

Guidelines for use of fly ash, bottom ash or pond ash in the manufacture of bricks and other construction activities for utilization of ash by the Thermal Power Plants.

Recently, one complaint was received from the Pawas Golap Dashcroshi Janhit Samiti contending that M/s.Finolex Industries Ltd., Ratnagiri had disposed off fly ash into the pit at 61/5, Mouje Pacheri Agar, Taluka : Guhagar, Dist: Ratnagiri through Jumbo Plastic Bags containing 100 metric ton fly ash. The Sub-Regional Officer, MPCB, Ratnagiri had collected samples from the nallas, water supply to the Pacheri Agar well, stream water of Ramenewadi. The Sub-Regional Officer, MPCB, Ratnagiri had no alternative than to file FIR at Ratnagiri Police Station on account of serious complaints of the said organization.

The Board had directions u/s 33A of the Water (Prevention & Control of Pollution) Act, 1974 and u/s 31A of the Air (Prevention & Control of Pollution) Act, 1981 to M/s.Finolex Industries Ltd., Ranpar Gholap, Dist: Ratnagiri vide letter dtd.14/09/2010, directing it to immediately discontinue the disposal of fly ash for dumping outside the factory premises in the quarry and to comply with the consent conditions as well as arrange for covering of the dumped fly ash (non-hazardous solid waste) by putting top soil layer / overburden dump on it as per the prevailing scientific practice within stipulated time and to obtain necessary amendment to the Environment Clearance to dispose off fly ash for mine filling purpose, if it so desires.

Thereafter, M/s.Finolex Industries Ltd. by its reply dtd.30/08/2010 specifically given details in respect of the utilization of the fly ash generated from their activity, stating that their fly ash is "Non-Hazardous Solid Waste" as per the Fly Ash Utilization Notification dtd.14/09/1999 as amended from time to time. It has submitted a copy of the agreement with M/s.Ganraj Road Lines allowing them to make available fly ash generated from their activity for further utilization by way of backfilling in the abandoned mines at the Survey No.61, Hissa No.5 at Village: Pacheri Agar, Tal: Guhagar, Dist: Ratnagiri. It has also submitted the details of the manufacturers, whom fly ash supplied, as per their requisition. M/s.Finolex Industries Ltd. referred to the provisions contained in the Fly Ash Utilization Notification, allowing it to use their fly ash for backfilling in the abandoned mines or pitheads or for any other use and they have not violated any conditions of consent to operate and also not caused any injury to the environment, with a request to withdraw the proposed directions issued to them.

The analysis results in respect of waste samples dumped in the stone mine pit at Survey No.61/5, At Pacheri Agar, Tal: Guhagar, Dist: Ratnagiri collected on 24/08/2010, done by the Maharashtra Pollution Control Board's Regional Laboratory at Chiplun for various parameters show below detectable limits. Therefore, M/s.Finolex Industries Ltd. by its letter dtd.22/11/2010 requested to the Secretary, Environment Department, Govt.of Maharashtra to give wide publicity to the utility value of fly-ash generated in the Power Plants for effective utilization and recycling of resources.

The Ministry of Environment and Forests, Govt. of India has issued directions in the exercise of the powers conferred by Sub-Section 1(1) read with Clause(V) of Sub-Section (2) of Section-3 and Section-5 of the Environment (Protection) Act, 1986 in pursuance of the orders passed by the Hon'ble High Court of Judicature at Delhi in the CWP No.2145/1999 filed by the Centre for Public Interest Litigation, Delhi v/s Union of India dtd.25/8/1999 to the effect that the Central Government to publish the final Notification in respect of fly ash utilization on or before 26th October, 1999. The Central Government therefore issued Notification bearing S.O.763 (E), dtd.14/09/1999, imposing restriction on the manufacturer of clay bricks or tiles or blocks for use in construction activities without mixing atleast 25% of ash (fly ash, bottom ash or pond ash) with soil on weight to weight basis within radius of 50 Kms. from coal or lignite based Thermal Power Plants.

The Ministry of Environment and Forests, Govt. of India has made the Amendments to the said Notification vide S.O. 979(E), dtd.27/10/2003, further imposing restriction on the construction activity within a radius of 50 to 100 kms. from a coal or lignite based Thermal Power Plant to 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 minimum percentage (by volume) of the total bricks, blocks and tiles as mentioned in the said Amendment.

The Central Government has further made amendment to the said Notification vide S.O.2804(E), dtd.3/11/2009, prescribing the percentage of fly ash utilization by weight in the building material or products and prescribing the target of fly ash utilization for all coal and, or lignite based Thermal Power Stations and, or, expansion units in operation before the date of the said amendment to achieve 100% fly ash utilization within 5 years from the date of issue of the said Notification dtd.3/11/2009. The target date for achieving 100% utilization of fly ash generated from new coal and, or lignite based Thermal Power Stations and, or expansion units commissioned after the date of the said amendment dtd.3/11/2009 shall be within 4 years from the date of commissioning thereof.

As per the Amendment to the Fly Ash Utilization Notification dtd.3/11/2009, it is obligatory on the part of every construction agency including all the construction agencies of Central or State or Local Government and Private or Public Sector within a radius of 100 kms. from a coal or lignite based Thermal Power Plant to use 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 Blocks or similar products or a combination or aggregate of them in every construction project, 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.

The following are the mandatory provisions of the said Notification dtd.14/09/1999, as amended from time to time for utilization of fly ash generated from the lignite or coal based Thermal Power Plants.

1. Every construction of building activity within a radius of 50 to 100 kms. 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 a aggregate of them, 100% by 31/8/2007 and in case of the construction of building activity within a radius of 50 kms., 100% utilization by 31/08/2005.

2. The percentage of fly ash utilization by weight in the building material or products and prescribing the target of fly ash utilization for all coal and, or lignite based Thermal Power Stations and, or, expansion units in operation before the date of the said amendment to achieve 100% fly ash utilization within 5 years from the date of issue of the said Notification dtd.3/11/2009. The target date for achieving 100% utilization of fly ash generated from new coal and, or lignite based Thermal Power Stations and, or expansion units commissioned after the date of the said amendment dtd.3/11/2009 shall be within 4 years from the date of commissioning thereof.
3. No agency, person or organization shall within a radius of 100 kms. 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 and such reclamation and compaction is done in accordance with the Bye-Laws, Regulations and Specifications laid down for the same.
4. The Thermal Power Plants have to ensure availability of fair quantity of ash to each user including brick kilns.

Therefore, as per the Amendment to the Fly Ash Utilization Notification dtd.14/09/1999 on 3/11/2009, it is obligatory on the part of all the coal or lignite based Thermal Power Plants to utilize the ash generated in their Power Plants as per the above mandatory provisions, ensuring that 100% fly ash generation percentage utilization is achieved within the stipulated time mentioned in the Table-II and Table-III reproduced hereunder :

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

Sr. No.	Percentage Utilization of Fly Ash	Target Date
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 unutilized 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.

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

Sr. No.	Fly ash Utilization Level	Target Date
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 unutilized 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.
