

DRAFT

FLY ASH

AMENDMENT NOTIFICATION

ISSUED BY MoEF

1. USE OF FA, BA, PA IN MANUFACTURE OF BRICKS AND OTHER CONSTRUCTION ACTIVITIES

Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(1)	No person shall within a radius of 100 Km of coal/lignite based TPP, manufacture clay bricks or tiles or blocks without mixing at least 25% of ash with soil on wt. to wt. basis	Deleted
(1A)	Mandatory use of 100% FA bricks, blocks, tiles, clay FA bricks, cement FA bricks / blocks or similar products by every construction agency engaged in construction of buildings within 100 Km of coal/lignite based TPP	Same
(1B)	Applicable to all construction agencies such as Housing Boards and those in the private sector builders of apartments, hotels, resorts, cottages and the like. Compliance report to submit to State Govt./Union Territory admin.	Applicable to all construction agencies of Central / State / Local Govt. and private / public sector. Annual returns to submit to State Pollution Control Board / Pollution Control Committee

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Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(1C)	Nil	<p>Minimum FA content for building materials to qualify as “FA based products” :</p> <ul style="list-style-type: none">– 50% of total raw material for FA bricks, blocks, tiles etc.– Use of PPC or 20% of OPC content for paving blocks /tiles, checker/mosaic tiles etc. where cement is used as binder– 20% of total raw material for cement– 25% of total raw materials for clay bricks /blocks/tiles etc.– Use of PPC or 20% of total raw materials for concrete, mortar, plaster

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Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(2)	The authority for ensuring the use of specified quantity of ash as per sub-para (1) shall be the concerned Regional Officer of State PCB or the Pollution Control committee, as the case may be.	Same
(2A)	The concerned State Govt. shall be the enforcing and monitoring authority for ensuring compliance of the provisions of sub-para (1A) and (1B)	Same

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Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(3)	In case of non-availability of ash from TPP in sufficient quantities as certified by said TPP, the stipulation under sub-para (1) shall be suitably modified by concerned State Govt. / Union Territory Govt.	Same
(3A)	A decision on application for manufacture of fly ash bricks, blocks and tiles and similar other FA based products shall be taken within 30 days from date of receipt of application by competent authority	A decision on application for manufacture of fly ash bricks, blocks and tiles and similar other FA based products shall be taken within 30 days from date of receipt of application by concerned State PCB / Pollution Control Committee

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Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(3B)	In case of non-compliance of the provisions, the CA, in addition of cancellation of consent order issued to establish brick-kiln, shall move the district admin. For cancellation of mining lease	Deleted
(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 mfg. unit within a radius of 100 Km of TPP in cases where the manufacturers does not mix a minimum of 25% by weight of FA	Deleted
(3D)	It shall be sufficient compliance of the notification within 12 months from date of issue of the notification	Deleted

1.

USE OF FLY ASH IN ROAD CONSTRUCTION

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Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(4)	Each TPP shall constitute a dispute settlement committee which shall include the GM of TPP and a Rep. of All India Brick & Tile Manufacturers Federation or a rep. of local brick kiln owners association, Fed., group	Same
(5)	No agency, person or organization shall, within a radius of 100 Km of a TPP, undertake construction or approve design for construction of roads or flyover embankments in contravention of the guidelines / specs. issued by IRC as contained in IRC spec 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 Engr (Design) or Engr-in-chief of the concerned agency or organization or on production of a certificate of PA not available from TPP located within 100 Km of site of construction. This certificate shall be provided by TPP within 2 working days from date of making a request for ash	Same

1. USE OF FLY ASH IN ROAD CONSTR AND LOW LAND FILLING

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Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(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	Same
(7)	No agency, person or organization shall within a radius of 100 Km of TPP 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 specs laid down by authorities mentioned sub-para (3) of para 3.	Same

1. USE OF FLY ASH IN MINE FILLING

Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(8)(i)	Nil	<p>No person or agency shall within fifty kilometers (by road) from TPP, undertake or approve (a) stowing of mine without using at least 25% of fly ash on weight to weight basis, of the total materials used for stowing of mine, subject to the approval of Director General of Mines Safety (DGMS)/ Central Mine Planning and Design Institute Limited (CMPDIL).</p> <p>Provided that such TPP shall facilitate availability of required quality & quantity of fly ash as may be decided by the expert committee for this purpose.</p>

1. USE OF FLY ASH IN MINE FILLING

Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(8)(ii)	Nil	<p>No person or agency shall within fifty kilometers (by road) from TPP, undertake or approve without using at least 20% 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 under the Guidance of Director General of Mines Safety (DGMS)/ Central Mine Planning and Design Institute Limited (CMPDIL).</p> <p>Provided that such TPP shall facilitate availability of required quality & quantity of fly ash as may be decided by the expert committee for this purpose</p>

1. USE OF FLY ASH IN ROAD CONSTRUCTION

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Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(9)	Nil	The provisions of sub para (8) shall be applicable to all mine agencies under Government, Public and Private Sector and to mines of all minerals or metals or items. It shall be the responsibility of agencies either undertaking or approving the backfilling/ stowing of mine or both to ensure compliance of sub-para (8) and to submit annual returns to the concerned State Pollution Control Board/ Pollution Control Committee and IBM as applicable.
(10)	Nil	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, DGMS, CMPDIL, Ministry of Environment and Forests, Ministry of Power, Ministry of Mines, Central Institute of Mining and Fuel Research (CIMFR). The committee shall also guide and advice the back filling/ stowing in accordance with the provisions contained in sub-para (8) & (9) above and specifications and guidelines laid down by the concerned authorities as mentioned in sub-para(1) of para3.
(11)	Nil	The concerned State Government or Union Territory Govt. shall be the enforcing and monitoring authority for ensuring compliance of the provisions of sub-para(8) and (9).

2.

Responsibilities of Thermal Power Plants

Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(1)	<p>Every TPP shall make available ash, for at least ten years from the date of publication of this notification, without any payment of any other consideration, for the purpose of manufacturing ash- based products such as cement, concrete blocks, bricks or a combination thereof, of roads, embankments, dams, dykes or for any other construction activity. The thermal power plants have to ensure availability of fair quantity of ash to each user including brick kilns</p>	<p>All Coal/ lignite based TPP would be free to sell fly ash to the user agencies subject to the following conditions:</p> <ul style="list-style-type: none"> (i) The pond ash and mound ash should be made available free of any charge on “as is where is basis” to manufactures of bricks/ blocks/ tiles including clay fly ash product manufacturing unit(s), farmers, Central and State road construction agencies, Public Works Department and to agencies engaged in backfilling/stowing of mines. (ii) At least 20% of dry ESP fly ash shall be made available free of charge to units manufacturing fly ash/ clay-fly ash bricks, blocks & tiles on a priority basis over other users. <p>The fly ash obtained from the thermal power station should be utilized only for the purpose for which it was obtained from the thermal power station/ plant failing which no fly ash shall be made available to the users.</p>

Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(2)	<p>Every TPP commissioned subject to environmental clearance conditions stipulating the submission of an action plan for full utilization 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 percent of the fly ash utilization, within three years from the publication of this notification with further increases in utilization by at least ten per cent points every year progressively for the next six years to enable utilization 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.</p>	<p>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:</p> <p>At least 50% - within 1 year At least 65% - within 2 years At least 85% - within 3 years 100% - 4 years from date of issue of notification</p> <p>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. The balance unutilized fly ash accumulated during first four years (the difference between the generation & the utilization target) shall be utilized progressively over next five years in addition to 100% utilization of current generation of fly ash</p>

Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(3)	<p>Every coal or lignite based TPP not covered by para (2) above shall, providing for twenty per cent of fly ash utilization within five years from the date of publication of this notification, with further increase in utilization every year progressively for the next 15 years to enable utilization of the entire fly ash generated in the power plant. Progress in this regard shall be reviewed after 5 years.</p>	<p>New coal and/or lignite based TPP and/or expansion units commissioned after this notification to achieve the target of fly ash utilization as per table:</p> <p>At least 50% - within 1 year At least 75% - within 2 years 100% - 3 years from date of commissioning</p> <p>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. The unutilized fly ash accumulated during first three years (the difference between the generation and utilization target) shall be utilized progressively over next five years (i.e. from 4th to 8th year) in addition to 100% utilization of current generation of fly ash”.</p>

Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(4)	All action plans prepared by TPPs 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 MoEF within a period of six months from the date of publication of this notification.	All action plans prepared by TPPs 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 MoEF within a period of four months from the date of publication of this notification.
(5)	The Central and State Government Agencies, the SEBs, the NTPC 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.	Same

Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(6)	Nil	<p>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 facilitating and promoting 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. 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 utilization level is again achieved and maintained.</p>

Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(7)	Nil	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 next 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, 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 owing more than one thermal power plant.

3. Specifications for use of fly ash-based products

Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(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, 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.	Manufacture of fly ash-based products such as cement, concrete blocks, bricks, panels or any other material or the use of fly ash in construction activity such as in road laying, embankments or use as landfill to reclaim low lying areas, back filling or stowing of mines or for any other use shall be carried out in accordance with specifications and guidelines laid down by the concerned competent authority

3. Specifications for use of fly ash-based products

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Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(2)	<p>The Central Public Works Dept, PWD in the State/Union Territory Governments, Development Authorities, Housing Boards, NHAI 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</p>	<p>The Central Public Works Department, Public Works Department in the State/ Union Territory Governments, Development Authorities, Housing Boards, National Highway Authority of India and other construction agencies including those in the private and public sector shall also 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 with immediate effects</p>
(2A)	<p>All agencies including the CPWD and State Govt. 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</p>	<p>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 immediately</p>

3. Specifications for use of fly ash-based products

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Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(2B)	<p>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-</p> <p>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</p> <p>b. make necessary specifications/ guidelines for road of fly over embankments that are not covered by the specifications laid down by the Indian Road Congress (IRC).</p>	<p>All agencies undertaking construction of roads or fly over bridges and reclamation & 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, with immediate effect -</p> <p>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 (7) of paragraph 1; and</p> <p>b. make necessary specifications/ guidelines for road of fly over embankments that are not covered by the specifications laid down by the Indian Road Congress (IRC).</p>

3. Specifications for use of fly ash-based products

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Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
(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 notifications.	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 other usage with immediate effect

OTHER POINTS

Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
4.	Nil	The Central Electricity Authority and other approving agencies may permit the land area for emergency ash pond in multiple lagoons for wet ash handling system up to 40 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/ lignite to be used.
5.	Nil	All Financial institutions which found construction activities shall include a clause in their loan agreement for compliance of the provisions of this notification.
6.	Nil	<p>A Monitoring committee shall be constituted by the Central Govt with members from following organization to monitor the implementation of the provisions of the notification and submit its recommendations/ observations every six months to Secretary, MoEF:</p> <p>Ministry of Coal, CPCB, CEA, Head Fly Ash Unit of Department of Science and Technology and Building Material Technology Promotion Council. Concerned Advisor/ Joint Secretary in the MoEF will be the convener of this committee</p>

OTHER POINTS

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Clause No.	Present Policy dtd. 14.09.99 & 27.08.03	Draft Amendment dtd. June 2008
7.	Nil	<p>For the purpose of monitoring the implementation of the provisions of the notification the State Governments / 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. This committee would deal with any unresolved issue by dispute settlement committee as prescribed in para 1(4), in addition to monitoring & facilitating implementation of this notification at the respective State Government/ Union Territory level. This committee would also be empowered to suitably modify (waive/ 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 plant. The Committee will meet at least once in every quarter.</p>

