NATIONAL CAPITAL REGION PLANNING BOARD
1ST Floor Core –IV B
Indian Habitat Centre
Lodhi Road, New Delhi- 110 003
Ministry of Urban Development
Phone: 24642284, 24642287, Fax: 24642163

No. K-14011/12/Envr/2002-NCRPB Vol. II Dated: 16-08-2007

Sub:- Notifications on usage of 'Fly ash' Ministry of Environment & Forests (MoEF)

This is in reference to decision taken by the National Capital Region Planning Board in its 29th meeting held on 24.5.2006 for constitution of a High Powered Group (HPG) for developing common approaches to problems of Water, Resource Management, Power, and Transportation & Pollution amongst the constituents of the NCR.

2. A meeting of the High Powered Group was held on 15.3.2007 where various agendas on different aspects were discussed. In the meeting a decision was taken to obtain the relevant circular of Ministry of Environment & Forests related to fly ash and request all the constituents of NCR with for strict observance of the circular.
3. Copy of the Ministry of Environment & Forests notification dared 14.9.1999 and subsequent draft notification dated 3.4.2007 as downloaded from the official website of MOEF are enclosed with a request to follow up and adherence of the notifications in respective Sub-regions as well as Counter magnet Areas of NCR.

Yours faithfully,

J.N. Daman,
Joint Director.

Encls: As mentioned above.

To:

1. Shri K.S. Mehra, Principal secretary, PWD, B Wing, Delhi Secretariat Players Building, Naya Sachivalaya, I.T.O., Delhi.
2. Shri Parvinder Singh, Principal Secretary, (Urban Governance), Department of Urban Development, Govt. Of Rajasthan, Rajashthan. Secretariat, Jaipur, Rajasthan.
3. Shri D.S. Dhesi, Commissioner & Secretary, Urban department, Govt of Haryana, Naya Sachivalaya, Room No.611, 6th Floor, Chandigarh.
4. Shri Mohinder Singh, Principal Secretary, Housing, Govt of Uttar Pardesh, Sacchivalaya, Lucknow(U.P.)
5. Shri Arun Goel, Secretary, Deptt of Housing, Govt. of Punjab Secretariat, Sector-9, Chandigarh.
6. Dr. Devraj Birdi, Principal Secretary, Department of Housing & Environment, Govt. of Madhya Pradesh, Vallabh Bhawan, Bhopal- 462 004.

THE GAZETTE OF INDIA
EXTRAORDINARY
PART II –Section 3 SUB-SECTION (ii)
MINISTRY OF ENVIORNMENT AND FORESTS

NOTIFICATION

New Delhi, the 14th September, 1999

S.0.763(E)- Whereas a draft notification containing certain directions was published, as required by subrule (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.

Where as 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 with in 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 at least 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 Manufactures 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 atleast 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 atleast 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 atleast 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 utilization 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 utilization within three years from the date of publication of this notification with further increase in utilization 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/Committee and 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.

4. 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 Material 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 3rd April, 2007

S.O. 513(E) – The following draft of a notification which the Central Government proposes to issue, in supersession of the existing notification number S.O. 763 (E) dated the 14th September, 1999 of the Government of India, in the Ministry of Environment and Forests relating to restrictions on the excavation of top soil for manufacture of bricks and promoting the utilization of fly ash in the manufacture of building materials and in construction activity is hereby published, as required under sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 for the information of all persons likely to be affected thereby and notice is hereby given that the said draft notification will be taken into consideration by the Central Government on or after the expiry of sixty days from the date on which copies of the Gazette containing this notification are made available to the public.

Any person interested in filing any objection(s) or suggestion(s) on the proposed draft notification may do so in writing to the Secretary, Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, Lodi Road, New Delhi – 110 003, within the said period of sixty days.

DRAFT NOTIFICATION

Whereas, It is necessary to protect the environment through conserving the top soil, and other non renewable resources used in the construction activities, through proper utilization of fly ash, bottom ash and pond ash, generated from coal and lignite based thermal power plants.
Whereas as per the notification S.O. 763(E) dated the 14.9.1999 the progress of the implementation of the provision of the said notification has been reviewed.
Whereas the review indicated while the renetation of ash increased from about 89 millions tones in 1999-2000 to about 112 million tones in 2005-2006 and the utilization increased from 13 million tones to 51 million tones.
Whereas every year about 65 to 75 million tones of ash continue to remain unutilized and dumped in ash ponds and the quantity of ash in ash ponds has increased from about 450 million tones in 1999-2000 to about 900 million tones in 2005-2006.
Whereas the land area under active ash ponds is about 16,000 hectares and needs to be put to gainful use.
Whereas the concerned Central and State Governments and their agencies have already laid down specifications for ash and ash based products.
Whereas the brick kiln owners have represented against compulsory mining of prescribed quantity of ash with clay on account of difficulties in meeting the cost of transportation
Where as the quantity of ash utilized by brick kiln in the past was limited to 0.7 million tones in 2004-2005 and 1.14 million tones in 2005-2006 and constitute only a small percentage of ash utilized
Whereas the plans for generation of power envisages setting up of large coal based thermal power plants which together with existing plants expected to generate about 150 to 170 million tones of ash per year by the end of the 11th Five Year Plan, which need to be properly utilized in order to avoid unnecessary extraction of top soil and other materials for construction activities.

Whereas the Central Government is of the opinion that in view of the increased ash generation, there is a need to accelerate the pace of utlisation of fly ash, bottom ash and pond ash
Now, therefore in exercise of the powers conferred by Sub-section (1) read with clause (v) of Subsection (2) of Section 3 and Section 5 of the Environment Protection Act, 1986 (29 of 1986) and in supersession of the Government of India in the Ministry of Environment and Forests number S.O. 763 (E) dated the 14th September, 1999 published in the Gazette of India, Part II. Section 3 Sub-section (ii) dated 14th September, 1999, except as respects things done or omitted to be done before such supersession, the Central Government hereby issues the following directions which shall come into force on and from the date of publication of the final notification namely.

1. Use of fly ash in construction activities:

(1) After twelve months from the date of publication of this notification, every person engaged in any activity involving building construction shall use building, materials composed wholly or partly of fly ash (hereafter, the term "fly ash" will refer to fly ash, bottom ash, and pond ash) instead of the corresponding materials made wholly of constructional materials such as clay, top soil, limestone, sand and such other material, wherever the former, on competitive tendering for delivery at the construction site, costs the same or less than the latter, and has not been found to be technically infeasible for the intended use.

Explanation 1: "Technically infeasible" is to be determined by one or more laboratories to be designated by the Director General, Council of Scientific and Industrial Research.

Explanation 2: "Building materials" in this context refers to bricks, tiles, cement, blocks, and similar products or a combination or aggregate of these.

(2) It shall be the responsibility of all persons and/or the agencies, either undertaking construction, or preparing, or approving the design to ensure compliance of the provisions of sub-paragraph (1).

(3) The authority for monitoring and enforcing the actual implementation of sub-paragraph (1) above in the construction shall be the concerned local body or development authorities or any other building plan approval or completion certification authority.

(4) All financial institutions, which fund construction activities, shall include a clause in their loan agreement requesting compliance with sub-paragraph (1) above.

(5) No person or agency engaged in road (including highways and fly overs) construction may use borrow material excavated from the "right of way" of the road for the construction of road embankments. All construction of road embankments will use fly ash, or municipal inerts, unless:

(a) the cost of the fly ash or municipal inerts delivered at the construction site is more than twenty-five per cent higher than the equivalent quantity of soil extracted from other than the "right of way" for embankment use, in which case such soil may be used for the road embankment or

(b) a designated technical authority of the Indian Roads Congress certifies that the use of fly ash or municipal inerts at the location for the intended purpose is technically infeasible.

(c) For the top and side covers, soil other than soil extracted from the 'right of way' may be used, notwithstanding (a) above.

(6) No person or agency shall undertake reclamation and compaction of low-lying areas with soil. Only pond ash shall be used for reclamation or compaction. They shall also ensure that such reclamation and compaction is done in accordance with the byelaws, regulations and specifications laid down by the authorities mentioned in sub-paragraph (3) above.

2**. Responsibilities of Thermal Power Plants. -**

Owners of Coal or lignite based thermal power plants (including captive and or cogeneration plants based on coal or lignite.)

(a) May dispose of fly ash through competitive bids to the best advantage of the owners.
Explanation: In case, the bids are all negative i.e., the bidders require payment to accept the fly ash for use in accordance with this notification, "best advantage" would mean least payment required bid by the bidders.

(b) Shall not at any time store more than three months ash generation in their storage and/or ash ponds. In case the quantity of fly ash already in storage and/or ash ponds on and from the date of this notification exceeds three months generation, the same shall be disposed of in accordance with sub-paragraph 1(1) above within a maximum period of five years from the date of issue of this notification.

(c) Shall maintain a record of all sale and/or disposal of the fly ash.

(d) Shall submit annual compliance report, including record of sale and/or disposal of the fly ash as stipulated in sub-paragraph (c) above by the thirtieth day of April every year to the concerned State Pollution Control Board or Committee.

3. Specifications for use of ash-based products/responsibility of other agencies:

(1) Manufacture of all ash-based products 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 as applicable.

(2) All Government agencies including the Central Public Works Department and State Government agencies concerned with construction activities shall make provisions for the use of fly ash based products or aggregates of them in the schedule of approved materials and rates.

(3) Central Electricity Authority while formulating norms for land requirement per Mega Watt of installed capacity of thermal power plants shall ensure that the area for ash storage be restricted to a maximum of three months ash generation.

(4) All agencies undertaking construction of roads or fly over bridges including Department of Road Transport and Highways, National Highways Authorities of India (NHAI), Central Public Works Department (CPWD), State Public Works Departments and other State Government Agencies shall make appropriate 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 (5) of paragraph 1.

(5) All local bodies or development 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.

F.No. 9-8-2005 HSMD
R. ANANDA KUMAR, ADVISOR