

**GOVERNMENT OF INDIA  
URBAN DEVELOPMENT AND POVERTY ALLEVIATION  
LOK SABHA**

UNSTARRED QUESTION NO:1896  
ANSWERED ON:04.03.2003  
USE OF FLY-ASH BRICKS/BLOCKS/TILES  
N.N. KRISHNADAS;VARKALA RADHAKRISHNAN;VILAS BABURAO MUTTEMWAR

**Will the Minister of URBAN DEVELOPMENT AND POVERTY ALLEVIATION be pleased to state:**

- (a) whether it is a fact that the Government propose to modify the existing rules so as to make it compulsory for all agencies engaged in the construction of buildings to use fly ash bricks or blocks or tiles;
- (b) if so, the existing rules about the use of fly ash in such activities;
- (c) whether the Government have finalised the revised rules for infrastructure development activities including construction, laying of roads and reclamation within a specified areas;
- (d) if so, the details thereof; and
- (e) the amendments made in the 1999 notification to this effect?

**Answer**

MINISTER OF STATE IN THE MINISTRY OF URBAN DEVELOPMENT & POVERTY ALLEVIATION ( SHRI PON RADHAKR )

(a)to(e): The Government of India, Ministry of Environment and Forest, issued a notification dated 14th September, 1999 envisaging use of fly-ash, bottom-ash or pond-ash in the manufacture of bricks and other construction activities, within a radius of 50 kms from coal or lignite based thermal power plants. A copy of the relevant notification dated 14.9.1999 is given at Annexure-I.

The Ministry of Environment and Forest have now published the draft notification dated 5th November, 2002 for amending their notification of 14.9.1999 referred to above. In this notification, it is proposed to substitute the words 50 kms by 100 kms.

The draft notification has been published inviting public objections and suggestions. A copy of this notification is enclosed at Annexure-II.

ANNEXURES REFERRED TO IN REPLY TO LOK SABHA UNSTARRED QUESTION NO. 1896 FOR 4.3.2003

ANNEXURE-I

MINISTRY OF ENVIRONMENT AND FORESTS

NOTIFICATION DATED 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 notifications 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 Manufacturer'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 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 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.

ANNEXURE-II

MINISTRY OF ENVIRONMENT AND FORESTS

NOTIFICATION DATED 5TH NOVEMBER, 2002

S.O.1164(E).- The following draft of a notification to amend the notification of the Government of India in the Ministry of Environment and Forests number S.O. 763 (E) dated the 14th September, 1999, relating to restriction of 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 within a specified radius of coal or lignite based thermal power plants which the Central Government proposes to issue, in exercise of the powers conferred by sub-section (1), read with clause

(v) of sub-section (2) of section 3 and clause (e) of sub-section (2) of section 6 of the environment (Protection) Act, 1986 (29 of 1986) 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 or suggestion on the proposed draft amendment may do so in writing to the Secretary, Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, Lodi Road, New Delhi-110003, within the said period of sixty days.

DRAFT 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:-

`(1 A) Every construction agency engaged in the construction of buildings within a radius of one hundred kilometers 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 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 March, 2003;

(ii) 50 per cent by 31st December, 2003;

(iii) 75 per cent by 31st December, 2004; and

(iv) 100 per cent by 31st December, 2005.

(1 B) The provisions of sub-paragraph (1 A) 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 (1 A) and to submit such returns and compliance reports to the State Government.`;

(c) in sub-paragraph (2), for the words, brackets and figure `as per para (1) above` the words, brackets and figure `as per sub-paragraph (1)` shall be substituted;

(d) after sub-paragraph (2), the following sub-paragraph shall be inserted, namely:-

`(2A) The concerned State Government shall be the enforcing and monitoring authority for ensuring compliance of the provisions of sub-paragraph (1A).`;

(e) 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;

(f) 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/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.

(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 due hearing. 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.

(3D) It shall be sufficient compliance of this notification if within twelve months from the 1st day of April, 2003, 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).

(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, and this soil borrow area shall be filled up with pond ash with proper compaction as required for structural fill. 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 of low-lying areas with any material other than pond ash. They shall also ensure that such reclamation 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, in sub-paragraph

(1), after the words `products such as cement, concrete blocks, bricks, panels` the words `or a combination thereof` shall be inserted.

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

`2A. Utilization of fly ash for reclamation of sea:-

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

5. In the said notification, after sub paragraph (2), paragraph 3, the following paragraphs shall be inserted, namely `(3) 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.....2002 (date of commencement of the amending notification will be filled in here at the appropriate time).-

(a) 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.

(4) All agencies undertaking construction of roads or fly over bridges including Ministry of Road Transport and Highways (MORTH), National Highway Authority of India (NHAI), Central Public Works Department (CPWD), State Public Works Departments and other

State Government Agencies, shall, within three months from the .....2002 (date of commencement of the amending notification will be filled in here at the appropriate time),-

(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).`

6. The existing sub paragraph (3) of paragraph 3 shall be renumbered as (5).

(F,No,16-2/95-HSMD) DR. V. RAJAGOPALAN, Joint. Secy.

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.