

**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
ORIGINAL APPLICATION NO. 93/2026
(UNDER SECTIONS 14 AND 15 OF THE NATIONAL GREEN TRIBUNAL ACT, 2010)**

IN THE MATTER OF:

GULSHANKUMAR BARUA

...APPLICANT

VERSUS

STATE OF ODISHA AND ORS.

...RESPONDENTS

INDEX

S. No.	Particulars	Page No.
1.	Synopsis & List of dates	1-6
2.	Memo of Parties	7-8
3.	Application under section 14 and 15 of The National Green Tribunal Act, 2010 along with affidavits	9-23
4.	<u>ANNEXURE A-1</u> A copy of the Notification dated 14.09.1999 issued by the Ministry of Environment and Forest, Government of India	24-31
5.	<u>ANNEXURE A-2</u> A copy of the Notification dated 27.08.2003 issued by the Central Government.	32-38
6.	<u>ANNEXURE A-3</u> A copy of the Notification dated 03.11.2009 issued by Central Government.	39-60

7.	<u>ANNEXURE A-4</u> A copy of the Notification dated 25.01.2016 issued by Central Government.	61-64
8.	<u>ANNEXURE A-5</u> A copy of the CPCB Guidelines, March 2019 issued by Central Pollution Control Board.	65-90
9.	<u>ANNEXURE A-6</u> A copy of the Notification dated 31.12.2021 issued by Central Government.	91-112
10.	<u>ANNEXURE A-7</u> A copy of the Resolution No. 24587/R&DM dated 07.07.2025 issued by the Revenue & Disaster Management Department, Government of Odisha.	113-117
11.	<u>ANNEXURE A-8</u> A copy of the Advertisement dated 21.08.2025 issued by the Office of the Collector & District Magistrate, Sundargarh (Mining Section).	118-120
12.	<u>ANNEXURE A-9</u> A copy of the letter dated 15.09.2025 addressed by the Tehsildar, Subdega.	121
13.	<u>ANNEXURE A-10</u> A copy of the letter dated 28.10.2025 addressed by the Respondent No.2 to the Tehsildar, Subdega.	122
14.	<u>ANNEXURE A-11</u> Photographs of indiscriminate fly-ash dumping along public roads and upon agricultural lands in and around Subdega by the Respondent Nos. 6 and 7.	123-130

15.	<u>ANNEXURE A-12</u> A copy of the news report with respect to the fly-ash pollution in Subdega and other parts of Sundergarh district published in the Odia newspaper	131-132
16.	<u>ANNEXURE A-13</u> A copy of the representation dated 13.11.2025 addressed by the villagers to the Tehsildar along with their objections to the public hearing	133-138
17.	Vakalatnama	139

Filed on: 21.03.2026

Filed by: *Arya Tripathy*

ARYA TRIPATHY,
NAVNEET DADHICHI,
Advocates for the appellants

SYNOPSIS

The present Original Application is being filed under Sections 14, 15 and 18 of the National Green Tribunal Act, 2010 seeking urgent directions to prevent the illegal and environmentally unsafe dumping of fly ash in the Perubhadi Stone Quarry situated in Perubhadi Reserve Forest, District Sundargarh, Odisha.

Fly ash is a hazardous industrial waste generated from thermal power plants and its disposal is strictly regulated under the Environment (Protection) Act, 1986 and various Notifications issued by the Ministry of Environment, Forest and Climate Change (“**MoEFCC**”). These laws clearly provide that fly ash must be handled and disposed of only in a scientific and environmentally safe manner and open or indiscriminate dumping is strictly prohibited. The Central Pollution Control Board (CPCB) has also issued Guidelines in March 2019 mandating prior approval, safeguards and continuous monitoring for any disposal activity.

In spite of these mandatory safeguards, the Respondent No.3 have identified the Perubhadi Stone Quarry as a site for disposal of fly ash. The said quarry is not an ordinary abandoned pit. Over the years, it has naturally filled with water and has become a perennial water reservoir. It is regularly used by nearby villagers for drinking, irrigation, bathing, cattle use and other daily needs. The quarry is located inside a Reserve Forest and also acts as a groundwater recharge source for the surrounding villages.

The Applicant is a permanent resident of Subdega and depends upon agriculture, forest resources and local water bodies for livelihood. Several

nearby villages, mostly inhabited by Scheduled Tribe communities, are directly dependent on this water source. Dumping of fly ash and slurry into this water-filled quarry will, in likelihood, contaminate the water, soil and air, and may result in serious health hazards, damage to crops, loss of drinking water and long-term environmental degradation. Any leakage or seepage may further pollute the Didga–Teljora Nala and ultimately River Ib, which is the main river of the area.

The proposed action of the Respondents is arbitrary, illegal and contrary to the Fly Ash Notifications, CPCB Guidelines and environmental laws. It violates the principles of sustainable development, precautionary principle and the right to a clean and safe environment guaranteed under Article 21 of the Constitution of India. Despite objections raised by the Applicant and villagers, no preventive steps have been taken and the dumping of fly-ash continues.

Further, pursuant to the allotment of the Perubhadi Stone Quarry to Respondent No. 6, Respondent Nos. 6 and 7 have been indiscriminately dumping fly-ash along public roads and upon agricultural lands in and around Subdega. Such unregulated disposal has resulted in severe soil degradation and air contamination in the area. The surrounding villages are gravely affected, as the continuous dispersal of fly-ash has rendered the air heavily dust-laden, posing serious health concerns to residents. Additionally, large tracts of agricultural land are progressively becoming infertile and uncultivable owing to the accumulation of fly-ash deposits. The situation has escalated into a matter of grave environmental and public concern for the inhabitants of Subdega.

Therefore, the Applicant has no other efficacious remedy except to approach this Hon'ble Tribunal seeking protection of the environment, water bodies and the livelihood of the local residents and for restraining the Respondents from carrying out fly ash dumping at the said site.

Hence, the present Original Application.

LIST OF DATES:

Dates:	Particulars:
14.09.1999	Ministry of Environment and Forest, Government of India issued first Fly Ash Notification under Section 3 of the Environment (Protection) Act, 1986 read with Rule 5 of the Environment (Protection) Rules, 1986, restricting excavation of top soil for brick manufacturing and mandating utilisation of fly ash in construction activities within a prescribed radius of 50kms of Thermal Power Plants.
27.08.2003	Amendment Notification issued by Ministry of Environment and Forest, Government of India strengthening fly ash utilisation norms by increasing the utilisation radius, mandating compulsory use of fly ash products in construction and reclamation works, and vesting enforcement responsibility in State Pollution Control Boards and State Authorities.
03.11.2009	Further amendment dated 03.11.2009 issued by the Ministry of Environment and Forest, Government of India prescribing time-bound targets for fly ash utilisation, compulsory use of

	fly ash in construction activities within 100 km radius of thermal power plants, and constitution of Monitoring Committees by State Governments for regulatory supervision.
25.01.2016	Notification S.O. 254(E) issued by the Central Government extending the mandatory utilisation radius from 100 km to 300 km and directing 100% utilisation of fly ash, disclosure of ash stock, and imposing statutory responsibility on Thermal Power Plants and State Authorities for regulated handling and safe disposal.
March 2019	The Central Pollution Control Board (CPCB) issued “Guidelines for Disposal/Utilisation of Fly Ash for Reclamation of Low-Lying Areas and Stowing of Abandoned Quarries”, prohibiting open or indiscriminate dumping and prescribing strict environmental safeguards and prior approval of Pollution Control Boards.
28.08.2019	MoEFCC stipulated additional environmental safeguard conditions in the existing Environmental Clearances of Thermal Power Plants concerning fly ash management.
31.12.2021	MoEFCC issued Notification No. S.O. 5481(E) introducing a stricter, time-bound framework based on the ‘Polluter Pays’ principle, mandating 100% utilisation of fly ash and environmentally sound disposal only with prior permission of the State Pollution Control Board.

07.07.2025	The Respondent No.1, by its Resolution dated 07.07.2025, issued the Standard Operating Procedure for disposal of fly ash in extinct stone quarries.
21.08.2025	Office of the Collector & District Magistrate, Sundargarh , (Respondent No.3) issued Advertisement inviting applications from fly ash generating companies for allotment of identified extinct stone quarries, including Perubhadi Stone Quarry, for disposal/filling of fly ash.
15.09.2025	The Tehsildar, Subdega addressed a letter to the Respondent No.2 thereby forwarding the names of six fly-ash generating companies who had applied for the allotment of Peruabhadi Stone Quarry for fly-ash dumping purposes.
28.10.2025	The Respondent No.2 addressed a letter dated 28.10.2025 to the Tehsildar, Subdega thereby informing him that in the meeting of the Respondent No.1 held on 23.10.2025, it was decided that the Perubhadi Stone Quarry was to be allotted to the Respondent No.6 for disposal of fly-ash.
	The Applicant, (Petitioner No. 1) a resident of Subdega, depends on local agriculture, forests and water sources for livelihood. The Perubahadi quarry, now a perennial water reservoir, supplies water to nearby villages and feeds the Didga–Teljora stream flowing into the River Ib. Proposed dumping of fly ash and slurry threatens to contaminate water, deplete groundwater and harm crops, livestock and public health, particularly affecting Scheduled Tribe

	<p>communities. Despite objections, no preventive action has been taken, giving rise to a continuing cause of action.</p> <p>Further, pursuant to the allotment of the Perubhadi Stone Quarry to Respondent No. 6, Respondent Nos. 6 and 7 have been indiscriminately dumping fly-ash along public roads and upon agricultural lands in and around Subdega. Such unregulated disposal has resulted in severe soil degradation and air contamination in the area.</p> <p>The surrounding villages are gravely affected, as the continuous dispersal of fly-ash has rendered the air heavily dust-laden, posing serious health concerns to residents. Additionally, large tracts of agricultural land are progressively becoming infertile and uncultivable owing to the accumulation of fly-ash deposits. The situation has escalated into a matter of grave environmental and public concern for the inhabitants of Subdega.</p>
	<p>Hence the instant OA.</p>

**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
ORIGINAL APPLICATION NO. ___ 2026**

(UNDER SECTIONS 14 AND 15 OF THE NATIONAL GREEN TRIBUNAL ACT, 2010)

IN THE MATTER OF:

1.	GULSHAN KUMAR BARUA S/o Raidhar Barua Age: 54 years Resident of Subdega, Sundergarh, Odisha – 770014	...APPLICANT
VERSUS		
1.	THE STATE OF ODISHA Through the Secretary, Revenue and Disaster Management Department, Government of Odisha, Bhubaneswar	...RESPONDENT NO.1
2.	STATE POLLUTION CONTROL BOARD, ODISHA Through its Member Secretary, BRIT Colony, Nilakantha, Bhubaneswar, Odisha 751012	...RESPONDENT NO.2
3.	COLLECTOR & DISTRICT MAGISTRATE, SUNDERGARH Dengibhadi, Sundargarh-770001, Odisha	...RESPONDENT NO.3
4.	REVENUE DIVISIONAL COMMISSIONER, SAMBALPUR Northern Division, Sambalpur-768001, Odisha	...RESPONDENT NO.4
5.	CENTRAL POLLUTION CONTROL BOARD Through its Member Secretary, Parivesh Bhawan, East Arjun Nagar, Shahdara Delhi – 110032	...RESPONDENT NO.5
6.	VEDANTA LIMITED Village Bhurkhamunda,	

	Jharsugudu, Odisha-768201	...RESPONDENT NO.6
7.	NATIONAL THERMAL POWER CORPORATION (NTPC) Darlipali Ujalpur Road, Mahikani, Odisha-770025	...RESPONDENT NO.7

Filed on:21.03.2026

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**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
ORIGINAL APPLICATION NO. ___ 2026**
(UNDER SECTIONS 14 AND 15 OF THE NATIONAL GREEN TRIBUNAL ACT, 2010)

MEMO OF PARTIES

IN THE MATTER OF:

1.	GULSHAN KUMAR BARUA S/o Raidhar Barua Age: 54 years Resident of Subdega, Sundergarh, Odisha – 770014 Email Id- anjumantripathy09@gmail.com	...APPLICANT
VERSUS		
1.	THE STATE OF ODISHA Through the Secretary, Revenue and Disaster Management Department, Government of Odisha, Bhubaneswar Email Id- revsec.od@nic.in	...RESPONDENT NO.1
2.	STATE POLLUTION CONTROL BOARD, ODISHA Through its Member Secretary, BRIT Colony, Nilakantha, Bhubaneswar, Odisha 751012 Email Id- paribesh1@ospcboard.org	...RESPONDENT NO.2
3.	COLLECTOR & DISTRICT MAGISTRATE, SUNDERGARH Dengibhadi, Sundargarh-770001, Odisha Email Id- dm-sundargarh@nic.in	...RESPONDENT NO.3
4.	REVENUE DIVISIONAL COMMISSIONER, SAMBALPUR Northern Division, Sambalpur-768001, Odisha Email Id- rdcnd.od@nic.in	...RESPONDENT NO.4
5.	CENTRAL POLLUTION CONTROL BOARD Through its Member Secretary, Parivesh Bhawan, East Arjun Nagar, Shahdara Delhi – 110032 Email Id- ccb.cpcb@nic.in	...RESPONDENT NO.5

6.	VEDANTA LIMITED Village Bhurkhamunda, Jharsugudu, Odisha-768201 Email Id- envvljsgsc@vedanta.co.inRESPONDENT NO.6
7.	NATIONAL THERMAL POWER CORPORATION (NTPC) Darlipali Ujalpur Road, Mahikani, Odisha-770025 Email Id- gbirganthia@ntpc.co.in	...RESPONDENT NO.7

APPLICATION UNDER SECTION 14 AND 15 OF THE NATIONAL GREEN TRIBUNAL ACT, 2010

1. The instant Original Application (“OA”) is being preferred under Sections 14 and 15 of the NATIONAL GREEN TRIBUNAL ACT, 2010, seeking directions orders and appropriate reliefs against the illegal and unscientific proposal of dumping fly ash and fly ash slurry in the water filled non-functional stone quarry situated at the hilltop of Perubahadi Reserve Forest, District Sundargarh, Odisha, which poses an imminent threat of toxic contamination of groundwater, streams, agricultural lands, forest ecology and the life, health and livelihood of the local residents, and for protection, restoration and preservation of the environment in accordance with the principles of sustainable development, precautionary principle and public trust doctrine.

FACTS IN BRIEF:

1. The Ministry of Environment, Forest and Climate Change, Government of India (“MoEFCC”), in exercise of powers under Section 3 of the Environment (Protection) Act, 1986 read with Rule 5 of the Environment (Protection) Rules, 1986 issued comprehensive directions from time to time regulating disposal and utilisation of fly ash generated from coal and lignite based thermal power plants.

2. Earlier, by Notification dated 14.09.1999, the MoEFCC *inter alia* issued directions for restricting the excavation of top soil for brick manufacturing within a prescribed radius of the thermal power plants and prescribed the compulsory utilisation of fly ash in construction of roads, embankments, dams, dykes or for any other construction activities. A copy of the Notification dated 14.09.1999 issued by the Ministry of Environment and Forest, Government of India is annexed herewith and marked as **ANNEXURE A-1**.
3. By amendment Notification dated 27.08.2003, the Central Government further strengthened the Fly Ash regulations by increasing the area where fly ash use was made compulsory and by introducing stricter measures to ensure proper utilisation and to prevent unsafe or indiscriminate dumping of fly ash.

Under the said amendment:

- a. the utilisation radius around thermal power plants was increased from 50 kilometres to 100 kilometres;
- b. mandatory use of fly ash and fly ash based products in construction activities, roads, embankments and reclamation works was prescribed;
- c. reclamation and filling of low-lying areas were required to be undertaken only with pond ash/fly ash and not by random dumping of soil or waste;
- d. enforcement and monitoring responsibility was specifically vested in the State Pollution Control Board and State authorities; and
- e. thermal power plants were cast with statutory responsibility to ensure proper utilisation and regulated handling of fly ash.

A copy of the Notification dated 27.08.2003 is annexed herewith and marked as ANNEXURE A-2.

4. Thereafter, by amendment Notification dated 03.11.2009, the Central Government further strengthened the regulatory framework by mandating compulsory use of fly ash based products in construction activities within 100 kilometres of thermal power plants, requiring utilisation of fly ash for reclamation and filling works instead of soil, fixing time-bound targets for thermal power plants to ensure progressive utilisation of fly ash, and providing for monitoring and compliance reporting to the Pollution Control Boards. The amendment also required every State Government to constitute a Monitoring Committee comprising officials of concerned departments and the State Pollution Control Board to supervise and regulate safe implementation of fly ash management. A copy of the Notification dated 03.11.2009 is annexed herewith and marked as ANNEXURE A-3.

5. Thereafter, by amendment Notification S.O. 254(E) dated 25.01.2016, the Central Government further strengthened the fly ash management framework by extending the mandatory utilisation radius from 100 kilometres to 300 kilometres, requiring thermal power plants to ensure 100% utilisation of fly ash, mandating disclosure of ash stock on their websites, providing dedicated infrastructure for ash handling, and directing that transportation costs of fly ash for construction and public projects be borne or shared by the power plants. The amendment also cast a statutory duty upon State Authorities to ensure the compulsory use of fly ash based products in construction activities and

Government schemes. A copy of the Notification dated 25.01.2016 is annexed herewith and marked as ANNEXURE A-4.

6. Further, the Central Pollution Control Board (CPCB), in March 2019, issued 'Guidelines for Disposal/Utilisation of Fly Ash for Reclamation of Low Lying Areas and Stowing of Abandoned Quarries', prescribing mandatory safeguards for environmentally safe handling and disposal of fly ash. The Guidelines specifically require dry and controlled collection of ash, transportation only through covered tankers or pipelines, prohibition on open or indiscriminate dumping, prior permission of the Pollution Control Board, protection of water bodies and ecologically sensitive areas, and continuous environmental monitoring during disposal activities. Thus, fly ash cannot be dumped arbitrarily at any site or water-filled quarry without scientific safeguards. The proposed dumping of fly ash in the Perubhadi quarry, which is a natural water reservoir situated in a reserve forest area and used by villagers for drinking and irrigation, is contrary to the said CPCB Guidelines and poses serious risks of air, water and soil contamination. A copy of the CPCB Guidelines, March 2019, is annexed herewith and marked as ANNEXURE A-5.
7. On 28.08.2019, the MoEFCC stipulated certain conditions in the existing environmental clearances of thermal power plants.
8. On 31.12.2021 the Central Government issued Notification No. S.O. 5481(E), introducing a stricter and time-bound framework for scientific management, utilisation and disposal of fly ash, based on the 'Polluter Pays' principle and principles of sustainable development and

under the said Notification, every thermal power plant has been made responsible to ensure the following:

- i. 100% utilisation of fly ash, and
- ii. disposal of fly ash is carried out only in an environmentally sound manner.
- iii. The Notification specifically provides that fly ash shall be utilised for approved purposes such as mine void filling, low-lying area filling and other eco-friendly uses, such utilisation shall be carried out only with prior permission of the State Pollution Control Board (SPCB) and compliance with environmental safeguards, monitoring and reporting requirements

A copy of the 31.12.2021 Notification is annexed herewith and marked as **ANNEXURE A-6**.

9. Continuous supervision and monitoring by the Central Pollution Control Board and the concerned State Pollution Control Board have also been prescribed to prevent contamination of land, water bodies and the surrounding environment, and to impose environmental compensation in cases of non-compliance.
10. In furtherance of the aforesaid statutory framework, the Odisha State Pollution Control Board conducted feasibility assessment for identification of suitable sites for disposal and utilisation of fly ash. During the said assessment, certain extinct stone quarries situated in the districts of Sundargarh and Bargarh were identified as potential locations for disposal and filling of fly ash. A feasibility report was

thereafter submitted by the Odisha State Pollution Control Board recommending allotment of the said quarries for fly ash disposal, subject to adherence to prescribed environmental safeguards.

11. In pursuance of Resolution No. 24587/R&DM dated 07.07.2025 issued by the , the authorities initiated steps for utilisation of identified extinct stone quarries for dumping of fly ash generated by thermal power plants. A copy of the Resolution No. 24587/R&DM annexed herewith and marked as **ANNEXURE A-7**.
12. Thereafter, the Office of the Collector & District Magistrate, Sundargarh (Mining Section) issued Advertisement dated 21.08.2025 inviting applications from fly ash generating companies for allotment of specified extinct stone quarries, including Blanada Stone Quarry, San Balichuan Stone Quarry and Perubhadi Stone Quarry, indicating the estimated volume capacity of each site. A copy of the Advertisement annexed herewith and marked as **ANNEXURE A-8**.
13. On 15.09.2025, the Tehsildar, Subdega addressed a letter to the Respondent No.2 thereby forwarding the names of six fly-ash generating companies who had applied for the allotment of Peruabhadi Stone Quarry for fly-ash dumping purposes. A copy of the letter dated 15.09.2025 addressed by the Tehsildar, Subdega to the Respondent No.2 is annexed herewith and marked as **ANNEXURE A-9**.
14. The Respondent No.2 addressed a letter dated 28.10.2025 to the Tehsildar, Subdega thereby informing him that in the meeting of the Respondent No.1 held on 23.10.2025, it was decided that the Perubhadi Stone Quarry was to be allotted to the Respondent No.6 for

disposal of fly-ash. A copy of the letter dated 28.10.2025 addressed by the Respondent No.2 to the Tehsildar, Subdega is annexed herewith and marked as ANNEXURE A-10.

15. The concerns in the present matter arise as the Applicant is a permanent resident of Subdega, District Sundargarh, and is dependent upon agriculture, forest resources and local water bodies for livelihood.
16. The identified Perubahadi stone quarry is situated on the hilltop of Perubahadi Reserve Forest and, over the years, has naturally filled with water, thereby forming a perennial water reservoir used by the surrounding villagers for drinking, bathing, irrigation, cattle consumption and other domestic purposes.
17. The said water body caters to several adjoining villages including Chatasargi, Teljora, Didga, Majhi Para, Mahar Para and Dumberbahal situated in the foothills directly below the site, where the inhabitants primarily depend upon agriculture and livestock.
18. The Didga–Teljora Nala flows from the said hill region and ultimately drains into River Ib, which is the principal river and lifeline of the area. Any contamination at the quarry site would directly affect the downstream water sources, agricultural lands and villages.
19. The proposed dumping of fly ash and fly ash slurry in the water-filled quarry is likely to cause seepage and flow of toxic slurry into natural streams and the River Ib, besides dispersal of fly ash particles through

wind, resulting in air and water pollution and damage to crops, cattle and human health.

20. The quarry also acts as a natural groundwater recharge source for the surrounding habitations and its destruction would lead to scarcity of safe drinking water, particularly during summer.
21. The affected population largely comprises Scheduled Tribe communities residing in the Scheduled Area whose livelihood, land and forest resources are directly dependent on the said ecosystem.
22. Despite serious environmental and livelihood concerns raised by the Applicant and other villagers, no preventive or protective measures have been taken by the Respondents, and the threat of dumping continues, thereby giving rise to a continuing cause of action.
23. Further, pursuant to the allotment of the Perubhadi Stone Quarry to Respondent No. 6, Respondent Nos. 6 and 7 have been indiscriminately dumping fly-ash along public roads and upon agricultural lands in and around Subdega. Such unregulated disposal has resulted in severe soil degradation and air contamination in the area. Photographs of indiscriminate fly-ash dumping along public roads and upon agricultural lands in and around Subdega by the Respondent Nos. 6 and 7 are annexed herewith and marked as **ANNEXURE A-11.**
24. The surrounding villages are gravely affected, as the continuous dispersal of fly-ash has rendered the air heavily dust-laden, posing serious health concerns to residents. Additionally, large tracts of

agricultural land are progressively becoming infertile and uncultivable owing to the accumulation of fly-ash deposits. The situation has escalated into a matter of grave environmental and public concern for the inhabitants of Subdega. In fact, the pollution has been widely reported in Odia newspapers and yet the authorities have turned a blind eye to the same. A copy of the news report with respect to the fly-ash pollution in Subdega and other parts of Sundergarh district published in the Odia newspaper is annexed herewith and marked as **ANNEXURE A-12.**

25. Further, the Sarpanch and other villagers from villages in Subdega, on 13.11.2025, addressed a letter to the Tehsildar seeking his immediate intervention in this matter of fly-ash pollution, but such requests fell to deaf ears. A copy of the representation dated 13.11.2025 addressed by the villagers to the Tehsildar along with their objections to the public hearing is annexed herewith and marked as **ANNEXURE A-13.**

26. Hence, the instant OA.

GROUND

The Applicant prefers the instant OA on the following among other grounds:

- A. Because the proposed dumping and disposal of fly ash and fly ash slurry in a water-filled quarry is an environmentally hazardous activity will cause air, water and soil pollution and is therefore contrary to and violative of the provisions of the Environment (Protection) Act, 1986 and the rules framed thereunder.
- B. Because the likely seepage and discharge of fly ash slurry into the Didga–Teljora Nala and thereafter into River Ib would result in

contamination of surface and groundwater sources and is prohibited under the Water (Prevention and Control of Pollution) Act, 1974.

- C. Because dispersal of fly ash particles from the elevated hilltop site will cause emission of pollutants into the atmosphere, adversely affecting nearby villages and agricultural lands, and is violative of the Air (Prevention and Control of Pollution) Act, 1981.
- D. Because the identified quarry presently functions as a natural water reservoir and groundwater recharge source and its conversion into a dumping site would destroy an existing water body, which is impermissible in law and against settled environmental safeguards.
- E. Because the Respondents have failed to conduct any scientific study, environmental impact assessment, risk analysis or obtain requisite environmental clearances before initiating the proposed activity, rendering the action arbitrary, illegal and unsustainable in law.
- F. Because the affected area is inhabited predominantly by rural and Scheduled Tribe communities whose livelihood depends upon agriculture, forests and local water sources, and any action prejudicial to their land and resources without consultation is unjust, unreasonable and contrary to environmental justice principles.
- G. Because the proposed activity is contrary to the Precautionary Principle and the Principle of Sustainable Development, which mandate that activities with potential environmental harm must be prevented in advance.
- H. Because the Respondents, being trustees of natural resources such as forests, rivers and water bodies, are bound by the Public Trust Doctrine to protect the same and cannot permit their degradation for hazardous waste disposal.

- I. Because the continuing threat of pollution and environmental degradation gives rise to a continuing cause of action, warranting interference and appropriate directions by this Hon'ble Tribunal under Sections 14 and 15 of the National Green Tribunal Act, 2010.
- J. Because pursuant to the allotment of the Perubhadi Stone Quarry to Respondent No. 6, Respondent Nos. 6 and 7 have been indiscriminately dumping fly-ash along public roads and upon agricultural lands in and around Subdega. Such unregulated disposal has resulted in severe soil degradation and air contamination in the area.
- K. Because the surrounding villages are gravely affected, as the continuous dispersal of fly-ash has rendered the air heavily dust-laden, posing serious health concerns to residents. Additionally, large tracts of agricultural land are progressively becoming infertile and uncultivable owing to the accumulation of fly-ash deposits.
- L. Because the situation has escalated into a matter of grave environmental and public concern for the inhabitants of Subdega. In fact, the pollution has been widely reported in Odia newspapers and yet the authorities have turned a blind eye to the same.

JURISDICTION

- 1. The instant Original Application is maintainable under Sections 14 and 15 of the National Green Tribunal Act, 2010 as it involves substantial questions relating to the environment and enforcement of the Air Act, Water Act and Environment (Protection) Act, 1986, which are enactments specified in Schedule I of the Act.

2. The cause of action has arisen within the territorial limits of Odisha and therefore this Hon'ble Eastern Zone Bench has the territorial jurisdiction to entertain and adjudicate the present Application.

LIMITATION

The present Application is within limitation under Section 14(3) of the NGT Act. The cause of action is continuing and recurring in nature as the illegal and polluting activities persist on a day-to-day basis. Therefore, the Application is not barred by limitation and is legally maintainable.

PRAYER

It is therefore most respectfully prayed that this Hon'ble Tribunal may be pleased to:

- a) Direct the Respondents to forthwith restrain and prohibit dumping, disposal or discharge of fly ash or fly ash slurry in the Perubahadi stone quarry situated at Subdega, District Sundargarh;
- b) Direct the Respondent i.e. Central Pollution Control Board and State Pollution Control Board and other competent authorities to conduct a joint inspection and environmental assessment of the Perubahadi stone quarry site and surrounding areas and submit a report before this Hon'ble Tribunal;
- c) Declare that the utilisation of the water-filled Perubahadi stone quarry for fly ash dumping is illegal, environmentally hazardous and violative of the provisions of the Environment

(Protection) Act, 1986, the Water Act, 1974 and the Air Act, 1981;

- d) Direct the Respondent Nos. 6 and 7 to forthwith restrain from dumping fly-ash on the agricultural fields or on public roads in Subdega, District Sundargarh;
- e) Direct the Respondents to protect and preserve the waterfilled Perubahadi stone quarry and surrounding forest and river ecosystem, and to ensure that no fly-ash dumping activity causing pollution or environmental degradation is permitted in the area;
- f) Direct restoration and remediation of the site and surrounding environment, in in terms of Sec. 15 of the NGT Act;
- g) Direct the Respondent Nos. 6 and 7 to pay compensation for causing damage to agricultural land of villagers;
- h) Pass such other or further order(s) as this Hon'ble Tribunal may deem fit and proper in the facts of the instant case.

Filed on- 21.03.2026

Filed by:

Arya Tripathy

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BEFORE SRI K.K. SAMANTARAY, NOTARY, SUNDARGARH
GOVT. OF INDIA

**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
ORIGINAL APPLICATION NO.OF 2026**

IN THE MATTER OF:

GULSHAN KUMAR BARUA

...APPLICANT

VERSUS

STATE OF ODISHA AND ORS

...RESPONDENTS

AFFIDAVIT

I, GULSHAN KUMAR BARUA, S/o Raidhar Barua, Age 54 years, resident of Subdega, Sundergarh, Odisha -770014, Applicant herein in the instant OA, do hereby solemnly affirm and declare as under: -

1. That I am the sole Applicant in the captioned matter, and I am aware of the facts of this case, and competent to swear this affidavit.
2. That the contents of the accompanying OA (including the Synopsis, List of dates at page .1. to 6. and OA from Para 1 to 23.at page 9... to 18.) and accompanying applications have been drafted by my counsel under my instructions and after going through and carefully understanding the same, I state that same to be true and correct to the best of my knowledge and belief, based on records of the case, and the legal submissions made therein are based on legal advice which I believe to true. No part thereof is false and nothing material has been concealed therefrom.
3. That annexures marked as Annexure A-1 to A-13 enclosed are true and/or typed and/or true and typed copies of their respective originals.
4. That the contents of this affidavit are true and correct.

Gulshan Ku Barua
DEPONENT

VERIFICATION

Verified at.....on this 10th day of February 2026 that the contents of foregoing affidavit are based on my knowledge and belief and that no part thereof is false and that nothing material has been concealed therefrom.

Gulshan Ku. Barua
DEPONENT

K.K. SAMANTARAY, NOTARY
Sundargarh, Govt. of India
REGD. NO. 45439/2025
EXP. ON DT. 05/03/2030
Sl. No. 181 Date: 10.02.26



Identified by
KQ
10.02.26
Advocate, Sundargarh.

deponent(s) being identified by
Sri/Smt./Ku. *K.K. Samantaray*
Advocate Solemnly Affirmed and
Declared the truthness of the contents

KQ
10.02.26

K.K. SAMANTARAY, NOTARY
Sundargarh, Govt. of India
REGD NO 45439/2025



भारत का राजपत्र

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PART II—Section 3—Sub-section (ii)

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अधिसूचना

नई दिल्ली, 14 सितम्बर, 1999

का.आ. 763(अ).— पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) द्वारा यथाअपेक्षित एक प्रारूप अधिसूचना जिसमें कतिपय निदेश अंतर्विष्ट हैं, भारत सरकार के पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 453(अ), तारीख 22 मई, 1998 द्वारा प्रकाशित किए गए थे जिसमें उन व्यक्तियों से, जिनके उससे प्रभावित होने की संभावना थी, आक्षेप और सुझाव उस तारीख से जिसको उक्त अधिसूचना की राजपत्रित प्रतियां जनता को उपलब्ध करा दी जाती हैं, साठ दिन की अवधि की समाप्ति के पूर्व, आमंत्रित किए गए थे ;

और उक्त राजपत्र की प्रतियां जनता को उसी तारीख को उपलब्ध करा दी गई थी ;

और उक्त प्रारूप अधिसूचना की बाबत जनता से प्राप्त आक्षेपों और सुझावों पर केन्द्रीय सरकार द्वारा सम्यक् रूप से विचार कर लिया गया है ;

और पर्यावरण का संरक्षण, उपरिमृदा संरक्षण और भूमि पर कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्रों से निस्सारित फ्लाई एश का सन्निक्षेपण और ध्वयन करने का निवारण करना आवश्यक है ;

और ईंटों के विनिर्माण के लिए उपरिमृदा के उत्खनन को निर्बंधित करने की तथा कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्रों से पचास किलोमीटर के विनिर्दिष्ट व्यास के भीतर भवन निर्माण सामग्री के विनिर्माण में और सन्निर्माण क्रिया कलापों में फ्लाई एश के उपयोग को सम्प्रवर्तित करने की आवश्यकता है ;

और माननीय दिल्ली उच्च न्यायालय ने सेंटर फार पब्लिक इन्ट्रेस्ट लिटिगेशन दिल्ली बनाम युनियन आफ इन्डिया की सिविल रिट याचिका संख्यांक 2145/99 में अपने 25 अगस्त, 1999 के आदेश द्वारा केन्द्रीय सरकार को फ्लाई एश की बाबत अन्तिम अधिसूचना 26 अक्टूबर, 1999 को या उससे पूर्व प्रकाशित करने का निदेश दिया है ;

अतः, अब, केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (2) के खंड (v) के साथ पठित उसकी उपधारा (1) और धारा 5 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, तथा माननीय दिल्ली उच्च न्यायालय के उपरिस्थित आदेशों के अनुसरण में निम्नलिखित निर्देश जारी करती है जो इस अधिसूचना के प्रकाशन की तारीख को प्रवृत्त होंगे, अर्थात् :-

1. ईटों के विनिर्माण और अन्य सन्निर्माण क्रिया कलापों के फ्लाई एश, बोटम एश या पोंड एश का उपयोग :-

- (1) कोई व्यक्ति, कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्रों से पचास किलोमीटर के व्यास के भीतर सन्निर्माण क्रिया कलापों में उपयोग के लिए मृदा में भार दर भार के आधार पर (फ्लाई एश, बोटम एश या पोंड एश) के कम-से-कम पच्चीस प्रतिशत मिश्रण के बिना मिट्टी, ईटों या टाइलों या ब्लोकों का विनिर्माण नहीं करेगा ।
- (2) ऊपर पैरा (1) के अनुसार एश की विनिर्दिष्ट मात्रा के उपयोग को सुनिश्चित करने के लिए, यथास्थिति सम्बद्ध राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति का क्षेत्रीय अधिकारी प्राधिकारी होगा । इसका अनुपालन न किए जाने की दशा में उक्त प्राधिकारी ईट भट्टा की स्थापना के लिए जारी अनुमति आदेश को रद्द करने के अतिरिक्त उक्त खनन पट्टा रद्द किए जाने के लिए जिला प्रशासन से अनुरोध करेगा । उक्त खनन पट्टा रद्द करने का विनिश्चय सम्यक् सुनवाई के पश्चात् किया जाएगा । उक्त प्राधिकारी को वास्तविक एश के उपयोग का सत्यापन करने हेतु समर्थ बनाने के लिए तापीय विद्युत संयंत्र प्रत्येक ईट भट्टे को उपलब्ध कराई गई एश का मासिक अभिलेख बनाए रखेगा ।
- (3) उक्त विद्युत संयंत्र द्वारा यथा प्रमाणित पर्याप्त मात्रा में तापीय विद्युत संयंत्र से एश की अनुपलब्धता की दशा में सम्बद्ध राज्य/संघ राज्यक्षेत्र की सरकार ऊपर पैरा (1) के अधीन अनुबंध को समुचित रूप से उपान्तरित (त्यजन/शिथिल) करेगा ।
- (4) प्रत्येक कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्र एक विवाद निपटारा समिति का गठन करेगा जिसमें तापीय विद्युत संयंत्र का महाप्रबंधक और अखिल भारतीय ईट और टाईल विनिर्माण संघ का प्रतिनिधि होगा । ऐसी समिति बिना कोई समय गंवाए एश की अबाध लदाई और परिवहन सुनिश्चित करेगी । किसी अनसुलझे विवाद की बाबत कार्रवाई राज्य/संघ राज्यक्षेत्र की सरकार द्वारा स्थापित की जाने वाली किसी राज्य/संघ राज्यक्षेत्र स्तर की समिति द्वारा की जाएगी, जिसमें राज्य प्रदूषण नियंत्रण बोर्ड/प्रदूषण नियंत्रण समिति के सदस्य सचिव, राज्य/संघ राज्यक्षेत्र सरकार के विद्युत मंत्रालय के प्रतिनिधि और अखिल भारतीय ईट तथा टाइल विनिर्माण संघ के प्रतिनिधि होंगे ।

2. तापीय विद्युत संयंत्र द्वारा एश का उपयोग -

सभी कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्र नीचे दिए गए विद्युत संयंत्रों में उत्पादित एश का उपयोग करेंगे, अर्थात् :-

- (1) प्रत्येक कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्र, इस अधिसूचना के प्रकाशन की तारीख से कम-से-कम दस वर्ष के लिए एश आधारित भवन सामग्री जैसे सीमेंट, कंक्रीट, ब्लाक, ईटें, पैनल या किसी अन्य सामग्री के विनिर्माण के प्रयोजनों के लिए या सड़कों, तटबंधों, बांधों, नहरों के सन्निर्माण के लिए या किसी अन्य सन्निर्माण क्रियाकलापों के लिए बिना किसी संदाय या किसी अन्य प्रतिफल के एश उपलब्ध कराएगा ।
- (2) प्रत्येक कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्र जिसे ऐसी पर्यावरणीय अनापत्ति शर्तों के अधीन आरंभ किया गया है, जिसमें संपूर्ण फ्लाई एश का उपयोग करने के लिए कार्य योजना अनुबद्ध की गई हो, इस अधिसूचना के प्रकाशन से नौ वर्ष की अवधि के भीतर योजना के अनुसार भूमि पर फ्लाई एश के सन्निक्षेपण और व्ययन को बंद कर देगा । ऐसी कार्य योजना में विद्युत संयंत्र में उत्पादित सम्पूर्ण एश का नवें वर्ष की समाप्ति तक उपयोग करने में समर्थ बनाने के लिए इस अधिसूचना के प्रकाशन से तीन वर्ष के भीतर तीस प्रतिशत फ्लाई एश के उपयोग के साथ आगामी छह वर्षों में उपयोग में उत्तरोत्तर प्रति वर्ष कम-से-कम दस प्रतिशत की और वृद्धि की व्यवस्था होगी । इस संबंध में पांच वर्ष के पश्चात् प्रगति का पुनरावलोकन किया जाएगा ।

- (3) ऊपर पैरा (2) के अंतर्गत न आने वाले प्रत्येक कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्र, इस अधिसूचना के प्रकाशन की तारीख से पन्द्रह वर्ष की अवधि के भीतर, विद्युत संयंत्रों द्वारा तैयार की जाने वाली कार्य योजना के अनुसार फ्लाई एश के उपयोग को बंद कर देंगे। ऐसी कार्य योजना में विद्युत संयंत्र में उत्पादित संपूर्ण फ्लाई एश का उपयोग करने में समर्थ बनाने के लिए, इस अधिसूचना के प्रकाशन की तारीख से तीन वर्ष के भीतर फ्लाई एश के बीस प्रतिशत के उपयोग के साथ आगामी बारह वर्षों के लिए उत्तरोत्तर प्रति वर्ष उपयोग में वृद्धि की व्यवस्था होगी।
- (4) इस अधिसूचना के पैरा 2 के उपपैरा (2) और (3) के अधीन कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्र द्वारा तैयार की गई सभी कार्य योजनाएं, इस अधिसूचना के प्रकाशन की तारीख से छह मास की अवधि के भीतर केन्द्रीय प्रदूषण नियंत्रण बोर्ड, संबद्ध राज्य प्रदूषण नियंत्रण बोर्ड/समिति तथा पर्यावरण और वन मंत्रालय के संबद्ध क्षेत्रीय कार्यालय को भेजी जाएंगी।
- (5) केन्द्रीय और राज्य सरकार अभिकरण, राज्य विद्युत बोर्ड, नेशनल थर्मल पावर कारपोरेशन और तापीय विद्युत संयंत्रों के प्रबंधक, उत्पादन क्रियाकलापों के प्रयोजनों के लिए भूमि, विद्युत और जल की व्यवस्था करेंगे और उस क्षेत्र के समीप जहां विद्युत संयंत्र में फ्लाई एश का उत्पादन होता है, एश आधारित उत्पादन एककों की स्थापना और संवर्धन करने के लिए एश उत्पादन क्षेत्र तक पहुंचने की व्यवस्था करेंगे।
- (6) कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्रों द्वारा इस अधिसूचना के उपबंधों की अनुपालना के बारे में जानकारी देने वाली क्रियान्वयन रिपोर्ट केन्द्रीय प्रदूषण नियंत्रण बोर्ड, संबद्ध राज्य प्रदूषण नियंत्रण बोर्ड/समिति तथा पर्यावरण और वन मंत्रालय के संबद्ध क्षेत्रीय कार्यालय को प्रति वर्ष 30 अप्रैल तक भेजी जाएगी।

3. एश आधारित उत्पादों के उपयोग के लिए विनिर्देश-

- (1) एश आधारित उत्पादों जैसे सीमेंट, कंक्रीट, ब्लॉक, ईंटों, पैनल या किसी अन्य सामग्री का विनिर्माण या सन्निर्माण क्रियाकलापों जैसे सड़कें बिछाना, तटबंधों में एश का उपयोग या ढलाऊँ क्षेत्रों को उपयोगी बनाने के लिए भूमिभरण के रूप में उपयोग जिसके अंतर्गत खाली पड़ी खानों या गड्ढों की पृष्ठभूमि भरना भी है या कोई अन्य उपयोग भारतीय मानक ब्यूरो, भारतीय खान ब्यूरो, भारतीय सड़क कांग्रेस, केन्द्रीय भवन अनुसंधान संस्थान, रूड़की, केन्द्रीय सड़क अनुसंधान संस्थान, नई दिल्ली, भवन सामग्री और प्रौद्योगिकी संवर्धन परिषद्, नई दिल्ली, केन्द्रीय लोक निर्माण विभाग, राज्य लोक निर्माण विभाग और अन्य केन्द्रीय तथा राज्य अभिकरणों द्वारा अधिकथित विनिर्देशों और मार्गदर्शक सिद्धांतों के अनुसार किया जाएगा।
- (2) केन्द्रीय लोक निर्माण विभाग, राज्य/संघ राज्यक्षेत्रों की सरकारों के लोक निर्माण विभाग, विकास प्राधिकरण, आवासन बोर्ड, भारतीय राजमार्ग प्राधिकरण और अन्य सन्निर्माण अभिकरण, जिसके अंतर्गत वे भी हैं जो प्राइवेट सैक्टर में हैं, इस अधिसूचना के प्रकाशन की तारीख से चार मास की अवधि के भीतर अपने-अपने विनिर्देशों और सन्निर्माण उपयोजनाओं की अनुसूचियों में, जिसके अंतर्गत समुचित मानक और आचार संहिता है, एश और एश आधारित उत्पादों का उपयोग विहित करेंगे।
- (3) सभी स्थानीय प्राधिकरण, इस अधिसूचना के प्रकाशन की तारीख से चार मास की अवधि के भीतर, अपनी-अपनी भवन उपविधियों और विनियमों में, भवन सामग्री, सड़कों, तटबंधों में या किसी अन्य उपयोग के लिए एश और एश आधारित उत्पादों का उपयोग और सन्निर्माण तकनीकें विहित करेंगे।

[फा०सं० 16-2/95-एच एस एम डी]

बी. राजगोपालन, संयुक्त सचिव

MINISTRY OF ENVIRONMENT AND FORESTS

NOTIFICATION

New Delhi, the 14th September, 1999

S.O. 763(E).— Whereas a draft notification containing certain directions was published, as required by sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 under the notification of the Government of India in the Ministry of Environment and Forests number S.O. 453(E) dated 22nd May, 1998 inviting objections and suggestions from all persons likely to be affected thereby, before the expiry of the period of sixty days from the date on which the copies of the Gazette of India containing the said notification are made available to the public;

And, whereas, copies of the said Gazette were made available to the public on the same date;

And, whereas, the objections and suggestions received from the public in respect of the said draft notification have been duly considered by the Central Government;

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

And, whereas, there is a need for restricting the excavation of top soil for manufacture of bricks and promoting the utilisation of fly ash in the manufacture of building materials and in construction activity within a specified radius of fifty kilometers from coal or lignite based thermal power plants;

And, Whereas, the Hon'ble High Court of Judicature, Delhi vide its order dated 25th August, 1999 in CWP No. 2145/99 Centre for Public Interest Litigation, Delhi v/s Union of India directed that the Central Government to publish the final notification in respect of fly ash on or before 26th October, 1999;

Now, therefore, in exercise of the powers conferred by sub-section (1), read with clause (v) of sub-section (2) of section 3 and section 5 of the Environment (Protection) Act, 1986 (29 of 1986); and in pursuance of the orders of the Hon'ble High Court, Delhi stated above, the Central Government hereby issues the following directions which shall come into force on the date of the publication of this notification, namely:-

1. Use of fly ash, bottom ash or pond ash in the manufacture of bricks and other construction activities.-

- (1) No person shall within a radius of fifty kilometers from coal or lignite based thermal power plants, manufacture clay bricks or tiles or blocks for use in construction activities without mixing atleast 25 per cent of ash (fly ash, bottom ash or pond ash) with soil on weight to weight basis.
- (2) The authority for ensuring the use of specified quantity of ash as per para (1) above shall be the concerned Regional Officer of the State Pollution Control Board or the Pollution Control Committee as the case may be. In case of non-compliance, the said authority, in addition to cancellation of consent order issued to establish the brick kiln, shall move the district administration for cancellation of mining lease. The cancellation of mining lease shall be decided after due hearing. To enable the said authority to verify the actual use of ash, the thermal power plant shall maintain month-wise records of ash made available to each brick kiln.
- (3) In case of non-availability of ash from thermal power plant in sufficient quantities as certified by the said power plant, the stipulation under para (1) shall be suitably modified (waived/relaxed) by the concerned State/Union Territory Government.
- (4) Each coal or lignite based thermal power plant shall constitute a dispute settlement committee which shall include the General Manager of the thermal power plant and a representative of All India Brick and Tile Manufacture's Federation (AIBTMF). Such a committee shall ensure unhindered loading and transport of ash without any undue loss of time. Any unresolved dispute shall be dealt with by a State/Union Territory level committee to be set up by State/Union Territory Government comprising Member Secretary of the State Pollution Control Board/Pollution Control Committee, representatives of Ministry of Power in the State/Union Territory Government and a representative of AIBTMF.

2. Utilisation of ash by Thermal Power Plants.-

All coal or lignite based thermal power plants

shall utilise the ash generated in the power plants as follows:-

- (1) Every coal or lignite based thermal power plant shall make available ash, for at least ten years from the date of publication of this notification, without any payment or any other consideration, for the purpose of manufacturing ash-based products such as cement, concrete blocks, bricks, panels or any other material or for construction of roads, embankments, dams, dykes or for any other construction activity.
- (2) Every coal or lignite based thermal power plant commissioned subject to environmental clearance conditions stipulating the submission of an action plan for full utilisation of fly ash shall, within a period of nine years from the publication of this notification, phase out the dumping and disposal of fly ash on land in accordance with the plan. Such an action plan shall provide for thirty per cent of the fly ash utilisation, within three years from the publication of this notification with further increase in utilisation by at least ten per cent points every year progressively for the next six years to enable utilisation of the entire fly ash generated in the power plant at least by the end of ninth year. Progress in this regard shall be reviewed after five years.
- (3) Every coal or lignite based thermal power plant not covered by para (2) above shall, within a period of fifteen years from the date of publication of this notification, phase out the utilisation of fly ash in accordance with an action plan to be drawn up by the power plants. Such action plan shall provide for twenty per cent of fly ash utilisation within three years from the date of publication of this notification, with further increase in utilisation every year progressively for the next twelve years to enable utilisation of the entire fly ash generated in the power plant.
- (4) All action plans prepared by coal or lignite based thermal power plants in accordance with sub-para (2) and (3) of para 2 of this notification, shall be submitted to the Central Pollution Control Board, concerned State Pollution Control Board/Committee and concerned regional office of the Ministry of Environment and Forests within a period of six months from the date of publication of this notification.
- (5) The Central and State Government Agencies, the State Electricity Boards, the National Thermal Power Corporation and the management of the

thermal power plants shall facilitate in making available land, electricity and water for manufacturing activities and provide access to the ash lifting area for promoting and setting up of ash-based production units in the proximity of the area where ash is generated by the power plant.

- (6) Annual implementation report 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/Committee and the concerned Regional Office of the Ministry of Environment and Forests by the coal or lignite based thermal power plants.

3. **Specifications for use of ash-based products.-**

- (1) Manufacture of ash-based products such as cement, concrete blocks, bricks, panels or any other material or the use of ash in construction activity such as in road laying, embankments or use as landfill to reclaim low lying areas including back filling in abandoned mines or pitheads or for any other use shall be carried out in accordance with specifications and guidelines laid down by the Bureau of Indian Standards, Indian Bureau of Mines, Indian Road Congress, Central Building Research Institute, Roorkee, Central Road Research Institute, New Delhi, Building Materials and Technology Promotion Council, New Delhi, Central Public Works Department, State Public Works Departments and other Central and State Government agencies.
- (2) The Central Public Works Department, Public Works Departments in the State/Union Territory Governments, Development Authorities, Housing Boards, National Highway Authority of India and other construction agencies including those in the private sector shall also prescribe the use of ash and ash-based products in their respective schedules of specifications and construction applications, including appropriate standards and codes of practice, within a period of four months from the publication of this notification.

- (3) All local authorities shall specify in their respective building bye-laws and regulations the use of ash and ash-based products and construction techniques in building materials, roads, embankments or for any other use within a period of four months from the date of publication of this notification.

[F. No. 16-2/95-HSMD]

V. RAJAGOPALAN, Jt. Secy.

MINISTRY OF ENVIRONMENT AND FORESTS**NOTIFICATION****New Delhi, the 27th August 2003.**

S.O. 979 (E)- Whereas a draft of certain amendments to the Government of India in the Ministry of Environment and Forests notification number S.O.763 (E) dated 14th September, 1999 (hereinafter referred to as the said notification) which the Central Government proposes to make 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, were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) dated the 6th November, 2002 *vide* S.O. 1164 (E), dated the 5th November, 2002 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 amendments were made available to the public.

And, whereas copies of the said Gazette were made available to the public on 27th November 2002;

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, the Central Government hereby makes the following amendments to the said notification, namely: -

AMENDMENTS

1. In the said notification, in the preamble, for the words "fifty kilometers", the words "one hundred kilometres" shall be substituted.
2. In the said notification, in paragraph 1, -
 - (a) in sub-paragraph (1), for the words "fifty kilometers", the words "one hundred kilometres" shall be substituted;
 - (b) after sub-paragraph (1), the following sub- paragraphs shall be inserted, namely: -

"(1A) Every construction agency engaged in the construction of buildings within a radius of fifty to one hundred kilometres from a coal or lignite based thermal power plant shall use fly ash bricks or blocks or tiles or clay fly ash bricks or cement fly ash bricks or blocks or similar products or a combination or aggregate of them in such construction as per the following minimum percentage (by volume) of the total bricks, blocks and tiles, as the case may be, used in each construction project, namely:-

- (i) 25 per cent by 31st August 2004;
- (ii) 50 per cent by 31st August 2005;
- (iii) 75 per cent by 31st August, 2006; and
- (iv) 100 per cent by 31st August 2007.

In respect of construction of buildings within a radius of 50 kilometres from a coal or lignite based thermal power plant the following minimum per centage (by volume) of use of bricks, blocks and tiles shall apply: -

- (i) 50 per cent by 31st August 2004;
- (ii) 100 per cent by 31st August 2005.

(1B) The provisions of sub-paragraph (1A) shall be applicable to all construction agencies such as Housing Boards and those in the private sector builders of apartments, hotels, resorts and cottages and the like. It shall be the responsibility of the construction agencies either undertaking the construction or approving the design or both to ensure compliance of the provisions of sub-paragraph (1A) and to submit such returns as may be called for and compliance reports to the State Government or Union territory Administration”;

- (c) for sub-paragraph (2), the following sub-paragraphs shall be substituted, namely: -

“(2) The authority for ensuring the use of specified quantity of ash as per sub-paragraph (1) shall be the concerned Regional Officer of the State Pollution Control Board or the Pollution Control Committee, as the case may be.

(2A) The concerned State Government shall be the enforcing and monitoring authority for ensuring compliance of the provisions of sub-paragraph (IA).”;

(d) in sub-paragraph (3), for the words, brackets and figure “under para (1)” the words, brackets and figure “under sub-paragraph (1)” shall be substituted;

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

“(3A) A decision on the application for manufacture of fly ash bricks, block, and tiles and similar other fly ash based products shall be taken within thirty days from the date of receipt of the application by the competent authority. A decision on consent to establish the brick kiln shall be taken by the Pollution Control Board or the Pollution Control Committee, as the case may be, within a period of thirty days from the date of receipt of application by it.

(3B) In case of non-compliance of the provisions of sub-paragraph (1) of paragraph 1, the competent authority, in addition to cancellation of consent order issued to establish the brick kiln, shall move the district administration for cancellation of the mining lease.

(3C) All authorities sanctioning or renewing any land, soil or clay mining lease shall not grant such lease or extension of lease or renewal to clay brick, block or tile manufacturing unit within a radius of

one hundred kilometres of the coal or lignite based thermal power plant in cases where the manufacturer does not mix a minimum of 25 per cent by weight of fly ash or pond ash in the manufacture of bricks or blocks or tiles. The cancellation of mining lease shall be decided by the district administration after giving the holder of such lease an opportunity of being heard. To enable the competent authority to verify the actual use of ash, the thermal power plant shall maintain month-wise records of ash made available to each brick kiln.

(3 D) It shall be sufficient compliance of this notification if within twelve months from the date of issue of this notification, manufacturers of clay bricks, blocks and tiles located within a radius of 50 to 100 kilometres of a coal or lignite based thermal power plant comply with the provisions of sub-paragraphs (1) and (2).”.

(f) in sub-paragraph (4), after brackets and letters “(AIBTMF)”, the words “or a representative of local brick kiln owners association, federation, group.” shall be inserted;

(g) after sub-paragraph (4), the following sub-paragraphs shall be inserted, namely: -

"(5) No agency, person or organization shall, within a radius of 100 kilometres of a thermal power plant undertake construction or approve design for construction of roads or flyover embankments in contravention of the guidelines/ specifications issued by the Indian Road Congress (IRC) as contained in IRC specification No. SP: 58 of 2001. Any deviation from this direction can only be agreed to on technical reasons if the same is approved by Chief Engineer (Design) or Engineer-in-Chief of the concerned agency or organization or on production of a certificate of "Pond ash not available" from the thermal power plant(s) (TPPs) located within 100 kilometres of the site of

construction. This certificate shall be provided by the TPP within two working days from the date of making a request for ash.

(6) 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 due to soil borrow area shall be filled up with ash with proper compaction and covered with topsoil kept separately as above. This would be done as an integral part of embankment project within the time schedule of the project.

(7) No agency, person or organization shall within a radius of 100 kilometres of a coal or lignite based thermal power plant allow reclamation and compaction of low-lying areas with soil. Only pond ash shall be used for compaction. They shall also ensure that such reclamation and compaction is done in accordance with the bye-laws, regulations and specifications laid down by the authorities mentioned in sub-paragraph (3) of paragraph 3.”.

3. In the said notification, in paragraph 2,
 - (a) for the marginal heading “**Utilisation of ash by Thermal Power Plants**”, the marginal heading “**Responsibilities of Thermal Power Plants**” shall be substituted;
 - (b) for the opening words, “All coal or lignite based thermal power plants shall utilise the ash generated in the power plants as follows: -”, “Every coal or lignite based thermal power plant shall take the following steps to ensure the utilisation of ash generated by it, namely: -”;
 - (c) in sub-paragraph (1), -

- (i) after the words “products such as cement, concrete blocks, bricks, panels”, the words “or a combination thereof” shall be inserted;
- (ii) the following shall be added at the end, namely: -

“ The thermal power plants have to ensure availability of fair quantity of ash to each user including brick kilns.”;

- 4. In the said notification, after paragraph 2, the following paragraph shall be inserted, namely: -

“2A. Utilization of fly ash for reclamation of sea.

“Subject to the rules made under the Environment (Protection) Act, 1986, (29 of 1986) reclamation of sea shall be a permissible method of utilization of fly ash.”.

- 5. In the said notification, in paragraph 3, the following sub-paragraphs shall be inserted, namely: -

“(2A) All agencies including the Central Public Works Department and State Government agencies concerned with utilization of fly ash for construction purposes shall, within three months from the 1st day of September, 2003 make provisions for the use of fly ash and fly ash based bricks, blocks or tiles or aggregates of them in the schedule of approved materials and rates.

(2B) All agencies undertaking construction of roads or fly over bridges including Ministry of Road Transport and Highways (MORTH), National Highways Authority of India (NHAI), Central Public Works Department (CPWD), State Public Works Departments and other State Government Agencies, shall, within three months from the 1st day of September, 2003 -

- a. make provisions in their tender documents, schedules of approved materials and rates as well as technical documents, including those relating to soil borrow area or pit as per sub-paragraph (7) of paragraph 1; and
- b. make necessary specifications/guidelines for road or fly over embankments that are not covered by the specifications laid down by the Indian Road Congress (IRC).” .

**[F.No.16-2/95-HSMD]
(Dr. V. Rajagopalan)
Joint Secretary to the Govt. of India**

Footnote. - The principal notification was published in the Gazette of India, Part II, Section 3, sub-section (ii) *vide* S.O.763 (E) dated 14.9.1999.

TRUE TYPED COPY

Arya Tripathy



भारत का राजपत्र

The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

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नई दिल्ली, मंगलवार, नवम्बर 3, 2009/कार्तिक 12, 1931

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पर्यावरण और वन मंत्रालय

अधिसूचना

नई दिल्ली, 3 नवम्बर, 2009

का.आ. 2804(अ).—केन्द्रीय सरकार ने, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (1) उपधारा (2) के खंड (v) तथा धारा 5 के अधीन जारी की गई भारत सरकार के पर्यावरण और वन मंत्रालय की अधिसूचना सं. का. आ. 763 (अ) तारीख 14 सितंबर, 1999 द्वारा (जिसे इसमें इसके पश्चात् उक्त अधिसूचना कहा गया है) ईटों के विनिर्माण के लिए ऊपरी मृदा के उत्खनन तथा निर्माण सामग्री के विनिर्माण में फ्लाई ऐश के उपयोग का संवर्धन करने तथा कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्रों से एक सौ किलोमीटर के विनिर्दिष्ट अर्धव्यास के भीतर संनिर्माण क्रियाकलाप को निर्बंधित करने के लिए निदेश जारी किए हैं;

और "फ्लाई ऐश" पद से तापीय विद्युत संयंत्र में जनित कोयला या लिग्नाइट ऐश के सभी प्रवर्ग या समूह इलेक्ट्रोस्टैटिक प्रेसिपिटेटर (ई एस पी) बैग फिल्टर या उसी तरह के अन्य उपयुक्त उपस्कर ऐश अभिप्रेत और सम्मिलित हैं; या बैग निचली ऐश बायलर की पेंदी में पृथक रूप से संग्रहीत ऐश है; पोन्ड ऐश और माउंड ऐश ई एस पी ऐश या शुष्क फ्लाई ऐश तथा निचली ऐश का सम्मिश्रण है किन्तु, इस अधिसूचना के प्रयोजन के लिए "फ्लाई ऐश" पद इलेक्ट्रोस्टैटिक प्रेसिपिटेटर (ई एस पी), बैग फिल्टर या उसी तरह के अन्य उपयुक्त उपस्कर ऐश, शुष्क, फ्लाई ऐश, निचली ऐश और माउंड ऐश के रूप में सभी ऐश अभिप्रेत और सम्मिलित है क्योंकि सभी ऐशों का उपयोग करना उद्देश्य है।

और ईटों के विनिर्माण के लिए तथा अन्य संकर्म के लिए जिसमें ऊपरी मृदा का उपयोग तथा कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्रों द्वारा उत्पादित फ्लाई ऐश के उपयोग का संवर्धन

अंतर्वर्तित है, जिसमें निर्माण सामग्री के विनिर्माण तथा संनिर्माण क्रियाकलाप में घरेलू विद्युत संयंत्र और सह उत्पादन संयंत्र सम्मिलित हैं, ऊपरी मृदा के उत्खनन को निर्बंधित करने की आवश्यकता है;

और यह संप्रेक्षित किया गया है कि फ्लाई ऐश ईटों या उत्पादों के विनिर्माण में फ्लाई ऐश के उपयोग में वर्ष 2002-2003 में लगभग 1.5 मिलियन टन से वर्ष 2006-2007 में 3.19 मिलियन टन की क्रमिक वृद्धि हुई थी, जिसके ऊपरि मृदा के संरक्षण के अंतिम लक्ष्य को अभिप्राप्त करने के लिए तथा फ्लाई ऐश के कारण हुए पर्यावरणीय प्रदूषण को कम से कम करने के लिए और प्रोत्साहित करने की आवश्यकता है।

और यह संप्रेक्षित किया गया है कि 1999 की उक्त अधिसूचना में फ्लाई ऐश आधारित उत्पादों के सौ प्रतिशत उपयोग के लिए विहित 31 अगस्त, 2007 की तारीख के पश्चात् भी फ्लाई ऐश आधारित उत्पादों के उपयोग के अपने लक्ष्यों को निर्माण अभिकरणों को अभिप्राप्त करना है और यह भी संप्रेक्षित किया गया था कि कई तापीय विद्युत केन्द्रों या संयंत्रों को भी उनकी कार्रवाई योजना में निर्धारित लक्ष्यों को अभिप्राप्त करना है;

और लंबी दूरी से फ्लाई ऐश के परिवहन की बाबत तथा उसमें अंतर्वर्तित संभारण तंत्र की बाबत भी, जिसमें ऊर्जा लागत सम्मिलित है, ईट भट्टा स्वामियों के अभ्यावेदनों पर विचार किया गया था;

और मुद्दों की भारत सरकार के पर्यावरण और वन मंत्रालय ने जांच कर ली है;

और केन्द्रीय सरकार की यह राय है कि उक्त अधिसूचना को संशोधित किया जाना चाहिए;

और पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) के खंड (क) में यह उपबंध है कि जब कभी केन्द्रीय सरकार यह समझती है कि किसी क्षेत्र में किसी उद्योग या किन्हीं प्रक्रियाओं या संक्रिया पर प्रतिषेध या निर्बंधन अधिरोपित किया जाना चाहिए तो वह ऐसा करने के अपने अधिकार की सूचना देगी।

और भारत सरकार के पर्यावरण और वन मंत्रालय की अधिसूचना सं. का. आ. 755 (अ), तारीख 14 सितंबर, 1999 में संशोधन का प्रारूप अधिसूचना सं. का.आ. 979(अ), तारीख 27 अगस्त, 2003 (जिसे इसमें इसके पश्चात् उक्त अधिसूचना कहा गया है) जिसे केन्द्रीय सरकार पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) के खंड (घ) के साथ पठित पर्यावरण (संरक्षण)

अधिनियम, 1986 (1986 का 21) की धारा 3 की उपधारा (1) उपधारा (2) के खंड (v) अधीन बनाने का प्रस्ताव करती है जिसे भारत के राजपत्र, असाधारण, भाग 2, खंड 3, उपखंड (ii) तारीख 6 नवंबर, 2008 में का.आ. 2633 (अ) द्वारा प्रकाशित किया गया था जिसमें ऐसे सभी व्यक्तियों से जिनकी उससे प्रभावित होने की संभावना है, उस तारीख से जिससे जनता की उक्त प्रारूप संशोधनों से अंतर्विष्ट राजपत्र की प्रतियां जनता को उपलब्ध करा दी गई थी, साठ दिन के अवसान के पूर्व आक्षेप और सुझाव मांगे गए थे,

और उक्त राजपत्र की प्रतियां जनता को 6 नवंबर के दिन, 2008 को उपलब्ध करा दी गई थी;

और उक्त प्रारूप अधिसूचना की बाबत उनसे संभावित प्रभावित विभिन्न व्यक्तियों अथवा अभिकारकों से प्राप्त आक्षेप और सुझावों पर केन्द्रीय सरकार के पर्यावरण और वन मंत्रालय द्वारा सम्यक रूप से विचार कर लिया गया है;

अतः अब केन्द्रीय सरकार पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (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 उक्त अधिसूचना में निम्नलिखित संशोधन करती है, अर्थात्

संशोधन

1. उक्त अधिसूचना में सर्वत्र, उसके सिवाय जो अन्यथा स्पष्ट रूप से उपबंधित है और उसके सिवाय जो संदर्भ में अन्यथा अपेक्षित है, "ऐश" शब्द के स्थान पर जहां-जहां वह आता है, "फ्लाई ऐश" शब्द रखे जाएंगे;
2. उक्त अधिसूचना के पैरा 1 में,-
 - (क) उप पैरा (1) के स्थान पर निम्नलिखित पैरा रखा जाएगा, अर्थात् :-
 - (i) संनिर्माण क्रियाकलापों में फ्लाईऐश आधारित उत्पादों का उपयोग ;
 - (ii) उप पैरा (1क) और (1ख) के स्थान पर क्रमशः निम्नलिखित उप पैरा रखे जाएंगे अर्थात्:-

"(1 क) कोयला या लिग्नाइट आधारित तापीय संयंत्र से 100 किलोमीटर के व्यास के भीतर (सड़क मार्ग द्वारा) भवनों के निर्माण में लगा प्रत्येक संनिर्माण अभिकरण, संनिर्माण के लिए केवल फ्लाई ऐश आधारित उत्पादों का, जैसे प्रत्येक संनिर्माण परियोजना में सीमेंट अथवा कंक्रीट, फ्लाई ऐश ईटें या ब्लाक या टाइलें या प्ले फ्लाई ऐश ईटे, ब्लाक या टाइलें या सीमेंट फ्लाई ऐश ईटे या ईटे या ब्लाक या समरूप उत्पाद या उनके किसी संयोजन या औसत उपयोग करेगा।"

(1ख) उप-पैरा (1ख) के उपबंध, केन्द्रीय सरकार या राज्य सरकार या स्थानीय सरकार और निजी या लोक क्षेत्र के सभी संनिर्माण अभिकरणों को लागू होंगे और यह अभिकरणों का दायित्व होगा कि वे या तो उप-पैरा (1 क) के उपबंधों के अनुसरण को सुनिश्चित करने के लिए संनिर्माण का वचन दें या डिजाइन या दोनों का अनुमोदन करें और वार्षिक विवरणियों को संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति को प्रस्तुत करें।"

(ग) उप-पैरा (1ख) के पश्चात् निम्नलिखित उप-पैरा अंतःस्थापित किया जाएगा :-

"(1ग) "फ्लाई ऐश आधारित उत्पाद" प्रवर्ग के रूप में अर्हता प्राप्त करने के लिए तथा निर्माण सामग्रियों या उत्पादों के लिए न्यूनतम फ्लाई ऐश अंतर्वस्तु वह होगी, तो नीचे सारणी- 1 में दी गई है :-

सारणी

क्रम संख्या	निर्माण सामग्री या उत्पाद	भार के आधार पर फ्लाई ऐश का न्यूनतम प्रतिशत
(1)	(2)	(3)
1.	फ्लाई ऐश, चूने, जिप्सम, बालू, पत्थरों की धूल, सीमेंट, आदि(क्ले के बिना) से बनी हुई फ्लाई ऐश ईटें, ब्लाक, टाइलें आदि।	कुल कच्ची सामग्री का 50 प्रतिशत
2.	पैविंग ब्लाक, पैविंग टाइलें, चैकर टाइलें, मोजाइक टाइलें, रुफिंग शीटें, प्रीकास्ट एलीमेंट आदि जिनमें सीमेंट का बाइंडर के रूप में उपयोग किया जाता है।	पी पी सी (आई एस - 1489 : भाग 1) या पी एस सी (आई एस - 455) या ओ पी सी (आई एस 269/8112/12269) अंतर्वस्तु का उपयोग
3.	सीमेंट	कुल कच्ची सामग्री का 15 प्रतिशत
4.	क्ले आधारित भवन सामग्री जैसे ईटें, ब्लाक, टाइलें आदि	कुल कच्ची सामग्री का 25 प्रतिशत
5.	कंक्रीट, मोर्टर और प्लास्टर	पी पी सी (आई एस - 1489 : भाग 1) या पी एस सी (आई एस - 455) या ओ पी सी (आई एस 269/8112/12269) अंतर्वस्तु का उपयोग

(घ) उप-पैरा (2) "(1)" कोष्ठकों और अंक के स्थान पर "(1ग)" कोष्ठक, संख्या और अक्षर रखे जाएंगे और उप पैरा (2) की संख्या को 1 (घ) द्वारा रखा जाएगा ;

(ङ.) पैरा (2क) में, पैरा 1(क) को 1 (क) और 1 (ख) द्वारा प्रतिस्थापित किया जाएगा और संशोधित पैरा 2 (क) को 1(ङ.) के रूप में संख्याकित किया जाएगा ;

(च) उप-पैरा (3) और (3क) के स्थान पर क्रमशः निम्नलिखित उप-पैरा रखे जाएंगे:-

"(3) स्थल के सौ किलोमीटर के भीतर उक्त विद्युत संयंत्रों द्वारा यथाप्रमाणित तापीय विद्युत संयंत्रों से पर्याप्त मात्रा में फ्लाई ऐश के उपलब्ध न होने की दशा में, उप-पैरा (1क) के अधीन नियत मात्रा को, इस अधिसूचना में अन्यत्र उल्लिखित संबंधित राज्य सरकार या संघ राज्य क्षेत्र सरकार स्तर की मानीटरी समिति द्वारा समुचित रूप से उपांतरित (अधित्यक्त या शिथिल) किया जाएगा ।

(3क) फ्लाई ऐश ईटों, ब्लाक और टाइलों तथा उसी प्रकार के अन्य फ्लाई ऐश आधारित उत्पादों के विनिर्माण के लिए आवेदन पर आवेदन की प्राप्ति की तारीख से तीस दिन के भीतर संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति द्वारा विनिश्चय किया जाएगा ।"

(छ) उप- पैरा (3ख) (3ग) और (3 घ) का लोप किया जाएगा ;

(ज) उप- पैरा (4) और (5) के स्थान पर निम्नलिखित उप-पैरा रखे जाएंगे, अर्थात:-

"(4) प्रत्येक कोयला या लिग्नाईट आधारित तापीय विद्युत संयंत्र एक विवाद निपटारा समिति का गठन करेगा जिसमें तापीय विद्युत संयंत्र का महाप्रबंधक और यथास्थिति, सुसंगत संनिर्माण और फ्लाई ऐश ईट विनिर्माण उद्योग संगम/निकाय का एक प्रतिनिधि सम्मिलित होगा और ऐसी समिति, कोई असाम्यक समय नष्ट किए बिना, फ्लाई ऐश की निर्बाध लदाई और परिवहन को सुनिश्चित करेगी । हल न किए गए किसी विवाद का इस अधिसूचना में अन्यत्र उल्लिखित सुसंगत राज्य या संघ राज्य क्षेत्र सरकार के स्तर की मानीटरी समिति द्वारा निपटारा किया जाएगा ।

(5) कोई अभिकरण, व्यक्ति या संगठन, किसी तापीय विद्युत संयंत्र के सौ किलोमीटर की दूरी के भीतर (सड़क मार्ग द्वारा) ऊपरी मृदा के साथ सड़क या फ्लाईओवर के ऊपरी संनिर्माण के लिए संनिर्माण करेगा या संनिर्माण के लिए डिजाईन का अनुमोदन करेगा ; फ्लाई ऐश के उपयोग की बाबत समय-समय पर यथा संशोधित आई आर सी विनिर्देश संख्या एसपी : 2001 का 5 में यथा अंतर्विष्ट भारतीय रोड कांग्रेस द्वारा जारी किए गए मार्गदर्शक सिद्धांतों या विनिर्देशों का अनुपालन किया जाएगा और इस निदेश के किसी विचलन पर तकनीकी कारणों के आधार पर सहमत हो सकती है यदि उसका संनिर्माण के स्थल के सौ किलोमीटर के भीतर अवस्थित तापीय विद्युत संयंत्रों (टीपीपी) से "फ्लाई ऐश उपलब्ध नहीं है" के संबंधित अभिकरण या संगठन के मुख्य इंजीनियर (डिजाईन) या प्रमुख इंजीनियर द्वारा अनुमोदन किया जाता है या कोई प्रमाणपत्र प्रस्तुत किया जाता है और यदि फ्लाई ऐश उपलब्ध नहीं है तो किसी अनुरोध की प्राप्ति की तारीख से दो कार्य दिवस के भीतर टीपीपी द्वारा यह प्रमाणपत्र उपलब्ध कराया जाएगा।";

(झ) उप-पैरा (6) में "मृदा उधार क्षेत्र के कारण सृजित रिक्त स्थान उचित सुसंहति सहित ऐश से भरा जाएगा और यथाउपरोक्त पृथक रूप में रखी गई ऊपरी मृदा से ढक दिया जाएगा और इसे परियोजना की समय सूची के भीतर तक बंद परियोजना के अभिन्न अंग के रूप में किया जाएगा।" शब्दों के स्थान पर "मृदा उधार क्षेत्र में सृजित रिक्त स्थान उचित सुसंहति सहित फ्लाई ऐश से भरा जाएगा और यथाउपरोक्त रूप से रखी गई ऊपरी मृदा से ढक दिया जाएगा और इसे बंद परियोजना के अभिन्न अंग के रूप में किया जाएगा।" शब्द रखे जाएंगे।

(ञ) उप-पैरा (7) के स्थान पर निम्नलिखित उप-पैरा रखे जाएंगे, अर्थात् :-

"(7) कोई अभिकरण, व्यक्ति या संगठन कोयला या लिग्नाईट आधारित तापीय विद्युत संयंत्र के सौ किलोमीटर के अर्धव्यास के भीतर (सड़क मार्ग द्वारा) मृदा से निचले क्षेत्रों का पुनः उद्धार करने और सुसंहति सहित करने का वचन देगा या उसका अनुमोदन अथवा अनुज्ञात करेगा ; सुसंहति और पुनः उद्धार करने के लिए केवल फ्लाई ऐश का उपयोग किया जायेगा और वे यह भी सुनिश्चित करेगी कि ऐसा पुनः उद्धार और सुसंहति पैरा (3) के उप-पैरा (1) में उल्लिखित प्राधिकारियों द्वारा अधिकथित किन्हीं विनिर्देशों और मार्गदर्शक सिद्धांतों के अनुसार किया जाता है।

(8) (i) कोई व्यक्ति या अभिकरण कोयला या लिग्नाईट आधारित तापीय विद्युत संयंत्र के पचास किलोमीटर के भीतर (सड़क मार्ग द्वारा) भार से भार के आधार पर उपयोग की गई कुल भरण

सामग्री की फ्लाई ऐश के कम से कम पच्चीस प्रतिशत का उपयोग किए बिना खान का भरण करेगा या उसका अनुमोदन करेगा तथा यह महानिदेशक, खान सुरक्षा के मार्गदर्शन के अधीन किया जाएगा :

परंतु यह कि ऐसे तापीय विद्युत केन्द्र अपेक्षित क्वालिटी और फ्लाई ऐश की मात्रा की उपलब्धता को सुकर बनाएंगे जो इस प्रयोजन के लिए उप-पैरा(10) में निर्दिष्ट विशेषज्ञ समिति द्वारा विनिश्चित किया जाएगा ;

(ii) कोई व्यक्ति या अभिकरण, कोयला या लिग्नाईट आधारित तापीय विद्युत संयंत्र के पचास किलोमीटर के भीतर (सड़क मार्ग द्वारा), बाह्य भंडार के अधिक भार हेतु उपयोग की गई कुल सामग्री के आयतन के आधार पर फ्लाई ऐश के कम से कम पच्चीस प्रतिशत उपयोग किए बिना करेगा या उसका अनुमोदन करेगा तथा खुला आवर्त खानों को पृष्ठ भरण की ऊपरी चिन्ह में वही प्रतिशतता होगी और इसे महानिदेशक, खान सुरक्षा के मार्गदर्शन के अधीन किया जाएगा ;

परंतु यह कि ऐसे तापीय विद्युत केन्द्र अपेक्षित क्वालिटी और फ्लाई ऐश की मात्रा की उपलब्धता को सुकर बनाएंगे जो इस प्रयोजन के लिए उप-पैरा (10) में निर्दिष्ट विशेषज्ञ समिति द्वारा विनिश्चित किया जाएंगे ।

(9) उप-पैरा (8) के खंड (i) और (ii) में अंतर्विष्ट उपबंध सरकार के अधीन, सार्वजनिक और निजी क्षेत्र के सभी खान अभिकरणों और सभी खनिजों या धातुओं या मटों की खानों को लागू होंगे और उप-पैरा (8) (i) और (ii) में अंतर्विष्ट उपबंधों के अनुपालन को सुनिश्चित करने के लिए खान के पृष्ठ भरण या दोनों को करने या उनका अनुमोदन करने का और संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति और भारतीय खान ब्यूरो को वार्षिक विवरणियां प्रस्तुत करने का अभिकरणों दायित्व होगा ।

(10) इस प्रयोजन के लिए कोयला मंत्रालय, फ्लाई ऐश इकाई, विज्ञान और प्रौद्योगिकी विभाग विज्ञान और प्रौद्योगिकी मंत्रालय, खान सुरक्षा महानिदेशक, केन्द्रीय खान नियोजन और डिजाइन संस्थान लिमिटेड, पर्यावरण और वन मंत्रालय, विद्युत मंत्रालय, खान मंत्रालय और केन्द्रीय खान और ईंधन अनुसंधान संस्थान, घनबाद के प्रतिनिधियों सहित एक विशेषज्ञ समिति का गठन करेगा ; समिति ऊपर उप-पैरा (8) (i) और (ii) और (9) में अंतर्विष्ट उपबंधों के अनुसार पृष्ठ भरण या भरण करने तथा पैरा (3) के उप-पैरा(1) में यथा उल्लिखित संबंधित प्राधिकारियों द्वारा अधिकथित विनिर्देशों और मार्गदर्शक सिद्धांतों के लिए मार्गदर्शन करेगी और उसकी सलाह भी देगी ।

(11) संबंधित राज्य सरकार या संघ राज्यक्षेत्र सरकार उप-पैरा (8) (i) और (8)(ii) के उपबंधों के अनुसरण को सुनिश्चित करने के लिए प्रवर्तन और मानदरी प्राधिकारी होगी । "

3. उक्त अधिसूचना के पैरा (2) में,-

(क) उप-पैरा (1)(2) और (3) के स्थान पर निम्नलिखित उप-पैरा रखे जाएंगे अर्थात् :-

"(1) सभी कोयला या लिग्नाईट आधारित तापीय विद्युत केन्द्र निम्नलिखित शर्तों के अधीन रहते हुए, उपयोक्ता अभिकरणों को फ्लाई ऐश का विक्रय करने के लिए स्वतंत्र होंगे, अर्थात् :-

(i) पॉड ऐश और माउंड ऐश ईटो, ब्लॉकों या टाइलों के विनिर्माणकर्ता को जिसके अंतर्गत क्ले फ्लाइ ऐश उत्पाद, विनिर्माणकारी इकाईयां, कृषक, केन्द्रीय और राज्य सड़क निर्माण अभिकरण, लोक निर्माण विभाग और खानों के पृष्ठ भरण में लगे हुए अभिकरण भी हैं, " जहां जैसा है " के आधार पर किसी प्रभार के बिना उपलब्ध रहनी चाहिए ।

(ii) शुष्क ईएसपी फ्लाइ ऐश कम से कम की बीस प्रतिशत, अन्य उपयोक्ताओं से अधिमानता के आधार पर फ्लाइ ऐश या क्ले फ्लाइ ऐश ईटो ब्लॉकों, और टाइलों की विनिर्माणकारी इकाईयों को प्रभार के बिना उपलब्ध कराई जाएगी और यदि ऐसे अभिकरणों की मांग, मात्रा की बीस प्रतिशत से कम हो जाती है तो शेष मात्रा का यथासंभव विद्युत केन्द्र द्वारा विक्रय या व्ययन किया जा सकता है ;

परंतु यह कि तापीय विद्युत केन्द्र से अभिप्राप्त फ्लाइ ऐश का केवल उस प्रयोजन के लिए उपयोग किया जाना चाहिए जिसके लिए इसे तापीय विद्युत केन्द्र या संयंत्र अभिप्राप्त किया गया था जिसके न हो सकने पर फ्लाइ ऐश को व्यतिक्रमी उपयोक्ता को उपलब्ध नहीं कराया जाएगा ।

(2) सभी कोयला और या लिग्नाईट आधारित तापीय विद्युत केन्द्र और, या इस अधिसूचना की तारीख से पूर्व प्रवर्तन में विस्तार इकाईयां नीचे दी गई सारणी के अनुसार फ्लाइ ऐश के उपयोग का लक्ष्य प्राप्त करेंगी :

सारणी II

क्रम संख्या	फ्लाइ ऐश के उपयोग की प्रतिशतता	लक्ष्य की तारीख
(1)	(2)	(3)
1	फ्लाइ ऐश उत्पादन का कम से कम पचास प्रतिशत	इस अधिसूचना के जारी करने की तारीख से एक वर्ष
2	फ्लाइ ऐश उत्पादन का कम से कम साठ प्रतिशत	इस अधिसूचना के जारी करने की तारीख से दो वर्ष
3	फ्लाइ ऐश उत्पादन का कम से कम पिछुत्तर प्रतिशत	इस अधिसूचना के जारी करने की तारीख से तीन वर्ष
4	फ्लाइ ऐश उत्पादन का कम से कम नब्बे प्रतिशत	इस अधिसूचना के जारी करने की तारीख से चार वर्ष
5	फ्लाइ ऐश उत्पादन का कम से कम सौ प्रतिशत	इस अधिसूचना के जारी करने की तारीख से पांच वर्ष

किसी वर्ष के दौरान लक्ष्य की बाबत लक्ष्य की बाबत उपयोग न की गई फ्लाइ ऐश का, यदि कोई हो, उन वर्षों के लिए नियत लक्ष्यों के अतिरिक्त अगले दो वर्षों के भीतर उपयोग किया जाएगा । पहले पांच वर्षों के दौरान संचय की गई उपयोग न की गई फ्लाइ ऐश का बकाया का (उत्पादन और उपयोग लक्ष्य के बीच का

अंतर) फ्लाई ऐश के चालू उत्पादन के सौ प्रतिशत उपयोग के अतिरिक्त अगले पांच वर्षों में प्रगामी रूप से उपयोग किया जाएगा।

(3) नीचे दी गई सारणी III के अनुसार फ्लाई ऐश उपयोग के लक्ष्य को प्राप्त करने के लिए इस अधिसूचना के पश्चात् शुरु किए गए नए कोयला और लिग्नाईट आधारित तापीय विद्युत केन्द्र और या विस्तार इकाईयां

सारणी III

क्रम संख्या	फ्लाई ऐश के उपयोग की प्रतिशतता	लक्ष्य की तारीख
(1)	(2)	(3)
1	फ्लाई ऐश उत्पादन का कम से कम पचास प्रतिशत	शुरु करने की तारीख से एक वर्ष
2	फ्लाई ऐश उत्पादन का कम से कम सत्तर प्रतिशत	शुरु करने की तारीख से दो वर्ष
3	फ्लाई ऐश उत्पादन का कम से कम नब्बे प्रतिशत	शुरु करने की तारीख से तीन वर्ष
4	फ्लाई ऐश उत्पादन का कम से कम सौ प्रतिशत	शुरु करने की तारीख से चार वर्ष

किसी वर्ष के दौरान लक्ष्य की बाबत उपयोग न की गई फ्लाई ऐश का, यदि कोई हों, इन वर्षों के लिए नियत लक्ष्यों के अतिरिक्त अगले दो वर्षों के भीतर उपयोग किया जाएगा और पहले तीन वर्षों के दौरान संचय की गई उपयोग न की गई फ्लाई ऐश का (उत्पादन और उपयोग लक्ष्य के बीच का अंतर) फ्लाई ऐश के चालू उत्पादन के सौ प्रतिशत उपयोग के अतिरिक्त अगले पांच वर्षों में प्रगामी रूप से उपयोग किया जाएगा।

(ख) उप-पैरा(4) में "छः मास" शब्दों के स्थान पर "चार मास" शब्द रखे जाएंगे ;

(ग) उप-पैरा (6) के स्थान पर निम्नलिखित उप-पैरा रखे जाएंगे, अर्थात् :-

"(6) कोयला और/या लिग्नाईट आधारित तापीय विद्युत केन्द्रों या उनकी सहायक या साथी समुत्थान इकाई द्वारा, जहां लागू हों, फ्लाई ऐश और फ्लाई ऐश आधारित उत्पादों के विक्रय से संग्रहीत रकम को एक पृथक खाते के शीर्ष में रखा जाएगा और उसका केवल अवसंरचना और सुविधाओं के विकास के लिए तथा सौ प्रतिशत फ्लाई ऐश उपयोग स्तर के प्राप्त होने तक फ्लाई ऐश के उपयोग के लिए संवर्धन और सुविधा क्रियाकलापों के लिए उपयोग किया जाएगा ; उसके पश्चात् जहां तक सौ प्रतिशत फ्लाई ऐश का उपयोग स्तर को बनाए रखा जाता है, तापीय विद्युत केन्द्र अन्य विकास कार्यक्रमों के लिए भी संग्रहीत रकम का उपयोग करने के लिए स्वतंत्र होगा और यदि पश्चात्पूर्ती वर्षों में फ्लाई ऐश उपयोग के स्तर में कमी आती है तो फ्लाई ऐश से वित्तीय आय के उपयोग को अवसंरचना या सुविधाओं के विकास तथा सौ प्रतिशत फ्लाई ऐश उपयोग के स्तर को पुनः प्राप्त करने तक फ्लाई ऐश उपयोग के लिए संवर्धन या सुविधा क्रियाकलापों तक निर्वन्धित रखा जाएगा और उसे बनाए रखा जाएगा।

3975 4/10/2

(7) इस अधिसूचना के उपबंधों के अनुपालन की बाबत जानकारी उपलब्ध कराने वाली वार्षिक कार्यान्वयन रिपोर्ट 1 अप्रैल से 31 मार्च की अवधि के लिए 30 अप्रैल तक प्रत्येक वर्ष केन्द्रीय प्रदूषण नियंत्रण बोर्ड, संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या समिति और संबंधित पर्यावरण और वन मंत्रालय के प्रादेशिक कार्यालय को कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्रों द्वारा प्रस्तुत की जाएगी तथा उसे जानकारीवार तापीय विद्युत संयंत्र के साथ-साथ तापीय विद्युत संयंत्र की वार्षिक रिपोर्ट का भाग भी बनाया जाएगा और एक तापीय विद्युत संयंत्र से अधिक तापीय विद्युत उत्पादन वाले अभिकरण की वार्षिक रिपोर्ट में उपलब्ध कराया जाएगा।”;

4. उक्त अधिसूचना के पैरा 3 में,-

(क) उप-पैरा (2) में, " इस अधिसूचना के प्रकाशन की तारीख से चार मास की अवधि के भीतर अपने-अपने विनिर्देशों और संनिर्माण उपयोजनाओं की अनुसूची में, जिसके अंतर्गत समुचित मानक और आचार संहिता है, " शब्दों के स्थान पर "तुरंत प्रभाव से अपने-अपने विनिर्देशों और संनिर्माण उपयोजनाओं के निविदा दस्तावेजों, अनुसूचियों में जिसके अंतर्गत समुचित मानक और आचार संहिता है, " शब्द रखे जाएंगे ;-

(ख) उप-पैरा (2) (क) के स्थान पर निम्नलिखित पैरा रखा जाएगा, अर्थात् :-

(2क) भवन निर्माण अभिकरण, सार्वजनिक और निजी दोनों में अपनी-अपनी निविदा दस्तावेजों विनिर्देशों और संनिर्माण उप परियोजनाओं में, जिसके अंतर्गत समुचित मानक और आचार संहिता है, फलाई ऐश और फलाई ऐश आधारित उत्पादों के उपयोग को विहित करेंगे और फलाई ऐश तथा फलाई ऐश आधारित ईंटों, ब्लॉकों या टाइलों अथवा अनुमोदित सामग्री की अनुसूची में उनके संयोजन तथा इस अधिसूचना के प्रकाशन की तारीख से चार मास की अवधि के भीतर दरों के उपयोग का तुरंत उपबंध करेंगे। "

(ग) उप-पैरा(2) (ख) के स्थान पर निम्नलिखित रखा जाएगा, अर्थात् :-

"2)(ख) सड़कों या ऊपरी पुलों का संनिर्माण और निचले क्षेत्रों का पुनः उद्धार और संहित करने वाले सभी अभिकरण जिसके अंतर्गत सड़क परिवहन और राजमार्ग विभाग, भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, केन्द्रीय लोक निर्माण विभाग, राज्य लोक निर्माण विभाग और अन्य राज्य सरकारी अभिकरण:-

(क) इस अधिसूचना के कार्यान्वयन के लिए तकनीकी दस्तावेजों के साथ-साथ अपनी-अपनी निविदा दस्तावेजों, अनुमोदित सामग्रियों और दरों की अनुसूचियों में, जिसके अंतर्गत वे भी हैं, जो पैरा 1 के उप-पैरा(6) के अनुसार मृदा उधार क्षेत्र या विवर्त से संबंधित हैं, उपबंध करेंगे ; और

(ख) सड़कों और फलाई-ओवर आच्छादों के लिए, जो भारतीय रोड कांग्रेस द्वारा अधिकथित विनिर्देशों के अंतर्गत नहीं आते हैं, आवश्यक विनिर्देश और मार्गदर्शन सिद्धांत बनाएंगे। "

- (3) सभी स्थानीय प्राधिकारी तुरंत प्रभाव से अपनी-अपनी निविदा दस्तावेजों, भवन उपविधियों और विनियमों में भवन सामग्रियों, सड़क तटबंधों या किसी प्रथा के लिए फ्लाई ऐश और फ्लाई ऐश आधारित उत्पादों और संनिर्माण तकनीकों के उपयोग को विनिर्दिष्ट करेंगे।
- (4) केन्द्रीय विद्युत प्राधिकारी और अन्य अनुमोदन अधिकरण पेंतालीस प्रतिशत ऐश अंतर्वस्तु कोयला पर आधारित या कोयला या लिग्नाईट में उपयोग की जाने वाली ऐश अंतर्वस्तु को ध्यान में रखते हुए अन्य क्षमताओं में इकाईयों के लिए उसी अनुपात में पांच सौ मेगावाट इकाईयों के लिए चालीस हेक्टेयर तक के आपात ऐश बॉंड या फ्लाई ऐश भंडारण क्षेत्र के लिए भूमि क्षेत्र को अनुज्ञात कर सकेंगे।
- (5) सभी वित्तीय संस्थाएं और अधिकरण जिनके निधि संनिर्माण क्रियाकलापों में इस अधिसूचना के उपबंधों के अनुपालन के लिए उनके ऋण या मंजूरी दस्तावेजों में एक खंड सम्मिलित होगा।
- (6) केन्द्रीय सरकार द्वारा कोयला मंत्रालय, केन्द्रीय प्रदूषण नियंत्रण बोर्ड, केन्द्रीय विद्युत प्राधिकरण, विज्ञान और प्रौद्योगिकी विभाग तथा भवन सामग्री प्रौद्योगिकी संवर्धन परिसर की फ्लाई ऐश इकाई के प्रमुख से सदस्यों सहित अधिसूचना के उपबंधों के कार्यान्वयन को मानीटर करने के लिए एक मानीटरिंग समिति गठित की जाएगी और यह सचिव, पर्यावरण और वन मंत्रालय को प्रत्येक छः मास में कम से कम एक बार अपनी सिफारिशों या संप्रेक्षणों को पेश करेगी। पर्यावरण और वन मंत्रालय में संबंधित सलाहकार या संयुक्त सचिव इस समिति का संयोजक होगा।
- (7) अधिसूचना के उपबंधों के कार्यान्वयन की मानीटरिंग करने के प्रयोजन के लिए राज्य सरकारों या संघ राज्य क्षेत्र सरकार, पर्यावरण विभाग के सचिव की अध्यक्षता में विद्युत विभाग, खनन विभाग, सड़क और भवन निर्माण विभाग तथा राज्य प्रदूषण नियंत्रण बोर्ड के प्रतिनिधियों सहित इस अधिसूचना के जारी करने की तारीख से तीन मास के भीतर एक मानीटरिंग समिति का गठन करेगी और यह समिति संबंधित राज्य सरकार या संघ राज्य क्षेत्र स्तर पर इस अधिसूचना की मानीटरिंग और सुकर बनाने के कार्यान्वयन के अतिरिक्त पैरा 1 के उप-पैरा (4) में यथाविहित विवाद समझौता समिति द्वारा हल न किए गए किसी मुद्दे का निपटारा करेगी और यह समिति, उक्त विद्युत संयंत्र द्वारा यथा प्रमाणित तापीय विद्युत संयंत्र से पर्याप्त मात्रा में फ्लाई ऐश के उपलब्ध न होने की दशा में उप-पैरा (1) के अधीन निश्चित की गई मात्रा को समुचित रूप से उपांतरित (अधित्यक्त या शिथिल करने) के लिए भी सशक्त होगी और समिति की प्रत्येक तिमाही में कम से कम एक बार बैठक होगी।

[फा. सं. 9-8/2005-एचएसएमडी]

जी. बी. सुब्रहामनयम, वैज्ञानिक 'जी'

पाद टिप्पण :- मूल नियम, भारत के राजपत्र, भाग 2 खंड 3, उपखंड (ii) में अधिसूचना संख्या का.आ.763 (अ), तारीख 14 सितम्बर, 1999 द्वारा प्रकाशित किए गए थे और अधिसूचना संख्या का.आ.979 (अ) 27 अगस्त, 2003 द्वारा संशोधित किए गए।

50
MINISTRY OF ENVIRONMENT AND FORESTS
NOTIFICATION

New Delhi, the 3rd November, 2009

S.O. 2804(E).—WHEREAS, by notification of the Government of India in the Ministry of Environment and Forests number S.O. 763(E), dated the 14th September, 1999 (hereinafter referred to as the said notification) issued under sub-section (1), clause (v) of sub-section (2) of section 3 and section 5 of the Environment (Protection) Act, 1986 (29 of 1986) the Central Government, issued directions for restricting the excavation of top soil for manufacture of bricks and promoting the utilisation of fly ash in the manufacture of building materials and in construction activity within a specified radius of one hundred kilometers from coal or lignite based thermal power plants;

AND WHEREAS, the term “fly ash” means and includes all categories or groups of coal or lignite ash generated at the thermal power plant and collected by Electrostatic Precipitator (ESP) or bag filters or other similar suitable equipments; bottom ash is the ash collected separately at the bottom of the boiler; pond ash is the mixture of ESP Fly ash and bottom ash, but, for the purpose of this notification, the term “fly ash” means and includes all ash generated such as Electrostatic Precipitator (ESP) ash, dry fly ash, bottom ash, pond ash and mound ash as the objective is to utilise all the ashes;

AND WHEREAS, there is a need for restricting the excavation of top soil for manufacture of bricks and for other works which involve use of top soil and promoting utilisation of fly ash produced by coal or lignite based thermal power plants including captive power plants and co-generation plants in the manufacture of building materials and construction activity;

AND WHEREAS, it was observed that there was a gradual increase in the use of fly ash in the manufacture of fly ash bricks or products from about 1.5 million tonne in 2002-2003 to 3.19 million tonne in 2006-2007 which needs to be further encouraged for achieving the ultimate objective of conservation of top soil and minimise environmental pollution caused due to fly ash;

51
AND WHEREAS, it is observed that construction agencies are yet to achieve their targets of utilization of fly ash based products even after the 31st August, 2007, the date prescribed for 100% utilisation of fly ash based products in the said notification of 1999 and it is also observed that many thermal power stations or plants are also yet to achieve the targets drawn up in their action plans;

AND WHEREAS, the representations of the brick kiln owners were considered with regard to transporting of fly ash over a long distance and also the logistics involved including the energy cost;

AND, WHEREAS, the issue has been examined by the Government of India in the Ministry of Environment and Forests;

AND WHEREAS, the Central Government is of the opinion that the said notification should be amended;

AND WHEREAS, clause (a) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 provides that whenever the Central Government considers that prohibition or restrictions of any industry or carrying on any processes or operation in any area should be imposed, it shall give notice of its intention to do so;

AND WHEREAS, a draft of amendment to the Government of India, Ministry of Environment and Forests notification no. S.O.763 (E), dated the 14th September, 1999 duly amended vide notification No. S.O. 979 (E), dated the 27th August, 2003 (hereinafter referred to as the said notification) which the Central Government proposes to make under subsection (1), 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, were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) dated the 6th November, 2008 *vide* S.O. 2623 (E), 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 amendments were made available to the public.

AND WHEREAS, copies of the said Gazette were made available to the public on the day of 6th November 2008;

52
AND WHEREAS, the objections and suggestions received from various persons or agencies likely to be affected thereby in respect of the said draft notification have been duly considered by the Central Government in the Ministry of Environment and Forests;

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, the Central Government hereby makes the following amendments to the said notification, namely: -

AMENDMENTS

1. Throughout the said notification, save as otherwise expressly provided and unless the context otherwise requires, for the word "ash" wherever it occurs, the words "fly ash" shall be substituted.

2. In the said notification, in paragraph 1,—

(a) for sub-paragraph (1), the following shall be substituted, namely:-

"(i) use of fly ash based products in construction activities";

(b) for sub-paragraphs (1A) and (1B), the following sub-paragraphs shall respectively be substituted, namely:-

"(1A) Every construction agency engaged in the construction of buildings within a radius of hundred kilometers from a coal or lignite based thermal power plant shall use only fly ash based products for construction, such as: cement or concrete, fly ash bricks or blocks or tiles or clay fly ash bricks, blocks or tiles or cement fly ash bricks or bricks or blocks or similar products or a combination or aggregate of them, in every construction project.

(1B) The provisions of sub-paragraph (1A) shall be applicable to all construction agencies of Central or State or Local Government and private or public sector and it shall be the responsibility of the agencies either undertaking construction or approving the design or both to ensure compliance of the provisions of sub-paragraph (1A) and to submit annual returns to the concerned State Pollution Control Board or Pollution Control Committee, as applicable";

(c) after sub-paragraph (1B), the following sub-paragraph shall be inserted, namely:—

“(1C) Minimum fly ash content for building materials or products to qualify as “fly ash based products” category shall be as given in the Table I below:

Table I

Serial Number	Building Materials or Products	Minimum % of fly ash by weight
(1)	(2)	(3)
1.	Fly ash bricks, blocks, tiles, etc. made with fly ash, lime, gypsum, sand, stone dust etc. (without clay).	50% of total input materials
2.	Paving blocks, paving tiles, checker tiles, mosaic tiles, roofing sheets, pre-cast elements, etc. wherein cement is used as binder.	Usage of PPC (IS-1489: Part-1) or PSC (IS-455) or 15% of OPC (IS-269/8112/12269) content.
3.	Cement.	15% of total raw materials
4.	Clay based building materials such as bricks, blocks, tiles, etc.	25% of total raw materials.
5.	Concrete, mortar and plaster.	Usage of PPC (IS-1489: Part-1) or PSC (IS-455) or 15% of OPC (IS-269/8112/12269) content.

(d) in sub-paragraph (2), for the brackets and number “(1)”, the brackets, number and letter “(1C)” shall be substituted and the number of sub-paragraph (2) shall be substituted by 1(D);

(e) in paragraph (2A), the paragraph 1(A) shall be substituted by 1(A) and 1(B) and the amended paragraph 2(A) is to be numbered as 1(E);

(f) for sub-paragraphs (3) and (3A), the following sub-paragraphs shall respectively be substituted, namely:—

“(3) In case of non-availability of fly ash from thermal power plants in sufficient quantities as certified by the said power plants, within 100 km of the site, the stipulation under sub-paragraph (1A) shall be suitably modified (waived or relaxed) by the concerned State Government or Union territory Government level monitoring committee mentioned elsewhere in this notification.

(3A) A decision on the application for manufacture of fly ash bricks, blocks and tiles and similar other fly ash based products shall be taken within thirty days from the date of receipt of the application by the concerned State Pollution Control Board or Pollution Control Committee.”;

(g) sub-paragraphs (3B), (3C) and (3D) shall be omitted;

(h) for sub-paragraphs (4) and (5), the following sub-paragraphs shall be substituted, namely:

“(4) Each coal or lignite based thermal power plant shall constitute a dispute settlement committee which shall include the General Manager of the thermal power plant and representative of the relevant Construction and fly ash Brick Manufacturing Industry Association or Body, as the case may be and such a Committee shall ensure unhindered loading and transport of fly ash in an environmentally sound manner without any undue loss of time. An unresolved dispute shall be dealt with by the concerned State or Union territory Government level monitoring committee mentioned elsewhere in this notification.

(5) No agency, person or organization shall, within a radius of hundred kilometers of a thermal power plant undertake construction or approve design for construction of roads or flyover embankments with top soil; the guidelines or specifications issued by the Indian Road Congress (IRC) as contained in IRC specification No. SP: 58 of 2001 as amended from time to time regarding use of fly ash shall be followed and any deviation from this direction can only be agreed to on technical reasons if the same is approved by Chief Engineer (Design) or Engineer-in-Chief of the concerned agency or organisation or on production of a certificate of “fly ash not available” from the thermal power plant(s) (TPPs) located within hundred kilometers of the site of construction and this certificate shall be provided by the TPP within two working days from the date of receipt of a request for fly ash, if fly ash is not available”;

(i) in sub-paragraph (6), for the words “Voids created due to soil borrow area shall be filled up with ash with proper compaction and covered with topsoil kept separately as above and this would be done as an integral part of embankment project within the time schedule of the project”, the words “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” shall be substituted;

(j) for sub-paragraph (7), the following sub-paragraphs shall be substituted, namely:—

“(7) No agency, person or organisation shall within a radius of hundred kilometers of a coal or lignite based thermal power plant undertake or approve or allow reclamation and compaction of low lying areas with soil; only fly ash shall be used for compaction and reclamation and they shall also ensure that such reclamation and compaction is done in accordance with the specifications and guidelines laid down by the authorities mentioned in sub-paragraph (1) of paragraph 3.

(8)(i) 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);

Provided that such thermal power stations shall facilitate the availability of required quality and quantity of fly ash as may be decided by the expert committee referred in sub-paragraph (10) for this purpose.

(ii) 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 fly 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);

Provided that such thermal power stations shall facilitate the availability of required quality and quantity of fly ash as may be decided by the expert committee referred in sub-paragraph (10) for this purpose.

(9) The provisions contained in clauses (i) and (ii) of sub-paragraph (8) shall be applicable to all mine agencies under Government, public and private sector and to mines of all minerals or metals or items and it shall be the responsibility of agencies either undertaking or approving the external dump of overburden, backfilling or stowing of mine or all these activities to ensure compliance of provisions contained in clauses (i) and (ii) of sub-paragraph (8) and to submit annual returns to the concerned State Pollution Control Board or Pollution Control Committee as applicable.

(10) The Ministry of Coal for this purpose shall constitute an expert committee comprising of representatives from Fly Ash Unit, Department of Science and Technology, Ministry of Science and Technology, Director General of Mines Safety (DGMS), Central Mine Planning and Design Institute Limited (CMPDIL), Ministry of Environment and Forests, Ministry of Power, Ministry of Mines and the Central Institute of Mining and Fuel Research (CIMFR), Dhanbad; the Committee shall also guide and advise the back filling or stowing in accordance with the provisions contained in sub-paragraphs (8) (i), 8 (ii) and (9), and specifications and guidelines laid down by the concerned authorities as mentioned in sub-paragraph (1) of paragraph 3.

(11) The concerned State Government or Union territory Government shall be the enforcing and monitoring authority for ensuring compliance of the provisions of sub-paragraphs (8) (i) and (8) (ii)";

3. in the said notification, in paragraph 2,—

(a) for sub-paragraphs (1), (2) and (3), the following sub-paragraphs shall be substituted namely:—

"(1) All coal or lignite based thermal power stations would be free to sell fly ash to the use agencies subject to the following conditions, namely:—

(i) the pond ash should be made available free of any charge on "as is where is basis" to manufacturers of bricks, blocks or tiles including clay fly ash products manufacturing unit(s), farmers, the Central and the State road construction agencies Public Works Department, and to agencies engaged in backfilling or stowing of mines.

(ii) at least 20% of dry ESP fly ash shall be made available free of charge to unit manufacturing fly ash or clay-fly ash bricks, blocks and tiles on a priority basis over other users and if the demand from such agencies falls short of 20% of quantity, the balance quantity can be sold or disposed of by the power station as may be possible;

Provided that the fly ash obtained from the thermal power station should be utilized on for the purpose for which it was obtained from the thermal power station or plant failing which no fly ash shall be made available to the defaulting users.

(2) All coal and, or lignite based thermal power stations and, or expansion units in operation before the date of this notification are to achieve the target of fly ash utilization as per the Table II given below:

Table II

Serial Number	Percentage Utilization of Fly Ash	Target Date
(1)	(2)	(3)
1.	At least 50% of fly ash generation	One year from the date of issue of this notification.
2.	At least 60% of fly ash generation	Two years from the date of issue of this notification.
3.	At least 75% of fly ash generation	Three years from the date of issue of this notification.

4.	At least 90% of fly ash generation	Four years from the date of issue of this notification.
5.	100% fly ash generation	Five years from the date of issue of this notification.

The unutilised fly ash in relation to the target during a year, if any, shall be utilized within next two years in addition to the targets stipulated for those years and the balance unutilized fly ash accumulated during first five years (the difference between the generation and the utilization target) shall be utilized progressively over next five years in addition to 100% utilization of current generation of fly ash.

(3) New coal and, or lignite based thermal power stations and, or expansion units commissioned after this notification to achieve the target of fly ash utilization as per Table III given below:

Table III

Serial Number	Fly ash utilization level	Target date
(1)	(2)	(3)
1.	At least 50% of fly ash generation	One year from the date of commissioning.
2.	At least 70% of fly ash generation	Two years from the date of commissioning.
3.	90% of fly ash generation	Three years from the date of commissioning.
4.	100% of fly ash generation	Four years from the date of commissioning.

The unutilised fly ash in relation to the target during a year, if any, shall be utilized within next two years in addition to the targets stipulated for these years and the balance unutilized fly ash accumulated during first four years (the difference between the generation and utilization target) shall be utilized progressively over next five years in addition to 100% utilization of current generation of fly ash.”;

(b) in sub-paragraph (4), for the words “six months”, the words “four months” shall be substituted;

(c) for sub-paragraph (6), the following sub-paragraphs shall be substituted, namely:—

“(6) The amount collected from sale of fly ash and fly ash based products by coal and/or lignite based thermal power stations or their subsidiary or sister concern unit, as applicable should be kept in a separate account head and shall be utilized only for development of infrastructure or facilities, promotion and facilitation activities for use of fly ash until 100 percent

fly ash utilization level is achieved; thereafter as long as 100% fly ash utilization levels are maintained, the thermal power station would be free to utilize the amount collected for other development programmes also and in case, there is a reduction in the fly ash utilization levels in the subsequent year(s), the use of financial return from fly ash shall get restricted to development of infrastructure or facilities and promotion or facilitation activities for fly ash utilization until 100 percent fly ash utilisation level is again achieved and maintained.

(7) 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 Committee and the concerned Regional Office of the Ministry of Environment and Forests by the coal or lignite based thermal power plants, and also be made a part of the annual report of the thermal power plant as well as thermal power plant wise information be provided in the annual report of thermal power producing agency owning more than one thermal power plant.”;

4. in the said notification, in paragraph 3,—

(a) in sub-paragraph (2), for the words “schedules of specifications and construction applications, including appropriate standards and codes of practice, within a period of four months from the publication of this notification”, the words “tender documents, schedules of specifications and construction applications including appropriate standards and codes of practice within a period of four months from the publication of this notification” shall be substituted;

(b) for sub-paragraph (2A), the following sub-paragraph shall be substituted, namely:—

“(2A) Building construction agencies both in public and private shall prescribe the use of fly ash and fly ash-based products in their respective tender documents, schedules of specifications and construction applications, including appropriate standards and codes of practice and make provisions for the use of fly ash and fly ash based bricks, blocks or tiles or aggregates of them in the schedule of approved materials and rates within a period of four months from the publication of this notification.”;

(c) for sub-paragraphs (2B) and (3), the following sub-paragraphs shall be substituted, namely:—

“(2B) All agencies undertaking construction of roads or fly over 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 Departments and other State Government Agencies, shall within a period of four months from the publication of this notification:-

(a) 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 as per sub-paragraph (6) of paragraph 1; and

(b) make necessary specifications or guidelines for road or fly over embankments that are not covered by the specifications laid down by the Indian Road Congress (IRC).

(3) All local authorities shall specify in their respective tender documents, building bye-laws and regulations, the use of fly ash and fly ash-based products and construction techniques in building materials, roads embankments or for any usage with immediate effect.

(4) The Central Electricity Authority and other approving agencies may permit the land area for emergency ash pond or fly ash storage area up to 50 hectares for a 500 MW unit, based on 45% ash content coal, or in the same proportion for units in other capacities taking into account the ash content in coal or lignite to be used.

(5) All Financial institutions and agencies which fund construction activities shall include a clause in their loan or grant document for compliance of the provisions of this notification.

(6) A Monitoring committee shall be constituted by the Central Government with Members from Ministry of Coal, Ministry of Mines, Ministry of Power, Central Pollution Control Board, Central Electricity Authority, Head Fly Ash Unit of Department of Science and Technology and Building Material Technology Promotion Council to monitor the implementation of the provisions of the notification and submit its recommendations or observations at least once in every six months to the Secretary, Ministry of Environment and Forests. Concerned Advisor or Joint Secretary in the Ministry of Environment and Forests will be the convener of this committee.

(7) For the purpose of monitoring the implementation of the provisions of this notification the State Governments or Union territory Government shall constitute a Monitoring Committee within three months from the date of issue of this notification under the Chairmanship of Secretary, Department of Environment with representatives from Department of Power, Department of Mining, Road and Building Construction Department and State Pollution Control Board and this Committee would deal with any unresolved issue by Dispute Settlement Committee as prescribed in sub-paragraph (4) of paragraph 1, in addition to monitoring and facilitating implementation of this notification at the respective State Government or Union territory level and this Committee would also be empowered to suitably modify (waive or relax) the stipulation under sub-paragraph (1) in case of non-availability of fly ash in sufficient quantities from thermal power plant as certified by the said power plants and the Committee will meet at least once in every quarter.

[F. No. 9-8/2005-HSMD]

G. V. SUBRAHMANYAM, Scientist 'G'

Foot Note :—The principal notification was published in the Gazette of India, Part II, Section 3, Sub-section (ii) *vide* notification number S.O. 763(E), dated the 14th September, 1999 and was amended *vide* notification number S. O. 979(E), dated the 27th August, 2003.

रजि. सं. सी. एल. 33004/99

REGD. NO. D. L.-33004/99



भारत का राजपत्र
The Gazette of India

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, 25 जनवरी, 2016

का.आ. 254(अ).—भारत सरकार, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की अधिसूचना सं. का.आ. 763(अ), तारीख 14 सितंबर, 1999 (जिसे इसमें इसके पश्चात् उक्त अधिसूचना कहा गया है) में कतिपय संशोधनों का प्रारूप, जिन्हें केन्द्रीय सरकार 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) के अंतर्गत करने का प्रस्ताव करती है, भारत के राजपत्र, असाधारण, भाग II, खंड 3, उप-खंड (ii) में अधिसूचना सं. का.आ. 1396(अ), तारीख 25 मई, 2015 द्वारा प्रकाशित किया गया था, जिसके द्वारा ऐसे सभी व्यक्तियों से, जिनके उनसे प्रभावित होने की संभावना थी, उस तारीख से, जिससे उक्त प्रारूप संशोधनों को अंतर्विष्ट करने वाली राजपत्र की प्रतियां जनता को उपलब्ध करा दी जाती हैं, साठ दिनों के अवसान से पूर्व आक्षेप और सुझाव आमंत्रित किए गए थे;

और उक्त राजपत्र की प्रतियां 25 मई, 2015 को जनता को उपलब्ध करा दी गई थी;

और उक्त प्रारूप अधिसूचना के संबंध में, ऐसे सभी व्यक्तियों से, जिनके उनसे प्रभावित होने की संभावना थी, प्राप्त सभी आक्षेपों और सुझावों पर केन्द्रीय सरकार द्वारा सम्यक् रूप से विचार कर लिया गया है;

अतः, अब, केन्द्रीय सरकार 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 उक्त अधिसूचना में निम्नलिखित संशोधन करती है, अर्थात् :-

1. उक्त अधिसूचना के पैरा 1 में-

- (क) उप पैरा 1(क) में "सौ किलोमीटर" शब्दों के स्थान पर "तीन सौ किलोमीटर" शब्द रखे जाएंगे;
- (ख) उप पैरा 3 में "100 कि.मी." अंकों और शब्दों के स्थान पर "तीन सौ किलोमीटर" शब्द रखे जाएंगे;
- (ग) उप पैरा 5 में "सौ किलोमीटर" शब्दों के स्थान पर "तीन सौ किलोमीटर" शब्द रखे जाएंगे;
- (घ) उप पैरा 7 में "सौ किलोमीटर" शब्दों के स्थान पर "तीन सौ किलोमीटर" शब्द रखे जाएंगे;

- (10) संबद्ध प्राधिकारी सभी सरकारी स्कीमों या कार्यक्रमों में, उदाहरणार्थ महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार गारंटी अधिनियम, 2005 (मनरेगा), स्वच्छ भारत अभियान, शहरी और ग्रामीण आवासन स्कीम, जहां संनिर्मित क्षेत्र एक हजार वर्ग फुट से अधिक है और अवसंरचना संबंधी संनिर्माण में, जिसके अंतर्गत अभिहित औद्योगिक संपदाओं या पार्कों या विशेष आर्थिक जोनों में भवन निर्माण भी है, ऐश आधारित ईटों या उत्पादों के आजापक उपयोग को सुनिश्चित करेंगे।
- (11) कृषि मंत्रालय कृषि क्रियाकलापों में ऐश के मृदा अनुकूलक के रूप में उपयोग का संवर्धन करने पर विचार कर सकेगा।"
5. सभी संबद्ध प्राधिकारियों द्वारा उपरोक्त उपबंधों का अनुपालन करने की समयावधि 31 दिसंबर, 2017 है। कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्र, उनके द्वारा उत्पादित फ्लाई ऐश के 100 प्रतिशत उपयोग के अतिरिक्त उपरोक्त उपबंधों का अनुपालन 31 दिसंबर, 2017 से पूर्व करेंगे।

[फा. सं. 9-8/2005-एचएसएमडी]

बिश्वनाथ सिन्हा, संयुक्त सचिव

टिप्पण:- मूल अधिसूचना भारत के राजपत्र, असाधारण, भाग II, खंड 3, उप-खंड (ii) में अधिसूचना सं. का.आ. 763(अ), तारीख 14 सितंबर, 1999 द्वारा प्रकाशित की गई थी और इसमें पश्चातवर्ती संशोधन अधिसूचना सं. का.आ. 979(अ), तारीख 27 अगस्त, 2003 और का.आ. 2804(अ), तारीख 3 नवंबर, 2009 द्वारा किए गए थे।

MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE
NOTIFICATION

New Delhi, the 25th January, 2016

S.O. 254(E).—Whereas a draft of certain amendments to the Government of India in the Ministry of Environment, Forests and Climate Change number S.O. 763(E), dated the 14th September, 1999 (hereinafter referred to as the said notification) which the Central Government proposes to make 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 (ii), vide S.O. 1396(E), dated the 25th May, 2015 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 amendments were made available to the public.

And, whereas copies of the said Gazette were made available to the public on 25th May, 2015;

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, the Central Government hereby makes the following amendments to the said notification, namely:—

1. In the said notification, in paragraph 1,-

- in sub-paragraph 1(A), for the words "hundred kilometers", the words "three hundred kilometers" shall be substituted;
- in sub-paragraph (3), for the figures and letters "100 km", the words "three hundred kilometers" shall be substituted;
- in sub-paragraph (5), for the words "hundred Kilometers", the words "three hundred Kilometers" shall be substituted;
- in sub-paragraph (7), for the words "hundred Kilometers", the words "three hundred Kilometers" shall be substituted.

2. In the said notification, in paragraph 2:-

(a) after sub-paragraph (1), the following proviso shall be inserted, namely:-

“provided further that the restriction to provide 20 % of dry ESP fly ash free of cost shall not apply to those thermal power plants which are able to utilise 100 % fly ash in the prescribed manner.”

(b) after sub-paragraph (7), the following sub-paragraphs shall be inserted, namely:-

“(8) Every coal or lignite based thermal power plants (including captive and or co-generating stations) shall, within three months from the date of notification, upload on their website the details of stock of each type of ash available with them and thereafter shall update the stock position at least once a Month.

(9) Every coal or lignite based thermal power plants shall install dedicated dry ash silos having separate access roads so as to ease the delivery of fly ash.

(10) The cost of transportation of ash for road construction projects or for manufacturing of ash based products or use as soil conditioner in agriculture activity within a radius of hundred kilometers from a coal or lignite based thermal power plant shall be borne by such coal or lignite based thermal power plant and the cost of transportation beyond the radius of hundred kilometers and up to three hundred kilometers shall be shared equally between the user and the coal or lignite based thermal power plant.

(11) The coal or lignite based thermal power plants shall promote, adopt and set up (financial and other associated infrastructure) the ash based product manufacturing facilities within their premises or in the vicinity of their premises so as to reduce the transportation of ash.

(12) The coal or lignite based thermal power plants in the vicinity of the cities shall promote, support and assist in setting up of ash based product manufacturing units so as to meet the requirements of bricks and other building construction materials and also to reduce the transportation.

(13) To ensure that the contractor of road construction utilizes the ash in the road, the Authority concerned for road construction shall link the payment of contractor with the certification of ash supply from the thermal power plants.

(14) The coal or lignite based thermal power plants shall within a radius of three hundred kilometers bear the entire cost of transportation of ash to the site of road construction projects under Pradhan Mantri Gramin Sadak Yojna and asset creation programmes of the Government involving construction of buildings, road, dams and embankments”.

3. In the said notification, in paragraph 2, sub-paragraph (2A) be read as sub-paragraph (15) and at the end of the said sub-paragraph, the following sub-paragraph shall be added, namely:-

“and the coal or lignite based thermal power plants located in coastal districts shall support, assist or directly engage into construction of shore line protection measures.”

4. In the said notification, in paragraph 3, after sub-paragraph (7), the following shall be inserted, namely:-

“(8) It shall be the responsibility of all State Authorities approving various construction projects to ensure that Memorandum of Understanding or any other arrangement for using fly ash or fly ash based products is made between the thermal power plants and the construction agency or contractors.

(9) The State Authorities shall amend Building Bye Laws of the cities having population One million or more so as to ensure the mandatory use of ash based bricks keeping in view the specifications necessary as per technical requirements for load bearing structures.

(10) The concerned Authority shall ensure mandatory use of ash based bricks or products in all Government Scheme or programmes e.g. Mahatma Gandhi National Rural Employment Guarantee Act, 2005 (MNREGA), SWACHH BHARAT ABIYAN, Urban and Rural Housing Scheme, where built up area is more than 1000 square feet and in infrastructure construction including buildings in designated industrial Estates or Parks or Special Economic Zone.

- (11) The Ministry of Agriculture may consider the promotion of ash utilisation in agriculture as soil conditioner.”
5. The time period to comply with the above provisions by all concerned authorities is 31st December, 2017. The coal or lignite based thermal power plants shall comply with the above provision in addition to 100 % utilization of fly ash generated by them before 31st December, 2017.

[F. No. 9-8/2005-HSMD]

BISHWANATH SINHA, Jt. Secy.

Note:- The principal notification was published in the Gazette of India, Extraordinary, Part II, section 3, Sub-section (ii) *vide* notification S.O. 763(E), dated the 14th September, 1999 and was subsequently amended *vide* notification S.O. 979(E), dated the 27th August, 2003 and S.O. 2804(E), dated the 3rd November, 2009.

**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

Sr No.	Chapter
1.0	Introduction
2.0	Status of flyash utilisation
3.0	Need of guidelines
4.0	Loading/unloading and transportation of flyash
4.1	Current Practice for Handling & Disposal of Flyash & Bottom ash (within the power plant)
4.2	Guidelines for loading, unloading, storage, transportation of flyash
4.2.1	Maximise dry collection of fly ash and bottom ash
4.2.1	Loading, unloading and storage
4.2.3	Transportation
4.2.4	Code of Practices for general maintenance of roads, vehicles and conditioning of flyash
5.0	Reclamation of Low Lying area using Ash
6.0	Disposal of flyash in voids of abandoned mines
6.1	Study requirements
6.2	Mode of ash transportation to mine void area
6.3	Monitoring
6.4	Reclamation of land post-filling
7.0	Precaution
8.0	Regulatory Procedure for Processing the Application
Appendix	Guidelines for disposal of flyash in open cast mines along with Over Burden (OB)
References	1.Guidelines for Reclamation of Low Lying Areas and Abandoned Quarries with Ash , August 2017, Odisha Pollution control board

- 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 flyash 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 Bulklers/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 (bulkiers/trucks) before deployed for fly ash transportation.
- c. Fly 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 bulkiers 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/bulkiers 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 allowing 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 compacted 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

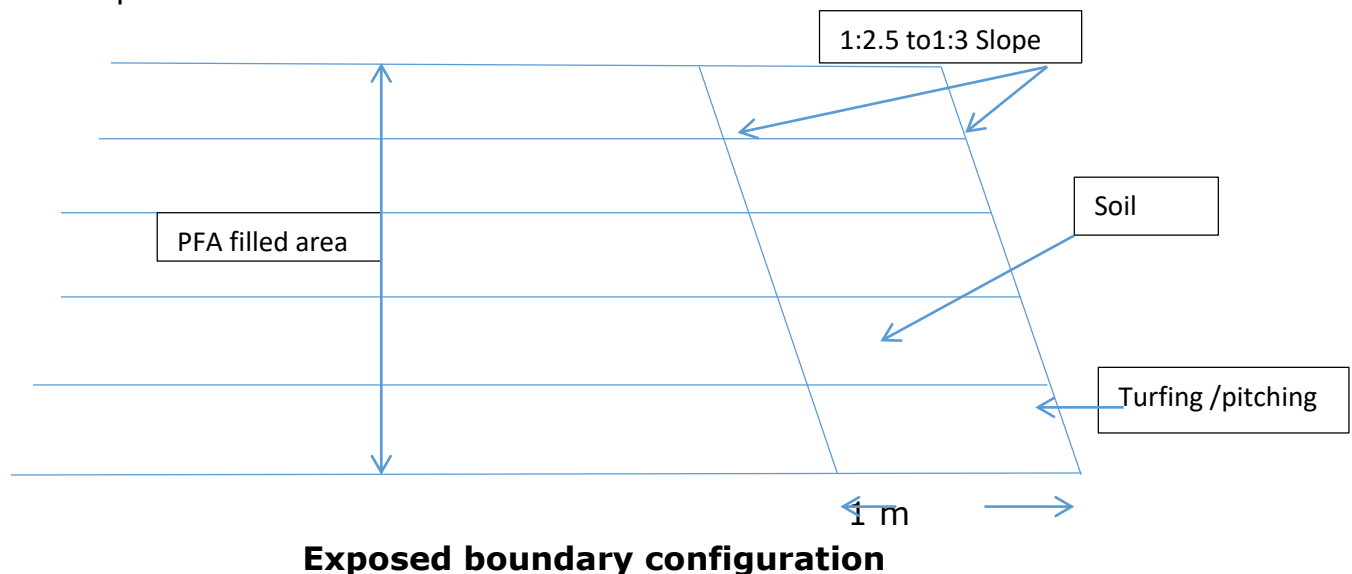
before rolling. The moisture content shall be at most uniform throughout the layer of material and ploughing or other methods of mixing to obtain uniform distribution. If the moisture content is more or less than the range of the required moisture content, or if it is not uniformly distributed throughout 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 or before it is used as Soil Cover.



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 ₂ O ₃ , Fe ₂ O ₃ , K ₂ O, TiO ₂ , CaO, MgO, Na ₂ O, P ₂ O 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	<ul style="list-style-type: none"> • 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
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Table 1.2: Proposed Monitoring Programme After Reclamation of Mine void

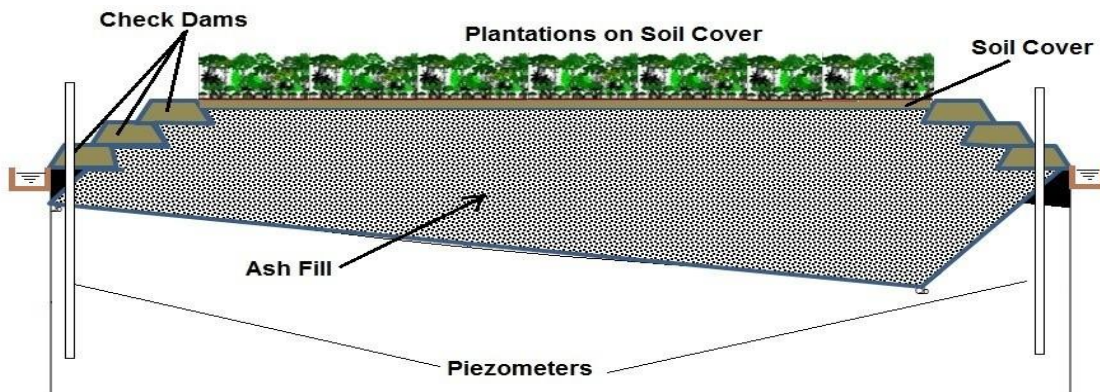
Samples	Parameters to be Analysed	Frequency
Piezometer Water Samples	Chemical Parameters (mg/l, except, pH and EC): pH, EC, TDS, Total Alkalinity, Ca, Mg, Na, K, Cl, SO ₄ , NO ₃ , PO ₄ , Trace Elements (mg/l): As, Ba, Cd, Co, Cr, Cu, F, Fe, Hg, Mn, Ni, Pb, Zn	Twice a year - Pre-monsoon and Post-monsoon
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	<ul style="list-style-type: none"> • 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 .

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/overburden 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 conducting 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

1.8.1 The surface and ground water measurement (Chemical Parameters (mg/l): pH, EC, TDS, Total Alkalinity, Ca, Mg, Na, K, Cl, SO₄, NO₃, PO₄, 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 filling and at the end of filling).

1.10.2 The 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, conducting different studies and shall maintain all records as prescribed.

1.10.4 Record 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.

1.10.5 Risk 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

1.10.6 In 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.



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भाग II—खण्ड 3—उप-खण्ड (ii)
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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, केन्द्रीय सरकार ने मौजूदा अधिसूचना की समीक्षा की;

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- (5) (i) सभी खान मालिकों को खान में खाली स्थानों में राख को समायोजित करने के लिए खान बंद योजना (प्रगामी और अंतिम) तैयार करनी होगी और खान में खाली स्थानों में राख के निपटान और अधिभार वाले ढेर के साथ राख को मिश्रित करने के लिए खान योजनाओं को संबंधित प्राधिकारी अनुमोदित करेगा। पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा ताप विद्युत संयंत्रों और कोयला खदानों की पर्यावरणीय मंजूरी की अपेक्षा से छूट देने के साथ-साथ ऐसे निपटान के लिए अपनाए जाने वाले दिशानिर्देशों के संबंध में तारीख 28 अगस्त, 2019 को दिशानिर्देश जारी किए गए।
- (ii) मंत्रालय, केन्द्रीय प्रदूषण नियंत्रण बोर्ड, महानिदेशक, खान सुरक्षा (डीजीएमएस) और भारतीय खान ब्यूरो (आईबीएम) के साथ परामर्श करके, खानों में खाली स्थानों में राख के निपटान करने तथा अधिभार वाले ढेरों में इसे मिश्रित करना सुगम बनाने के लिए समय-समय पर आगे भी दिशानिर्देश जारी कर सकता है और यह खान मालिकों की जिम्मेदारी होगी कि वे ऐसी खानों को अभिज्ञात करने की तिथि से एक वर्ष के भीतर विभिन्न विनियामक प्राधिकरणों द्वारा जारी की गई अनुमतियों में आवश्यक संशोधन या परिवर्तन प्राप्त करेंगे।
- (6) (i) पर्यावरणीय प्रदूषण के संदर्भ में सुरक्षा, व्यवहार्यता (आर्थिक व्यवहार्यता नहीं) और पहलुओं की जांच सहित राख से खान में खाली स्थान को वापस भरने/अधिभार वाले ढेर के साथ राख को मिश्रित करने के लिए खानों की पहचान करने के लिए पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, विद्युत मंत्रालय, खान मंत्रालय, कोयला मंत्रालय, महानिदेशक खान सुरक्षा और भारतीय खान ब्यूरो से प्रतिनिधियों को शामिल करते हुए अध्यक्ष, केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) की अध्यक्षता में एक समिति का गठन किया जाएगा और यह समिति पणधारी मंत्रालयों या विभागों के लिए अभिज्ञात खानों (भूमिगत और खुली, दोनों) के संबंध में तैयार की गई तिमाही रिपोर्टों को अद्यतन करेगी और यह समिति, इस अधिसूचना के प्रकाशन के तुरंत पश्चात उपयुक्त खानों की पहचान करना आरंभ करेगी।
- (ii) ताप विद्युत संयंत्र या खानें, उपरोक्त अनुसार अधिदेशित उपयोग लक्ष्यों को पूरा करने के लिए उपर्युक्त समिति द्वारा पहचान किए जाने तक राख के निपटान हेतु प्रतीक्षा नहीं करेंगी।
- (7) राख से निचले क्षेत्र को भरने का कार्य, अनुमोदित परियोजनाओं के लिए राज्य प्रदूषण नियंत्रण बोर्ड की पूर्व अनुमति से और केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा निर्धारित दिशा-निर्देशों के अनुसार किया जाएगा और राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति द्वारा अनुमोदित स्थलों, अवस्थान, क्षेत्र और अनुमत मात्रा को अपनी वेबसाइट पर प्रतिवर्ष प्रकाशित किया जाएगा।
- (8) केन्द्रीय प्रदूषण नियंत्रण बोर्ड, संगत पणधारी के साथ मिलकर, राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी) या प्रदूषण नियंत्रण समिति (पीसीसी) द्वारा अनुमति प्रदान करने के लिए समयबद्ध ऑनलाइन आवेदन प्रक्रिया प्रस्तुत करने के साथ-साथ इस अधिसूचना के अधीन परिकल्पित सभी प्रकार के कार्यकलापों के लिए एक वर्ष के भीतर दिशानिर्देश प्रस्तुत करेगा।
- (9) कोयला या लिग्नाइट आधारित तापीय ऊर्जा संयंत्र से तीन सौ किलोमीटर के दायरे में स्थित सभी भवन निर्माण परियोजनाएं (केंद्रीय, राज्य और स्थानीय प्राधिकरणों सरकारी उपक्रमों, अन्य सरकारी अभिकरणों तथा सभी निजी अभिकरणों) राख की ईटों, टाइल्स, धातुमल राख अथवा अन्य राख आधारित उत्पादों का उपयोग करेंगी बशर्ते कि वे वैकल्पिक उत्पादों की कीमत से अधिक कीमत पर उपलब्ध न हो।
- (10) राख आधारित उत्पादों के विनिर्माण और ऐसे उत्पादों में राख के उपयोग में भारतीय मानक ब्यूरो, भारतीय सड़क कांग्रेस और केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा निर्धारित विनिर्देशों और दिशानिर्देशों की अनुपालना होगी।
- ग. गैर-अनुपालन के लिए पर्यावरणीय प्रतिकर .-**
- (1) तीन वर्ष के चक्र के प्रथम दो वर्षों में, यदि कोयला या लिग्नाइट आधारित तापीय ऊर्जा संयंत्र (कैप्टिव और/ या सह-उत्पादक स्टेशनों या दोनों सहित) ने कम-से-कम 80 प्रतिशत राख (फ्लाइ-राख और बॉटम-राख) उपयोग नहीं की है तो ऐसे गैर-अनुपालन ताप विद्युत संयंत्रों पर प्रस्तुत की गई वार्षिक रिपोर्टों के आधार पर वित्तीय वर्ष के

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

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

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

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

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

ड. प्रवर्तन, निगरानी, लेखा परीक्षा और प्रतिवेदन करना

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

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

[फा. सं. एचएसएम-9/1/2019-एचएसएम]

नरेश पाल गंगवार, संयुक्त सचिव

उपाबंध

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

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

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

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

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

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 31st December, 2021

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

C. Environmental compensation for non-compliance.—

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

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

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

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

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

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

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

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

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

E. Enforcement, Monitoring, Audit and Reporting.—

- (1) The Central Pollution Control Board (CPCB) and the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall be the enforcing and monitoring authority for ensuring compliance of the provisions and shall monitor the utilisation of ash on quarterly basis. Central Pollution Control Board shall develop a portal for the purpose within six months of date of publication of the notification. The concerned District Magistrate shall have concurrent jurisdiction for enforcement and monitoring of the provisions of this notification.
- (2) (i) Thermal power plants shall upload monthly information regarding ash generation and utilisation by 5th of the next month on the web portal. Annual implementation report (for the period 1st April to 31st March) providing information about the compliance of provisions in this notification shall be submitted by the 30th day of April, every year to the Central Pollution Control Board, concerned State Pollution Control Board or Pollution Control Committee (PCC), Central Electricity Authority (CEA), and concerned Integrated Regional Office of Ministry of Environment, Forest and Climate Change by the coal or lignite based thermal power plants. Central Pollution Control Board and Central Electricity Authority shall compile the annual reports submitted by all the thermal power plants and submit to Ministry of Environment, Forest and Climate Change by 31st May.

(ii) All other user agencies shall submit consumption or utilisation or disposal of ash and use of ash based products as mandated in this notification in the compliance report of Environmental Clearance (EC) issued by Ministry of Environment, Forest and Climate Change or State Level Environment Impact Assessment Authority (SEIAA) or Consent to Operate (CTO) issued by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC), whichever is applicable. The Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall publish annual report of ash utilisation of all other agencies except thermal power plants to review the effective implementation of the provisions of the notification.
- (3) For the purpose of monitoring the implementation of the provisions of this notification, a committee shall be constituted under the Chairperson, Central Pollution Control Board (CPCB), with members from Ministry of Power, Ministry of Coal, Ministry of Mines, Ministry of Environment, Forest and Climate Change, Ministry Road Transportation and Highways, Department of Heavy Industry as well as any concerned stakeholder(s), to be nominated by the Chairman of the committee. The committee may make recommendations for effective and efficient implementation of the provisions of the notification. The committee shall meet at least once in six months and review annual implementation reports and the committee shall also hold stakeholder consultations for monitoring of ash utilisation as mandated by this notification by inviting relevant stakeholder(s) at least once in six months. The committee shall submit the six monthly report to Ministry of Environment, Forest and Climate Change (MoEFCC).

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

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

NARESH PAL GANGWAR, Jt. Secy.

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

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

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

	<p>Reclaimed</p> <p>(b) Date of start of ash disposal in ash pond (DD/MM/YYYY or MMYYYY):</p> <p>(c) Date of stoppage of ash disposal in ash pond after completing its capacity (DD/MM/YYYY or MM/YYYY): (Not applicable for active ash ponds)</p> <p>(c) area (hectares):</p> <p>(d) dyke height (m):</p> <p>(d) volume (m³):</p> <p>(e) quantity of ash disposed as on 31st March (Metric Tons):</p> <p>(f) available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons):</p> <p>(g) expected life of ash pond (number of years and months):</p> <p>(e) co-ordinates (Lat and Long): (please specify minimum 4 co-ordinates)</p> <p>(f) type of lining carried in ash pond: HDPE lining or LDPE lining or clay lining or No lining</p> <p>g) mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)</p> <p>(h) Ratio of ash: water in slurry mix (1:___):</p> <p>(i) Ash water recycling system (AWRS) installed and functioning: Yes or No</p> <p>(j) Quantity of wastewater from ash pond discharged into land or water body (m3):</p> <p>(k) Last date when the dyke stability study was conducted and name of the organisation who conducted the study:</p> <p>(l) Last date when the audit was conducted and name of the organisation who conducted the audit:</p>								
19.	<p>Quantity of legacy ash utilised (MTPA):</p> <ol style="list-style-type: none"> i. Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels): ii. Cement manufacturing: iii. Ready mix concrete: iv. Ash and Geo-polymer based construction material: v. Manufacturing of sintered or cold bonded ash aggregate: vi. Construction of roads, road and flyover embankment: vii. Construction of dams: viii. Filling up of low lying area: ix. Filling of mine voids: x. Use in overburden dumps: xi. Agriculture: xii. Construction of shoreline protection structures in coastal districts; xiii. Export of ash to other countries: xiv. Others (please specify): 								
20.	<table border="1"> <tr> <td colspan="4" data-bbox="268 1935 1433 1980">Summary:</td> </tr> <tr> <td data-bbox="268 1980 568 2054">Details</td> <td data-bbox="568 1980 871 2054">Quantity generated (MTP)</td> <td data-bbox="871 1980 1155 2054">Quantity utilised (MTP) and (per cent)</td> <td data-bbox="1155 1980 1433 2054">Balance quantity (MTP)</td> </tr> </table>	Summary:				Details	Quantity generated (MTP)	Quantity utilised (MTP) and (per cent)	Balance quantity (MTP)
Summary:									
Details	Quantity generated (MTP)	Quantity utilised (MTP) and (per cent)	Balance quantity (MTP)						

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

REVENUE AND DISASTER MANAGEMENT DEPARTMENT

RESOLUTION

No 24587 R&DM, Bhubaneswar dated 07 JUL 2025

RDM-MMS-POLICY-0039-2024

Sub: Standard Operating Procedure (SOP) for disposal of fly ash in extinct stone quarries

The principles regarding the temporary allotment of Government land for private purposes has been outlined in this Department letter No. GE(GL)-S-56/2013-33503/R&DM dated 31.08.2013. Additionally, this Department had also issued a clarification concerning the issuance of permits for industries to use abandoned (extinct) stone quarries or low-lying Government land for filling with unused fly ash via letter No. RDM-MMS-CLRFIC-0007-2020- 38754/R&DM dated 16.11.2022.

In supersession of all the previous resolutions/notifications/letters/clarifications issued in this regard, the Government is pleased to prescribe the following SOP for the use of extinct stone quarries for the disposal of fly ash which should be followed by all concerned henceforward:

1. The Steel and Mines Department, Government of Odisha, shall prepare a list of extinct stone quarries (hereinafter referred to as ESQ) in the state, district-wise, and notify them according to the guidelines prescribed by the Steel & Mines Department in this regard and return the said quarries to R&DM Department. Steel & Mines Department should strive to identify at least 100 ESQs during each year subject to availability. This Identification must be spread over the year to ensure that adequate number of ESQs are available to Industries on a regular basis.
2. The S&M Department will ensure that the notified ESQs are returned to the R&DM Department within one week from the date of notification by the S & M Department.
3. The R&DM Department shall forward this list of ESQs, returned from the Steel & Mines Department to the Odisha State Pollution Control Board (OSPCB) for conducting feasibility study on environmental consideration for filling them with fly ash preferably within one fortnight of receipt of the list of identified ESQs.
4. On receipt of the list from the R&DM Dept, the OSPCB will conduct feasibility study of the identified extinct stone quarries, aiming to complete it preferably within one month. It is expected that at least 15 extinct stone quarries will be examined during this timeframe, with the next 15 being studied in the following month, and so on. The OSPCB may engage expert consultant agencies for this purpose. The exercise for each case will be completed preferably within a period of one month.



5. After receiving the environment feasibility study report from SPCB, the R&DM Department will provide the list of feasible extinct stone quarries to the respective Revenue Divisional Commissioners and the District Collectors. This will enable them to temporarily lease these quarries to fly ash generating companies for the deposition of fly ash in accordance with Rule 9 of the OGLS Rules, 1983.
6. The temporary lease of the ESQ for the filling of fly ash shall be granted exclusively to fly ash generating companies and not to any other agency.
7. The Collector shall invite applications from fly ash generating companies for temporary leases of feasible extinct stone quarries within the district. A period of 15 days shall be allowed for fly ash generating companies to submit their applications. A list of the fly ash generating companies, along with the quantity of fly ash they produce, will be provided by the OSPCB to the Collectors. Accordingly, these companies will be informed to apply for ESQs by the Collector. Applications may be invited by Collectors from Fly Ash Generating Companies Irrespective of receiving the list of ESQs from RDC. This list may be valid for one year from the date of notification. This list can then be used for allocation of ESQs by Competent Authority.
8. After receiving applications from the fly ash generating companies, the Collector shall forward them to the concerned Tahsildars for scrutiny. After obtaining the report from Tahsildar, if the company is found eligible, then the Collector shall propose a temporary lease of the extinct stone quarry in favour of the applicant fly ash generating company to the RDC for approval in accordance with Rule 9 of the OGLS Rules, 1983.
9. If there are more than one application for a particular ESQ, the following principles should be followed to determine the priority —
 - i. Priority should be given to companies generating fly ash that are closer to the ESQ to reduce transportation distance.
 - ii. The capacity of the fly ash generating companies may be reviewed, and the total number of ESQs may be allotted keeping in view the quantum/volume of void space (in terms of m^3) required by the applicant companies.
 - iii. The capacity of thermal power plant (in terms of MW) may also be taken into consideration since capacity will reflect the magnitude of their requirements. A proposal to allot the ESQ may then be made by the Collector.
10. Every Fly ash-generating company should receive at least one extinct stone quarry. While allocating the extinct stone quarries, it is to be ensured that the filling capacity of the ESQ (void volume) should be proportionate to their power generation capacity, as much as possible, to effectively address the disposal of fly ash. Once an ESQ is allocated by the Competent Authority, it shall not be changed ordinarily.
11. Companies that generate fly ash should be encouraged to recycle it for use in road construction, cement production, brick manufacturing, mine void filling and other applications. Disposal in the extinct stone quarries should be the last option and

A


least in quantity, with no more than 50% of the generated fly ash placed in these quarries.

12. The District Collector, with prior permission from the RDC, shall allow the temporary use of Extinct Stone Quarries for the fly ash generating company for this specific purpose. A lease deed, outlining all conditions, shall be executed between the Collector and the project proponent and shall be registered at the latter's expense.
13. After securing a temporary lease for the abandoned quarry, the project proponent must obtain the Consent to Establish (CTE) and the Consent to Operate (CTO), as applicable, from the SPCB to fill the quarry with fly ash.
14. The temporary lease for filling the fly ash shall be subject to the following conditions —
 - i. The temporary lease may be sanctioned for a period of one year. However, this period may be extended by the Government for such period as the Government may decide from time to time.
 - ii. The project proponent must pay 10% of the current market value of the land as license fee each year.
 - iii. Any fraction of a year beyond one year shall be considered as one year, and an additional 10% of the market value will be collected as a license fee up to a maximum of 10 years.
 - iv. All conditions, restrictions, and limitations outlined in the SPCB guidelines for transportation, filling, compaction, top soil capping, closure plan and plantation must be strictly adhered to.
 - v. The project proponent shall make a security deposit for top soil capping which will be assessed by SPCB. SPCB will do the estimate of top soil capping every year at the time of renewal and the differential amount, if any, should be deposited by the project proponent. The project proponent shall submit a Bank Guarantee @ Five(5) Lakhs/.Acre for top soil capping followed by plantation over it, if required.
 - vi. Filling of quarries should be done under the guidance of SPCB and SPCB will give certificate to the Collector every month. Filling of quarries should be done as per the regulation of SPCB.
 - vii. After the ESQ is completed, SPCB will certify that it is fit and suitable for public use, and after that the abandoned quarry area shall be returned to the Government. However in case the filling has exceeded the permitted quantity or exceeded in height compared to its immediate surrounding, SPCB will direct the user company to remove the excess quantity and District Administration will record it as an adverse remark which may impact upon subsequent allocation of ESQ.
 - viii. If the project proponent fails to return the land in all respects, the Collector shall, after providing the temporary lessee with an opportunity of being heard, cancel the temporary lease and forcibly take possession, transferring it to the Government khata.



- ix. If the temporary lessee violates any conditions of the temporary lease or any stipulations set by the SPCB, the Collector shall cancel the lease after providing an opportunity of being heard and revert the land to the government khata along with a penalty of INR 1,00,000 per acre.
- x. If the temporary lessee further renders the land unusable for any future purpose, the cost of the damage, that is, the amount required to restore the land to a usable status, shall be assessed by a technical committee comprising of representatives from Works Department, SPCB and District Administration and recovered from the lessee, along with a penalty of INR 1,00,000 per Acre.
15. A committee consisting of the Tahasildar, IIC, and R.O. SPCB under the chairmanship of Sub Collector will conduct field visit to each ESQ assigned for this purpose, every quarter, to ensure that fly ash filling complies with SPCB guidelines. The report, accompanied by geo-tagged photos and satellite imagery, will be submitted to the Collector by the 5th of every quarter and Collector in turn will submit the report to RDC by the 10th day of each quarter
16. Towards the end of the temporary lease year, the Tahsildar shall submit a report to the Collector through Sub Collector. Collector in turn will submit the report to RDC. Any decision regarding the extension of the temporary lease or the closure of the lease and the use of the fly ash-filled ESQ will be based on the District Collector's report. If the ESQ is completely filled with fly ash, the Collector shall recommend to the R&DM Department through RDC to reserve such land for one or more of the following purposes -
- i. Plantation
- ii. Convert to Gharabari kism and use it for settling homesteads for the landless in accordance with the OGLS Act and Rules.
- iii. Public amenities, such as schools, Anganwadi Centre, Kalyan Mandaps, Community Centre, play ground and so on.
- Safe bearing capacity shall be assessed by Works Department before opting for use as listed in items ii and iii above.**

By Order of Governor


07/07/2025

Additional Chief Secretary
Revenue & Disaster Management Department

Memo No. 24588 /R&D.M. dated 07 JUL 2025

Copy along with copy of the enclosure forwarded to Secretary Board of Revenue/ All RDCs /All Collectors for information and necessary action.

Additional Secretary to Government

Memo No. 24589 /R&D.M. dated 07 JUL 2025

Copy along with copy of the enclosure forwarded to Member Secretary State Pollution Control Board for information and necessary action.

Additional Secretary to Government

Memo No. 24590 /R&D.M. dated 07 JUL 2025

Copy along with copy of the enclosure forwarded to the Special Secretary to Government, Steel & Mines Department/Special Secretary to Government, Forest, Environment and Climate Change Department /Director, Directorate of Minor Minerals, Odisha for information and necessary action.

Additional Secretary to Government

Memo No. 24591 /R&D.M. dated 07 JUL 2025

Copy along with copy of the enclosure forwarded to All Departments for information and necessary action.

Additional Secretary to Government

Memo No. 24592 /R&D.M. dated 07 JUL 2025

Copy along with copy of the enclosure forwarded to All Sub- Collectors/ All Tahasildars for information and necessary action.

Additional Secretary to Government



OFFICE OF THE COLLECTOR & DISTRICT MAGISTRATE, SUNDARGARH
(Mining Section)

No. 400 /Dt. 21/08/2025

ADVERTISEMENT

In pursuance of the Resolution No. 24587/ R&DM dt. 07.07.2025 of R&DM, Department, applications are hereby invited in prescribed proforma from the fly ash generating companies/ power plants for allotment of the following Extinct Stone Quarries for disposal of fly ash. The applications should reach to the office of the undersigned within 15 days of issue of this notice through speed-post.

Sl No	District	Name of the Quarry	Name of Tahasil	Estimated volume in M3
1	Sundargarh	Blanada Stone quarry 11	Lathikata	5.66 lakhm3
2	Sundargarh	San Balichuan Stone Quarry	Hemgir	8.25 lakhm3
3	Sundargarh	Peruabhadi Stone Quarry	Subdega	1 lakhm3

The quarries will be allotted adhering to the principles laid down in the aforesaid Resolution. In case of more than one application for a particular ESQ the following principle will be followed.

- Priority will be given to companies generating fly ash that are closer to the ESQ to reduce transportation distance.
- The capacity of the fly ash generating companies shall be reviewed, and the total number of ESQs may be allotted keeping in view the quantum/ volume of void space (in terms of M3) required by the applicant companies.
- The capacity of the thermal power plant (in terms of MW) shall also be taken into consideration since capacity will reflect the magnitude of their requirements.

Collector, Sundargarh


Memo No. 401 / Date 21/08/2025

Copy forwarded to DDM, Rourkela/ RO, SPCB, Regional Office, Rourkela for information.

Collector, Sundargarh


Memo No. 402 / Date 21/08/2025

Copy forwarded to Revenue Divisional Commissioner, Northern Division, Odisha,
Sambalpur for information.


Collector, Sundargarh

Memo No. 413 / Date 21/08/2025

Copy forwarded to NTPC, SAIL, Power Company Ltd./ Darlipali STPP, NTPC Ltd./
Kamanda Steel Plant of M/s Rungta Mines Ltd./ Mahavir Ferro Alloys Pvt. Ltd./ Bhaskar Steel
& Ferro Alloys/ Suraj Product/ Ganesh Metallicks/ Scan Steel Ltd. (U-II)/ Surendra Mining
Industries/ Dalmaia Cement Bharat Ltd. for information and necessary action.


Collector, Sundargarh

**APPLICATION FOR ALLOTMENT OF EXTINGUISHED STONE QUARRIES FOR
DISPOSAL OF FLY ASH**

1. Name of the Fly Ash Generating Company/ Power Plant :

2. Name of the ESQ applied for :

3. Quantity of Fly Ash generation Annually/ Monthly :

4. Location of the Plant & distance to the applied ESQ in KMs:

5. Capacity of the Power Plant in MW :

DECLARATION

I do hereby declare that the above information provided is true and correct to the best of my knowledge.

Authorized Signatory



OFFICE OF THE DISTRICT MAGISTRATE & COLLECTOR, SUNDARGARH
(Mining Section)

Letter No. 439 / XV-15/2025, Dt. 15/09/25

To,

The Tahasildar,
Subdega.

Sub: Scrutiny of applications for allotment of **Peruabhadi Stone Quarry**
(Extinct Stone Quarry) for disposal of fly-ash.

Ref: Resolution No. 24587 Dated 07.07.2025 of R&DM Department.

Sir

With reference to the subject cited above I am to forward herewith the applications received from the following fly-ash generating companies for allotment of **Peruabhadi Stone Quarry** having estimated volume of **14 Lakh M³**. You are therefore requested to scrutinize the applications as per Para-8 of aforesaid resolution (copy enclosed) and submit your report with considered views for further action at this end.

Sl No.	Name of the fly-ash Generating Company	Annual Fly-ash Generation Capacity	Capacity of Power Plant	Distance from the ESQ
1	M/s Vibrant Spirits Pvt Ltd	20400 MT ✓	2.5 MW	38 Kms
2	M/s Scan Steels Ltd. ✓	1.2 Lakh MT ✓	8 MW	53 Kms
3	M/s Vedanta Ltd	90 Lakh MT ✓	3615 MW	66 Kms
4	NTPC Ltd, Darlipali	42.0 Lakh MT	1600 MW	80 Kms
5	OPGC Ltd	43 Lakh MT	1740 MW	95 Kms ✓
6	Bhusan Power & Steel Ltd	1.3 Lakh MT	506 MW	100 Kms

Yours Faithfully

Memo No. 440 / Date 15/09/25 ✓
Collector, Sundargarh

Copy to Deputy Collector, Revenue Section, Collectorate, Sundargarh for information and necessary action with a request to take necessary steps to propose a temporary lease of the ESQ to the RDC for approval in accordance with Rule 9 of the OGLS Rules, 1983 in favour of the eligible fly-ash generating company as per report of Tahasildar concerned.

Collector, Sundargarh



OFFICE OF THE DISTRICT MAGISTRATE & COLLECTOR, SUNDARGARH
(Mining Section)

Letter No. 538 / XV-15/2025, Dt. 28/10/2025

To,

The Tahasildar,
Subdega.

Sub: Regarding allotment of **Peruabhadl Stone Quarry** (Extinct Stone Quarry) for disposal of fly-ash in favour of **M/s Vedanta Ltd.** and submission of case record for temporary lease thereof.

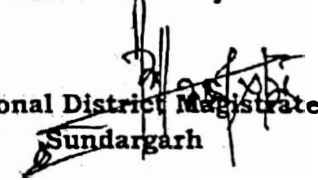
Ref: This office letter No. 439 dated 15.09.2025.

Sir/ Madam,

With reference to the letter on the subject cited above I am to enclose herewith the proceedings of the meeting held on 23.10.2025 under the chairmanship of the Revenue Divisional Commissioner (ND), Sambalpur regarding allotment of extinct stone quarries for disposal of fly ash and to intimate you that the **Peruabhadl Stone Quarry** having estimated volume of **14 Lakh M³** has been allotted to **M/s Vedanta Ltd., Jharsuguda** for disposal of fly ash.

You are therefore requested to process the case record for the temporary lease of the **Peruabhadl Stone Quarry** for filling with fly ash in favour of **M/s Vedanta Ltd., Jharsuguda** in accordance with Rule 9 of the OGLS Rules, 1983.

Yours Faithfully


Additional District Magistrate,
Sundargarh









Latitude: 22.243785
Longitude: 84.141608
Elevation: 402.31±3.9 m
Accuracy: 3.0 m
Time: 31-01-2026 09:24
Note: peruabhadi

Powered by NoteCam



Latitude: 22.243732
Longitude: 84.141919
Elevation: 398.31±9.6 m
Accuracy: 3.9 m
Time: 31-01-2026 09:21
Note: peruabhadi

Powered by NoteCam



Latitude: 22.243248
Longitude: 84.142697
Elevation: 394.21±13.1 m
Accuracy: 3.812 m
Time: 31-01-2026 09:18
Note: peruabhadi

Powered by NoteCam



Latitude: 22.243907
Longitude: 84.141059
Elevation: 396.31±5.5 m
Accuracy: 2.983 m
Time: 31-01-2026 09:25
Note: peruabhadi

Powered by NoteCam



Latitude: 22.24373
Longitude: 84.141857
Elevation: 403.81±4.0 m
Accuracy: 2.98 m
Time: 31-01-2026 09:23
Note: peruabhadi

Powered by NoteCam

Sundergarh Full of Ash Mafia Groups Active

Sundergarh 7/1(Printed) – There is a plot of land admeasuring 1 acre 70 decimals recorded in Khata No. 19, Plot No. 44 located near Karmahidi – Balishankara Road which falls under Subdega, Block Karmahidi, Village – Gilkudar. The nature of this land is suitable for habitation and is categorized as unpopulated. There was a time when cattle from nearby villages used to graze on this land. Today there are mountains of ash generated from Thermal Power Plants. Not only this plot of land, ash is being thrown on many government lands falling on the way from Karmahidi to Subdega. Today, Sundergarh is turning into a situation like Jharsuguda. Be it city or village, roadside or riverbelt, ash is being dumped everywhere. Power generating companies are not ready to understand the situation despite protests by local inhabitants. The situation today is such that these companies are now dumping ash on government land and also on private lands. Ash from various power plants is being dumped in Sundergarh turning it into ash-hub. Mafia groups are dumping ash everywhere as per their whims and fancies. These mafia groups neither fear the pollution control board nor require the permission of the tehsildar. If the locals protest, the mafia groups are terrorizing them by showing guns.

The ash dumping business is being run with full muscle power. Whoever protests has to face the mafia groups and their anger. These groups are turning barren government lands into mountains of ash. Rules suggest that one layer of mud should fall on one layer of ash. However only ash is being dumped everywhere. Ash blown away by wind is polluting both water and air. Illegal ash dumping is being done in Subdega, Balishankara, Sadar Block, Sundergarh city, Badagaon, Kutra, Kuaramunda and all other places of Sundergarh. Hundreds of youth from Kutra, Badagaon, Balishankara, Kuaramunda had in the recent past complained regarding illegal ash dumping before the collector. They had protested against this illegal activity and had noticed the collector to take action failing which the protests will grow stronger. But the administration and the Pollution Control Department chose to remain silent. On the other hand overloaded trucks are all the time parked on the roadsides.

There have been recent allegations regarding illegal ash dumping in Kanjima Block of Sundergarh district. Few days back, the Superintendent of Police of Sundergarh had seized 6 ash filled trucks but later the police also chose to remain silent. It was expected the police will take action under the law after the seizure of these trucks. However, The dumping of ash has increased after this seizure. Recently, the deputy

speaker had addressed a letter to the chief minister demanding action against illegal ash dumping. However no action was taken. The transportation companies are illegally earning from the illegal transportation and dumping of ash but the general public is facing the consequences of such illegal dumping activities. It is feared that if strict action is not taken against the ash mafia, Sundergarh will lose all its uninhabited grazing land.

TRUE TRANSLATED COPY

Arya Tripathy

To

The Tehsildar,
Subdega Tehsil, Odisha.

Sub: Objection to the Proposed Fly Ash Dumping in the Water-filled Non-functional Metal Stone Quarry at Peruabhadi Reserve Forest – Imminent Risk of Slurry Overflow and Environmental Damage

Respected Madam,

We, the residents of **Chatasargi and Teljora villages**, under **Hamirpur Gram Panchayat, Subdega Block**, strongly oppose and protest against the proposed plan to dump **fly ash slurry** into the **non-functional metal stone quarry** located on the **Peruabhadi mountain/forest top**, a reserve forest area.

The quarry pit is already filled to **capacity and on the verge of overflowing**, making it **extremely unsafe for any additional dumping**. Using this pit for fly ash disposal will create an **immediate risk of slurry overflow**, threatening nearby villages, farmlands, and the surrounding forest ecosystem.

Our Major Concerns

1. **Overflow of Toxic Slurry:**
 - The quarry pit lies on the mountain top, directly above **Chatasargi village** and its fertile farmlands.
 - Any further dumping will raise the water level and cause **overflow during rainfall**, spreading toxic, ash-laden water down the slopes.
 - The slurry overflow will **contaminate soil, ponds, and wells**, destroy standing crops, and permanently damage agricultural lands.
2. **Toxic Contamination:**
 - The fly ash contains **arsenic, mercury, and lead**, which will seep into **groundwater** and flow **downstream to nearby rivers**.
 - This will make water **unsafe for drinking, irrigation, and daily use**.
3. **Fertile Lands at Immediate Risk:**
 - Farmlands below the forest depend on natural rainwater runoff carrying decomposed organic matter.
 - Overflow of slurry will deposit **poisonous residues**, turning fertile soil **infertile and barren**.
4. **Forest and Grazing Land Destruction:**
 - Overflow will spread through **forest streams**, killing trees, medicinal plants, and wildlife.
 - Grazing lands for cattle will be **polluted and lost**.
5. **Threat to Tribal Livelihood:**
 - The affected villages are predominantly **Scheduled Tribe communities** who depend on **farming and forest produce** for survival.

- Contamination of land and water will destroy their livelihood and traditional way of life.
6. **Unscientific and Unsafe Proposal:**
- The quarry is not lined, engineered, or designed to hold fly ash slurry.
 - Dumping toxic waste into a water-filled pit is an environmental disaster waiting to happen. .
7. **Alternative Use of Quarry Water:**
- The existing water in the quarry can be used for irrigation by nearby villages.
 - Using it for agriculture would be a constructive and beneficial alternative for the local community.
-

Our Humble Appeal

We respectfully request your kind intervention to:

- **Cancel the proposed fly ash dumping plan at the Peruabhadri mountain/forest top immediately.**
- **Conduct a Gram Sabha consultation as required under the Forest Rights Act and PESA Act**
- **Protect the tribal population, agricultural lands, forests, and water bodies from toxic contamination and ecological disaster.**

Sir, the quarry pit is **already filled with water and dangerously close to overflowing**. Dumping fly ash here will be a **serious environmental and human disaster**. We therefore appeal for your **urgent action** to stop this proposal and safeguard the lives, livelihoods, and environment of our community.

Thanking you,

Yours faithfully,

Residents of local villages.

Gouram Bahola

Byapat Bahola

Pradeep Kujur -

Copy to:

1. The Collector and District Magistrate, Sundargarh
2. The Block Development Officer (BDO), Subdega Block
3. The District Forest Officer (DFO), Sundargarh Forest Division

Martin Kupus
 Games Kujin
 Lajras Kujin
 Marcel Kujin
 Manisli Soreng
 GAVGA TOPPO
 James Kaus
 Lophish Kujin
 Anand Teli
 Jagadp Jager Soreng
 Sumit Soreng
 Pradap Kujin
 BRIDHICH Kujin
 Lelindara Kujin
 MANARJAN TOPPO
 KISHOK Aind
 ASHOK TOPPO
 DEEPRANJAN TOPPO
 Seebak Kalo
 biJay LAKER
 BAREAN bHAsa
 Monoj TOPPO
 27 5/21
 Dibya Teli
 27 5/21

To

The Tahasildar, Subdega

District: Sundargarh, Odisha

Subject:

Objection to the Hearing Regarding Dumping of Fly Ash in the Water-Filled Non-Functional Metal Quarry on the Mountain Top of Peruabhadi Forest

Madam,

With reference to your letter no. 2644 dated 17/11/2025. We, the villagers of Chatasargi, Teljora, and Dumerbahal under Hamirpur Gram Panchayat; Peruabhadi and Domkuda under Domkuda Gram Panchayat; and Didga under Deogaon Gram Panchayat of Subdega Tahsil, Sundargarh district, strongly oppose the proposed fly ash dumping site on the hilltop of Peruabhadi Reserve Forest on the following grounds:

1. The abandoned stone quarry has already turned into a natural water reservoir filled to its full capacity. It is regularly used by villagers for bathing, drinking, cattle consumption and is also used by wild animals. This water body can serve at least ten adjoining villages for Irrigation.
2. Villages such as Chatasargi, Teljora, Didga, Majhi Para, Mahar Para, and Dumerbahal are situated at the foothills of the Peruabhadi Reserve Forest in low-lying areas directly beneath the proposed dumping site, while Peruabhadi village lies on the mountain top.
3. The Didga-Teljora Nala flows through Birtola Bridge near Katndihi on the Karamdihi-Subdega route and joins River Ib. During rains, fly ash slurry containing arsenic and other contaminants will flow down the hillside, pollute water bodies, contaminate agricultural soil, and eventually silt and pollute River Ib — the lifeline for Karamdihi, Jagatgarh, Phaguapara, and Sundargarh Town.
4. Any fly ash dumped on the mountain top will immediately flow down through the natural streams originating from the site, passing through multiple water bodies in Chatasargi, Mahar Para, and Dumerbahal villages. These water bodies are used for bathing, irrigation, and fishery. These streams further connect to the Didga-Teljora Nala and eventually drain into River Ib.
5. Since the proposed site is on a mountain top, fly ash particles dumped or transported uphill will be easily carried by wind to surrounding villages, forests, farmlands, and water bodies. This will cause severe air pollution, leading to respiratory illnesses, reduced visibility, damage to crops, and deposition of toxic particles across the entire foothill region.

6. The proposed fly ash dumping poses a grave danger to the livelihood of the local communities. The villagers rely fully on agriculture, forest resources, livestock rearing, and natural water bodies for their daily sustenance. Any contamination from fly ash will degrade farmlands, poison water sources, reduce agricultural productivity, harm fish and cattle, and cause irreversible damage to the livelihood systems of the tribal and rural families.
7. The water-filled quarry has substantially increased the groundwater level in the surrounding villages. As a result, even during the peak summer season, the ponds and handpumps in nearby villages continue to retain water. This quarry functions as a vital natural recharge source. Any dumping of fly ash into it will destroy this recharge system, leading to severe scarcity of drinking water and contamination of ponds used by villagers and livestock for drinking and bathing during summer.
8. Nearly 80% of the population in the affected villages belong to Scheduled Tribes, and the area falls under a Scheduled Area, requiring Gram Sabha consultation and safeguarding of their land, forest, and livelihood.
9. Villagers fear large-scale destruction of the mountain, its ecosystem, flora, fauna, medicinal plants, fertile agricultural lands, and water sources on both the hilltop and foothills. All farmlands lie directly beneath the proposed dumping site, and agriculture is the main livelihood.
10. The quarry is filled to the brim with water and is on the verge of spilling over. Dumping fly ash will cause slurry overflow, contamination of farmlands, destruction of habitats, and poisoning of water sources.
11. There is no motorable road for the transport of fly ash to the mountain top. Heavy vehicles will be forced to pass through villages, causing dust pollution, road damage, and major safety hazards.
12. The water-filled quarry on the mountain top is like a ticking time bomb. Any fly ash dumping or additional pressure from heavy rain or natural calamities may cause the quarry wall to give way, leading to loss of human lives, destruction of fertile lands, and devastation of habitats below the mountain.

Prayer

1. We, the villagers, therefore humbly urge your good self to quash the proposed plan to dump fly ash in the non-functional stone quarry located on the Peruabhadl mountain hilltop, which falls within a reserve forest area, and instead consider developing the site for irrigation purposes in the larger public interest of the residents of Chatasargi Gram Panchayat, Peruabhadl village under Domkuda Panchayat, and parts of Deogaon Panchayat.
2. We also strongly demand that a Gram Sabha be convened before any further decision is taken on this matter.

Yours faithfully,

The residents of Chatasargi, Teljora, Dumerbahal, Peruabhadl, Domkuda & Dldga.

Jyoti S. Ganu
Prasad Bahala
Cyodam Bahala
A. M. Khemraj. Minz

Sufister Tisney

Tiwaz NUSUD

Poemas Lakna

SOMM KUZUK

Baris dangdang

Suchita Lakna

Rathi Lakna

Sudip Barua

manil Toppo

Bisita Lakna

Animes P Toppo

Valera Toppo

Placius Toppo

Nuas Lakna

BYIDHICH KESIC

Roshma Kujal

Jagadek Ekka

Jasinda Ekka

Helena Ekka

Rita Ekka

Anita Kujal

Sufit Lakna

Ladha Kartoffa

Rakirun Tete

Rania Tete

Akshay Gopang

Ashin Ekka

Prinay Ekka

Nabin Ekka

Deepak Tete

**BEFORE THE NATIONAL GREEN TRIBUNAL, PRINCIPAL
BENCH, NEW DELHI**
ORIGINAL APPLICATION NO. _____ OF 2026

IN THE MATTER OF:

GULSHAN KUMAR BARUA

... APPLICANT

VERSUS

STATE OF ODISHA & ORS.

...RESPONDENTS

VAKALATNAMA

I, Gulshan Kumar Barua, son of Raidhar Barua, age 54 years, resident of Sudega, Sundergarh, Odisha – 770014, the Applicant hereinabove do hereby appoint and retain:

ARYA TRIPATHY, NAVNEET DADHICHI, AMISHA CHAUHAN and
MOHIT SINGH SIKARWAR

Advocates

H-508, Dion Riverfront Apartment, Trishulia, Cuttack, Odisha - 754005


Email: aryatrip17@gmail.com

Ph: 9654899419

to appear for me/us in the above Original Application and to conduct and prosecute or defend the same and all proceedings that may be taken in respect of any application for execution of any decree or order passed therein. I/We empower our Advocates to appear in all miscellaneous proceedings in the above Original Application or matter till all decrees or orders are fully satisfied or adjusted and, in all applications, related thereto including execution and review, till they are finally disposed of in this Commission and to obtain the return of documents and draw monies that might be payable to me/us in the said Original Application or the matter. They are also authorized to depute other Counsel to act on their behalf.

Dated 1 day of march 2026.

Accepted:


Gulshan Kumar Barua
(Applicant)