-तरीकों की जांच करना, उनकी समीक्षा एवं अनुशंसा करना तथा प्रौद्योगिकीय विकासों तथा पणधारी से प्राप्त अनुरोधों के आधार पर उप-पैरा (2) में यथोल्लिखित ऐसे तौर-तरीकों की सूची में समिति द्वारा सुझाए गए तौर-तरीकों को शामिल करना या किसी तौर-तरीके को सूची से हटाना या उसमें संशोधन करना है। जब भी इस प्रयोजन के लिए अपेक्षित हो, यह समिति राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति, ताप विद्युत संयंत्र और खानों के प्रचालकों को आमंत्रित कर सकती है। इस समिति सिफारिश के आधार पर, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय ऐसे पारि-अनुकूल प्रयोजन प्रकाशित करेगा।

(4) प्रत्येक कोयला या लिग्नाइट आधारित ताप विद्युत संयंत्र उस वर्ष के दौरान सृजित राख (फ्लाई-राख और बॉटम-राख) का 100 प्रतिशत उपयोग करने हेतु उत्तरदायी होगा; तथापि, किसी भी स्थिति में, किसी वर्ष में राख का उपयोग 80 प्रतिशत से नीचे नहीं होगा और साथ ही, उस ताप विद्युत संयंत्र को तीन वर्ष की अवधि में 100 प्रतिशत औसत राख के उपयोग का लक्ष्य प्राप्त करना होगा :

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

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

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

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

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

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

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

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

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

(6) किसी भी नए तापीय विद्युत संयंत्र (टीपीपी) में 0.1 हेक्टेयर प्रति मेगावाट (एमडब्ल्यू) क्षेत्रफल के साथ आपातकालीन या अस्थायी राख कुंड की अनुमति दी जा सकती है। राख के तालाब या डाइकों का तकनीकी विर्निदेश, केन्द्रीय विद्युत प्राधिकरण (सीईए) के परामर्श से केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा बनाए गए दिशानिर्देशों के अनुसार होगा और ये दिशानिर्देश राख के कुंड या डाइक के संबंध में इसकी सुरक्षा, पर्यावरणीय प्रदूषण, उपलब्ध प्रमात्रा, निपटान का तरीका, निपटान में जल की खपत या संरक्षण, राख जल पुनर्चक्रण और ग्रीन बेल्ट आदि के वार्षिक प्रमाणन के लिए कार्यविधि भी निर्धारित करेंगे और इस अधिसूचना के प्रकाशन की तारीख से तीन महीनों के भीतर प्रस्तुत किए जाएंगे।

(7) प्रत्येक कोयला या लिग्नाईट आधारित ताप विद्युत संयंत्र यह सुनिश्चित करेगा कि राख की लदाई, उतराई, ढुलाई, भंडारण और निपटान पर्यावरणीय दृष्टि से अनुकूल रीति से किया गया है और वायु और जल प्रदूषण की रोकथाम के लिए सभी ऐहितयात किए गए हैं और इस संबंध में स्थिति की सूचना इस अधिसूचना में संलग्न अनुबंध में संबंधित राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) को दी जाएगी।

(8) प्रत्येक कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्र, संस्थापित क्षमता पर आधारित राख के कम से कम 16 घंटों के भंडारण के लिए समर्पित शुष्क फ्लाई राख साइलोस प्रतिष्ठापित करेगा, जिनके पास पृथक पहुंच मार्ग होंगे, जिससे कि राख पहुंचाने के कार्य को सुगम बनाया जा सके। इसकी सूचना संबंधित राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) को उपाबंध में दी जाएगी और केन्द्रीय प्रदूषण नियंत्रण

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

(9) प्रत्येक कोयला या लिग्नाईट आधारित तापीय विद्युत संयंत्र (जिसके अंतर्गत कैप्टिव या सह उत्पादन केन्द्र भी है या दोनों), वास्तविक उपयोगकर्ता (उपयोगकर्ताओं) के हित के लिए केन्द्रीय प्रदूषण नियंत्रण बोर्ड के वेब पोर्टल या मोबाईल फोन एप्प का लिंक उपलब्ध कराकर ताप विद्युत संयंत्र के पास राख की उपलब्धता के वास्तविक आंकड़े प्रदान करेगा।

(10) राख के 100 प्रतिशत उपयोग का वैधानिक दायित्व, जहां भी लागू हो, विधि में बदलाव के रूप में माना जाएगा।

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

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

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

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

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

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

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

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

(5) (i) सभी खान मालिकों को खान में खाली स्थानों में राख को समायोजित करने के लिए खान बंद योजना (प्रगामी और अंतिम) तैयार करनी होगी और खान में खाली स्थान में राख के निपटान और अधिभार वाले ढेर के साथ राख को मिश्रित करने के लिए खान योजनाओं को संबंधित प्राधिकारी अनुमोदित करेगा। पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा ताप विद्युत संयंत्रों और कोयला खदानों की पर्यावरणीय मंजूरी की अपेक्षा से छूट देने के साथ-साथ ऐसे निपटान के लिए अपनाए जाने वाले दिशानिर्देशों के संबंध में तारीख 28 अगस्त, 2019 को दिशानिर्देश जारी किए गए।

(ii) मंत्रालय, केन्द्रीय प्रदूषण नियंत्रण बोर्ड, महानिदेशक, खान सुरक्षा (डीजीएमएस) और भारतीय खान ब्यूरो (आईबीएम) के साथ परामर्श करके, खानों में खाली स्थानों में राख के निपटान करने तथा अधिभार वाले ढेरो में इसे मिश्रित करना सुगम बनाने के लिए समय-समय पर आगे भी दिशानिर्देश जारी कर सकता है और यह खान मालिकों की जिम्मेदारी होगी कि वे ऐसी खानों को अभिज्ञात करने की तिथि से एक वर्ष के भीतर विभिन्न विनियामक प्राधिकरणों द्वारा जारी की गई अनुमतियों में आवश्यक संशोधन या परिवर्तन प्राप्त करेंगे।

(6) (i) पर्यावरणीय प्रदूषण के संदर्भ में सुरक्षा, व्यवहार्यता (आर्थिक व्यवहार्यता नहीं) और पहलुओं की जांच सहित राख से खान में खाली स्थान को वापस भरने/अधिभार वाले ढेर के साथ राख को मिश्रित करने के लिए खानों की पहचान करने के लिए पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, विद्युत मंत्रालय, खान मंत्रालय, कोयला मंत्रालय, महानिदेशक खान सुरक्षा और भारतीय खान ब्यूरो से प्रतिनिधियों को शामिल करते हुए अध्यक्ष, केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) की अध्यक्षता में एक समिति का गठन किया जाएगा और यह समिति पणधारी मंत्रालयों या विभागों के लिए अभिज्ञात खानों (भूमिगत और खुली, दोनों) के संबंध में तैयार की गई तिमाही रिपोर्टों को अद्यतन करेगी और यह समिति, इस अधिसूचना के प्रकाशन के तुरंत पश्चात उपयुक्त खानों की पहचान करना आरंभ करेगी।

(ii) ताप विद्युत संयंत्र या खानें, उपरोक्त अनुसार अधिदेशित उपयोग लक्ष्यों को पूरा करने के लिए उपर्युक्त समिति द्वारा पहचान किए जाने तक राख के निपटान हेतु प्रतीक्षा नहीं करेंगी।

(7) राख से निचले क्षेत्र को भरने का कार्य, अनुमोदित परियोजनाओं के लिए राज्य प्रदूषण नियंत्रण बोर्ड की पूर्व अनुमति से और केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा निर्धारित दिशा-निर्देशों के अनुसार किया जाएगा और राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति द्वारा अनुमोदित स्थलों, अवस्थान, क्षेत्र और अनुमत मात्रा को अपनी वेबसाइट पर प्रतिवर्ष प्रकाशित किया जाएगा।

(8) केन्द्रीय प्रदूषण नियंत्रण बोर्ड, संगत पणधारी के साथ मिलकर, राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) द्वारा अनुमति प्रदान करने के लिए समयबद्ध ऑनलाइन आवेदन प्रक्रिया प्रस्तुत करने के साथ-साथ इस अधिसूचना के अधीन परिकल्पित सभी प्रकार के कार्यकलापों के लिए एक वर्ष के भीतर दिशानिर्देश प्रस्तुत करेगा।

(9) कोयला या लिग्नाइट आधारित तापीय ऊर्जा संयंत्र से तीन सौ किलोमीटर के दायरे में स्थित सभी भवन निर्माण परियोजनाएं (केंद्रीय, राज्य और स्थानीय प्राथिकरणों सरकारी उपक्रमों, अन्य सरकारी अभिकरणों तथा सभी निजी अभिकरणों) राख की ईटों, टाईल्स, धातुमल राख अथवा अन्य राख आधारित उत्पादों का उपयोग करेंगी बशर्ते कि वे वैकल्पिक उत्पादों की कीमत से अधिक कीमत पर उपलब्ध न हो।

(10) राख आधारित उत्पादों के विनिर्माण और ऐसे उत्पादों में राख के उपयोग में भारतीय मानक ब्यूरो, भारतीय सड़क कांग्रेस और केंद्रीय प्रदूषण नियंत्रण बोर्ड द्वारा निर्धारित विनिर्देशों और दिशानिर्देशों की अनुपालना होगी।

ग. गैर-अनुपालन के लिए पर्यावरणीय प्रतिकर .-

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

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

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

(2) अधिकारियों द्वारा एकत्रित पर्यावरणीय प्रतिकर को केन्द्रीय प्रदूषण नियंत्रण बोर्ड के निर्दिष्ट खाते में जमा किया जाएगा।

(3) लैगेसी राख के मामले में, यदि कोयला या लिग्नाइट आधारित तापीय ऊर्जा संयंत्र (कैप्टिव या सह-उत्पादक स्टेशनों या दोनों सहित) ने स्थापित क्षमता पर आधारित उत्पन्न राख का कम-से-कम 20 प्रतिशत (प्रथम वर्ष के लिए), 35 प्रतिशत (द्वितीय वर्ष के लिए), 50 प्रतिशत (तीसरे से दसवें वर्ष तक) उपयोग के बराबर लक्ष्य प्राप्त नहीं किया है तो उस वित्तीय वर्ष के दौरान अप्रयुक्त लैगेसी राख पर 1000 रुपए प्रति टन की दर से पर्यावरणीय प्रतिकर लगाया जाएगा और यदि 10 वर्ष के अंत में लैगेसी राख का उपयोग नहीं किया जाता है तो 1000 रुपए प्रति टन की दर से शेष अप्रयुक्त मात्रा पर पर्यावरणीय प्रतिकर लगाया जाएगा जिस पर पहले पर्यावरणीय प्रतिकर नहीं लगाया गया है।

(4) अधिकृत खरीददारों या उपभोक्ता अभिकरणों तक राख भेजने की जिम्मेदारी परिवाहकों या वाहन मालिक की जिम्मेदारी है और यदि इसका अनुपालन नहीं किया जाता है, तो अनधिकृत उपयोगकर्ताओं अथवा गैर-अधिकृत उपयोगर्ताओं को ऐसी मात्रा गलत तरीके से वितरित करने पर 1500 रूपए प्रति टन की दर से पर्यावरणीय प्रतिकर लगायी, इसके अतिरिक्त राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) द्वारा गैर अनुपालनकर्ता परिवाहकों पर अभियोजन लागू होगा।

(5) इस अधिसूचना के पैरा ख में विहित पर्यावरण अनुकूल तरीके में राख के उपयोग की जिम्मेदारी खरीददार या उपभोगकर्ता एजेंसियों की है और ऐसा नहीं करने पर केन्द्रीय प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) द्वारा 1500 रूपए प्रति टन की दर से पर्यावरणीय प्रतिकर लगाया जाएगा।

(6) यदि उपयोगकर्ता अधिकरण पैरा ख के अधीन निर्धारित सीमा तक अथवा पैरा घ के उप-पैरा (1) के अधीन, दिए गए नोटिस के माध्यम से सूचित की गई सीमा, इनमें से जो भी कम हो, तक राख का उपयोग नहीं करती है, वे अतिरिक्त राख की मात्रा का 1500 रूपए प्रति टन की दर से भुगतान करने के लिए उत्तरदायी होंगी।

परंतु भवन निर्माण के संबंध में पर्यावरणीय प्रतिकर निर्मित क्षेत्र के 75 रूपये प्रति वर्ग फीट की दर से वसूल किया जाएगा।

(7) (i) ताप विद्युत संयंत्रों अन्य बकायादारों से केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा लगायी गई का पर्यावरणीय प्रतिकर उपयोग अप्रयुक्त राख के सुरक्षित निपटान हेतु किया जाएगा और राख आधारित उत्पादों सहित राख के उपयोग के संबंध में और अधिक अनुसंधान करने के लिए भी निधि का उपयोग किया जा सकता है।

(ii) अप्रयुक्त मात्रा पर लगाए गए पर्यावरणीय प्रतिकर के पश्चात भी राख के उपयोग का उत्तरदायित्व ताप विद्युत संयंत्रों की होगी और यदि पश्चातवती चक्रों में पर्यावरणीय प्रतिकर लगाने के पश्चात ताप विद्युत संयंत्र, किसी विशेष चक्र की राख के उपयोग के लक्ष्य को प्राप्त करता है तो अगले चक्र के दौरान अप्रयुक्त मात्रा पर एकत्र की गई पर्यावरणीय प्रतिकर में 10 प्रतिशत कटौती के पश्चात उक्त रकम ताप विद्युत संयंत्र को वापस कर दी जाएगी और पश्चातवती चक्रों में राख के उपयोग के मामले में एकत्र की गई पर्यावरणीय प्रतिकर की 20 प्रतिशत, 30 प्रतिशत और उसी क्रम में कटौती की जानी है।

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

(1) ताप विद्युत संयंत्रों के स्वामी अथवा राख की ईटों या टाईल्स या धातुमल आधारित राख के विनिर्माता उन व्यक्तियों या अभिकरणों को लिखित सूचना देंगे जो बिक्री या परिवहन या दोनों के लिए प्रस्तुत राख या राख आधारित उत्पादों के उपयोग के लिए उत्तरदायी हैं।

(2) ऐसे व्यक्ति या उपयोगकर्ता अभिकरणों जिन्हें ताप विद्युत संयंत्रों के स्वामी द्वारा या राख की ईटों या टाईल्स या धातुमल आधारित राख के उत्पादकों द्वारा सूचना दी गई है, यदि वे पहले ही राख या राख उत्पादों के उपयोग के प्रयोजन से अन्य अभिकरणों के साथ जुड़े हुए हैं, यदि वे किसी भी राख/राख उत्पादों का उपयोग नहीं कर सकते हैं अथवा कम मात्रा का उपयोग कर सकते हैं, तदनुसार ताप विद्युत संयंत्र को सूचित करेंगे।

ड. प्रवर्तन, निगरानी, लेखा परीक्षा और प्रतिवेदन करना

(1) केंद्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) और संबंधित राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी), उपबंधों के अनुपालना सुनिश्चित करने के लिए प्रवर्तन और निगरानी प्राधिकरण होंगे। सीपीसीबी या एसपीसीबी या पीसीसी तिमाही आधार पर राख के उपयोग की निगरानी करेंगे और सीपीसीबी इस प्रयोजन के लिए अधिसूचना की प्रकाशन की तारीख से छ: माह के भीतर एक पोर्टल विकसित करेगा। संबंधित जिला अधिकारी के पास इस अधिसूचना के उपबंधों को लागू करने और निगरानी करने के लिए समवर्ती अधिकारिता होगी।

(2) (i) ताप विद्युत संयंत्र, राख उत्सर्जन और उपयोग से संबंधित मासिक सूचना वेब पोर्टल पर अगले महीने की 5 तारीख तक अपलोड करेगा। कोयला या लिग्नाइट आधारित ताप ऊर्जा संयंत्रों द्वारा केंद्रीय प्रदूषण नियंत्रण बोर्ड, संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति (पीसीसी), केंद्रीय विद्युत प्राधिकरण (सीईए) और पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय के संबंधित एकीकृत क्षेत्रीय कार्यालयों को इस अधिसूचना के उपबंधों के अनुपालन संबंधी सूचना उपलब्ध कराते हुए वार्षिक कार्यान्वयन रिपोर्ट प्रत्येक वर्ष (1 अप्रैल से 31 मार्च तक की अवधि के लिए) अप्रैल माह के 30वें दिन तक प्रस्तुत की जाएगी। सीपीसीबी और सीईए द्वारा सभी ताप विद्युत संयंत्रों द्वारा प्रस्तुत वार्षिक रिपोर्टों का समेकन किया जाएगा और उसे पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय को 31 मई तक प्रस्तुत किया जाएगा।

(ii) सभी अन्य उपयोगकर्ता अधिकरण पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय या राज्य स्तरीय पर्यावरण प्रभाव आकलन प्राधिकरण (एसईआईएए) द्वारा जारी पर्यावरणीय मंजूरी (ईसी) अथवा राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) द्वारा जारी संचालन की सहमति (सीटीओ), जो भी लागू हो, की अनुपालना रिपोर्ट में इस अधिसूचना में आज्ञापकता के अनुसार राख के उपभोग या उपयोग या निस्तारण तथा राख आधारित उत्पादों के उपयोग संबंधी सूचना प्रस्तुत करेंगे। केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) या राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) अधिसूचना के उपबंधों के प्रभावी कार्यान्वयन की समीक्षा करने हेतु ताप विद्युत संयंत्रों के अतिरिक्त अन्य सभी अधिकरणों की राख उपयोग की वार्षिक रिपोर्ट प्रकाशित करेंगे।

(3) इस अधिसूचना के उपबंधों की निगरानी और कार्यान्वयन के प्रयोजन के लिए केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) की अध्यक्षता में एक समिति का गठन किया जाएगा जिसके सदस्य विद्युत मंत्रालय, कोयला मंत्रालय, खनन मंत्रालय, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, सड़क परिवहन और राजमार्ग मंत्रालय और भारी उद्यम विभाग से होने के साथ-साथ समिति के अध्यक्ष द्वारा नामित किए जाने वाले कोई संबंधित पणधारी होंगे। यह समिति संगत पणधारी को आमंत्रित कर सकती है। यह समिति इस अधिसूचना के उपबंधों के प्रभावी और दक्ष कार्यान्वयन के लिए सिफारिशें कर सकती है। यह समिति छ: माह में कम से कम एक बार एक बैठक करेगी और वार्षिक कार्यान्वयन रिपोर्टों की समीक्षा करेगी और यह समिति, इस अधिसूचना द्वारा आजापक किए गए अनुसार छ: महीनों में कम से कम एक बार संगत पणधारी (को) को आमंत्रित करके राख के उपयोग की निगरानी करने के लिए पणधारी से साथ परामर्शदात्री बैठकें आयोजित करेगी। यह समिति पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय (एमओईएफसीसी) को छ: मासिक रिपोर्ट प्रस्तुत करेगी।

(4) ताप विद्युत संयंत्रों और राख के उपयोगकर्ताओं या राख आधारित उत्पादों के विनिर्माताओं के बीच के विवाद का समाधान करने के प्रयोजन से राज्य सरकारें या संघ राज्यक्षेत्र की सरकारें इस अधिसूचना के प्रकाशन की तारीख से तीन माह के भीतर राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) की अध्यक्षता में एक समिति का गठन करेंगी जिसमें विद्युत विभाग के प्रतिनिधि और एक प्रतिनिधि उस विभाग का होगा, जो विवाद वाले संबंधित अभिकरण का कार्य देख रहे हैं।

(5) केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) द्वारा प्राधिकृत लेखा परीक्षकों द्वारा ताप विद्युत संयंत्रों और उपयोगकर्ता अभिकरणों द्वारा किए गए राख के निपटान की अनुपालन लेखा परीक्षा संचालित की जाएगी और लेखा परीक्षा की रिपोर्ट प्रत्येक वर्ष 30 नवम्बर तक केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) और संबंधित राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) को प्रस्तुत की जाएगी। केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) और संबंधित राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) लेखा परीक्षा की रिपोर्ट प्राप्त होने के पंद्रह दिनों के भीतर अनुपालन न करने वाले ताप विद्युत संयंत्रों के विरूद्ध कार्रवाई प्रारंभ करेगें।

[फा. सं. एचएसएम-9/1/2019-एचएसएम]

नरेश पाल गंगवार, संयुक्त सचिव

उपाबंध

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

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

	कुल मात्रा (एमटीपीए) : (ख) उपयोग की गई फ्लाई राख की मात्रा (एमटीपीए) : i. फ्लाई-एश आधारित उत्पाद (ईंट या ब्लॉक या टाइल्स या फाइबर सीमेंट शीट या पाइप या बोर्ड/पैनल) : ii. सीमेंट विनिर्माण : iii. रेडी मिक्स कंक्रीट : iv. राख और जीओ-पॉलिमर आधारित निर्माण सामग्री : v. सिंटर्ड या कोल्ड बॉन्डेड राख एग्रीगेट का निर्माण : vi. सड़कों, सड़क और फ्लाई ओवर के पुश्तों का निर्माण : vii. बांधों का निर्माण : viii. निम्न भू-क्षेत्र का भराव : ix. खनिज क्षेत्रों का भराव : x. अधिभार वाले डम्पों में उपयोग : xi. कृषि : xii. तटीय जिलों में तटरेखा सुरक्षा संरचनाओं का निर्माण : xiii. अन्य देशों को राख का निर्यात : xiv. अन्य (कृपया विनिर्दिष्ट करें) : (ग) उपयोग किए गए तल के राख की मात्रा (एमटीपीए) : i. फ्लाई-एश आधारित उत्पाद (ईंट या ब्लॉक या टाइल्स या फाइबर सीमेंट शीट या पाइप या बोर्ड या पैनल) : ii. सीमेंट विनिर्माण : iii. रेडी मिक्स कंक्रीट : iv. राख और जीओ-पॉलिमर आधारित निर्माण सामग्री : v. सिंटर्ड या कोल्ड बॉन्डेड राख एग्रीगेट का निर्माण : vi. सड़कों, सड़क और फ्लाईओवर के पुश्तों का निर्माण : vii. बांधों का निर्माण : viii. निम्न भू-क्षेत्र का भराव : ix. खनिज क्षेत्रों का भराव : x. अधिभार वाले डम्पों में उपयोग : xi. कृषि : xii. तटीय जिलों में तटरेखा सुरक्षा संरचनाओं का निर्माण : xiii. अन्य देशों को राख का निर्यात : xiv. अन्य (कृपया विनिर्दिष्ट करें) : रिपोर्टिंग की अवधि के दौरान वर्तमान में अप्रयुक्त राख की कुल मात्रा (एमटीपीए :	
16.	रिपोर्टिंग की अवधि के दौरान वर्तमान में उत्पादित राख का प्रतिशतता उपयोग (%) :	
17.	**राख कुंडों में राख के निपटान का ब्यौरा** क) तारीख 31 मार्च तक (रिपोर्टिंग की अवधि को छोड़कर) राख कुण्ड (कुण्डों) में निपटान किए गए राख की कुल मात्रा (मीट्रिक टन):	

	ख) रिपोर्टिंग की अवधि के दौरान राख कुण्ड (कुण्डों) में निपटान किए गए राख की मात्रा (मीट्रिक टन): ग) रिपोर्टिंग की अवधि के दौरान राख कुण्डों में गारा निस्सरण हेतु खपत हुए जल की कुल मात्रा (मी^{3}): घ) राख कुण्डों की कुल संख्या: (i) सक्रिय: (ii) खाली किए गए (पुन: भरा जाना है) (iii) पुन: भरे गए: ड.) राख कुण्डों के अधीन कुल क्षेत्र (हेक्टेयर):	
18.	**अलग-अलग राख कुण्ड का ब्यौरा** *राख कुण्ड 1,2 आदि (यदि राख कुण्डों की संख्या एक से अधिक हो, तो कृपया निम्नलिखित ब्यौरा अलग से उपलब्ध कराएं)* क) स्थिति: निर्माणाधीन या सक्रिय या खाली किया गया या पुन: भरा गया ख) राख कुण्ड में राख का निपटान शुरू करने की तारीख/महीना/वर्ष या महीना/वर्ष): ग) राख कुण्ड की क्षमता पूर्ण किए जाने के पश्चात् उसमें राख निपटान रोकने की तारीख (तारीख/महीना/वर्ष या महीना/वर्ष): (सक्रिय राख कुण्डों के लिए लागू नहीं) ग) क्षेत्र (हेक्टेयर): घ) डाइक की ऊंचाई (मी.): घ) आयतन (मी^{3}): ड.) तारीख 31 मार्च तक निपटान किए गए राख की मात्रा (मीट्रिक टन): च) उपलब्ध आयतन का प्रतिशत (%) और आगे निपटान किए जा सकने वाले राख की मात्रा (मीट्रिक टन): छ) राख कुण्ड के भरे जाने की अनुमानित अवधि (वर्षों और महीनों की संख्या): ड.) निर्देशांक (अक्षांश और देशान्तर): (कृपया न्यूनतम 4 निर्देशांकों को विनिर्दिष्ट करें) ज) राख कुण्ड में की गई लाइनिंग का प्रकार: एचडीपीई लाइनिंग या एलडीपीई लाइनिंग या क्ले लाइनिंग या कोई लाइनिंग नहीं छ) निपटान की विधि: शुष्क निपटान या नम गारा (नम गारा के मामले में कृपया विनिर्टिष्ट करें कि क्या एचसीएसडी या एमसीएसडी या एलसीएसडी है) ज) राख का अनुपात: गारा मिश्रण में जल (1:____): झ) संस्थापित और कार्यशील राख जल पुनर्चक्रण प्रणाली (एडब्ल्यूआरएस): हां या नहीं ञ) जमीन के अंदर या जल निकाय में राख कुण्ड से निस्सरित अपशिष्ट जल की मात्रा (मी^{3}): ट) डाइक की स्थिरता का अध्ययन कराए जाने की पिछली तारीख और उस संगठन का नाम जिसने अध्ययन किया: ठ) लेखा-परीक्षा किए जाने की पिछली तारीख और उस संगठन का नाम जिसने लेखा-परीक्षा की:	
19.	उपयोग किए गए पुराने राख की मात्रा (एमटीपीए): i. फ्लाई-एश आधारित उत्पाद (ईंट या ब्लॉक या टाइल्स या फाइबर	

	सीमेंट शीट या पाइप या बोर्ड या पैनल): ii. सीमेंट विनिर्माण: iii. रेडी मिक्स कंक्रीट: iv. राख और जीओ-पॉलिमर आधारित निर्माण सामग्री: v. सिंटर्ड या कोल्ड बॉन्डेड राख एग्रीगेट का निर्माण: vi. सड़कों, सड़क और फ्लाई ओवर के पुश्तों का निर्माण: vii. बांधों का निर्माण: viii. निम्न भू-क्षेत्र का भराव: ix. खनिज क्षेत्रों का भराव: x. अधिभार वाले डम्पों में उपयोग: xi. कृषि: xii. तटीय जिलों में तटरेखा सुरक्षा संरचनाओं का निर्माण: xiii. अन्य देशों को राख का निर्यात xiv. अन्य (कृपया विनिर्दिष्ट करें):	

20.	**सार :**			
	ब्यौरा	सृजित मात्रा (एमटीपी)	उपयोग की गई मात्रा (एमटीपी) और (%)	शेष मात्रा (एमटीपी)
	रिपोर्टिंग की अवधि के दौरान राख			
	पुरानी राख			
	कुल			

21.	कोई अन्य सूचना : वार्षिक अनुपालन रिपोर्ट, और विद्युत संयंत्रों और राख कुण्डों की शेष फाइलों की सॉफ्ट कॉपी ई-मेल:- moefcc-coalash@gov.in पर भेजी जाए।	
22.	प्राधिकृत हस्ताक्षरकर्ता के हस्ताक्षर	

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 31st December, 2021

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

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

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

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

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

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

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

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

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

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

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

(1) Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall be primarily responsible to ensure 100 per cent utilisation of ash (fly ash, and bottom ash) generated by it in an eco-friendly manner as given in sub-paragraph (2);

(2) The ash generated from coal or lignite based thermal power plants shall be utilised only for the following eco-friendly purposes, namely:-

(i) Fly ash based products viz. bricks, blocks, tiles, fibre cement sheets, pipes, boards, panels;

(ii) Cement manufacturing, ready mix concrete;

(iii) Construction of road and fly over embankment, Ash and Geo-polymer based construction material;

(iv) Construction of dam;

(v) Filling up of low lying area;

(vi) Filling of mine voids;

(vii) Manufacturing of sintered or cold bonded ash aggregate;

(viii) Agriculture in a controlled manner based on soil testing;

(ix) Construction of shoreline protection structures in coastal districts;

(x) Export of ash to other countries;

(xi) Any other eco-friendly purpose as notified from time to time.

(3) A committee shall be constituted under the chairmanship of Chairman, Central Pollution Control Board (CPCB) and having representatives from Ministry of Environment, Forest and Climate Change (MoEFCC), Ministry of Power, Ministry of Mines, Ministry of Coal, Ministry of Road Transport and Highways, Department of Agricultural Research and Education, Institute of Road Congress, National Council for Cement and Building Materials, to examine and review and recommend the eco-friendly ways of utilisation of ash and make inclusion or exclusion or modification in the list of such ways as mentioned in Sub-paragraph (2) based on technological developments and requests received from stakeholders. The committee may invite State Pollution Control Board or Pollution Control Committee, operators of thermal power plants and mines, cement plants and other stakeholders as and when required for this purpose. Based on the recommendations of the Committee, Ministry of Environment, Forest and Climate Change (MoEFCC) may publish such eco-friendly purpose.

(4) Every coal or lignite based thermal power plant shall be responsible to utilise 100 per cent ash (fly ash and bottom ash) generated during that year, however, in no case shall utilisation fall below 80 per cent in any year, and the thermal power plant shall achieve average ash utilisation of 100 per cent in a three years cycle:

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

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

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

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

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

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

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

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

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

(6) Any new as well as operational thermal power plant may be permitted an emergency or temporary ash pond with an area of 0.1 hectare per Mega Watt (MW). Technical specifications of ash ponds or dykes shall be as per the guidelines of Central Pollution Control Board (CPCB) made in consultation with Central Electricity Authority (CEA) and these guidelines shall also lay down a procedure for annual certification of the ash pond or dyke on its safety, environmental pollution, available volume, mode of disposal, water consumption or conservation in disposal, ash water recycling and greenbelt, etc., and shall be put in place within three months from the date of publication of this notification.

(7) Every coal or lignite based thermal power plant shall ensure that loading, unloading, transport, storage and disposal of ash is done in an environmentally sound manner and that all precautions to prevent air and water pollution are taken and status in this regard shall be reported to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in Annexure attached to this notification.

(8) Every coal or lignite based thermal power plant shall install dedicated silos for storage of dry fly ash silos for at least sixteen hours of ash based on installed capacity and it shall be reported upon to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in the Annexure and shall be inspected by Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) from time to time.

(9) Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall provide real time data on daily basis of availability of ash with Thermal Power Plant (TPP), by providing link to Central Pollution Control Board's web portal or mobile phone App for the benefit of actual user(s).

(10) Statutory obligation of 100 per cent utilisation of ash shall be treated as a change in law, wherever applicable.

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

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

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

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

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

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

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

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

(4) (i) All mine owners shall get mine closure plans (progressive and final) to accommodate ash in the mine voids and the concerned authority shall approve mine plans for disposal of ash in mine voids and mixing of ash with overburden dumps. The Ministry of Environment, Forest and Climate Change (MoEFCC) has issued guidelines on 28th August, 2019 regarding exemption of requirement of Environmental Clearance of thermal power plants and coal mines along with the guidelines to be followed for such disposal.

(ii) The Ministry in consultation with Central Pollution Control Board (CPCB), Director General of Mine Safety (DGMS) and Indian Bureau of Mines (IBM) may issue further guidelines time to time to facilitate ash disposal in mine voids and mixing with overburden dumps and it shall be the responsibility of mine owners to get the necessary amendments or modifications in the permissions issued by various regulatory authorities within one year from the date of identification of such mines.

(5) (i) There shall be a committee headed by Chairperson, Central Pollution Control Board (CPCB) with representatives from Ministry of Environment, Forest and Climate Change, Ministry of Power, Ministry of Mines, Ministry of Coal, Director General of Mine Safety and Indian Bureau of Mines for identification of mines for backfilling of mine voids with ash or mixing of ash with overburden dump including examination of safety, feasibility (not economic feasibility) and aspects of environmental contamination and the committee shall get updated quarterly reports prepared regarding identified mines (both underground and opencast) for the stakeholder Ministries or Departments and the committee shall start identifying the suitable mines immediately after the publication of this notification.

(ii) Thermal power plants or mines shall not wait for disposal of ash till the identification is done by the above mentioned committee, to meet the utilisation targets mandated as above.

(6) Filling of low lying areas with ash shall be carried out with prior permission of the State Pollution Control Board or Pollution Control Committee for approved projects, and in accordance with guidelines laid down by Central Pollution Control Board (CPCB) and the State Pollution Control Board or Pollution Control Committee (PCC) shall publish approved sites, location, area and permitted quantity annually on its website.

(7) Central Pollution Control Board after engaging relevant stakeholders, shall put in place the guidelines within one year for all types of activities envisaged under this notification including putting in place time bound online application process for the grant permission by State Pollution Control Boards (SPCBs) or Pollution Control Committees (PCCs).

(8) All building construction projects (Central, State and Local authorities, Govt. undertakings, other Govt. agencies and all private agencies) located within a radius of three hundred kilometres from a coal or lignite based thermal power plant shall use ash bricks, tiles, sintered ash aggregate or other ash based products, provided these are made available at prices not higher than the price of alternative products.

(9) Manufacturing of ash based products and use of ash in such products shall be in accordance with specifications and guidelines laid down by the Bureau of Indian Standards, Indian Road Congress, and Central Pollution Control Board.

C. Environmental compensation for non-compliance.—

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

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

(2) Environmental compensation collected by the authorities shall be deposited in the designated account of Central Pollution Control Board.

(3) In case of legacy ash, if the coal or lignite based thermal power plant (including captive or co-generating stations or both) has not achieved utilisation equivalent to at least 20 per cent (for the first year), 35 per cent (for the second year), 50 per cent (for third to tenth year) of ash generated based on installed capacity, an environmental compensation of Rs. 1000 per ton of unutilised legacy ash during that financial year shall be imposed and if the utilization of legacy ash is not completed at the end of 10 years, an environmental compensation of Rs.1000 per ton shall be imposed on the remaining unutilised quantity which has not been imposed earlier.

(4) It shall be the responsibility of the transporters or vehicle owner to deliver ash to authorised purchaser or user agency and if it is not complied, then an environmental compensation of Rs. 1500 per ton on such quantity as mis-delivered to unauthorised users or non- delivered to authorised users will be imposed besides prosecution of such non-compliant transporters by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC).

(5) It is the responsibility of the purchasers or user agencies to utilise ash in an eco-friendly manner as laid down at para B of this notification and if it is not complied, then an environmental compensation of Rs. 1500 or per ton shall be imposed by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC).

(6) If the user agencies do not utilise ash to the extent obligated under para B or the extent to which they have been intimated through Notice(s) served under sub-paragraph (1) of para D, whichever is lower, they shall be liable to pay Rs. 1500 per ton of ash for the quantity they fall short off:

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

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

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

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

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

(1) The owner of thermal power plants or manufacturers of ash bricks or tiles or sintered ash aggregate shall serve written notice to persons or agencies who are liable to utilise ash or ash based products, offering for sale, or transport or both.

(2) Persons or user agencies who have been served notices by owner of thermal power plants or manufacturers of ash bricks or tiles or sintered ash aggregate, if they have already tied up with other agencies for the purpose of utilisation of ash or ash products, shall inform the thermal power plant accordingly, if they cannot use any ash or ash products or use reduced quantity.

E. Enforcement, Monitoring, Audit and Reporting.—

(1) The Central Pollution Control Board (CPCB) and the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall be the enforcing and monitoring authority for ensuring compliance of the provisions and shall monitor the utilisation of ash on quarterly basis. Central Pollution Control Board shall develop a portal for the purpose within six months of date of publication of the notification. The concerned District Magistrate shall have concurrent jurisdiction for enforcement and monitoring of the provisions of this notification.

(2) (i) Thermal power plants shall upload monthly information regarding ash generation and utilisation by 5th of the next month on the web portal. Annual implementation report (for the period 1st April to 31st March) providing information about the compliance of provisions in this notification shall be submitted by the 30th day of April, every year to the Central Pollution Control Board, concerned State Pollution Control Board or Pollution Control Committee (PCC), Central Electricity Authority (CEA), and concerned Integrated Regional Office of Ministry of Environment, Forest and Climate Change by the coal or lignite based thermal power plants. Central Pollution Control Board and Central Electricity Authority shall compile the annual reports submitted by all the thermal power plants and submit to Ministry of Environment, Forest and Climate Change by 31st May.

(ii) All other user agencies shall submit consumption or utilisation or disposal of ash and use of ash based products as mandated in this notification in the compliance report of Environmental Clearance (EC) issued by Ministry of Environment, Forest and Climate Change or State Level Environment Impact Assessment Authority (SEIAA) or Consent to Operate (CTO) issued by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC), whichever is applicable. The Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall publish annual report of ash utilisation of all other agencies except thermal power plants to review the effective implementation of the provisions of the notification.

(3) For the purpose of monitoring the implementation of the provisions of this notification, a committee shall be constituted under the Chairperson, Central Pollution Control Board (CPCB), with members from Ministry of Power, Ministry of Coal, Ministry of Mines, Ministry of Environment, Forest and Climate Change, Ministry Road Transportation and Highways, Department of Heavy Industry as well as any concerned stakeholder(s), to be nominated by the Chairman of the committee. The committee may make recommendations for effective and efficient implementation of the provisions of the notification. The committee shall meet at least once in six months and review annual implementation reports and the committee shall also hold stakeholder consultations for monitoring of ash utilisation as mandated by this notification by inviting relevant stakeholder(s) at least once in six months. The committee shall submit the six monthly report to Ministry of Environment, Forest and Climate Change (MoEFCC).

(4) For the purpose of resolving disputes between thermal power plants and users of ash or manufacturer of ash based products, the State Governments or Union territory administration constitute a Committee within three months from the date of publication of this notification under the Chairman, State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) with representatives from Department of Power, and one representative from the Department which deals with the subject of concerned agency with which dispute is made.

(5) The compliance audit for ash disposal by the thermal power plants and the user agency shall be conducted by auditors, authorised by Central Pollution Control Board (CPCB) and audit report shall be submitted to Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) by 30th November every year. Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall initiate action against non-compliant thermal power plants within fifteen days of receipt of audit report.

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

NARESH PAL GANGWAR, Jt. Secy.

Annexure

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

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

	(iii) Ready mix concrete: (iv) Ash and Geo-polymer based construction material: (v) Manufacturing of sintered or cold bonded ash aggregate: (vi) Construction of roads, road and fly over embankment: (vii) Construction of dams: (viii) Filling up of low lying area: (ix) Filling of mine voids: (x) Use in overburden dumps: (xi) Agriculture: (xii) Construction of shoreline protection structures in coastal districts; (xiii) Export of ash to other countries: (xiv) Others (please specify): (c) Quantity of bottom ash utilised (MTPA): (i) Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels): (ii) Cement manufacturing: (iii) Ready mix concrete: (iv) Ash and Geo-polymer based construction material: (v) Manufacturing of sintered or cold bonded ash aggregate: (vi) Construction of roads, road and flyover embankment: (vii) Construction of dams: (viii) Filling up of low lying area: (ix) Filling of mine voids: (x) Use in overburden dumps: (xi) Agriculture: (xii) Construction of shoreline protection structures in coastal districts: (xiii) Export of ash to other countries: (xiv) Others (please specify): Total quantity of current ash unutilised (MTPA) during reporting period:	
16.	Percentage utilisation of current ash generated during reporting period (per cent):	
17.	Details of disposal of ash in ash ponds (a) Total quantity of ash disposed in ash pond(s) (Metric Tons) as on 31st March (excluding reporting period): (b) Quantity of ash disposed in ash pond(s) during reporting period (Metric Tons): (c) Total quantity of water consumption for slurry discharge into ash ponds during reporting period (m^3): (d) Total number of ash ponds: (i) Active: (ii) Exhausted (yet to be reclaimed): (iii) Reclaimed: (e) total area under ash ponds (ha):	
18.	Individual ash pond details *Ash pond-1,2, etc (please provide below mentioned details separately, if number of ash ponds is more than one)* (a) Status: Under construction or Active or Exhausted or	

	Reclaimed (b) Date of start of ash disposal in ash pond (DD/MM/YYYY or MMYYYY): (c) Date of stoppage of ash disposal in ash pond after completing its capacity (DD/MM/YYYY or MM/YYYY): (Not applicable for active ash ponds) (c) area (hectares): (d) dyke height (m): (d) volume (m^3): (e) quantity of ash disposed as on 31st March (Metric Tons): (f) available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons): (g) expected life of ash pond (number of years and months): (e) co-ordinates (Lat and Long): (please specify minimum 4 co-ordinates) (f) type of lining carried in ash pond: HDPE lining or LDPE lining or clay lining or No lining g) mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD) (h) Ratio of ash: water in slurry mix (1:___): (i) Ash water recycling system (AWRS) installed and functioning: Yes or No (j) Quantity of wastewater from ash pond discharged into land or water body (m3): (k) Last date when the dyke stability study was conducted and name of the organisation who conducted the study: (l) Last date when the audit was conducted and name of the organisation who conducted the audit:	
19.	Quantity of legacy ash utilised (MTPA): i. Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels): ii. Cement manufacturing: iii. Ready mix concrete: iv. Ash and Geo-polymer based construction material: v. Manufacturing of sintered or cold bonded ash aggregate: vi. Construction of roads, road and flyover embankment: vii. Construction of dams: viii. Filling up of low lying area: ix. Filling of mine voids: x. Use in overburden dumps: xi. Agriculture: xii. Construction of shoreline protection structures in coastal districts; xiii. Export of ash to other countries: xiv. Others (please specify):	
20.	Summary:	

Details	Quantity generated (MTP)	Quantity utilised (MTP) and (per cent)	Balance quantity (MTP)

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

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असाधारण
EXTRAORDINARY

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

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पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 30 दिसम्बर, 2022

का.आ. 6169(अ).—पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय में भारत सरकार ने पर्यावरण (संरक्षण) नियम, 1986 के नियम (5) के उप-नियम (3) के खंड (घ) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उप-धारा (1) और उप-धारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए भारत के राजपत्र, असाधारण, भाग II, खंड 3 उप खंड (ii) का.आ. 5481(अ), तारीख 31 दिसंबर, 2021 द्वारा एक अधिसूचना जारी की थी (जिन्हें इसमें इसके पश्चात इसे राख के उपयोग से संबंधित अधिसूचना कहा गया है);

और, राख के उपयोग से संबंधित अधिसूचना के उपबंधों के कार्यान्वयन के संबंध में विद्युत मंत्रालय, ताप विद्युत संयंत्रों और विभिन्न हितधारकों से अनुरोध प्राप्त हुए हैं;

और, राख के उपयोग से संबंधित अधिसूचना के कार्यान्वयन में सुचारू परिवर्तन लाने हेतु उक्त अधिसूचना के कतिपय उपबंधों में संशोधन लाना उचित है;

अत: अब, केन्द्रीय सरकार पर्यावरण (संरक्षण) नियम, 1986 के नियम (5) के उप-नियम (1), (2) और (4) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उप-धारा (1) और उप-धारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, जारी राख के उपयोग संबंधी अधिसूचना में निम्नलिखित संशोधन करती है, अर्थात्:-

जारी राख के उपयोग से संबंधित अधिसूचना में संशोधन –

1. पैरा क में, -

(i) उप पैरा क (4) में, तीसरे परंतुक के पश्चात निम्नलिखित परन्तुक अंतर्विष्ट किया जाएगा, अर्थात् :

"परन्तु, यह भी कि इस अधिसूचना के प्रकाशन की तारीख को अथवा उसके पश्चात् स्थापित नए ताप विद्युत संयंत्र सारणी में यथा विनिर्दिष्ट 60 प्रतिशत से कम ताप विद्युत संयंत्रों के लिए विनिर्दिष्ट अनुपालन चक्र के समान प्रथम अनुपालन चक्र का अनुसरण करेंगे।

टिप्पण : लागू अनुपालन चक्र के अनुसार उपयोग के लक्ष्य 1 अप्रैल, 2022 से प्रभावी होंगे।"

(ii) उप पैरा 5 में, -

(क) आरंभिक पैरा में, "इस अधिसूचना के प्रकाशन की तारीख" शब्दों के स्थान पर "1 अप्रैल, 2022" उक्त अक्षर और शब्द रखे जाएंगे;

(ख) दूसरे परंतुक में, -

(i) "हरित पट्टी या पौधरोपण" के पश्चात, "या उप पैरा (6) में यथा विनिर्दिष्ट केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) द्वारा जारी मार्गदर्शी सिद्धांतों के अनुसार सौर ऊर्जा संभव या पवन ऊर्जा संयंत्र" शब्द कोष्ठकों और अक्षरों को अंत:स्थापित किए जाएंगे;

(ii) "केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीब) या" शब्द कोष्ठक और अक्षर हटा दिया जाएंगे।

(iii) "एक वर्ष" शब्दों के स्थान पर "तीन वर्ष" शब्दों को रखा जाएगा।

(iv) "इस अधिसूचना के प्रकाशन की तारीख" शब्दों के स्थान पर "1 अप्रैल, 2022" उक्त अक्षर और शब्द रखे जाएंगे;

(ग) दूसरे परंतुक के पश्चात निम्नलिखित उपलब्ध अंत:स्थापित किया जाएगा, अर्थात् :

"परंतु कि पैरा क (6) में यथाविनिर्दिष्ट राख के अस्थायी भंडारण हेतु अभिहीत किए गए संचालित राख कुंड या डाइक के सिवाय सभी राख कुंडों या डाइक में संग्रहीत राख में पुरानी राख एकत्रित होगी और या तो इसे पुनःप्राप्त या स्थिर या उपयोग करना होगा।"

(iii) उप पैरा (6) के स्थान, उप पैरा रखा जाएगा, अर्थात्:

"(6) किसी भी नए और साथ ही चालू थर्मल पावर प्लांट को 0.1 हेक्टेयर प्रति मेगा वाट (मेगावाट) के क्षेत्र में राख के अस्थायी भंडारण के लिए परिचालन राख तालाब या डाइक की अनुमति दी जा सकती है। केन्द्रीय विद्युत प्राधिकरण के परामर्श से बनाए गए केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) के दिशा-निर्देशों के अनुसार परिचालन के साथ-साथ स्थिर और पुन: दावा किए गए राख तालाबों या बांधों की तकनीकी विशिष्टताओं के अनुसार होंगे और ये दिशानिर्देश वार्षिक प्रमाणन के लिए एक प्रक्रिया भी निर्धारित करेंगे। परिचालन के साथ-साथ राख तालाब या डाइक को उसकी सुरक्षा, पर्यावरण प्रदूषण, उपलब्ध मात्रा, निपटान के तरीके, पानी की खपत या निपटान में संरक्षण, राख जल पुनर्चक्रण और हरित पट्टी, आदि पर परिचालन के साथ-साथ स्थिर और पुन: प्राप्त किया जाएगा और इस अधिसूचना के प्रकाशन की तारीख से तीन महीने भीतर रखा जाएगा :

परंतु कि 31 दिसंबर, 2021 से पहले चालू किए गए ताप विद्युत संयंत्रों के लिए 1600 मेगावाट से कम या उसके बराबर स्थापित क्षमता वाले दो परिचालन राख तालाबों या डाइकों तक और 1600 से अधिक स्थापित क्षमता वाले ताप विद्युत संयंत्रों के लिए चार परिचालन राख तालाबों या बांधों तक MW, मौजूदा राख तालाबों या बांधों से निर्दिष्ट क्षेत्र के भीतर कई लैगून होने पर, निर्देशांक के साथ स्पष्ट सीमांकन के साथ नामित किया जा सकता है, और केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) और संबंधित राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी)/प्रदूषण को सूचित करेगा। नियंत्रण समिति (पीसीसी) 31 मार्च, 2023 तक :

परंतु आगे कि नए थर्मल पावर प्लांट या मौजूदा थर्मल पावर प्लांट के विस्तार के मामले में केवल एक ऐश पोंड या डाइक की अनुमति दी जाएगी 31 दिसंबर, 2021 को या उसके बाद, जो केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) और संबंधित राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी)/प्रदूषण नियंत्रण समिति (पीसीसी) को कमीशन की तारीख से 3 महीने के भीतर निर्देशांक के साथ सीमांकन के विवरण की सूचना देगा। थर्मल पावर प्लांट या 31 मार्च, 2023 तक, जो भी बाद में हो :

परंतु यह और कि कोयला और लिग्नाइट आधारित तापीय विद्युत संयंत्रों को आगे किसी भी नए कार्यशील राख कुंड या डाइक को स्थापित करने या नाम निर्दिष्ट करने की अनुमति नहीं दी जाएगी।

परंतु यह और कि कार्यशील राख कुंड या डाइक की 0.1 हे./मेगावॉट (एमडब्ल्यू) का विनिर्देशन तारीख 3 नवम्बर, 2009 से पूर्व चालू तापीय विद्ययुत संयंत्रों पर लागू नहीं होंगे।"

2. पैरा ख में, -

(i) उप पैरा (1) में, "300 कि.मी. के भीतर" शब्दों कोष्ठकों और आंकड़ों के स्थान पर "300 कि.मी. के रेडियस के भीतर" शब्द कोष्ठक और आंकड़े रखें जाएंगे।

(ii) उप पैरा (8) में, उच्चतर "वैकल्पिक उत्पादों के मूल्य से अधिक" शब्दों के स्थान पर "केन्द्रीय लोक कार्य विभाग (सीपीडब्ल्यूडी) या संबंधित लोक कार्य विभाग (पीडब्ल्यूडी) द्वारा विनिर्दिष्ट दरों की अनुसूची में उल्लिखित मूल्य या दरों की अनुसूची के अधीन निर्धारित न होने परल वैकल्पिक उत्पादों का मूल्य" शब्द रखे जाएंगे।

3. पैरा घ में, -

(i) उप पैरा (2) के स्थान, उप पैरा रखा जाएगा, अर्थात्:

''(2) जिन व्यक्तियों या उपयोगकर्ता या एजेंसियों को थर्मल पावर प्लांट के मालिक द्वारा नोटिस दिया गया है, अगर वे राख के उपयोग के उद्देश्य से पहले से ही अन्य एजेंसियों के साथ करार कर चुके हैं तो थर्मल पावर प्लांट को तदनुसार सूचित करेंगे और यदि वे उपयोग नहीं कर सकते हैं कोई राख या कम मात्रा का उपयोग कर सकता है।''

(ii) उप-पैरा (2) के पश्चात्, निम्नलिखित उप-पैरा अंत:स्थापित किया जाएगा, अर्थात्:

"(3) जिन व्यक्तियों या उपभोकता अभिकरणों को, यदि वे राख आधारित उत्पादों के उपयोग के उद्देश्य से अन्य अभिकरणों के साथ पहले से जुड़े हुए हैं, ऐश ब्रिक्स या टाइल्स या सिंटर्ड ऐश ऐग्रीगेट या अन्य राख आधारित उत्पादों के विनिर्माताओं के द्वारा नोटिस दिया गया है तो उन्हें ऐश ब्रिक्स या आइल्स या सिंटर्ड ऐश ऐग्रीगेट या अन्य राख आधारित उतपादों के विनिर्माताओं को सूचित करना होगा, तद्नुसार, यदि वे राख आधारित उत्पादों का उपयोग नहीं कर सकते या कम प्रमात्रा में उपयोग कर सकते हैं।"

2. यह अधिसूचना राजपत्र में प्रकाशन की तारीख से प्रवृत होगी।

[फा. सं. एचएसएम - 9/1/2019- एचएसएम]

नरेश पाल गंगवार, अपर सचिव

टिप्पण : मूल अधिसूचना भारत के राजपत्र, असाधारण, भाग-II, खंड 3, उप-खंड (ii) सं. एस 5481(अ) तारीख 31 दिसम्बर, 2021 के द्वारा में प्रकाशित की गई।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 30th December, 2022

S.O. 6169(E).—Whereas, the Government of India, Ministry of Environment, Forest and Climate Change, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule (5) of the Environment (Protection) Rules, 1986, issued a notification published in the Gazette of India, Extraordinary, Part II, Section 3, sub-section (ii) *vide* S.O.5481(E), dated the 31st December, 2021 (herein after referred to as the ash utilisation notification);

And whereas, requests have been received from Ministry of Power, thermal power plants and various stakeholders regarding implementation of provisions of the ash utilisation notification;

And whereas, it is expedient to make amendments to certain provisions of the said notification to have smooth transitioning in implementation of the ash utilisation notification;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with of sub-rule (1), (2) and (4) of rule (5) of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following amendments in the ash utilisation notification namely:-

In the ash utilisation notification,-

(1) in paragraph A,-

(i) in sub-paragraph (4), after the third proviso, the following shall be inserted, namely,-

"Provided also that new thermal power plants commissioned on or after the date of publication of this notification shall follow the first compliance cycle similar to the compliance cycle specified for thermal power plants having utilisation per cent. less than 60 per cent. as specified in the table.

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

(ii) in sub- paragraph (5),-

(a) in the opening paragraph, for the words "the date of publication of this notification", the figures, letters and word "1st April, 2022" shall be substituted;

(b) in the second proviso, -

(i) after the words "green belt or plantation", the words, brackets, letters and figure "or solar power plant or wind power plant as per the guidelines issued by the Central Pollution Control Board (CPCB) as specified in sub-para (6)" shall be inserted,

(ii) the words, brackets and letters "Central Pollution Control Board (CPCB) or" shall be deleted,

(iii) for the words "a year", the words "three years" shall be substituted,

(iv) for the words "the date of publication of this notification", the figures, letters and word "1st April, 2022" shall be substituted.

(c) after the second proviso, the following proviso shall be inserted, namely:

"Provided that ash stored in all ash ponds or dykes other than operational ash pond or dyke designated for temporary storage of ash as specified in sub-para (6) shall constitute the legacy ash and either to be reclaimed or stabilised or utilised.".

(iii) for sub- paragraph (6), the following sub-para shall be substituted, namely,-

"(6) Any new as well as operational thermal power plant may be permitted operational ash pond or dyke for temporary storage of ash within an area of 0.1 hectare per Mega Watt (MW). Technical specifications of operational as well as stabilised and reclaimed ash ponds or dykes shall be as per the guidelines of the Central Pollution Control Board (CPCB) made in consultation with the Central Electricity Authority (CEA) and these guidelines shall also lay down a procedure for annual certification of the operational as well as stabilised and reclaimed ash pond or dyke on its safety, environment pollution, available volume, mode of disposal, water consumption or conservation in disposal, ash water recycling and green belt, etc. and shall be put in place within three months from the date of publication of this notification:

Provided that up to two operational ash ponds or dykes for thermal power plants commissioned before 31st December, 2021, having installed capacity less than or equal to 1600 MW, and up to four operational ash ponds or dykes for thermal power plants having installed capacity more than 1600 MW, having multiple lagoons, within the specified area from the existing ash ponds or dykes, may be designated with clear demarcation along with coordinates, and shall inform to Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) by 31st March, 2023:

Provided further that one ash pond or dyke shall be permitted in case of new thermal power plants or expansion of existing thermal power plants commissioned on or after 31st December, 2021, which shall inform the details of demarcation along with coordinates to Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) within 3 months from the date of commissioning of thermal power plant or by 31st March, 2023, whichever is later:

Provided also that coal and lignite based thermal power plants shall not be allowed to further establish or designate any new operational ash pond or dyke:

Provided also that specification of 0.1 hectare per Mega Watt (MW) of an operational ash pond or dyke shall not be applicable for the thermal power plants commissioned before 03rd November, 2009.".

(2) in paragraph B,-

(i) in sub- paragraph (1), for the words, figures and letters "within 300 kms", the words, figures and letters "within a radius of 300 kms" shall be substituted,

(ii) in sub- paragraph (8), for the words "higher than the price of alternative products", the words, brackets and letters "more than the price mentioned in the Schedule of Rates as specified by Central Public Works Department (CPWD) or concerned Public Works Department (PWD) or price of alternative products, if not mentioned in the Schedule of Rates." shall be substituted.

(3) in paragraph -D, -

(i) for sub- paragraph (2), the following sub- paragraph shall be substituted, namely,-

"(2) Persons or user agencies who have been served notice by owner of thermal power plants, if they have already tied up with other agencies for the purpose of utilisation of ash, shall inform the thermal power plant accordingly, and if they cannot use any ash or may use reduced quantity.".

(ii) after sub- paragraph (2), the following sub-para shall be inserted, namely,-

"(3) Persons or user agencies who have been served notice by manufacturers of ash bricks or tiles or sintered ash aggregate or other ash based products, if they have already tied up with other agencies for the purpose of utilisation of ash based products, shall inform the manufacturer of ash bricks or tiles or sintered ash aggregate or other ash based products, accordingly, and if they cannot use ash based products, or may use reduced quantity.".

2. This notification shall come into force on the date of its publication in the Official Gazette.

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

NARESH PAL GANGWAR, Addl. Secy.

Note : The principal notification was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), dated the 31st December, 2021, *vide* number S.O.5481 (E), dated the 31st December, 2021.

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असाधारण
EXTRAORDINARY

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

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

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पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 1 जनवरी, 2024

का.आ. 05(अ).—केन्द्रीय सरकार ने पर्यावरण (संरक्षण) नियम, 1986 के नियम (5) के उप-नियम (3) के खंड (घ) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (1) और उपधारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, भारत के राजपत्र, असाधारण भाग II, खंड 3, उप-खंड (ii) में प्रकाशित *संख्या का. आ.* 5481(अ), दिनांक 31 दिसंबर, 2021 द्वारा एक अधिसूचना जारी की गई थी;

और, उक्त अधिसूचना के उपबंधों के कार्यान्वयन के संबंध में विद्युत मंत्रालय और अन्य हितधारकों से अनुरोध प्राप्त हुए हैं;

और, पर्यावरण-अनुकूल उद्देश्यों के लिए राख के उपयोग को बढ़ावा देने के लिए उक्त अधिसूचना के कुछ उपबंधों में संशोधन करना समीचीन है, जिसमें राख-आधारित उत्पाद निर्माण में लगे सूक्ष्म और लघु उद्यमों द्वारा निर्मित राख-आधारित उत्पादों में राख का उपयोग सम्मिलित है;

अत: अब, पर्यावरण (संरक्षण) नियम, 1986 के नियम (5) के उप-नियम (1), उप-नियम (2) और उप-नियम (4) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (1) और उपधारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, केन्द्रीय सरकार राख के उपयोग से संबंधित अधिसूचना में निम्नलिखित संशोधन करती है, अर्थात्: -

राख के उपयोग से संबंधित अधिसूचना के,-

(1) पैरा ख में,-

(i) उप-पैरा (1) में, दोनों परंतुकों के स्थान पर, निम्नलिखित परंतुक रखा जाएगा, अर्थात्: -

"परंतु कोयला या लिग्नाइट आधारित थर्मल पावर प्लांट ने ऐसी एजेंसियों को राख उपलब्ध कराने के लिए नोटिस दिया हो, जिसके लिए राख और परिवहन की लागत कोयला या लिग्नाइट आधारित थर्मल पावर प्लांट द्वारा वहन की जाएगी।"

(ii) उप-पैरा (8) में, निम्नलिखित को रखा जाएगा, अर्थात्:

"कोयला या लिग्नाइट आधारित थर्मल पावर प्लांट से 300 किलोमीटर के दायरे में स्थित सभी भवन निर्माण परियोजनाएं (केंद्रीय, राज्य और स्थानीय प्राधिकरण, सरकारी उपक्रम, अन्य सरकारी एजेंसियां और सभी निजी एजेंसियां) राख की ईंटों, टाइल्स, सिंटर्ड राख समुच्चय या अन्य राख आधारित उत्पाद का उपयोग करेंगी, परन्तु इन्हें केंद्रीय लोक निर्माण विभाग (सीपीडब्ल्यूडी) या संबंधित राज्य के लोक निर्माण विभाग (पीडब्ल्यूडी) द्वारा निर्दिष्ट दरों की अनुसूची में उल्लिखित कीमत से अनधिक कीमत पर उपलब्ध कराया जाएगा या दरों की अनुसूची के आधीन निर्धारित न होने पर वैकल्पिक उत्पादों के मूल्य पर उपलब्ध कराया जाएगा.

परंतु केंद्रीय लोक निर्माण विभाग और संबंधित राज्य के लोक निर्माण विभाग 01 जनवरी, 2024 से छह महीने के भीतर निर्दिष्ट दरों की अनुसूची प्रकाशित करेंगे।"

(iii) उप-पैरा (9) के पश्चात, निम्नलिखित उप-पैरा अंत:स्थापित किया जाएगा, अर्थात्:

"(10) सभी स्थानीय प्राधिकरण राख और राख-आधारित उत्पादों अर्थात् इमारतों, सड़कों, तटबंधों या किसी अन्य संबंधित निर्माण गतिविधि के निर्माण में ईंटें, ब्लॉक, टाइलें, सिंटर्ड या कोल्ड बॉन्डेड राख समुच्चय, फाइबर सीमेंट शीट, पाइप, बोर्ड, पैनल के उपयोग के लिए अपने संबंधित भवन उपनियमों और अन्य सुसंगत विनियमों में उपबंध करेंगे।"

(2) पैरा घ में,-

(i) पैरा (1) के स्थान पर, निम्नलिखित को रखा जाएगा, अर्थात्:

"(1) ताप विद्युत संयंत्रों के मालिक उन व्यक्तियों या एजेंसियों को, जिन्हें पैरा ख के उप-पैरा (1) और (3) के अधीन राख का उपयोग करने की आवश्यकता है, परिवहन की लागत को वहन करते हुए राख की मुफ्त आपूर्ति करने के लिए संबंधित राज्य प्रदूषण नियंत्रण बोर्ड को एक प्रति के साथ एक लिखित नोटिस देंगे।

(1क) राख की ईंटों या टाइलों या सिंटर्ड राख समुच्चय या अन्य राख-आधारित उत्पादों के निर्माता उन व्यक्तियों या एजेंसियों को जिन्हें पेशकश के लिए पैरा ख के उप- पैरा (8) के अधीन राख-आधारित उत्पादों का उपयोग करना आवश्यक है, ऐसे उत्पादों की बिक्री के लिए एक लिखित नोटिस देने सहित संबंधित राज्य प्रदूषण नियंत्रण बोर्ड को उसकी एक प्रति देंगें।"

(ii) उप-पैरा (3) के पश्चात, निम्नलिखित उप-पैरा अंत:स्थापित किए जाएंगे, अर्थात्:

"(4) कोयला या लिग्नाइट आधारित थर्मल पावर प्लांट इस अधिसूचना के अधीन राख का उपयोग करते समय, राख का एक निश्चित प्रतिशत राख आधारित उत्पादों अर्थात् ईंटों, ब्लॉकों, टाइलों, सिंटर्ड या कोल्ड बॉन्डेड राख समुच्चय, फाइबर सीमेंट शीट, पाइप, बोर्ड, पैनल के निर्माण में लगे सभी सूक्ष्म और लघु उद्यमों को केंद्र सरकार के विद्युत मंत्रालय द्वारा जारी दिशानिर्देशों के अनुसार रियायती मूल्य पर या सीमित नीलामी के माध्यम से आपूर्ति के लिए आरक्षित रखेंगे।"

[फा. सं. 09/01/2019-एचएसएमडी]

नरेश पाल गंगवार, अपर सचिव

टिप्पण: मूल अधिसूचना भारत के राजपत्र, असाधारण, भाग II, खंड 3, उप-खंड (ii) में संख्या का.आ. 5481 (अ), दिनांक 31 दिसंबर, 2021 द्वारा प्रकाशित की गई थी और संख्या का.आ. 6169 (अ) दिनांक 30 दिसम्बर, 2022 द्वारा अंतिम संशोधन किया गया था।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 1st January, 2024

S.O. 05(E).—Whereas, the Central Government in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule (5) of the Environment (Protection) Rules, 1986, issued a notification published in the Gazette of India, Extraordinary, Part II, Section 3, sub-section (ii) *vide* number S.O.5481(E), dated the 31st December, 2021;

AND WHEREAS, requests have been received from Ministry of Power and other stakeholders regarding implementation of provisions of the said notification;

AND WHEREAS, it is expedient to amend certain provisions of the said notification to promote use of ash for eco-friendly purposes, including use of ash in ash-based products manufactured by micro and small enterprises engaged in ash-based product manufacturing;

NOW, THEREFORE, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with of sub-rule (1), (2) and (4) of rule (5) of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following amendments in the ash utilisation notification, namely:-

In the ash utilisation notification,-

(1) In paragraph B,-

(i) in sub-paragraph (1), for both the provisos, the following proviso shall be substituted, namely: -

"Provided that the coal or lignite based thermal power plant has given a notice to such agencies for making available ash to such agencies for which cost of ash and transportation shall be borne by the coal or lignite based thermal power plant."

(ii) in sub-paragraph (8), the following shall be substituted, namely:

"All building construction projects (Central, State and Local authorities, Govt. undertakings, other Govt. agencies and all private agencies) located within a radius of 300 kms from a coal or lignite based thermal power plant shall use ash bricks, tiles, sintered ash aggregate or other ash based products, provided these are made available at prices not more than the price mentioned in the Schedule of Rates as specified by the Central Public Works Department (CPWD) or Public Works Department (PWD) of the State concerned or price of alternative products, if not mentioned in the Schedule of Rates.

That the Central Public Works Department and Public Works Department of the State concerned shall publish the Schedule of Rates specified within six months from the 1st January, 2024."

(iii) after sub-paragraph (9), the following sub-paragraph shall be inserted, namely:

"(10) All local authorities shall make provisions in their respective building bye-laws and other relevant regulations for the use of ash and ash-based products, such as bricks, blocks, tiles, sintered or cold bonded ash aggregates, fibre cement sheets, pipes, boards, panels in construction of buildings, roads, embankments or for any other related construction activity."

(2) In paragraph D,-

(i) for paragraph (1), the following shall be substituted, namely:

"(1) The owner of thermal power plants shall give a written notice to persons or agencies who are required to utilise ash under sub-paragraph (1) & (3) of paragraph B for offering the supply of ash free of cost and bearing cost of transportation, with a copy to concerned State Pollution Control Board.

(1A) The manufacturers of ash bricks or tiles or sintered ash aggregate or other ash-based products shall give a written notice to persons or agencies who are required to utilise ash-based products under sub-paragraph (8) of paragraph B for offering for sale of such products with a copy to concerned State Pollution Control Board."

(ii) after sub-paragraph (3), the following sub-paragraphs shall be inserted, namely:

"(4) The coal or lignite based thermal power plants, while utilising ash under this notification shall reserve certain percentage of ash for supply to all micro and small enterprises engaged in ash-based product manufacturing namely, bricks, blocks, tiles, sintered or cold bonded ash aggregates, fibre

cement sheets, pipes, boards, panels for sale at concessional price or through limited auction in accordance with the guidelines issued by the Central Government in the Ministry of Power."

[F. No. 09/01/2019-HSMD]

NARESH PAL GANGWAR, Addl. Secy.

Note : The principal notification was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), *vide* number S.O.5481 (E), dated the 31st December, 2021 and last amended, *vide* number S.O. 6169 (E) dated the 30th December, 2022.

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ANNEXURE-5

F. No. 22-13/2019-IA.III

Government of India

Ministry of Environment, Forest and Climate Change

(Impact Assessment Division)

*****

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

Dated: 28th August, 2019

Office Memorandum

Sub: Change in conditions stipulated in the Environmental Clearances of Thermal Power Plants and Coal Mines in line with the Fly Ash Notification and subsequent amendments - reg.

The Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986 mandates the requirement of prior environmental clearance to the projects/activities listed in the schedule to the said Notification. These projects/activities have been categorized under category A or B and require appraisal/and approval by the respective regulatory authorities (MoEF&CC/SEIAAs) at the Central/State level.

2. As per the provisions of the EIA Notification, 2006, read with subsequent amendments, mining of minerals is covered under Category A/B of the Schedule to the EIA Notification, 2006 based on their areal extent, and thus requiring prior environmental clearance from the concerned regulatory authority.

3. Based on the proposals submitted by the project proponent and recommendations of the sectoral Expert Appraisal Committee, mining projects and thermal power plants were granted Environmental Clearance by the Ministry/State Environment Impact Assessment Authorities (SEIAAs) from time to time, subject to compliance of certain terms and conditions as environmental safeguards necessitated at that stage, which also included the condition for backfilling of mines voids, use/disposal of fly ash in low lying areas, etc.

4. In order to address the environmental concerns of fly ash and to improve its utilization, MoEF&CC has issued a Notification on 14th September, 1999 and subsequent amendments issued vide Notifications dated 27th August, 2003, 3rd November, 2009 and 25th January, 2016 from time to time.

The Fly Ash Notification issued vide S.O.2804 (E) dated 3rd November, 2009 provides for mandatory use of fly ash in the external overburden dump, backfilling or stowing of mines. The main concern is poor fly ash utilization by the pithead power plants mainly because of limited potential in cement industries/road projects and non-utilization of fly ash in stowing and overburden in coal mines.

5. An Expert Committee was constituted for developing a focussed strategy for best utilization of flyash to manufacture end products. The Committee has made recommendations for enhanced utilization of flyash in various sectors viz. mines, roads, bricks manufacturing, cement manufacturing, etc. During an Inter-ministerial consultation held on 21st January, 2019 under the Chairmanship of Secretary (EF&CC), recommendations of the Expert Committee were accepted, which *inter-alia* included the following:-

a) MoEF&CC should revisit the conditions stipulated in the existing environmental clearances of Thermal Power Plants for flyash utilization and modify them in consonance with the flyash notification.
b) Appropriate conditions need to be incorporated in the environmental clearances for utilization of flyash in mines backfilling/stowing.

6. The matter has been examined in the Ministry. Further, the matter has been also been referred to the EAC (Thermal Power Projects) in its meeting held on 28.5.2019 and 12.7.2019. The EAC mentioned that though the Flyash Notification, 1999 and subsequent amendments allow the unrestricted use of flyash in abandoned mines, low lying areas, soil conditioner in agriculture, there are no specific guidelines/methodology available for safe disposal of flyash so as to minimize the damage to the environment. In absence of methodology, EAC has been examining the proposals on case to case basis and recommending for disposal of flyash in abandoned mines. Further, the EAC has also expressed the concerns over the long term impacts of flyash disposal on groundwater, soil quality and impact on associated flora and fauna. Now, the guidelines for disposal of fly ash utilisation in low lying areas and mine voids have been prepared by the Central Pollution Control Board and placed before the EAC (Thermal Power and Coal Mining) in its meeting held on 12.7.2019.

7. In view of the recommendations of the EAC (Thermal Power) in its meeting held on 12.7.2019, after careful examination of the matter and to meet the objectives of the Fly Ash Notification, 1999 & its amendments, the Ministry hereby stipulates the following conditions in the existing Environmental Clearances of Thermal Power Plants and Coal mines which have valid Environmental Clearance accorded by the Ministry/SEIAA, that will replace the existing conditions (Specific & General) which prohibited the use of fly ash in abandoned mines/low lying areas/soil conditioner in agriculture:

i. The guidelines prepared by CPCB for disposal of flyash for reclamation of low lying areas and in stowing/backfilling of abandoned mines/quarries shall be followed during disposal of ash in abandoned or working mines, as annexed.

ii. There should at least be clearance of 500 m of safe distance be maintained from River and water body in case of ash disposal in abandoned mines to prevent embankment failures and flyash flowing into the nearby water body.

iii. The top layer of the flyash disposal area in the abandoned mines shall be kept moist during disposal.

iv. Top layer of the disposed area should have 70 cm overburden or gravels/stones and then 30 cm sweet soil cover. Subsequently, the vegetation shall be raised on the soil cover.

v. Bioaccumulation and bio-magnification tests shall be conducted on surrounding flora and fauna (tree leaves, vegetation, crop yields and cattle population) during pre-monsoon and post monsoon to find out any trace metals escaped through groundwater or runoff.

vi. Surface runoff and supernatant water, in any case shall not be let into the surrounding areas. It shall be collected by providing adequate drains around the mine. The supernatant water along with surface runoff shall be treated and re-used for mixing ash and plant operations.

vii. To the extent possible, only decanted water from mine, make up water from treated effluents such as cooling tower blow down and treated sewage water shall be used for making ash slurry.

viii. Flyash to be used as soil conditioner in agriculture needs and to be applied in controlled manner to limit excessive application so as to prevent soil degradation. The optimize proportion of ash to be applied which is to be certified by the State Agricultural Universities/Colleges based on the soil testing.

ix. Approval from DGMS shall be obtained before disposing the ash in the mine voids.

x. Technology for conversion of fly ash into coarse granules for stowing in the underground mines to be explored.

xi. All the power plants should install different silos for dry collection of flyash.

xii. Records pertaining to details of month-wise quantity of flyash disposed and water consumption along with nature/source of water shall be maintained and submitted to Ministry/Regional Office annually.

xiii. Before starting the disposal of ash into mine voids, the NOC/Permission from the mine owner is to be obtained incase the mine closure activities are not completed or State Government incase the mine has been handed over to the State Govt. after its closure. A copy of such NOC/Permission is to be submitted to the Ministry and its Regional Offices.

8. This issues with the approval of the Competent Authority.

(Dr. S. Kerketta)
Director, IA Division

To

1. The Chairman, Central Pollution Control Board (CPCB)
2. The Chairman/Member Secretaries all the Expert Appraisal Committees
3. The Chairman /Member Secretaries of all the SEIAAs/SEACs
4. The Chairman/Member Secretaries of all SPCBs/UTPCCs
5. All the Power Plant Operators/ Coal Mining Operators who were accorded Environmental Clearance.
6. All the ROs of MoEF&CC.
7. All the Officers of I.A. Division

Copy for information to:

1. PS to Hon'ble Minister for Environment, Forest and Climate Change
2. PS to Hon'ble MoS (EF&CC)
3. PPS to Secretary(EF&CC)
4. PPS to SS(AKJ) / AS (RSP)
5. Sr.PPS to JS (GM)/ JS(NK)
6. Website of MoEF&CC.
7. Guard file.

ANNEXURE-6

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

EMAIL & SPEED POST

IPC-II/TPP/CP-11/76/2022/ 5520-5550 October 14, 2024

To,

The Member Secretary
State Pollution Control Board
(As per the list enclosed)

Sub: Directions 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 for ensuring effective implementation and monitoring of the Ash Notification No. S.O. 5481 (E) dated 31.12.2021 by the coal or lignite-based thermal power plants (including captive or co-generating stations or both).

WHEREAS, amongst others, under Section 17 of the Water (Prevention and Control of Pollution) Act, 1974, one of the functions of the State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs), constituted under the Water (Prevention and Control of Pollution) Act, 1974, is to plan a comprehensive program for prevention, control and abatement of pollution of streams and wells located in the State/U.T. and to secure the execution thereof; and

WHEREAS, amongst others, under Section 17 of the Air (Prevention and Control of Pollution) Act, 1981, one of the functions of the State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs), constituted under Water (Prevention and Control of Pollution) Act, 1974, is to plan a comprehensive program for prevention, control and abatement of air pollution in the State/U.T. and to secure the execution thereof; and

WHEREAS, by notification of the Government of India in the erstwhile Ministry of Environment and Forests vide S.O.763 (E), dated the 14.09.1999, as amended from time to time, the Central Government, issued directions for promoting the utilisation of fly ash in the manufacturing of building materials and in construction activity within a specified radius of three hundred kilometres from the coal or lignite based thermal power plants; and

WHEREAS, in super-session of the aforesaid notification the Central Government has issued Notification No. S.O. 5481 (E) dated 31.12.2021, which has been subsequently amended on 30.12.2022 and 01.01.2024, to ensure more effective implementation of 100 percent fly ash utilisation/disposal by the coal or lignite-based thermal power plants in various permitted avenues/uses. In this regard, Central Pollution Control Board (CPCB) vide **letter dated 09.11.2022** requested all SPCBs to take necessary action for enforcement of the provisions of the Ash Notification by the coal or lignite based thermal power plants and monitoring of compliance by the SPCBs (**copy enclosed** for ready reference), and

WHEREAS, as per Para A(1) of the Ash Notification dated 31.12.2021, "*Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall be primarily responsible to ensure 100 per cent utilisation of ash (fly ash, and bottom ash) generated by it in an eco-friendly manner as given in sub-paragraph (2)*"; and

WHEREAS, as per Para A(2) of the Ash Notification dated 31.12.2021, the ash generated from coal or lignite based thermal power plants shall be utilised only for the eco-friendly purposes prescribed at A(2) (i) to (xi) (it doesn't include "ash dyke raising" or "disposal of ash into the operational ash ponds/dykes"). Further, the utilization avenue mentioned under Para A(2)(xi) of the notification i.e. *"Any other eco-friendly purpose as notified from time to time"* is not applicable as of now, as any additional avenue has not been notified by the Central Government; and

WHEREAS, as per Para A(4) of the Ash Notification dated 31.12.2021, *"Every coal or lignite based thermal power plant shall be responsible to utilise 100 per cent ash (fly ash and bottom ash) generated during that year, however, in no case shall utilisation fall below 80 per cent in any year, and the thermal power plant shall achieve average ash utilisation of 100 per cent in a three years cycle* (first compliance cycle of four/five year is prescribed for specific cases with exemption from minimum 80 per cent annual ash utilization target for initial 1/2 years). In this regard, CPCB vide **letter dated 20.02.2024** circulated the status of compliance of the Ash Notification dated 31.12.2021 by the independent thermal power plants across the country during the first compliance cycle i.e. FY 2022-23 to the concerned SPCBs requesting to take appropriate action in the matter (**copy enclosed** for ready reference); and

WHEREAS, as per Para A(5) of the Ash Notification dated 31.12.2021, "…. *Provided further that the legacy ash utilisation shall not be required where ash pond or dyke has stabilised and the reclamation has taken place with greenbelt or plantation or solar power plant or wind power plant as per the guidelines issued by the Central Pollution Control Board (CPCB) as specified in sub-para (6) and the concerned State Pollution Control Board shall certify in this regard. Stabilisation and reclamation of an ash pond or dyke including certification by the State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall be carried out within three years from 1st April, 2022* (i.e. **by 31st March 2025**). *The ash remaining in all other ash ponds or dykes shall be utilised in progressive manner as per the above mentioned timelines. Provided that ash stored in all ash ponds or dykes other than operational ash pond or dyke designated for temporary storage of ash as specified in sub-para (6) shall constitute the legacy ash and either to be reclaimed or stabilised or utilised"*; and

WHEREAS, as per Para A(6) of the Ash Notification dated 31.12.2021, "…. *Provided that up to two operational ash ponds or dykes for thermal power plants commissioned before 31st December, 2021, having installed capacity less than or equal to 1600 MW, and up to four operational ash ponds or dykes for thermal power plants having installed capacity more than 1600 MW, having multiple lagoons, within the specified area from the existing ash ponds or dykes, may be designated with clear demarcation along with coordinates, and shall inform to Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) by 31st March, 2023"*. In this regard, Central Pollution Control Board (CPCB) and Central Electricity Authority (CEA) have issued ***"Guidelines on Design, Construction, O&M and Annual Certification of Coal Ash Ponds, June 2023"*** for coal or lignite based thermal power plant (**copy enclosed** for reference); and

WHEREAS, as per Para A(7) of the Ash Notification dated 31.12.2021, *"Every coal or lignite based thermal power plant shall ensure that loading, unloading, transport, storage*

and disposal of ash is done in an environmentally sound manner and that all precautions to prevent air and water pollution are taken and status in this regard shall be reported to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in Annexure attached to this notification"; and

WHEREAS, as per Para A(8) of the Ash Notification dated 31.12.2021, *"Every coal or lignite based thermal power plant shall install dedicated silos for storage of dry fly ash silos for at least sixteen hours of ash based on installed capacity and it shall be reported upon to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in the Annexure and shall be inspected by Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) from time to time"*. In this regard, the aforesaid CPCB's **letter dated 20.02.2024** to the concerned SPCBs also highlighted the non-compliance of the said provision of the Ash Notification dated 31.12.2021 by a large number of thermal power plants; and

WHEREAS, as per Paras A(9) and E(2) of the Ash Notification dated 31.12.2021, all coal or lignite-based thermal power plants shall upload monthly information regarding ash generation and utilisation by 5th of the next month and ash pond details on yearly basis on the web portal developed by the CPCB for the benefit of actual user(s). In this regard, CPCB in association with NTPC and CEA, has developed **Ash Portal** (***https://coalash.cpcb.gov.in/***) for this purpose; and

WHEREAS, CPCB vide **letters dated 18.07.2023, 02.08.2023 and 25.08.2023** requested all concerned SPCBs to obtain the SPCB's login credentials for the **Ash Portal** and to issue necessary directions/instructions to all Captive Power Plants (CPPs) in the State to ensure immediate registration and regular uploading of ash data on the **Ash Portal**, along with ensuring regular uploading of ash data on the **Ash Portal** by all coal or lignite-based thermal power plants (including captive or co-generating plants or both) in the State; and

WHEREAS, CPCB issued **directions 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, to all concerned SPCBs vide **dated 13.09.2023** *a) To issue necessary directions/instructions to coal or lignite-based CPPs (including co-generating plants) in the State to ensure registration on the **Ash Portal** developed by CPCB (https://coalash.cpcb.gov.in/) immediately and uploading monthly information regarding ash generation and utilisation by 5th of the next month, and ash pond details on yearly basis, and b) To ensure regular uploading of ash data on the **Ash Portal** by all coal or lignite-based thermal power plants (including captive or co-generating stations or both) in the State*; and

WHEREAS, CPCB vide **letters dated 19.01.2024 and 29.08.2024** circulated to all concerned SPCBs the status of registration of the coal or lignite-based CPPs on the Ash Portal along with the state-wise lists with further instructions to SPCBs to ensure compliance of the directions dated 13.09.2023 (**copies enclosed** for ready reference); and

WHEREAS, as per Para B(5)(ii) of the Ash Notification dated 31.12.2021, *"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)]*"*. In this regard, as per the decisions of the committee constituted under Para B(5)(i) taken during 1st and 3rd meeting held on 01.08.2022 and 06.10.2023, CPCB vide **letter dated 08.09.2022** (and **20.10.2023**) and has requested all

SPCBs/PCCs to constitute District Level Working Groups for deciding allocation of non-coal mines (major and minor minerals) for ash disposal to the coal or lignite based power plants, with Regional Officers, SPCB as the nodal agency (**copies enclosed** for ready reference); and

WHEREAS, as per Para B(6) of the Ash Notification dated 31.12.2021, *"Filling of low lying areas with ash shall be carried out with prior permission of the State Pollution Control Board or Pollution Control Committee for approved projects, and in accordance with guidelines laid down by Central Pollution Control Board (CPCB) and the State Pollution Control Board or Pollution Control Committee (PCC) shall publish approved sites, location, area and permitted quantity annually on its website"*. In this regard, CPCB has laid down ***"Guidelines for disposal/utilisation of Fly Ash for reclamation of Low Lying Areas and in stowing of Abandoned mines/Quarries, 2019"*** which were issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India vide **O.M. dated 28.08.2019**; and

WHEREAS, as per Para C(4) of the Ash Notification dated 31.12.2021, *"It shall be the responsibility of the transporters or vehicle owner to deliver ash to authorised purchaser or user agency and if it is not complied, then an environmental compensation of Rs. 1500 per ton on such quantity as mis-delivered to unauthorised users or non- delivered to authorised users will be imposed besides prosecution of such non-compliant transporters by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC)"*; and.

WHEREAS, as per Para C(5) of the Ash Notification dated 31.12.2021, *"It is the responsibility of the purchasers or user agencies to utilise ash in an eco-friendly manner as laid down at para B of this notification and if it is not complied, then an environmental compensation of Rs. 1500 or per ton shall be imposed by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC)"*; and

WHEREAS, as per Para D(4) of the Ash Notification dated 31.12.2021, *"The coal or lignite based thermal power plants, while utilising ash under this notification shall reserve certain percentage of ash for supply to all micro and small enterprises engaged in ash-based product manufacturing namely, bricks, blocks, tiles, sintered or cold bonded ash aggregates, fibre cement sheets, pipes, boards, panels for sale at concessional price or through limited auction in accordance with the **guidelines** issued by the Central Government in the Ministry of Power"*. In this regard, the Ministry of Power, Government of India has issued **guidelines** on the aforesaid subject vide **dated 15.03.2024** to all coal or lignite based thermal power plants and concerned State Governments (**copy enclosed** for reference); and

WHEREAS, as per Para E(4) of the Ash Notification dated 31.12.2021, *"For the purpose of resolving disputes between thermal power plants and users of ash or manufacturer of ash based products, the State Governments or Union territory administration constitute a Committee within three months from the date of publication of this notification under the Chairman, State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) with representatives from Department of Power, and one representative from the Department which deals with the subject of concerned agency with which dispute is made"*; and

WHEREAS, as per Para E(5) of the Ash Notification dated 31.12.2021, *"The compliance audit for ash disposal by the thermal power plants and the user agency shall be conducted by auditors, authorised by Central Pollution Control Board (CPCB) and audit*

report shall be submitted to Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) by 30th November every year. Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall initiate action against non-compliant thermal power plants within fifteen days of receipt of audit report". In this regard, CPCB vide **O.M. dated 09.09.2024** (earlier **O.M. dated 06.03.2023 and 17.07.2023**) has issued the list of authorized auditors to undertake the compliance audit for ash disposal by the coal or lignite based thermal power plants and the users as per Ash Notification No. 5481(E) dated 31.12.2021 (**copy enclosed** for ready reference); and

WHEREAS, the Ash Notification dated 31.12.2021 designates SPCBs as the enforcing and monitoring authority in their States for ensuring compliance of various provisions of the Ash Notification on quarterly basis [Para E(1)];

NOW, THEREFORE, in exercise of the powers 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, and with the approval of the Chairman, Central Pollution Control Board (CPCB), the (as per list enclosed) State Pollution Control Board is hereby directed as follows:

a) To ensure effective enforcement and monitoring of compliance of the various provisions of the Ash Notification by all coal or lignite-based thermal power plants (including captive or co-generating stations or both) in the State on quarterly basis,

b) To ensure immediate registration and regular uploading of monthly ash generation and utilisation data by 5th of the next month, and ash pond details on yearly basis ont the Ash Portal by all coal or lignite-based thermal power plants (including captive or co-generating stations or both) in the State,

c) To ensure that the ash generated from coal or lignite based thermal power plants (including captive or co-generating stations or both) shall be utilised only for the eco-friendly purposes prescribed at A(2) (i) to (x) of the Ash Notification,

d) To ensure stabilisation, reclamation and certification of un-operational ash ponds/dykes and operational ash ponds/dykes beyond the permitted numbers (two for plants with installed capacity up to 1600 MW and four for plants with installed capacity above 1600 MW) by 31.03.2025 if the plant has not decided to utilise ash from such ash ponds/dykes in a progressive manner within 10 years as per the Ash Notification,

e) To ensure and periodically monitor the compliance of the "*Guidelines on Design, Construction, O&M and Annual Certification of Coal Ash Ponds, June 2023*" (issued by CPCB and CEA) by the coal or lignite-based thermal power plants (including captive or co-generating stations or both) in the State,

f) To ensure that the loading, unloading, transport, storage and disposal of ash is done in an environmentally sound manner and that all precautions to prevent air and water pollution are taken by all coal or lignite-based thermal power plants (including captive or co-generating stations or both) in the State,

g) To ensure the installation of dedicated dry fly ash silos for storage of at least 16 hours of ash based on installed capacity by all coal or lignite-based thermal power plants (including captive or co-generating stations or both) in the State and periodic inspection of the same,

h) To ensure that the filling of low lying areas with ash shall be carried out only with prior permission of the SPCB and for approved projects complying with the CPCB's guidelines and the SPCB shall publish approved sites, location, area and permitted quantity annually on its website,

i) To ensure that the transporters or vehicle owner deliver ash to authorised purchaser or user agency only, and take appropriate action for the non-compliant cases as per the provisions of the Ash Notification, which include imposition of environmental compensation and prosecution of such non-compliant transporters by SPCB,

j) To ensure compliance of the guidelines dated 15.03.2024 issued by the Ministry of Power, Government of India regarding reserving certain percentage of ash for supply to all micro and small enterprises engaged in ash-based product manufacturing namely, bricks, blocks, tiles, sintered or cold bonded ash aggregates, fibre cement sheets, pipes, boards, panels for sale at concessional price or through limited auction,

k) To ensure effective mechanism for resolving disputes between thermal power plants and users of ash or manufacturer of ash based products, through the State Level Committee under the Chairman, SPCB, and

l) To ensure submission of the annual implementation report and annual compliance audit report by 30th April and 30th November every year, respectively, by the coal or lignite based thermal power plants in the State to the concerned authorities and take appropriate action against the non-compliant thermal power plants as per the provisions of the Ash Notification dated 31.12.2021.

The SPCB shall submit the latest status/action taken report on the above mentioned directions within one month from the receipt of these directions, and ensure regular compliance of the above mentioned diirections and submission of annual status report by 31st December every year from December 2024 onward.

(Bharat Kumar Sharma)
Member Secretary

Copy to:

1. Additional Secretary (HSM Division)
   Ministry of Environment, Forest and Climate Change,
   Indira Paryavaran Bhawan, Aliganj,
   Jor Bagh Road, **New Delhi – 110 003**

2. The Joint Secretary (Thermal)
   Ministry of Power,
   Shram Shakti Bhawan, Rafi Marg,
   New Delhi

3. The Regional Directors : For follow-up with the concerned SPCBs.
   Central Pollution Control Board,
   (As per the list enclosed)

4. The Divisional Head - IT, CPCB, Delhi : For uploading the directions on the website.

(Bharat Kumar Sharma)
Member Secretary

* Enclosures sent via email.

List of State Pollution Control Boards

1. 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**

2. 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

5. The Member Secretary,
   Gujarat Pollution Control Board
   Paryavaran Bhavan, Sector 10-A,
   Gandhi Nagar - 382 010, Gujarat

6. 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**

10. The Member Secretary,
    Madhya Pradesh Pollution Control Board,
    Paryavaran Parisar, E-5, Arera Colony,
    Bhopal – 462 016, Madhya Pradesh

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

12. The Member Secretary,
Meghalaya State Pollution Control Board,
"ARDEN", Lumpyngngad,
Shillong – 793 014, Meghalaya

13. 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

16. The Member Secretary,
Tamil Nadu Pollution Control Board
76, Anna Salai, Guindy Industrial Estate,
Race View Colony, Guindy,
Chennai – 600 032, Tamil Nadu

17. The Member Secretary,
Telangana State Pollution Control Board,
Paryavaran Bhawan, A-III, Industrial Estate,
Sanathnagar, **Hyderabad – 500 018**

18. The Member Secretary,
Uttar Pradesh Pollution Control Board,
H. No. TC-12 V, Vibhuti Khand, Gomti Nagar,
Lucknow - 226 010, Uttar Pradesh

19. The Member Secretary,
Uttarakhand Pollution Control Board,
Gaura Devi Bhawan, 46 B, IT Park,
Sahastradhara, **Dehradun – 248 001**, Uttarakhand

20. The Member Secretary,
West Bengal Pollution Control Board,
Paribesh Bhawan, 10A, Block-LA, Sector-III,
Bidhannagar, **Kolkata-700 106**, West Bengal

List of CPCB Regional Directorates

1. The Regional Director,
   Central Pollution Control Board,
   1st & 2nd Floors, Nisarga Bhawan, A-Block,
   Thimmaiah Main Road, 7th D Cross,
   Shivanagar, **Bengaluru –560 079**

2. The Regional Director,
   Central Pollution Control Board,
   Parivesh Bhawan, Paryavaran Parisar,
   E-5, Arera Colony, **Bhopal - 462 016**,
   Madhya Pradesh

3. The Regional Director,
   Central Pollution Control Board,
   BSNL Telephone Exchange, 2nd Floor,
   Sector -49 C, **Chandigarh - 160 059**

4. The Regional Director,
   Central Pollution Control Board,
   2nd Floor, 77-A, South Avenue Road,
   Ambattur Industrial Estate,
   Chennai - 600 058, Tamil Nadu

5. The Regional Director,
   Central Pollution Control Board,
   South End Conclave, Block 502, 5th & 6th Floor
   1582, Rajdanga Main Road, **Kolkata - 700 107**

6. The Regional Director,
   Central Pollution Control Board,
   Survey No. 110, Dhankude Multi-Purpose Hall,
   Baner Road, Baner, **Pune - 411 045**, Maharashtra

7. The Regional Director,
   Central Pollution Control Board,
   Parivesh Bhawan, Opp. VMC Ward No. 10 Office
   Subhanpura, **Vadodara - 390 023**

8. The Regional Director,
   Central Pollution Control Board,
   PICUP Bhawan, Ground Floor,
   Vibhuti Khand, Gomti Nagar,
   Lucknow - 226 010

9. The Regional Director,
   Central Pollution Control Board,
   Opp. Government Press, BSNL NE-I,
   Ground Floor, CTO Building,
   Shillong - 793 001

VILLAGEINFO

ANNEXURE-7

Siriapali

Siriapali is a village located in Kolabira tehsil of Jharsuguda district in Odisha, India. It is situated 8km away from sub-district headquarter Kolabira (tehsildar office) and 13km away from district headquarter Jharsuguda. As per 2009 stats, Paramanpur is the gram panchayat of Siriapali village.

Siriapali has its own place in the vibrant Jharsuguda region. In the following sections, you'll find details about population, literacy, households, children, caste data, area, pincode, local governance, nearby villages, connectivity, and more.

About Siriapali

According to Census 2011, the location code or village code of Siriapali is 381240. The village spans a total geographical area of 1131 hectares, and the pincode of the locality is 768213. Jharsuguda is nearest town to Siriapali village for all major economic activities, which is approximately 13km away.

When it comes to local governance, Siriapali village is administered by a Sarpanch, the elected head of the village, in accordance with the Constitution of India and the Panchayati Raj Act. The village falls under the Jharsuguda Vidhan Sabha constituency for state-level representation and the Bargarh Lok Sabha constituency for national parliamentary elections. The local administration is responsible for civic services and development within the village.

Google Map of Siriapali

The Map data on this website is provided by Google Maps, a free online map service one can access and view in a web browser.

ANNEXURE-8

Guidelines for disposal/utilisation of Fly Ash for reclamation of Low Lying Areas and in stowing of Abandoned mines/Quarries

Central Pollution Control Board
March, 2019

INDEX

2. Guidelines for Low Lying area development using Ash, ash Policy 2015, NTPC Ltd.

3. Permission of DGMS to M/s JSPL & JPL for disposing ash in coal mines

Guidelines for disposal/utilisation of flyash for reclamation of Low Lying Areas and in stowing of Abandoned mines/Quarries

1.0 Introduction:

Management of huge quantity of ash (fly ash, bottom ash and pond ash) generated from coal fired Thermal Power Plants (TPPs) is a serious environmental challenge. Ash generation from coal or lignite based thermal power plants, has increased from 40 Million tonne per year in 1993-94, to more than 200 Million tonne per year in 2017-18 and is projected to increase to 275 Million Tons / year by 2032.

The ash generation in coal and lignite based thermal power plants in various forms such as dry ash, bottom ash, pond ash and mound ash that are required to be managed in such a manner that it does not affect the environment. Utilisation of ash for reclamation of low lying areas and abandoned quarries is recognised as an alternate option and therefore, MoEF&CC has issued a notification to address utilisation off ash for various purposes including these two options

The Ministry of Environment, Forest and Climate Change (MoEF&CC) issued the Fly Ash notification on 14th September, 1999, which has subsequently been amended in 2003, 2009 and 2016. The Fly Ash notification (1999) mandates the use of fly ash for the purpose of manufacturing ash-based products such as cement, concrete blocks, bricks, panels or any other material and for construction of roads, embankments, dams or for any other construction activity within a radius of 300 km from thermal power stations (TPPs). Besides, it also mandates use of fly ash in mines backfilling or stowing of mines within a distance of 50 km.

2.0 Status of fly ash utilisation:

Since 1999 when flyash utilisation was made mandatory, the utilization of fly ash has increased from 6.64 million-ton in 1996-97 to 147.7 million-ton in 2017-18. Fly ash generation and utilization in 2017-18 from 182 coal/lignite based TPPs of various power utilities in the country was 220.7 and 147.7 million-ton, respectively. The percentage of fly ash utilization during 2017-18 has been 66.9%. During 2017-18, out of total fly ash generation, 35.6 % of total fly ash was used in the cement sector, followed by 14.28 % in making bricks & tiles, 11.57 % stored in ash dyke raising,

7.99% in mine filling, 16.85 % in reclamation of low lying area, 5.43 % in roads & embankments, 1.34% in concrete making, 0.21 % in agriculture, 6.73 % in others and 33.1% remained as unutilized fly ash.

Mine reclamation represents a potential beneficial use of flyash that has been receiving increased attention in recent years. Coal mining operations have produced both open pits and deep underground mine voids that can be filled by flyash. Placement of flyash into deep mines can provide structural support to abate subsidence, and placement of flyash in surface mines or other open pits can aid in restoring mined land to beneficial use. The use of flyash as mine backfill may provide the additional benefit of limiting impacts of acid mine drainage (AMD). Mostly flyashe is alkaline material that can neutralize acidic water and/or inhibit production of acid. Placement of fly ash may also reduce the permeability of mine strata and divert water away from acid-generating materials. Although flyash possess these beneficial physical and chemical properties, there are concerns regarding potential for release of toxic chemicals in the leachates from the fly ash. Therefore, scientifically sound fly ash management is needed so that environmental concerns can be adequately and reliably identified and addressed.

3.0 Need of Guidelines:

Ministry of Environment and Forests and Climate Change (MoEF&CC) vide Notification No. S.O. 763 (E) dated 14th September 1999, last amended on 25th January, 2016 issued following directions for reclamation low lying area and stowing of mines;

i. No agency, person or organization shall within a radius of three hundred Kilometres of a coal or lignite based thermal power plant undertake or approve or allow reclamation and compaction of low-lying areas with soil; only ash shall be used for compaction and reclamation.

ii. Soil required for top or side covers of embankments of roads or flyovers shall be excavated from the embankment site and if it is not possible to do so, only the minimum quantity of soil required for the purpose shall be excavated from soil borrow area. In either case, the topsoil should be kept or stored separately. Voids created at soil borrow area shall be filled up with fly ash with proper compaction and covered with topsoil kept separately as above and this would be done as an integral part of embankment project.

iii. No person or agency shall within fifty kilometers (by road) from coal or lignite based Thermal Power Plants, undertake or approve stowing of mine without using at least 25 % of fly ash on weight to weight basis, of the total stowing materials used and this shall be done under the guidance of the Director General of Mines Safety (DGMS).

iv. No person or agency shall within fifty kilometers (by road) from coal or lignite based Thermal Power Plants, undertake or approve external dump of mining Over Burden (OB) without using at least 25 % of ash on volume to volume basis of the total materials used for external dump of overburden and same percentage in upper benches of back filling of opencast mines and this shall be done under the guidance of the Director General of Mines Safety (DGMS);

v. All agencies undertaking construction of roads of flyover bridges and reclamation and compaction of low lying areas, including Department of Road Transport and Highways (DORTH), National Highways Authority of India (NHAI), Central Public Works Department (CPWD), State Public Works Department and other State Government Agencies, shall within a period of four months from the publication of this Notification " make provisions in their tender documents, schedules of approved materials and rates as well as technical documents for implementation of this Notification, including those relating to soil borrow area or pit".

vi. The pond ash should be made available free of any charge as is as where basis to manufacturers of bricks, blocks, tiles including clay flyash bricks production manufacturer's units, farmers, central and the state road construction agencies, Public Works Department and to agencies engaged in backfilling or stowing of mines.

Though, flyash utilisation has gained momentum progressively over the years, further efforts are required to explore new areas of ash utilisation. With suitable safeguards, mine backfilling including disposal of flyash in abandoned quarries and road construction specially in the construction of National Highways and Expressways could be the major mode of flyash utilisation in the near future as these areas have vast potential. It would perhaps be desirable that the concerned Ministries should take steps in sorting out the bottlenecks such as declaring a list of abandoned mines, making adequate provisions in respective schedules for flyash utilisation by the Indian Road Congress & construction agencies etc.

MoEF & CC vide letter dated 01.03.2019 asked CPCB to come out with guidelines based on Odisha Pollution Control Board experience for reclamation of low lying areas and abandoned quarries with ash as recommended by the Expert Committee that was constituted by Niti Aayog vide O.M. No. 25 (11)/2014–Minerals dated 12.06.2018 for developing a focus strategy for best utilisation of fly ash to manufacture end products recommended.

The scope of guidelines covers transportation and disposal of flaysh in low lying areas and abandoned quarries in an environmentally friendly manner.

4.0 Loading/unloading and transportation of flyash

4.1 Current Practice for Handling & Disposal of Flyash & Bottom ash (within the power plant)

Flyash is collected in dry form from ESP hopper and disposed either in dry form or through wet slurry form. While, bottom ash collected at the bottom of boiler and is disposed in wet slurry form into the ash ponds.

Following technologies are conventionally used for handling & disposal of flyash and bottom ash collected from ESPs hoppers and boiler bottom respectively within the plant or upto the ash pond area:

I. Dry Pneumatic conveying
II. Dry (moist) Conveying system through belt conveyor/tube belt conveyor
III. High concentration slurry disposal system
IV. Medium concentration slurry disposal system
V. Lean concentration slurry disposal system

Amongst the above technologies, Dry Pneumatic conveying, Medium concentration slurry disposal system, High concentration slurry disposal system, and Dry (moist) Conveying system through belt conveyor/tube belt conveyor are preferable as compared to Lean concentration slurry disposal system.

The dry ash is typically conveyed pneumatically from the ESP or filter fabric hoppers to storage silos where it is kept dry, pending utilization or further processing, or to a system where the dry ash is mixed with water and conveyed (sluiced) to an on-site storage pond. Fly ash is stored in silos, domes and other bulk storage facilities. Fly ash can be transferred using air

slides, bucket conveyors and screw conveyors, or it can be pneumatically conveyed through pipelines under positive or negative pressure conditions.

Dry fly ash collected is also be suitably moistened with water and wetting agents, as applicable, using specialized equipment (conditioned) and hauled in covered dump trucks for special applications such as structural fills. Water conditioned fly ash can also be suitably stockpiled at jobsites. Exposed stockpiled material must be kept moist or suitably covered to prevent fugitive emission.

The dry bottom ash removal and its transportation is certainly more environment friendly, compared to that of wet ash removal and transport system.

4.2 Guidelines for loading, unloading, storage, transportation of flyash

The power plants need to maximise dry collection of fly ash & bottom ash and also adopt adequate measures to prevent fugitive dust emission during loading, unloading, storage, transportation and various uses of dry as well as ash bottom ash and pond ash. Following guidelines are, therefore, suggested for prevention of pollution and augmentation of flyash utilisation

4.2.1 Maximise dry collection of fly ash and bottom ash

a. Coarse fly ash from first field of ESP hoppers need to be collected and stored separately.

b. Fine fly ash from second field onwards of ESP Hoppers should be collected separately. For some specific usage, fine fly ash may be passed through Classifier for further separation of fine fly ash and stored in separate silo.

c. Bottom ash which is not utilised presently could also be collected in dry form and converted into a valuable resource if processed to match the end use specification. Wet collection & disposal of bottom ash should be minimised as far as possible

4.2.2 Loading, Unloading and Storage

Installation of Bag Filters with dry flyash collection and storage in Silos at loading and unloading points are standard practices at both locations i.e loading at power plant site as well as at the unloading point at user's site. Suggestions for further improvement in existing practices are as under:

a. Current practice of loading of fly ash in Bulkers/Tankers requires improvement at the stage of loading of fly ash in Tankers. The opening of telescopic chutes at the loading end should be air tight and confined to avoid fugitive dust emission.

b. The Pollution Control Equipment / Cascade Filters, attached with fly ash loading chute should be periodically cleaned along with regular scheduled maintenance of bag filter to avoid choking and malfunctioning of Bag Filter. It would mitigate the dust emission during loading of fly ash.

c. Malfunctioning of level sensors can be avoided, with regular maintenance, to prevent over filling of fly ash in Tankers .

d. The Weigh Bridge to be installed under fly ash loading chute to fill just the required quantity of fly ash in tankers so that overflow/spillage of fly ash in open areas is avoided which otherwise results in heavy fugitive emission all around.

e. Opening of tankers need to be properly locked during transportation of fly ash. Automatic opening / closing system need to be installed without fail.

f. Current practice of unloading of fly ash from tanker to storage hopper through pneumatic system is fairly good. Otherwise, the leakage of fly ash will occur at bends and joints of transportation pipe line. The fly ash being abrasive in nature causes damage at bends and joint locations. Fly ash should, therefore be transported through PVC coated pipes to avoid abrasion otherwise it may lead to leakage of flyash. The mechanical unloading system should be envisaged to avoid high pressure and dust leakage from unloading pipe lines. As far as possible, number of bends should be minimised.

g. The fly ash storage silo should be of or coated with anti-abrasive or anti-corrosive material. It is better to provide concrete silo/hopper to avoid leakages.

h. Proper functioning of all the level sensor of Storage Hopper to be ensured to avoid any possible spillage from Hopper opening.

i. The Bag Filter made of anti-abrasive material/cloth be provided with telescopic chute.

j. Dumping of ash in Ash pond should be done mechanically in moist condition so that ash does not get air borne and pose fugitive dust problem.

k. The bottom ash discharged from boiler bed, may be transported pneumatically in dry form / in slurry form to the ash pond

4.2.3 Transportation

Fly ash transportation has many challenges like distance to be transported, form of ash i.e. dry or wet ash, user's requirement, economic feasibility, requirement of surrounding vicinity and many other site specific issues. In any case, control of dust emission during transportation is prime concern and more challenging being a non-point source of pollution and larger area coverage due to movement from one place to other passing through various receptors. As flyash is used by different users for different purposes such as cement manufacturing, brick manufacturing, mine back filling, road construction and filling of low lying area, the handling and transportation have to accordingly decided. Following modes of transportation and precautions are suggested for mine back filling and development of low lying areas by disposal of flyash or bottom ash to avoid fugitive dust emission:

a. Transportation for abandoned mine back filling

I. Pipe conveyors, wherever feasible, based on the topography of the area should be used.

II. Tankers/ railway wagons/ bulkers or mechanically designed covered trucks need to be used

III. Thermal Power Plants using wet ash disposal, if permitted can transport ash slurry directly to abandoned mine through ash slurry pipe line.

b. Transportation for filling of low lying area

I. Tankers/ bulkers or mechanically designed covered Trucks need to be used.

In no case, flyash or bottom ash shall be transported by open trucks / trollies irrespective of distance or end use. Thermal power plants and fly ash user agency shall collectively ensure that fly ash or bottom ash is transported in environmentally sound manner by following the guidelines mentioned in para 4.2.3 & 4.2.4.

4.2.4 General Code of Practices for Maintenance of roads, vehicles and conditioning of flyash

a. Roads inside power plant and that of flyash user agency should be paved and plantation of adequate width should be done at both sides. Mechanised road sweepers should be deployed. In addition, adequate arrangements for water sprinkling should be made to suppress fugitive dust emission, if any.

b. Thermal power plants and user agencies should make arrangements (two stages) for washing of wheels of the vehicles (bulkers/trucks) before deployed for fly ash ransportation.

c. Pond ash to be transported should be conditioned with water to maintain minimum of 15% moisture at the disposal point so that ash does not get air borne and cause fugitive emission.

d. Adequate free board in trucks should be kept to avoid overflow/spillage during transportation.

e. In case of any spillage enroute during transportation of fly ash, the agency shall ensure that spilled ash is collected and transported to the disposal/usage site immediately.

f. All the bulkers and trucks responsible for carrying fly ash should be with valid Pollution Under Control certificates.

g. Provision should be preferably made for weighing of fly ash loaded into tankers/ railway wagons/bulkers etc under the silo.

h. The speed limit of vehicles carrying flyash should be strictly enforced and it should not exceed 40 km per hour.

i. State Pollution Control Boards shall clearly indicate mode of transportation and method of loading and unloading while granting the consent.

j. Transportation of flyash through thickly populated areas should be avoided as far as possible.

k. General awareness/ training programmes be organised regularly for tanker operating staff like drivers and cleaners on the impact of hazards of fly ash.

5.0 Reclamation of Low Lying area using Ash

Filling of Low lying areas inside the plant premises and outside within 300 km. of power plant may be taken up using ash. Low lying area reclamation with ash should be taken up adopting standard practices as per 2015 technical specification mentioned in NTPC Policy. Following steps should be taken up prior to initiate low lying area developmental activities.

5.1 Preconditions:

5.1.1 **Consent from land owner:** Consent/ permission should be obtained in writing from the land owner before start of work.

5.1.2 **Permission from Regulatory authority:** Power plant/ land owner/ agency shall obtain statutory permission from regulatory authorities such as SPCB as per the requirement.

5.1.3 **Prevention of pollution:** Suitable methods should be adopted and necessary arrangement should be made to prevent pollution during excavation of pond ash at ash pond, filling area and during transportation of ash.

5.1.4 **Soil Cover on the top of ash fill:** As per the MOEF&CC gazette notification of ash utilization dated 14-09-1999 and as amendment on dated 27-08-2003 and 03-11-2009, the soil required for soil cover shall be excavated from land fill site itself and kept separately before taking for ash filling. If it is not possible to do so, only the minimum quantity of soil required for the purpose of cover shall be excavated from the soil borrow area. The voids so created due to removal of soil shall be filled up with ash with proper compaction and covered at top with soil cover. About 300–500 mm thick soil layer shall be placed over the ash fill area. This should be done as an integral part of low lying area development work.

5.1.6 **Restrictions :**

Reclamation of area by ash shall not be permitted in the following areas :

i. Flood plain area/Ecologically Sensitive Areas.
ii. Agriculture land / area.
iii. Reclamation of Forest land / area is permissible only if clearance from MoEF&CC as per Forest Conservation Act, 1980 is available.
iv. Gochar Kisan Land.

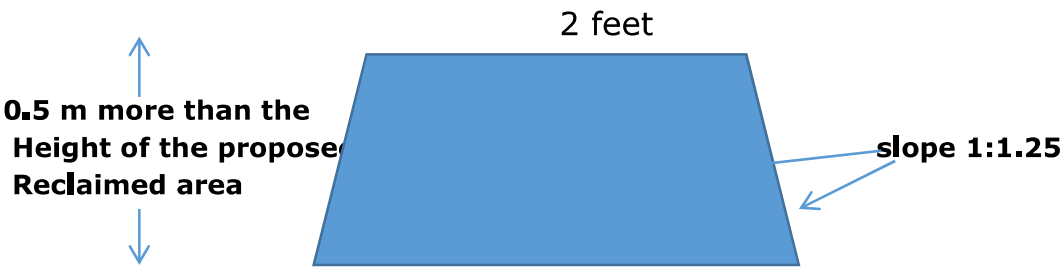
5.2 Preparation of filling area

5.2.1 The entire area meant to receive the ash and earth filling shall be stripped by minimum 150 mm. The exact depth of stripping shall be decided by the Engineer-in-Charge depending upon nature of top soil and the vegetation present. All organic matter, vegetation, roots, stumps, bushes, rubbish, swamp materials, etc. shall be removed from the site. The stripping material and other unsuitable materials as referred above shall be kept away from the area to be filled up so that these do not get mixed up with filling material and disposed off to a place as decided by the Engineer-in-Charge.

5.2.2 Levelling

All existing undulations, holes, cavities and excavations made for plate load rests and other soil investigations, etc. shall be filled with pond ash having requisite moisture content. The ash thus filled shall be compacted with the help of vibratory rollers so as to achieve dry density of not less 95% as per I.S–2720 (Part-VII). This would result in a levelled surface upon which layer wise filling of compacted ash can be done.

5.2.3 Protection of pond or water body adjoining or within the working site: If any pond or water body exists within or adjoining the low lying area /quarry then an earthen embankment of the cross-section as given in the Figure below be constructed around the pond or water body to protect it from
spilling of ash or ingress of surface runoff into it.



Cross- section of water body protection embankment

The soil used for the embankment should neither be granular nor black cotton soil. It should be of good quality for geo-technical application. Soil should be compacted to 95% proctor by Vibratory Roller of 15 T minimum capacity, in the layers of 25-30 cm and the optimum moisture content determined before execution of work. After attaining the desired height, the disposal area should be thoroughly compacted, graded followed by soil cover at least 15 cm thickness for proper reclamation of the land by grass turfing or appropriate plantation.

5.3 Excavation of pond ash from borrow area

5.3.1 Borrow Area-location

The location and permissible depth of excavation of the Borrow areas for pond ash shall be got specifically approved from concerned Thermal Power Station. The boundaries and permissible depth of excavation so approved shall be strictly followed and no deviation shall be allowed. Similarly, routes for movement of all ash transportation vehicles, water tankers, equipment, etc. shall be got approved from Thermal Power Station. These shall be strictly followed and no deviation shall be allowed.

The excavation surfaces and surface of waste materials shall be left in a reasonably smooth and even condition. All the excavations within the ash pond shall be at a minimum slope of 4 (Horizontal): 1(Vertical)

5.3.2 Site Clearance

All areas required for borrowing shall be cleared of all trees and stumps, roots, bushes, rubbish and other objectionable material. Particular care shall be taken to exclude all organic matter from the ash to be placed in the fill. The cleared areas shall be maintained free of vegetation growth during the progress of the work.

5.3.3 Stripping

Borrow area shall be stripped of top layer by a depth of minimum 150 mm. The exact depth of stripping shall be decided by the Engineer-in-charge depending upon nature of top layer and the vegetation present.

5.3.4 Borrow area watering & dewatering

The natural moisture content of material in the borrow areas as well as the optimum moisture corresponding to the Proctor's maximum dry density for the material in the particular borrow area shall be obtained from laboratory tests. Additional moisture, if required, shall be introduced into the borrow area by watering well in advance of excavation to ensure uniformity of moisture content. If in any borrow area before or during excavation there is excess moisture, steps shall be taken to reduce the moisture by the selective excavation to secure the materials of required moisture content by excavating drainage ditches, by all owing adequate time for drying or by other means. To avoid formation of pools in the borrow areas during excavation operations, drainage ditches from borrow areas to the nearest outlets shall be excavated so as to obtain homogeneous mix. In general, all materials from a particular borrow area shall be mixture of materials obtained for the full depth of cut.

5.3.5 Earth cover in Borrow Area

It shall be the responsibility of Thermal Power plant to arrange sweet soil from approved external borrows areas. The earth cover material shall consist of sandy loam free of admixture of stiff clay, refuse, stumps, roots, rock, bushes, weeds or any other material which would be detrimental to the proper development of vegetation growth. It shall not contain stone of size 25 mm and over . The loamy top soil shall be of healthy crops, grass or other plant growth, that is of good quality and reasonably free draining. Other specifications for Borrow area e.g. site clearance, stripping, Borrow area watering/De-watering etc. shall be as per relevant clauses of Borrow area for ash as outlined above i.e clause nos. 5.3.1 to 5.3.4.

5.4 Filling with pond ash

5.4.1 Placement

After the area has been prepared and levelled, pond ash excavated from Borrow areas having required moisture content shall be placed in layers not exceeding 300 mm in compacts thickness. The placing operations shall be such that in strips of 10-15 m of the material when compacted in the fill will be blended sufficiently to produce specified degree of compaction and stability. No stones, cobbles or rock fragments, having maximum dimensions more than 100 mm shall be placed in the fill. Stones and

cobbles shall be removed either at the borrow pit site before it is used as soil cover.

5.4.2 Procedure

The material shall be placed in the fill in continuous horizontal layers, stretching right across the whole section, not more than 300 mm in compacted thickness and rolled as herein specified. The length of one layer shall not exceed 150 meters at one stretch. The layers shall be compacted in strips overlapping not less than 600 mm, if the rolled surface of any fill is found to be too wet for proper compaction, it shall be raked up, allowed to dry, or shall be worked with a harrow or any other approved equipment to reduce the moisture content to the required amount and then it shall be re-compacted before the next layer of ash is placed. Ash surfaces are likely to become dry in short intervals especially during hot and dry weather and hence enough moisture shall be added between difference passes to ensure proper compaction

5.4.3 Compaction

The compaction of each layer shall be carried out so as to achieve maximum in-situ dry density 95% of maximum dry density (MDD) of the material found out as per I.S 2720 (Part VII). To achieve maximum compaction level use of vibratory rollers shall be made. Required number of passes shall be made so as to achieve desired compaction. Number of passes required shall be verified through trials tests before actual execution of work. The broad specifications of vibratory rollers required for the purpose is as follows:

a)Static Weight = 6 to 10 t
b)Static Linear Load = 20 – 35 kg/cm
c)Frequency = 18 – 30 Hz (1100 to 1800 vibrations/ minute)
d)Amplitude of vibrations = 0.5 mm to 1.5 mm

5.4.4 Moisture control

So far as practicable, the materials shall be brought to the proper moisture content in the borrow area before excavation. If additional moisture is required, it shall be added at the fill site by sprinkling water before rolling the layer. Thermal Power Plant shall make arrangements for supply of water to the borrow areas as well as to the fill area. If the moisture content is more than requirement, the material shall be spread and allowed to dry

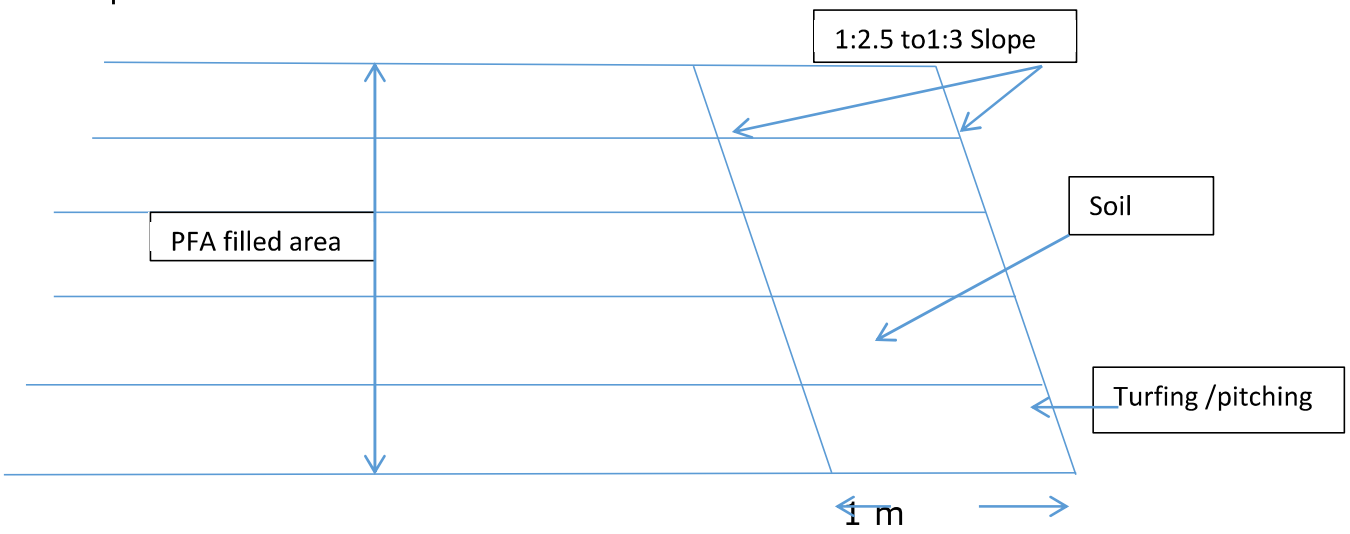
before rolling. The moisture content shall be at most uniform throughout the layer of material and ploughing or other methods of mixing to obtain uniform distribution. If the moisture content is more or less than the range of the required moisture content, or if it is not uniformly distributed throughout the layer, rolling shall be stopped, and shall be started again only when the above conditions are met with.

Fill materials shall be placed only when the weather conditions are satisfactory to permit accurate control of the moisture content in the materials.

5.4.5 **Placement of earth cover in filing area**

Earth cover shall be laid simultaneously with the laying of compacted ash layers and on side slopes. As in the case of ash layers, compacted thickness of earth layers shall not be exceeding 300 mm. As far as top cover of earth is concerned, after the area has been covered with compacted ash up to 500 mm below the required finished level of the area, a compacted layer of 500 mm thickness of suitable earth shall be placed over ash surface. This cover shall be placed in layers, each layer shall be of 250 mm in compacted thickness.

The combined excavation and placing operations shall be such that the materials when compacted in the fill will be blended sufficiently to produce specified degree of compaction on stability. No stones, cobbles or rock fragments, having maximum dimensions more than 25 mm shall be placed in the earth cover. Such stones or cobbles shall be removed either at the borrow pit orbefore it is used as Soil Cover.



Exposed boundary configuration

Other requirements of earth cover laying shall be similar to those of ash laying i.e. as outlined in 5.4.1 to 5.4.4 above.

5.5 Prevention of Pollution

It shall be responsibility of thermal power plant or his contractor that no air borne and water borne pollution shall occur during all stages of operations such as in Borrow areas, during transportation of ash/ earth, during placement of fill material etc. All measures such as water sprinkling covering moist ash/ earth with tarpaulins in open trucks, etc., shall be taken to done care of above.

6.0 Disposal of flyash in voids of abandoned mines

As per notifications 1999 and 2009, power plant shall undertake or approve stowing of mines without using at least 25% of fly ash on weight to weight basis, of the total stowing materials used. Mine void filling on pilot basis is being carried out at the power plants of NTPC Ltd., Bhushan Steel and NALCO in Odisha with prior permission from MoEF & CC and OSPCB. Based on their experience and study conducted by CMPDIL, Ranchi for NTPC Talcher, following methodology is suggested for filling of mine voids with flyash.

6.1 The power plant authority shall carry out following study prior to taking up ash disposal activities in mine void to ensure no change/damage/deterioration in water quality and hydrology in and around the proposed area:

- Ash Characterisation and Leachate Study (Table 1.1)
- Techno-Economic Feasibility Study for disposal of ash into the Quarry
- Topographical Survey of Pipeline Corridor & Mine Void area
- Feasibility of transportation of ash to mine void
- Geotechnical study of the Pipeline Corridor & Mine Void area
- Pre and post filling mine water quality including leachability of metals (Table 1.1)

6.2 Mode of ash transportation to mine void area

One of flowing mode of transport actions of flyash shall be used depending upon the topography of the area:

1. Pipeline using pneumatic conveying system

2. Dumpers/ Trucks
3. Merry Go Round (MGR) System
4. Belt Conveyors in case of dry ash disposal
5. Wet ash (lean slurry or high concentration slurry) through pipeline

6.3 Monitoring:

6.3.1 Regular environmental monitoring to be undertaken during the period of disposal of ash into mine void as well as after the reclamation of mine void. The detailed monitoring programme is given in Tables below:

Table 1.1 : Proposed Monitoring Programme during Disposal of Ash

Samples	Parameters to be Analysed	Frequency
Ash Samples	Chemical Parameters (%): SiO_2, Al_2O_3, Fe_2O_3, K_2O, TiO_2, CaO, MgO, Na_2O, P_2O_5, SO_3 Trace Elements (mg/kg, using TCLP Test): As, Ba, Cd, Co, Cr, Cu, F, Fe, Hg, Mn, Ni, Pb, Zn Radio-activity (Bq/kg): ^{238}U, ^{236}Ra, ^{232}Th, ^{228}Ra, ^{230}Pb, ^{40}K, ^{137}Cs	Once before initiation of filling
Ash Leachate Analysis	Trace Elements (mg/kg, using TCLP Test): As, Ba, Cd, Co, Cr, Cu, F, Fe, Hg, Mn, Ni, Pb, Zn	Once a year
Piezometer Water Samples	Chemical Parameters (mg/l, except, pH and EC): pH, EC, TDS, Total Alkalinity, Ca, Mg, Na, K, Cl, SO_4, NO_3, PO_4, Trace Elements (mg/l): As, Ba, Cd, Co, Cr, Cu, F, Fe, Hg, Mn, Ni, Pb, Zn	Monthly
Mine Water Sample	Same as above	Monthly
Ground Water	Same as above	Twice a year - Pre-monsoon and Post-monsoon
Surface Water Samples	Same as above	Twice a year - Pre-monsoon and Post-monsoon
Soil Samples	Texture, type, pH & cation exchange capacity. Trace Elements (mg/l): As, Ba, Cd, Co, Cr, Cu, F, Fe, Hg, Mn, Ni, Pb, Zn	Once a year

Survey of Flora and Fauna	• Listing of Flora (herbs, shrubs and trees) and Fauna (soil invertebrates and other animals) based on field observations and review of information available • Analysis of trace elements in plants (herbs, shrubs and trees), the invertebrates • Analysis of trace elements in aquatic fauna from the mine void filled with fly ash • Bio-accumulation and Bio-magnification tests	Once in two years

Table 1.2: Proposed Monitoring Programme After Reclamation of Mine void

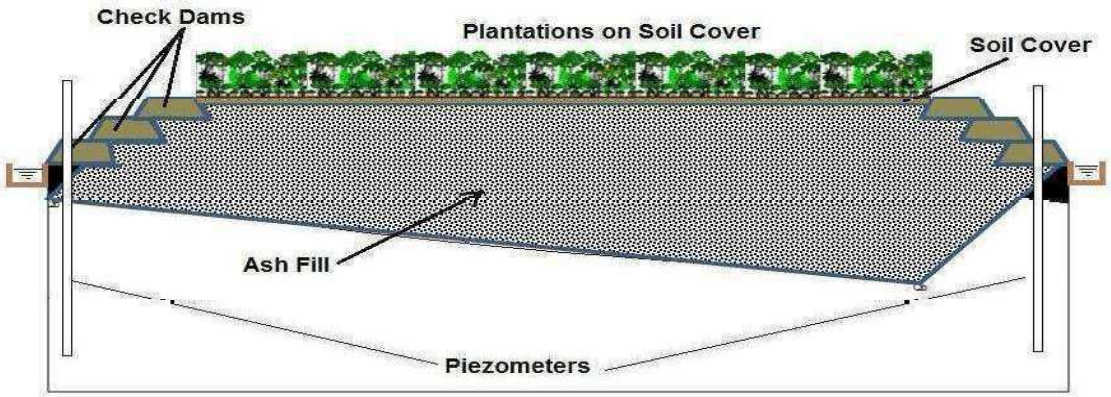
Samples	Parameters to be Analysed	Frequency
Piezometer Water Samples	Chemical Parameters (mg/l, except, pH and EC): pH, EC, TDS, Total Alkalinity, Ca, Mg, Na, K, Cl, SO_4, NO_3, PO_4, Trace Elements (mg/l): As, Ba, Cd, Co, Cr, Cu, F, Fe, Hg, Mn, Ni, Pb, Zn	Twice a year - Pre-monsoon and Post-monsoon
Ground Water Samples	Same as above	Once a year - Pre-monsoon
Surface Water Samples	Same as above	Once a year - Pre-monsoon
Survey of Flora and Fauna	• Listing of Flora (herbs, shrubs and trees) and Fauna (soil invertebrates and other animals) based on field observations and review of information available • Analysis of trace elements in plants (herbs, shrubs and trees), the invertebrates • Analysis of trace elements in aquatic fauna from the mine void filled with fly ash • Bio-accumulation and Bio-magnification tests	Once in five years

In the event of deterioration of environmental quality, the same will be reported to concerned SPCB immediately and suitable preventive/ corrective action will be undertaken.

6.4 Reclamation of Land filled site

After the quarry is filled to the permitted height as per DGMS, the same shall be provided with a soil cover and plantation shall be done with local fast growing species (preferably trees), to make it a part of the overall

post-mining land use pattern envisaged in the mine closure plan The design of surface contours and land profile will be in consonance with the surrounding features. A three tier plantation approach (consisting of large trees, smaller trees and shrubs) will be followed for overall eco-restoration of the area. This will also help in checking the surface run-off, preventing the water from percolation and maintaining the aesthetics beauty of the surrounding in general. A conceptual diagram of the reclaimed mine void is presented below.



Conceptual Plan for Reclamation of Mine Void
(Drawing not to Scale)

During the mine void reclamation, the following measures are to be undertaken:

i. Storm water drains shall be constructed for channelizing the run-off water away from the disposal site.

ii. A 30 cm thick soil cover shall be provided to promote vegetation growth.

iii. For plantation purpose, preference shall be given to both native species and mixed culture. The species will be selected carefully from the following groups for quick reclamation under the guidance of a taxonomist:

- Tree species for fuel wood and timber
- Forestry type tree species.
- Tree species with dense foliage for shade.
- Native species.

iv. However, fruit bearing species shall be avoided.

7.0 Precaution

The following precautionary measures are required for safe working during the reclamation activity:

(i) Appropriate measures should be taken to prevent entry of cattle/livestock inside the disposal area during execution period.

(ii) Care shall be taken to avoid any kind of nuisance / inconvenience to the public due to such dumping / filling activities.

(iii) Water sprinkling for dust suppression during handling of Ash shall be ensured from being air borne.

(iv) After complete reclamation of the site, sign board shall be kept indicating the low lying land / abandoned quarry has been reclaimed with ash. This will help to propagate the message of mine void using ash.

8.0 Regulatory Procedure for Processing the Application for consideration of grant of permission for Reclamation of Low Lying Areas / Abandoned Quarries :

8.1 The activity of reclamation of Low Lying Areas / Abandoned Quarries will be regulated under the provisions of Water (Prevention and Control of Pollution) Act, 1974 and Air Water (Prevention and Control of Pollution) Act, 1981. The stipulations specified in this guideline is consistent with the provisions of Fly Ash Notification, 1999 and amended thereafter which should be a special condition mentioned in consent order issued under the Water (Water (Prevention and Control of Pollution) Act,1974 and the Air Water (Prevention and Control of Pollution) Act, 1981. Thereafter any deviations from the guidelines shall be treated as violation of both Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 and action as deemed proper shall be taken under Consent Administration by the Board.

8.2 Necessary clearances shall be obtained from the concerned agencies such as DGMS, SPCB, IBM, MoC, etc .

Appendix

Guidelines for disposal of flyash in open cast mines along with Over Burden (OB)

As per notifications 1999 and 2009, "No person or agency shall within fifty kilometres (by road) from coal or lignite based Thermal Power Plants, undertake or approve without using at least 25 % of ash on volume to volume basis of the total materials used for external dump of overburden (OB) and same percentage in upper benches of back filling of opencast mines and this ***shall be done under the guidance of the Director General of Mines Safety (DGMS).***

The methodology as approved by Directorate General of Mine Safety (DGMS) in case of M/s JSPL & JPL (RGR/JPL/P-98(1) &(3)/Flyash/18/2014/1518 dated 31.07.2014) may be referred for filling ash in coal mines. **However, for each case separate approval of methodology from DGMS shall be sought.** Following methodology for disposal of flyash in open cast mines along with Over Burden in case of JSPL was approved by DGMS.

1.1 Distance of the internal/overbuden dump area from the working faces of mine shall not be less than 100 m.

1.2 The area of filling ash shall be specifically earmarked and the same shall be marked on the plan and dumping fly ash shall be carried out accordingly.

1.3 Height of each deck shall not be more than 30 m and the total height of the dump shall not exceed 90 m.

1.4 The road leading to the dump site for transportation of fly ash shall be independent from the main haul road for transporting OB to the dump site from the mine.

1.5 Method of dumping fly ash

1.5.1 The fly ash shall be dumped in alternate layers/stages, of height not exceeding 5.0 m in each layer/stage.

1.5.2 Initially a row of OB dumps not less than 15.0 m width shall be dumped having height of 5.0 m all around the area proposed for ash dump over a deck (of 30.0 m height) of only overburden dump adequately compacted. A number of such areas shall be formed in a layer/stage wherein the fly ash shall be dumped so that one dump of fly ash is separated by another with 15 m wide over burden dump.

1.5.3 Thereafter, fly ash (25%) and overburden shall be dumped within the area surrounded by such OB dumps. In this manner, the dumping shall be laid in the section/layer of 5.0 m height containing both over burden as well as fly ash so as to form a deck of height not more than 30.0 m , distance between two consecutive decks shall not be less than 30.0 m.

1.5.4 In the next section i.e. immediately above bottom section/stage, only OB dumping shall be made to ensure that the Ash is totally covered and protected from the OB dumps all around.

1.5.5 In the same manner as explained above the alternate layer/section of the over burden and over burden with fly ash shall be dumped. Each layer/stage shall be adequately compacted by dozing.

1.5.6 At the top of the dump i.e. at the final stage, the dump shall be covered with 2.0 m thick soil and adequately compacted by dozing. Adequate precaution against rain fall shall be taken by way of plantation, geo-synthetic, or jute/coir reinforcement and formation of gully drains along the slope of the dump and formation of toe walls and peripheral drains as suggested by the scientific agency conducing geo-technical study. The precaution measures shall periodically be checked for its efficacy.

1.5.7 Plan and section in suitable scale (1:2000) shall be maintained showing the details of the dump both external and interval, height of each deck and dump, distance between the dumps containing fly ash and also the distance from the active working faces, plantation done, gully drains, peripheral drains, toe walls, etc. Such plan shall be signed by the Surveyor and countersigned by the Manager as prescribed in the statute.

1.5.8 Code of practices for transportation, dumping compaction of fly ash as mentioned in para 5(4.2.3 & 5.4.3 of main guidelines), shall be implemented.

1.5.9 **1.6 Dump slope management**

1.6.1 The sides of the OB dumps shall be kept benched and height thereof shall not exceed 30.0 m at an angle of slope not exceeding the angle of repose of the dumped material or 28° whichever is less.

1.6.2 Width of the OB dump shall not be less than 40.0 m which shall also be compacted. The benches shall be laid in such a manner that the overall slope of the dump shall not exceed 21° from horizontal.

1.6.3 The toe of the OB dumps shall be protected or armored in such a manner that the sludge does not flow down into the working faces.

1.6.4 A geotechnical study shall be conducted to assess the stability of the dump and the monitoring of various parameters during the course of dumping and also thereafter till the mine is closed permanently.

1.7**Dust control measures**: The fly ash dumping including the OB dumps shall be kept moist all the time to prevent ash getting airborne. The quality of the Ash shall be chemically and physically tested at least once in every quarter.

1.8 **Surface and ground water quality monitoring**

1.8.1The surface and ground water measurement (Chemical Parameters (mg/l): pH, EC, TDS, Total Alkalinity, Ca, Mg, Na, K, Cl, SO_4, NO_3, PO_4, Trace Elements (mg/l): As, Ba, Cd, Co, Cr, Cu, F, Fe, Hg, Mn,Ni, Pb, Zn) shall be carried out once in a year (post monsoon) in consultation with the State Pollution Control Board in order to ensure that no harmful heavy metals or any other chemicals pollute the surface or ground water sources or any other water sources present in the area.

1.9 **Provision of check drains** Proper Check Drains/garland drains having width of adequate size and section shall be made around the OB dumps to ensure that the sludge or waste materials along with the ash does not go into any river, nullah, water streams or any other surface water bodies.

1.10 Impact assessment of flora, fauna, aquatic lives and habitat, water & air quality:

1.10.1 A scientific study shall be carried out by an independent scientific organization to study the impact of Ash filling on Flora, Fauna, Aquatic Life and Habitation (once during the filing and at the end of filling).

1.10.2The Monitoring of all the aforementioned parameters shall be carried out through any accredited institute/organization/Labs and monitoring report shall be submitted to SPCB and DGMS.

1.10.3 A dedicated team of qualified persons headed by senior officer at the level of General Manager shall be established in the mine level, who shall be responsible for the entire ash filling operation, conducing different studies and shall maintain all records as prescribed.

1.10.4Record of every analysis and study shall be maintained in a bound page register kept for the purpose and the same shall be signed by the person in-charge of the operation and countersigned by the manager of the mine. Records shall also be maintained showing the details about the slope of each dump, quantity of ash filled, quantity of overburden removed, etc.

1.10.5Risk Analysis about the risk arising out of ash filling operation shall specifically be conducted at regular intervals and Safety Management Plan including the control mechanism shall be prepared as per the guideline contained in DGMS(Tech)(S&T) Circular No.13 of 2002 dated 31.12.2002 and implemented and the same shall be reviewed time to time

1.10.6In case, any adverse impact is observed, it should be brought to the notice of the DGMS and also to the State Pollution Control Board including the Environment and Forest Ministries of the State and Central Government. No further use of fly ash shall be done in the mine till permitted in writing afresh from DGMS.

*****

VAKALATNAMA

NATIONAL GREEN TRIBUNAL

_____No. _____ of 2025

Between O.A.

Satya Prakash Nayak _____ Petitioner / Appellant

Vrs

State of Odisha & ors. _____ Opposite Party/Respondent

KNOW ALL MEN BY THESE PRESENT, that by this VAKALATNAMA

I/We Satya Prakash Nayak .....

.....

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.....

Appellant/Respondent/Petitioner/Opposite Party in the aforesaid Case do hereby appoint and retain BISWARANJAN PARAMGURU, ADVOCATE,O-495/08, Sudarshan Vihar, Khordha Town , Dist: Khordha ,7982055330 to appear for me/us, in the above case and to conduct and prosecute or defend the same and all proceedings that may be taken in respect of any application connected with the same or any decree or Order passed therein including all applications for return of documents or receipt of any money that may be payable to me / us in the said case and also in application for review and appeal under Orissa High Court. Order and in applications for leave to appeal to the Supreme Court , I/We authorise my/our Advocate (s) to admit any compromise lawfully entered in the said case.

Dated the 20/07/2025

Received from the Executant(s), satisfied and accepted as I/We hold no brief for the other side.

Advocate
Accepted as above

Biswaranjan Paramguru

Advocate
Accepted as above

Satya Prakash Nayak

Signature of the Executant (s)

Email ID:biswaranjanparamguru81@gmail.com