FINAL RULES

MoEFCC issues the ash utilization notification for coal and lignite based thermal power plants

S.O. 5481(E) requires coal and lignite based thermal power plants to use all their ash, sets legacy ash targets and fixes environmental compensation.

S.O. 5481(E), A NOTIFICATION OF the Ministry of Environment, Forest and Climate Change dated December 31, 2021, sets the rules for using ash from coal or lignite based thermal power plants. It supersedes S.O. 763(E) of September 14, 1999, which restricted the excavation of top soil for manufacturing bricks and promoted the use of fly ash within three hundred kilometers of these plants. It completes the draft G.S.R. 285(E) of April 22, 2021, whose objections and suggestions it records were duly considered, and it came into force on the date of its publication.

THE CHANGE

Replaces S.O. 763(E) of September 14, 1999 with a framework for using all the fly ash and bottom ash that coal or lignite based thermal power plants generate: yearly and three-year utilization targets, a ten-year schedule for legacy ash, duties on construction agencies, mines and building projects near the plants, and environmental compensation for shortfalls.

KEY FACTS

TYPE

Final rules

S.O. NUMBER

S.O. 5481(E)

DATED

December 31, 2021

APPLIES FROM

On the date of the publication of this notification (the paragraph beginning “Now, therefore”). The Gazette is dated December 31, 2021; the e-Gazette lists it as published on January 1, 2022. The utilization targets in sub-paragraphs (4) and (5) of paragraph A apply from April 1, 2022 (the Note to paragraph A(5)).

REFERENCES

S.O. 5481(E)

CG-DL-E-01012022-232336

MoEFCC issues the ash utilization notification for coal and lignite based thermal power plants

S.O. 5481(E) · December 31, 2021

S.O. 5481(E), a notification of the Ministry of Environment, Forest and Climate Change dated December 31, 2021, sets the rules for using ash from coal or lignite based thermal power plants. It supersedes S.O. 763(E) of September 14, 1999, which restricted the excavation of top soil for manufacturing bricks and promoted the use of fly ash within three hundred kilometers of these plants. It completes the draft G.S.R. 285(E) of April 22, 2021, whose objections and suggestions it records were duly considered, and it came into force on the date of its publication.

Every coal or lignite based thermal power plant, including captive or co-generating stations, is primarily responsible for using 100 percent of the ash (fly ash and bottom ash) it generates, only for the eco-friendly purposes the notification lists. Each year it must use all the ash generated that year, never less than 80 percent, and average 100 percent over a three-year cycle; the first cycle is four years for plants whose utilization in 2021-2022 was 60-80 percent and five years for those below 60 percent, and for them the 80 percent floor does not apply in the first year and the first two years of that cycle respectively. Legacy ash stored before the notification must be used up within ten years, at least 20, 35 and 50 percent of annual ash in the first, second and third to tenth years. These targets apply from April 1, 2022.

Agencies building roads, embankments, shoreline protection structures and dams within 300 kms of a plant must use ash delivered free of cost; mines within three hundred kilometers by road must mix at least 25 percent of ash by weight into overburden dumps and backfilling once a plant serves a notice; and building construction projects within that radius must use ash based products priced no higher than alternative products. Environmental compensation is Rs. 1000 per ton of unutilized ash for plants, including legacy ash, and Rs. 1500 per ton for transporters who mis-deliver ash and for user agencies that fall short, or Rs. 75 per square foot of built up area for building construction.

CPCB and the State Pollution Control Boards or Pollution Control Committees enforce and monitor the notification, the concerned District Magistrate has concurrent jurisdiction, and CPCB was to develop a portal within six months. Plants upload monthly ash data by the 5th of the next month and submit an annual implementation report by April 30, and compliance audit reports are due by November 30 every year. Paragraph A(10) says the statutory obligation of 100 percent utilization of ash shall be treated as a change in law, wherever applicable.

The notification (F. No. HSM-9/1/2019-HSM) appears in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), No. 5075, dated December 31, 2021; the e-Gazette put it online on January 1, 2022.

S.O. number	S.O. 5481(E)
Dated	December 31, 2021
Put online	January 1, 2022
Gazette ID	CG-DL-E-01012022-232336
Rule	Other waste rules
Type	Final rules
Supersedes	notification S.O. 763(E) of September 14, 1999
Products	Fly ash, Bottom ash, Ash based products
What it does	Replaces S.O. 763(E) of September 14, 1999 with a framework for using all the fly ash and bottom ash that coal or lignite based thermal power plants generate: yearly and three-year utilization targets, a ten-year schedule for legacy ash, duties on construction agencies, mines and building projects near the plants, and environmental compensation for shortfalls.
Applies from	On the date of the publication of this notification (the paragraph beginning “Now, therefore”). The Gazette is dated December 31, 2021; the e-Gazette lists it as published on January 1, 2022. The utilization targets in sub-paragraphs (4) and (5) of paragraph A apply from April 1, 2022 (the Note to paragraph A(5)).
Completes the draft	G.S.R. 285(E) of April 22, 2021; objections and suggestions received were considered
Conditions	• Every coal or lignite based thermal power plant (including captive or co-generating stations or both) is primarily responsible for 100 percent utilization of the ash it generates, and only for the eco-friendly purposes listed in paragraph A(2), from fly ash based products and cement manufacturing to filling of mine voids, agriculture and export of ash (paragraph A(1) and (2)). • Each year a plant must use 100 percent of the ash generated that year, never less than 80 percent (a floor that does not apply in the first year, or the first two years, of the first compliance cycle for plants in the 60-80 percent and below 60 percent categories), and achieve an average of 100 percent over a three-year cycle; 20 percent of the ash generated in the final year of a cycle may be carried forward to the next (paragraph A(4)). • Plants must install dedicated silos for storage of dry fly ash for at least sixteen hours of ash, and provide real time data on daily basis

	of ash availability through CPCB's web portal or mobile phone App (paragraph A(8) and (9)). • Government, semi-government and private agencies building roads, road and flyover embankments, shoreline protection structures in coastal districts and dams within 300 kms of a plant must use ash in these activities, provided it is delivered at the project site free of cost with transportation paid by the plant (paragraph B(1)). • Mines within three hundred kilometers (by road) of a plant must mix at least 25 percent of ash on weight to weight basis in external overburden dumps, backfilling or stowing, under Extended Producer Responsibility (EPR), once the plant serves a notice on the mine owner (paragraph B(3)). • Building construction projects within a radius of three hundred kilometers must 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 (paragraph B(8)). • Plants upload monthly ash generation and utilization data by the 5th of the next month and submit an annual implementation report by April 30; compliance audit reports are due by November 30 every year (paragraph E(2) and (5)).
Applies to	Coal and lignite based thermal power plants, including captive and co-generating stations; construction agencies, mines and building construction projects within three hundred kilometers of them; transporters and user agencies of ash.
Issued 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
Signed by	NARESH PAL GANGWAR, Jt. Secy.

The notification, entry by entry

Entry	Text
Paragraph A(4): utilization in 2021-2022 above 80 percent	First compliance cycle to meet 100 per cent utilisation: 3 years. Second compliance cycle onwards: 3 years
Paragraph A(4): utilization in 2021-2022 of 60 to 80 percent	First compliance cycle to meet 100 per cent utilisation: 4 years. Second compliance cycle onwards: 3 years
Paragraph A(4): utilization in 2021-2022 below 60 percent	First compliance cycle to meet 100 per cent utilisation: 5 years. Second compliance cycle onwards: 3 years

Paragraph A(5): legacy ash, 1st year from date of publication	At least 20 per cent (of annual ash)
Paragraph A(5): legacy ash, 2nd year	At least 35 per cent (of annual ash)
Paragraph A(5): legacy ash, 3rd to 10th year	At least 50 per cent (of annual ash)
Paragraph C(1): thermal power plants	Environmental compensation of Rs. 1000 per ton on unutilised ash
Paragraph C(3): legacy ash	Environmental compensation of Rs. 1000 per ton of unutilised legacy ash
Paragraph C(4): transporters or vehicle owners	Environmental compensation of Rs. 1500 per ton on such quantity as mis-delivered to unauthorised users or non- delivered to authorised users
Paragraph C(6): user agencies	Rs. 1500 per ton of ash for the quantity they fall short off; on building constructions, Rs.75/- per square feet of built up area of construction

The notification (PDF, 1.4 MB)

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