

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH  
NEW DELHI**

.....

**ORIGINAL APPLICATION NO. 10 (T<sub>HC</sub>) OF 2013**

**IN THE MATTER OF:**

Eshan Group of Industries  
Through its Chairman Raj Kumar Agrawal  
R/o M-31, MIDC, Jalgaon,  
Bhusawal Road,  
Jalgaon (MH).

.....Applicant

Versus

1. NEPA Limited  
Through its Chairman cum Managing Director  
NEPA Nagar, (MP).
2. Member Secretary  
Central Pollution Control Board  
Ministry of Environment & Forest,  
Govt. of India, Parivesh Bhawan,  
East Arjun Nagar,  
Delhi
3. Member Secretary  
Madhya Pradesh Pollution Control Board  
Paryavaran Parishar, E-5  
Arera Colony, Bhopal, (MP)
4. M.S.T.C. Ltd.  
Through Junior Manager (T)  
Western Region, 607,  
Raheja Centre  
Nariman Point, Mumbai

.....Respondents

**AND**

**ORIGINAL APPLICATION NO. 11 (T<sub>HC</sub>) Of 2013**

**IN THE MATTER OF:**

Chudaman Mohan Prajapati  
S/o Mohan Prajapati  
Occupation: Brick Manufacturer  
R/o Choti Kumhar Wadi,  
Jainabad,  
Burhanpur (MP).

.....Applicant

Versus

1. NEPA Limited  
Through its Chairman cum Managing Director  
NEPA Nagar,  
District Burhanpur (MP).
  2. Deputy General Manager  
(Commercial), NEPA Limited  
NEPA Nagar,  
District Burhanpur (MP).
  3. M.S.T.C. Ltd.  
Through Junior Manager (T)  
Western Region, 607,  
Raheja Centre  
Nariman Point, Mumbai
  4. Central Pollution Control Board  
Through its Member Secretary  
Ministry of Environment & Forest,  
Govt. of India, Parivesh Bhawan,  
East Arjun Nagar, Delhi
  5. Madhya Pradesh Pollution Control Board  
Through its Member Secretary  
Paryavaran Parishar, E-5  
Arera Colony, Bhopal, (MP)
- .....Respondents

**AND**

**ORIGINAL APPLICATION NO. 12 (T<sub>HC</sub>) Of 2013**

**IN THE MATTER OF:**

1. Ramdas Prajapati  
S/o Ukhardu Prajapati  
Occupation: Brick Manufacturer  
R/o Behind Bardiya Gin,  
Mahajnapeth, Burhanpur,  
District Burhanpur (MP).
2. Prakash Prajapati  
S/o Late Shri Nathlal  
Occupation: Brick Manufacturer  
R/o Village Jainabad,  
Tehsil and District Burhanpur (MP).
3. Anil Roopchand Kumbhar  
S/o Roopchand Kumbhar  
Occupation: Brick Manufacturer  
R/o Sindhipura,  
Tehsil and District Burhanpur (MP).
4. Vasanta Prajapati  
S/o Bisen Prajapati  
Occupation: Brick Manufacturer  
R/o Shikarpura,  
Tehsil and District Burhanpur (MP).

.....Applicants

Versus

1. Union of India  
Through the Secretary,  
The Ministry of Environment and Forest  
Paryavaran Bhawan, CGO Complex,  
New Delhi
2. NEPA Limited  
Through its Chairman cum Managing Director  
NEPA Nagar,  
District Burhanpur (MP).
3. Central Pollution Control Board  
Through its Member Secretary  
Ministry of Environment & Forest,  
Govt. of India, Parivesh Bhawan,  
East Arjun Nagar, Delhi
4. Madhya Pradesh Pollution Control Board  
Through its Member Secretary  
Paryavaran Parishar, E-5  
Arera Colony, Bhopal, (MP)

5. M.S.T.C. Ltd.  
Through Junior Manager (T)  
Western Region, 607,  
Raheja Centre  
Nariman Point, Mumbai

.....Respondents

**AND**

**ORIGINAL APPLICATION NO. 13 (T<sub>HC</sub>) Of 2013**

**IN THE MATTER OF:**

Prathvi Educational Welfare Society  
Kila Road Burhanpur  
Through Secretary, Wasim Khan  
R/o Karanj Bazar,  
Distt. Burhanpur (MP)

.....Applicant

Versus

1. NEPA Limited  
Through its Chairman cum Managing Director  
NEPA Nagar,  
District Burhanpur (MP).
2. Deputy General Manager  
(Commercial), NEPA Limited  
NEPA Nagar,  
District Burhanpur (MP).
3. M.S.T.C. Ltd.  
Through Junior Manager (T)  
Western Region, 607,  
Raheja Centre  
Nariman Point, Mumbai
4. Central Pollution Control Board  
Through its Member Secretary  
Ministry of Environment & Forest,  
Govt. of India, Parivesh Bhawan,  
East Arjun Nagar, Delhi
5. Madhya Pradesh Pollution Control Board  
Through its Member Secretary  
Paryavaran Parishar, E-5  
Arera Colony, Bhopal, (MP)

.....Respondents

**AND**

**ORIGINAL APPLICATION NO. 160 Of 2014**

**IN THE MATTER OF:**

NEPA Limited  
Through its Chairman cum Managing Director  
NEPA Nagar, (MP).

.....Applicant

Versus

1. Union of India  
Through the Secretary,  
The Ministry of Environment and Forest  
Paryavaran Bhawan, CGO Complex,  
Delhi – 110003
2. Ramdas Prajapati  
S/o Ukhardu Prajapati  
Occupation: Brick Manufacturer  
R/o Behind Bardiya Gin,  
Mahajnapeth, Burhanpur,  
District Burhanpur (MP).

.....Respondents

**COUNSEL FOR APPLICANT:**

Mr. Manoj Kumar Agrawal and Mrs. Anita Manoj, Advocates

**COUNSEL FOR RESPONDENTS:**

Mr. Sumeer Sodhi, Ms. Sadhna Pathak and Mr. Arjun Nanda,  
Advocates for Respondent No. 1  
Ms. Panchajanya Batra Singh, Advocate for Respondent No. 2  
Mr. Rajul Shrivastav, Advocate for Respondent No. 3  
Mr. Rajkumar, Advocate with Mr. S.L. Gundli, SLO, for CPCB

**JUDGMENT**

**PRESENT:**

**Hon'ble Mr. Justice Swatanter Kumar (Chairperson)**

**Hon'ble Mr. Justice M.S. Nambiar (Judicial Member)**

**Hon'ble Dr. Devendra Kumar Agrawal (Expert Member)**

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**Reserved on: 6<sup>th</sup> November, 2015**  
**Pronounced on: 10<sup>th</sup> December, 2015**

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1. Whether the judgment is allowed to be published on the net?
2. Whether the judgment is allowed to be published in the NGT Reporter?

**JUSTICE SWATANTER KUMAR, (CHAIRPERSON)**

Inter-alia but primarily a short but significant question that comes up for determination before the Tribunal is: Whether the expression “fly ash” appearing in the Notifications dated 14<sup>th</sup> September, 1999, 27<sup>th</sup> August, 2003 and 3<sup>rd</sup> November, 2009 all issued by the Ministry of Environment & Forest (for short, “MoEF”), Government of India would take within its fold ash containing high carbon value, i.e., the ash which contains un-burnt coal and ash capable of use.

The Writ Petitions No. 15013/2006, 1574/2006, 15005/2006 and 846/2007 filed in the Madhya Pradesh High Court were ordered to be transferred to the National Green Tribunal vide order dated 4<sup>th</sup> December, 2012. Upon receipt, they were registered as Original Application Nos. 10/2013, 11/2013, 12/2013 and 13/2013 respectively. They were taken up for hearing together from time to time. Respondent No. 1 (NEPA Limited) filed an independent Original Application No. 160/2014 before the Tribunal directly praying that the Notifications afore-referred would not be applicable to the applicant industry so as to mandate them to provide the fly ash containing high carbon value to the brick kilns which are the Applicants in other four cases free of cost free of cost. Thus, all these cases raise common question of law based on somewhat

similar facts and we would dispose of all the above five applications by this common judgment.

2. To assimilate the facts giving rise to these applications before the Tribunal, it is not necessary for us to notice facts of individual applications in any great detail. Suffices it to refer to the facts averred by the parties in their respective pleadings in Original Application No. 10/2013 (case of Eshan Group Industries) and the original application no. 160/2014 (NEPA Limited)

Eshan Group of industries is a group of small scale industries duly registered as such. The application has been filed through its Chairman, Shri Rajkumar Agrawal. It is clear that these applicants are involved in manufacture of building material, namely Neeru, Samla, plaster, etc. used for building construction. For the purposes of manufacturing these items, raw materials like cot, gypsum, coal ash etc. is used. These Companies are certified as ISO 9001 Companies. The Applicant Companies are situated within 90 kms from the Thermal Power Plant of NEPA Limited – Respondent No. 1. It is the case of the applicant that the Notification dated 14<sup>th</sup> September, 1999 was issued by the Central Government in exercise of 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 (for short “Act of 1986”). The object of this Notification was to protect environment, conserve top soil and prevent dumping and disposal of ash discharged from Thermal

Power Plants on land whereas there is need for restricting the excavation of top soil for manufacturing of bricks and promoting the utilisation of ash in manufacturing of building materials and this construction activity should be within the specified radius of 50 km from Thermal Power Plant.

On 27<sup>th</sup> August, 2003 a subsequent Notification was issued which increased the specific radius of manufacture of clay bricks for construction activities to 100 km. The Notifications stated that the coal ash would be made available to the Applicant free of cost. NEPA Limited – Respondent No. 1 is engaged in the production of paper for which it runs a Captive Thermal Power Plant in which coal is utilised as a raw material in the boiler of aforesaid power plant. As a result of its activity, three types of ash are formed as a by-product depending upon the process used in the boiler, they are, fly ash, pond ash and bottom ash.

Paragraph 2(1) of the Notification states that every coal and lignite and Thermal Power Plant shall make available coal ash for atleast 10 years from the date of publication of the Notification without any payment or any other consideration for the purpose of ash based products. Under the auspices of above mentioned Notification, the Central Pollution Control Board (for short, “CPCB”) vide their letter dated 17<sup>th</sup> July, 2002 wrote to Madhya Pradesh State Pollution Control Board (for short, “MPSPCB”) for ensuring implementation of the Notification dated 14<sup>th</sup> September, 1999.

These Notifications were to be strictly complied and in case of default, the licence/ permission of the unit could be cancelled. In pursuance of these Notifications, the applicant companies wrote to respondent no. 1 vide their letter dated 14<sup>th</sup> October, 2004 to grant permission for lifting of 40000 MT coal ash free of cost which is arising from Captive Thermal Power Plant of Respondent no. 1 as per the terms of the Notification. The applicant vide their letter dated 12<sup>th</sup> August, 2006 reminded and requested respondent no. 1 to give permission for lifting of the coal ash as per Notification. Respondent no. 1 did not respond to the said letter of the applicant. On the contrary, respondent no. 1 was trying to sell coal ash arising from its Captive Thermal Power Plant through respondent no. 4 to get and earn some consideration, which is derogation with the directions given in the said Notification. It is further stated that when respondent no. 1 did not respond to the letters, wrote to respondents no. 2 and 3 requesting them to cancel the licence/permission of respondent no. 1 for non-compliance of the Notification. It is averred by the applicants that despite receiving the said letters, respondent nos. 2 and 3 have done nothing in this regard. The applicant in these circumstances prayed that respondent no. 1 should be directed to dispose of the accumulated coal free of cost and they should be restrained from selling coal ash in violation to the Notification. It is also prayed that their licence/permission should be cancelled and such direction should be issued to the other respondents as well.

3. CPCB has filed a detailed reply and although basically the averments made in the application have not been seriously disputed, it is stated that Thermal Power Plant is coal based and generates ash as they are utilising coal as fuel in the boiler. According to this respondent, the term “fly ash” means and includes all the ash generated such as Electrostatic Precipitator ash, dry ash, bottom ash, pond ash as the objective is to utilise all ashes. Table 1 of the said Notification stipulates how the fly ash shall be utilised by the brick owners. According to the CPCB, the Notification is exhaustive and has mandated that it should be complied rigorously. They submit that applications should be dismissed.

4. The MPSPCB has filed a reply affidavit stating that as per para 1(4) of Notification dated 14<sup>th</sup> September, 1999, each coal or lignite base Thermal Power Plant shall constitute a Dispute Committee including the General Manager of Thermal Power Plant and representative of Indian Brick and Tile Manufacture is federation and such a Committee shall ensure unhindered transportation of ash without any undue loss of time. In case of an unresolved dispute it would be dealt with by the State Level Committee which is to be set up by the State Government. The Government of Madhya Pradesh has formed a State Level Committee vide Notification dated 29<sup>th</sup> July, 2004. The complainant has not presented his case before the Committee. Further, MPSPCB had issued a letter dated 30<sup>th</sup> November, 2006 to respondent no. 1

stating that it had come to the notice of the Board that respondent no. 1 had not complied with the Notification and therefore directed it to comply with the Notification dated 14<sup>th</sup> September, 1999.

5. Respondent no. 1 in its reply submitted that NEPA Limited has been established in 1948 and now it is a sick unit. The unit is using the Stocker Fire Boiler, by-products/end-product of the ignition process is coal ash which has a carbon content of more than 7.5%. According to respondent no. 1 new Thermal Power Plant uses latest technology and boilers, such as Pulveriser and Fluidized boilers. The ignition process results in 100% combustion in the case of these boilers. The by-product/end-product of these Thermal Power Plants is fly ash/bottom ash which has nil carbon content. It is submitted that the Notification dated 14<sup>th</sup> September, 1999 has put an embargo on the sale of fly ash/pond ash/bottom ash. Such coal ash which has a carbon content of 7.5% is outside the ambit of the Notification.

6. As per the test conducted and certificate issued by the laboratory it has been shown that the coal ash generated by respondent no. 1 has 12% carbon content. It is also averred that the tests have been conducted by the MPSPCB and it has been found that this ash does not cause any air or water pollution. The coal used by the respondent no. 1 in the boiler installed in the plant is known as Stocker Fired Boiler and the size of the coal used as fuel is from 0 to 25 MM whereas in case of new Thermal Power

Plant the coal is used in pulverised/ponder form. This is one of the reasons that the Thermal Power Plant generates ash which has higher carbon content. This content can be used as heating fuel whereas fly ash etc. cannot be used for generating heat. Fly ash is the final product which is a waste product while for respondent no. 1 the ash is not a waste product. Respondent No. 1 had been selling this coal for a long time. It is the case of respondent no. 1 that the brother of the Applicant is involved in the wholesale and retail business of coal ash and other coal products. He was the successful bidder in the year 2002 and was awarded the contract and has lifted 29266.59 MT from the premises of respondent no. 1. On account of the breach of the terms of the contract he was required to pay as much as Rs. 45 lakh towards ground rent and interest which he failed to do till date. It is only when fresh tender was processed that the applicant wrote the letter dated 14<sup>th</sup> October, 2004 asking for free fly ash. The applicant also has the unit at a distance of 30 km from Deepnagar Thermal Power Station, a unit of Maharashtra State Electricity Board. The present application, thus, is not *bona fide*.

7. Respondent no. 1 has also filed an additional affidavit on record. It is stated therein that it is a public undertaking. The unburnt coal which it collects after its process is sold at Rs. 1700 per MT and they have collected large sums of money with intent to upgrade their plant. The high carbon content has a commercial

value and is a source of fuel which cannot be covered under the Notification.

We may also notice here that when the matter was pending before the High Court of Madhya Pradesh and interim order dated 23<sup>rd</sup> November, 2006 had been passed in favour of the applicants restraining the respondent no. 1, 2 and 3 from disposing of coal ash through tender or auction. This order was modified on 31<sup>st</sup> January, 2007 permitting the sale of fly ash by respondent no. 1 and 2 to different brick manufacturers and the consideration amount of sale to be retained by NEPA Limited subject to refund in case the applicant succeeds in his writ petition. These interim orders were re-agitated before the High Court and the Division Bench of the Madhya Pradesh High Court on 19<sup>th</sup> February, 2007 after discussing the issue at some length and keeping in view the fact that the respondent no. 1 was a sick unit in terms of Section 2 of the Sick Industrial Companies (Special Provision) Act, 1985 which deals with legal proceeding and contracts of such sick unit noticed that it may be difficult for the petitioner to recover the paid amounts. When deciding whether such coal was covered by the Notification or not, the Court passed the following order:

“We accordingly, order that respondent no. 1 would be at liberty/entitled to sell the ash to all brick manufacturers and other building material manufacturers by adopting the same procedure as was being followed before the say order came into operation, subject to condition that respondent no. 2 shall open a separate account with regard to the amount received from the purchasers of the ash.

The said sale of the ash, of course, shall also be subject to the relevant provisions contained in the Notification dated 14.09.1999 (as amended) and would be carried out without prejudice to any other rights of the parties.

In case, the writ petitions are ultimately allowed and the Notification then, as a necessary consequences thereof, all such purchasers, notwithstanding any contrary provision contained in the Act of 1985, would be entitled to refund of the respective amount paid as price of the ash from respondent no. 1 within a period of three months from the date of final decision of these petitions.

Subjects to the aforesaid conditions, the interim orders of stay stand hereby vacated. The I.A. filed in this regard are allowed to the extent mentioned hereinabove and they stand closed.”

As is evident from the above pleadings of the parties, the linchpin to first resolve in the present matter is whether or not such fly ash as is being generated by respondent no. 1 would be covered by the Notification. When the matter came up before the Tribunal on 1<sup>st</sup> April, 2013, the Tribunal passed the following order:-

“We have heard the arguments at some length. Different submissions have been made before us. We direct the Ministry of Environment and Forests, Central Pollution Control Board (CPCB), and Pollution Control Board, State of Madhya Pradesh to take clear stand as to:

- (a) Whether the material which contains more than 12.5 percent carbon in its discharge is Ash and can it be termed as a Fly Ash in terms of the Notification, 2009. They should submit the complete scientific data to support their contention.
- (b) This material, by whatever name it is called, can in the form discharged or any other higher residue value, be used for the purposes stated in the Notification of 2009.

Stand over to 16<sup>th</sup> April, 2013.”

8. Later, National Environmental Engineering Research Institute, Nagpur was required to collect the samples from the premises of respondent no. 1 and place a report before the Tribunal upon

finalising the same, clearly indicating the actual carbon content in the ash generated by the plant of respondent no. 1. The CPCB, the MPSPCB and MoEF were required to file an additional affidavit on the questions raised in the order of the Tribunal dated 1<sup>st</sup> April, 2013. The affidavits were filed. Ambient air quality data was also required to be placed on record. The Boards were to collect the ambient air quality as well as stack samples from and around the premises of the respondent no. 1 and place their report before the Tribunal. Vide order dated 3<sup>rd</sup> April, 2014, the Tribunal by way of an interim order had permitted NEPA Limited to withdraw 20% of the fund for sale of fly ash so far since 3<sup>rd</sup> November, 2009 till passing of the order subject to final decision.

Additional affidavit that was filed in furtherance to the order of the Tribunal by the MPSPCB further stated that as respondent no. 1 was using old technology, it would not be correct to say that ash generated at the bottom of the plant contains un-burnt coal which can be used as fuel. According to MPSPCB, it is true that un-burnt coal particulates are collected and the bottom coal/fly ash generated from the Thermal Power Plant would come in the purview of “fly ash” in light of the three Notifications.

9. With reference to the language of the Notification dated 14<sup>th</sup> September, 1999, it is stated that the ash generated by respondent no. 1 will come under the definition of bottom ash as the same is collected at the bottom but it is correct that the ash generated

contains un-burnt coal particulates but due to that it cannot be said that ash generated would not fall within the definition as the Notification applies to all three ashes.

10. In the additional affidavit filed on behalf of the MoEF, the stand taken is that “fly ash” is a generic term and is for the purpose of promoting utilisation of fly ash produced by all coal or lignite based Thermal Power Plant including captive power plants. This includes bottom ash, pond ash and fly ash. The Notification does not mention about quantum of un-burnt carbon content in the fly ash, therefore, it will be applicable to all ashes. As per the amendment Notification of 2009, the minimum required percentage of fly ash by weight is 25% of total raw material for manufacturing of clay based building material such as bricks, tiles, etc.

The CPCB in its additional affidavit stated that upon analysis of the samples collected in furtherance to the order of the Tribunal, it is shown that un-burnt coal as LOI was found as 14.16% in fly ash, 19.44% in bottom ash (composite ash) and 25.14% in bottom ash, un-burnt carbon samples were analysed using laws of Ignition Technique. It is submitted that the technology of fly ash used in the Notification is not related to physio chemical characteristic of the ash and presence of any un-burnt carbon of ash does not influence its technology. The fly ash containing higher un-burnt coal as in present case can be used for manufacturing of bricks, tiles, etc. and therefore would be covered. It is stated on behalf of CPCB that the

existing technology of the respondents plant generates has higher coal consumption, its emissions are more polluting and these Stock Fire Boilers contain more un-burnt carbon and also contribute more to greenhouse gas emission.

11. The Respondent No. 1 filed further documents and affidavits denying the averments of various respondents that such fly ash or bottom ash with higher carbon content would be covered under the Notification. Further, according to him, this cannot be used as bottom ash or for construction activity on the items specified therein particularly with reference to IS Standards that are prescribed with those products. The respondent no. 1 also relied upon letter of the MoEF dated 7<sup>th</sup> October, 2015 in support of this contention.

The learned Counsel appearing for the applicant has relied upon the averments made in the reply filed by MoEF to say that fly ash means and includes all categories or groups of coal or lignite ash generated at Thermal Power Plant which could be a mixture of fly ash and bottom ash is in terms of the Notification of 3<sup>rd</sup> November, 2009 as the object is to utilise all kind of ashes, therefore, all ashes will be covered irrespective in their content. This argument is without substance. Firstly, the Notification of 2009 does not define or explain ash/fly ash as noticed above. It also provides for no specifications nature or content of such ash/fly ash.

Secondly, copy of the letter dated 7.10.2015 has been placed on record, where MoEF has taken the following stand:

**“(i). Is it possible to use fly ash with high coal content for making bricks, the impact on strength of bricks made up of such high coal content fly ash:**

- Presence of high unburnt carbon increase water to cement-material ratio, making the brick highly porous, resulting in poor strengths and high water absorption.
- Due to in cohesive matrix, the surface of the brick erodes even with slight rubbing; thus the brick erodes with splash of rain progressively.
- Even though such brick wall is protected through cement-mortar plastering, due to high porosity, the wall absorbs undue water during rains, causing mappings on the wall by spoiling pain over it.
- So such high carbon ash is not fit for manufacturing fly ash bricks which gain strength through hydration chemistry.
- But, such high carbon ash is certainly fit for blending with clay to manufacture sintered clay-fly ash bricks which gain strength through ceramic bond/chemistry.”

### **DISCUSSION ON MERITS**

12. In light of the above, now, we proceed to discuss the merits or otherwise of all the contentions raised by the learned Counsel appearing for the respective parties in relation to question of law that arise in the present case as referred at the outset of the judgment. It is clear from the record before us that the first Notification that was issued in regard to compulsive distribution of fly ash, bottom ash and pond ash to the units involved in construction activities and specified products was issued on 14<sup>th</sup> September, 1999. This Notification provided that any unit located within 50 km would be entitled to this benefit. The Notification also

provided that initially the free delivery of said ash would be 20% which should specifically increase to 50%. This Notification came to be amended by another Notification issued by MoEF on 17<sup>th</sup> August, 2003 but this amendment was not material in terms of content and was limited to the change of the distance from 50 km to 100 km while other contents remained the same. Finally, the Notification dated 3<sup>rd</sup> November, 2009 came to be issued by MoEF and this Notification did make substantial changes. However, the basic purpose of the Notification remained the same but amendments were relatable to application of the contents of the Notification. The Notification of 3<sup>rd</sup> November, 2009 was not in force prior to institution of the writ petitions before the High Court. The subject matter of the application before the Tribunal, thus, has to be governed by the Notification of 3<sup>rd</sup> November, 2009 which can be appropriately reproduced as under:

MINISTRY OF ENVIRONMENT AND FORESTS  
NOTIFICATION

New Delhi, the 3<sup>rd</sup> November, 2009

S.O. 2804(E).—WHEREAS, by notification of the Government of India in the Ministry of Environment and Forests number S.O. 763(E), dated the 14<sup>th</sup> September, 1999 (herein after referred to as the said notification) issued under sub section (1), clause (v) of sub-section (2) of section 3 and section 5 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government, issued directions 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 one hundred kilometres from coal or lignite based thermal power plants;

AND WHEREAS, the term "fly ash" means and includes all categories or groups of coal or lignite ash generated at the

thermal power plant and collected by Electrostatic Precipitator (ESP) or bag filters or other similar suitable equipments; bottom ash is the ash collected separately at the bottom of the boiler; pond ash is the mixture of ESP Fly ash and bottom ash, but, for the purpose of this notification, the term "fly ash" means and includes all ash generated such as Electrostatic Precipitator (ESP) ash, dry fly ash, bottom ash, pond ash and mound ash as the objective is to utilise all the ashes;

AND WHEREAS, there is a need for restricting the excavation of top soil for manufacture of bricks and for other works which involve use of top soil and promoting utilisation of fly ash produced by coal or lignite based thermal power plants including captive power plants and co-generation plants in the manufacture of building materials and construction activity;

AND WHEREAS, it was observed that there was a gradual increase in the use of fly ash in the manufacture of fly ash bricks or products from about 1.5 million tonne in 2002-2003 to 3.19 million tonne in 2006-2007 which needs to be further encouraged for achieving the ultimate objective of conservation of top soil and minimise environmental pollution caused due to fly ash;

AND WHEREAS, it is observed that construction agencies are yet to achieve their targets of utilization of fly ash based products even after the 31<sup>st</sup> August, 2007, the date prescribed for 100% utilisation of fly ash based products in the said notification of 1999 and has also observed that many Thermal Power stations or plants are also yet to achieve the targets drawn up in their action plans.

AND WHEREAS, the representations of the brick kiln owners were considered with regard to transporting of fly ash over a long distance and also the logistics involved including the cost,

AND, WHEREAS, the issue has been examined by the Government of India in the Ministry of Environment and Forests;

AND WHEREAS, the Central Government is of the opinion that the said notification should be amended;

AND WHEREAS, clause (a) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 provides that whenever the Central Government considers that prohibition or restrictions of any industry or carrying on

any processes or operation in any area should be imposed, it shall give notice of its intention to do so;

AND WHEREAS, a draft of amendment to the Government of India, Ministry of Environment and Forests Notification no S.O.763 (E), dated the 14th September, 1999 duly amended vide notification No. S.O. 979 (E), dated the 27<sup>th</sup> August, 2003 (hereinafter referred to as the said notification) which the Central Government proposes to make under sub-section (1) 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, 1956, were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) dated the 6th November, 2008 vide S.O. 2623 (E) inviting Objections and suggestions from all persons likely to be affected thereby before the expiry of sixty days from the date on which copies of the Gazette containing the said draft amendments were made available to the public.

AND WHEREAS, copies of the said Gazette were made available to the public on the day of 6<sup>th</sup> November 2008;

AND WHEREAS, the objections and suggestions received from various persons or agencies likely to be affected thereby in respect of the said draft notification have been duly considered by the Central Government in the Ministry of Environment and Forests;

Now, therefore, in exercise of the powers conferred by 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, the Central Government hereby makes the following amendments to the said notification, namely: -

#### AMENDMENTS

1. Throughout the said notification, save as otherwise expressly provided and unless the context otherwise requires, for the word "ash" wherever it occurs, the words "fly ash" shall be substituted.

2. In the said notification, in paragraph 1,—

(a) for sub-paragraph (1), the following shall be substituted, namely:-

"(i) use of fly ash based products in construction activities";

(b) for sub-paragraphs (1A) and (1B), the following sub-paragraphs shall respectively be substituted, namely:-

"(1A) Every construction agency engaged in the construction of buildings within a radius of hundred kilometres from a coal or lignite based thermal power plant shall use only 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 bricks or blocks or similar products or a combination or aggregate of them, in every construction project.

(1B) The provisions of sub-paragraph (1A) shall be applicable to all construction agencies of Central or State or Local Government and private or public sector and it shall be the responsibility of the agencies either undertaking construction or approving the design or both to ensure compliance of the provisions of sub-paragraph (1A) and to submit annual returns to the concerned State Pollution Control Board or Pollution Control Committee, as applicable";

(c) after sub-paragraph (1B), the following sub-paragraph shall be inserted, namely:--

"(1C) Minimum fly ash content for building materials or products to qualify as "fly ash based products" category shall be as given in the Table I below:

Table 1

<b>Sl. No.</b>	<b>Building Materials or Products</b>	<b>Minimum % of Fly ash by weight</b>
(1)	(2)	(3)
1.	Fly ash bricks, blocks, tiles, etc. made with fly ash, lime, gypsum, sand, stone dust etc. (without clay).	50% of total input materials
2.	Paving blocks, paving tiles, checker tiles, mosaic tiles, roofing sheets, pre-Cast elements, etc. wherein cement is used as binder.	Usage of PPC (IS-1489: Part-1) or PSC (IS-455) or 15% of OPC (IS- 269/ 8112/12269) content.
3.	Cement	15% of total raw materials
4.	Clay based building materials such as bricks, blocks, tiles, etc	25% of total raw materials
5.	Concrete, mortar and plaster.	Usage of PPC (IS-1489: Part-1) or PSC (IS-455) or 15% of OPC (IS- 269/8112/12269) content

(d) in sub-paragraph (2), for the brackets and number "(1)", the brackets, number and letter "(1C)" shall be substituted

and the number of sub-paragraph (2) shall be substituted by 1(D);

(e) in paragraph (2A), the paragraph 1(A) shall be substituted by 1(A) and 1(B) and the amended paragraph 2(A) is to be numbered as 1(E);

(f) for sub-paragraphs (3) and (3A), the following sub-paragraphs shall respectively be substituted, namely:-

"(3) In case of non-availability of fly ash from thermal power plants in sufficient quantities as certified by the said power plants, within 100 km of the site, the stipulation under sub-paragraph (1A) shall be suitably modified (waived or relaxed) by the concerned State Government or Union territory Government level monitoring committee mentioned elsewhere in this notification.

(3A) A decision on the application for manufacture of fly ash bricks, blocks and tiles and similar other fly ash based products shall be taken within thirty days from the date of receipt of the application by the concerned State Pollution Control Board or Pollution Control Committee.";

(g) sub-paragraphs (3B), (3C) and (3D) shall be omitted;

(h) for sub-paragraphs (4) and (5), the following sub-paragraphs shall be substituted, namely:-

"(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 the relevant Construction and fly ash Brick Manufacturing Industry Association or Body, as the case may be and such a Committee shall ensure unhindered loading and transport of fly ash in an environmentally sound manner without any undue loss of time. Any unresolved dispute shall be dealt with by the concerned State or Union territory Government level monitoring committee mentioned elsewhere in this notification.

(5) No agency, person or organization shall, within a radius of hundred kilometres of a thermal power plant undertake construction or approve design for construction of roads or flyover embankments with top soil; the guidelines or specifications issued by the Indian Road Congress (IRC) as contained in IRC specification No. SP 58 of 2001 as amended from time to time, regarding use of fly ash shall be followed and 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 organisation or on production of a certificate of "fly ash not available" from the thermal power plant(s) (TPPs) located within hundred kilometres of the site of construction and this certificate shall be provided by the TPP within two working days from the date of receipt of a request for fly ash if fly ash is not available";

(i) in sub-paragraph (6), for the words "Voids created due to soil borrow area shall be filled up with ash with proper compaction and covered with topsoil kept separately as above and this would be done as an integral part of embankment project within the time schedule of the project, the words "Voids created at soil borrow area shall be filled up with fly ash with proper compaction and covered with topsoil kept separately as above and this would be done as an integral part of embankment project" shall be substituted;

(j) for sub-paragraph (7), the following sub-paragraphs shall be substituted, namely:—

"(7) No agency, person or organisation shall within a radius of hundred kilometres of a coal or lignite based thermal power plant undertake or approve or allow reclamation and compaction of low-lying areas with soil; only fly ash shall be used for compaction and reclamation and they shall also ensure that such reclamation and compaction is done in accordance with the specifications and guidelines laid down by the authorities mentioned in sub-paragraph (1) of paragraph 3.

(8)(i) No person or agency shall within fifty kilometres (by road) from coal or lignite based thermal power plants, undertake or approve stowing or mine without using at least 25% of fly ash on weight to weight basis, of the total stowing materials used and this shall be done under the guidance of the Director General of Mines Safety (DGMS):

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 referred in sub-paragraph (10) for this purpose.

(ii) No person or agency shall within fifty kilometres (by road) from coal or lignite based thermal power plants, undertake or approve without using at least 25% 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 and this shall be done under the guidance of the Director General of Mines Safety (DGMS);

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 referred in sub-paragraph (10) for this purpose.

(9) The provisions contained in clauses (i) and (ii) of sub-paragraph (8) shall be applicable to all mine agencies under Government, public and private sector and to mines of all minerals or metals or items and it shall be the responsibility of agencies either undertaking or approving the external dump of overburden, backfilling or stowing of mine or all these activities to ensure compliance of provisions contained in clauses (i) and (ii) of sub-paragraph (8) and to submit annual returns to the concerned State Pollution Control Board or Pollution Control Committee as applicable

(10) The 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, Director General of Mines Safety (DGMS), Central Mine Planning and Design Institute limited (CMPDIL), Ministry of Environment and Forests, Ministry of Power, Ministry of Mines and the Central Institute of Mining and Fuel Research (CIMFR), Dhanbad; the Committee shall also guide and advise the back filling or stowing in accordance with the provisions contained in sub-paragraphs (8) (i), 8 (ii) and (9), and specifications and guidelines laid down by the concerned authorities as mentioned in sub-paragraph (1) of paragraph 3.

(11) The concerned State Government or Union territory Government shall be the enforcing and monitoring authority for ensuring compliance of the provisions of sub-paragraphs (8) (i) and (8) (ii)-;

3. in the said notification, in paragraph- 2,—

"(a) for sub-paragraphs (1), (2) and (3), the following sub-paragraphs shall be substituted namely,

“(1) All coal or lignite based thermal power stations would be free to sell fly ash to the user agencies subject to the following conditions, namely.—

(i) the pond ash should be made available free of any charge on "as is where is basis" to manufacturers of bricks, blocks or tiles including clay fly ash product manufacturing unit(s), farmers, the Central and the State road construction agencies, Public Works Department, and to agencies engaged in backfilling or stowing of mines.

(ii) at least 20% of dry ESP fly ash shall be Made available free of charge to units manufacturing fly ash or clay-fly ash bricks, blocks and tiles on a priority basis over other users and if the demand from such agencies falls short of 20% of quantity, the balance quantity can be sold or disposed of by the power station as may be possible;

Provided that 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 or plant failing which no fly ash shall be made available to the defaulting users.

(2) 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

<b>Serial Number</b>	<b>Percentage Utilization of Fly Ash</b>	<b>Target Date</b>
(1)	(2)	(3)
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 year from the date of issue of this notification
3.	At least 75% of fly ash generation	Three year from the date of issue of this notification
4.	At least 90% of fly ash generation	Four year from the date of issue of this notification
5.	At least 100% of fly ash generation	Five year from the date of issue of this notification

The unutilised 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.

(3) 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

<b>Serial Number</b>	<b>Fly Ash Utilization Level</b>	<b>Target Date</b>
(1)	(2)	(3)
1.	At least 50% of fly ash generation	One year from the date of issue of this notification
2.	At least 70% of fly ash generation	Two year from the date of issue of this notification
3.	At least 90% of fly ash generation	Three year from the date of issue of this notification
4.	At least 100% of fly ash generation	Four year from the date of issue of this notification

The unutilised 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";

(b) in sub-paragraph (4), for the words "six months", the words "four months" shall be substituted;

(c) for sub-paragraph (6), the following sub-paragraphs shall be substituted, namely:—

"(6) 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 facilities, promotion and facilitation activities for 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 and 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 utilisation level is again achieved and maintained.

(7) Annual implementation report (for the period 1' April to 31' March) 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 or 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 was. e information be provided in the annual report of thermal power producing agency owning more than one thermal power plant.";

4. in the said notification, in paragraph 3,—

(a) in sub-paragraph (2), for the words "schedules of specifications and construction applications, including appropriate standard and codes of practice, within a period of four months from the publication of this notification", the words "tender documents, 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" shall be substituted;

(b) for sub-paragraph (2A), the following sub-paragraph shall be substituted, namely:—

"(2A) 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 within a period of four months from the publication of this notification,";

(c) for sub-paragraphs (2B) and. (3), the following sub-paragraphs shall be substituted, namely:—

"(2B) All agencies undertaking construction of roads or fly over bridges and reclamation and compaction of low lying areas, including Department of Road Transport and Highways (DORTH), National Highways Authority of India (NHAI), Central Public Works Department (CPW'D), State Public Works Departments and other State Government Agencies, shall within a period of four months from the publication of this notification:-

(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 (6) of paragraph 1; and

(b) make necessary specifications or guidelines for road or fly over embankments that are not covered by the specifications laid down by the Indian Road Congress (IRC).

(3) 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 usage with immediate effect.

(4) The Central Electricity Authority and other approving agencies may permit the land area for emergency ash pond or fly ash storage area up to 50 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 or lignite to be used

(5) All Financial institutions and agencies which fund construction activities shall include a clause in their loan or grant document for compliance of the provisions of this notification.

(6) A Monitoring committee shall be constituted by the Central Government with Members from Ministry of Coal, Ministry of Mines, Ministry of Power, Central Pollution Control Board, Central Electricity Authority, Head Fly Ash Unit of Department of Science and Technology and Building Material Technology Promotion Council to monitor the implementation of the provisions of the notification and submit its recommendations or observations at least once in every six months to the Secretary, Ministry of Environment and Forests. Concerned Advisor or Joint Secretary in the Ministry of Environment and Forests will be the convener of this committee.

(7) For the purpose of monitoring the implementation of the provisions of this notification the State Governments or 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 and this Committee would deal with any unresolved issue by Dispute Settlement Committee as

prescribed in sub-paragraph (4) of paragraph 1, in addition to monitoring and facilitating implementation of this notification at the respective State Government or Union territory level and this Committee would also be empowered to suitably modify (waive or 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 plants and the Committee will meet at least once in every quarter.”

13. The bare reading of the above Notification, make it clear that it intended to amend/alter substantially the Notification issued by the government on 14<sup>th</sup> September, 1999. In the very opening paragraph of the Notification, it was noticed that the directions issued in terms of Notification dated 14<sup>th</sup> September, 1999 were issued for restricting excavation of top soil for manufacturing of bricks and permitting utilisation of fly ash in the manufacture of building materials used for construction activity within the specified radius of 100 km from coal or lignite based Thermal Power Plants. In the recitals to the Notification, the expression “fly ash” was stated to mean and include the ash generated at Thermal Power Plants and collected by electrostatic precipitator or bag filters or other similar equipment. Bottom ash is the ash collected separately at the bottom of the boiler. Pond ash is the mixture of fly ash and bottom ash. But for the purpose of Notification, “fly ash” means and includes all ashes generated as electrostatic precipitator ash/dry fly ash as the objective is to utilise all ashes (emphasis supplied). Having noticed these fundamental contents of the Notification dated 14<sup>th</sup> September, 1999, the draft amendment Notification was published on 27<sup>th</sup> August, 2003 inviting the objections and final

Notification came to be issued on 3<sup>rd</sup> November, 2009. The word ash appearing in the Notification of 1999 was substituted by the word 'fly ash'.

14. Amongst other amendments to the Notification of 14<sup>th</sup> September, 1999, the Constitution of State Level Monitoring Committee was an important amendment. In spite of discussing at this stage, the details of the amendment as made by the Notification of 2009, we may usefully refer to the entire Notification so that its object and content can be clearly understood. The Notification dated 14<sup>th</sup> September, 1999, to a limited extent, was amended by the Notification dated 17<sup>th</sup> August, 2003 which was finally amended vide Notification dated 3<sup>rd</sup> November, 2009. The 2009 Notification amended the previous notifications in relation to the distance from the plants, scope of utility and the procedure that was required to be followed by the authorities.

15. For the purpose of the present case, we are not concerned with other amendments incorporated to the Notification of 14<sup>th</sup> September, 1999, vide Notification of 3<sup>rd</sup> November, 2009. Suffices it to refer to the purpose and object of Notification, the meaning of the expression 'fly ash'/ 'ash' and the purpose for which it is expected to be used. Constitution of Committees, distance, the period and age of the utilisation of fly ash and other amendments would really not have much impact on the issue arising in the present case. It is a settled principle of law that object and purpose

of a Notification is a relevant consideration for the Tribunal while interpreting such statutory provisions of the Notification. This tool of interpretative law is quite often used, particularly when there is doubt about the meaning of expression or as to how they should be understood in the context of the Statute. Normally, such words should be understood in the sense in which they best harmonize the subject of the enactment and the object which legislature had in view. In *Workmen of Dimakuchi Tea Estate v. Management of Dimakuchi Tea Estate*, AIR 1958 SC 353, the Hon'ble Supreme Court of India stated that the meaning of the words is found not so much in a strict grammatical or etymological propriety of the language nor even in its popular use, as in the subject or in the occasion on which they are used and the object to be attained. This approach had also been adopted by the Hon'ble Supreme Court in the case of *New India Sugar Mills Limited v. Commissioner of Sales Tax, Bihar*, AIR 1963 SC 1207.

Another settled principle of law is that meaning of a word or expression in a statute is not to be taken in abstract. Regard must be had to be setting in which the word occurs as also to the subject matter and object of the enactment. However, in case of doubt and rival interpretation, the one which is reasonable should be adopted. Recourse to the Rule of Purposive Construction is appropriate when the words are capable of different and wider interpretation. Where a statute has been enacted for some particular purpose, a court of law will not make any attempt which may extend its operation to do

something else, which would fall beyond the object and scope of the Act.

16. All the parties are ad-alteram that purpose and object of the Notification was to use ash/fly ash, pond ash and bottom ash for completing material or products second and most importantly to protect the top soil layer of the earth. Framers of the Notification by amendment of 2009, provided specific tables relating to building material or products for which the fly ash was expected to be used, minimum percentage of fly ash by weight, percentage of utilisation of fly ash, etc. It related to both the existing units as well as the units that were to be established after the issuance of the Notification. At the one hand, the Notification of 2009, admitted to clarify and define with specific words, process and manner in which the existing or prospective units were to comply with the Notification. There, it did not in any manner, specify actual content or percentage of the coal in the ash that was being generated both by coal and lignite Thermal Power Plants. The purpose of the Notification were laudable besides they being an advancement of social cause were much needed environmentally. The Notification of 1999 had required and placed a restriction upon a person within the radius of 50 km from coal or lignite based Thermal Power Plant manufacturing coal products, tiles or products for use of manufacturing activity without including 25% of ash which would include fly ash bottom ash and pond ash. By amendment of 2009, the expression ash was substituted by fly ash that would mean that

25% of fly ash which would include fly ash, bottom ash and pond ash with the top soil of weight to weight basis. It further directed for utilisation of ash substituted as fly ash by Thermal Power Plant and there was a restriction on the utilisation of such fly ash only for the purpose specified in clause 2 of the Notification. Lastly, it had provided specification for use of fly ash based products, it could be used for cement or any other material could be used for landfill to reclaim long life air and including back-filling, stowing, mines or pitheads but all such work has to be carried out in accordance with prescribed specifications.

17. When the two Notifications are examined, it is evident that the amendment did not provide for clarification of the expression ash, fly ash in terms of coal/carbon content. Secondly, the utilisation of the fly ash was for specific purpose and as per prescribed specifications, the intent of the framers is clear that restrictions in relation to utilisation of generated fly ash as well as items for which such fly ash was to be utilised and obliged the coal/lignite Thermal Power Plant to release the required percentage of fly ash free of cost and provided certainty to the various aspects of implementation in relation to the Notification. All these restrictions have to be construed literally or on the principle of plain construction. They do not require any expansion or clarity. Expressions are unambiguous, clear and certain in their language. However, the expression “ash/fly ash” whatever be the source, does admit of an element of ambiguity.

Form of a Notification would not override the element of content of the Notification. The Tribunal has to keep in mind the object and purpose of Notification. All parts should be construed harmoniously in aid and not in derogation of the Notification. In other words, the object and purpose of a Notification is a relevant consideration. The object and purpose of the Notification in this case is social and environmental centric. To protect the top layer soil of the earth is the most significant aim and object of the Notification. Equally valuable is the purpose that the ash generated from Thermal Power Plant should be utilised appropriately and not be permitted, as a source of environmental pollution. The purpose of the Notification thus, is not deprivation of any material and valuable product but utilisation of the waste, i.e., ash/fly ash. Furthermore, there has to be a direct nexus between the generation of waste, ash/fly ash and its utilisation for manufacturing of the items specified in the table of the Notification itself. If such waste cannot be fairly utilised for production of those items then an interpretation to include such items should be excluded. An approach which would further this cause should be accepted.

18. The Notification in question does not define ash/fly ash. In absence of clarity of these expressions, linguistic or otherwise, it would leave greater scope for supplying the ambiguity by the process of interpretation. The Notification of 1999 is completely silent except using the word fly ash, bottom ash and pond ash. The Notification of 3<sup>rd</sup> November, 2009 amends the Notification of 1999

limited to the extent that the word “ash” wherever occurs, the word “fly ash” shall be substituted. It does not introduce any other amendment as far as defining or explaining the term ash/fly ash is concerned. We may notice that in the second recital of the Notification of 2009 it was mentioned that fly ash means and includes all categories of group of coal or lignite ash generated at Thermal Power Plant and collected by electrostatic, precipitator or bag filters or other suitable equipment. It will include fly ash, bottom ash and all ashes generated such as ESP, dry fly ash. However, the framers despite such recitals opted to introduce no specific definition or expansion in relation to the expression ash/fly ash.

19. According to the applicants, ash/fly ash will include any ash, even high coal content ash (containing un-burnt coal) whether pond ash, bottom ash and dry ash. It is contended on behalf of the applicants that then alone the purpose and object of the Notification would be achieved. If high carbon content ash is permitted to be sold for financial benefits of the Thermal Power Plant then it will frustrate the object of Notification. On the contrary, particularly, respondent no. 1 contended that un-burnt coal by its characteristic, utilisation and purpose cannot be included or termed as ash/fly ash. Ash/fly ash connotes a waste product while the un-burnt coal is a by-product capable of utilisation and has value in terms of money. It is the contention of these respondents that such inclusion, especially when the

notification does not provide an inclusive definition, it will not be appropriate to include ash with high carbon content to 'Ash or Fly Ash' within the meaning of the notification. The learned Counsel appearing for the project proponent particularly has contended that un-burnt coal even when mixed with ash cannot be utilised for manufacture of the items stated in the table. It cannot be utilised to produce cement or construction material as the prescribed standards for manufacturing such items does not contemplate utilisation of un-burnt coal from manufacture of these items. The word ash/fly ash therefore should be construed with reference to literal construction. The true way according to Lord Brougham is, "to take the word as the Legislature have given them and to take the meaning which the words given naturally imply unless where the construction of those words is, either by the preamble or by the context of words in question, is controlled or altered." Natural meaning should not be departed by the Tribunal unless while reading the statute as a whole, context requires the Tribunal to conclude otherwise.

20. It is, therefore, appropriate for us to refer to the ordinary meaning of the word ash/fly ash. Collins English Dictionary defines the word ash the residue formed when the matter is burnt, a light silvery grey colour. The "fly ash" means fine solid particles of waste carried into or during combustion. The Oxford dictionary explains the word "fly ash" as ash produced in small target flex by burning of ponder of coal or other material and carried on into the air.

Thus, ash or fly ash has to be understood as residue from burning the coal or other material. Once the coal is burnt, it is a waste product ash that is generated. Main source of consumption of as a waste product is its proportionate use in bricks or some construction material and other by filling the sites, road construction, etc. The Notification contemplates the specific purpose for which the ash/fly ash can be used besides dumping. It is utilised for those purposes alone which on the one hand requires the Thermal Power Plant to provide the fly ash while on the other hand gives right to the manufacturers of those items like brick kiln to receive the same free of cost. For the purpose of present case and the limited question that arise for our consideration, we are only concerned with the meaning of word ash/fly ash and the end-products for which it is expected to be utilised in terms of the Notification. Thus, we are not dwelling upon other provisions of the Notification.

21. Thus, while giving plain meaning to the expression “ash/fly ash” as it is understood in general parlance, now we will examine as to its utilisation for the products specified in the Notification. Unless these two ingredients are specified, it would be difficult to hold that the compulsive requirements of the Notification are still to be satisfied by the Thermal Power Plant. Clause 2 of the Notification of 2009 mandated that all coal or lignite base Thermal Power Plant shall utilise the ash generated in the Thermal Power Plant as

mentioned there. It is therefore, obligation of Thermal Power Plant to make ash available for atleast 10 years from the date of publication of the Notification without any payment or any other consideration but 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. In terms of clause 3(1) of the Notification of 1999 it was further stated that ash based products as above including landfill reclaims low lying areas including back-fill in the abandoned mines in the pitheads or any use shall be carried out in accordance with subsequent guidelines laid down by BIS and other specified bodies/authorities in that clause. The Notification of 2009 amended the earlier Notification in relation to minimum fly ash content for completing materials or products to clarify fly ash based products in terms of table-1. The distance of the industry manufacturing such utilisation should be within 100 kms. All the coal or lignite based Thermal Power Plants were to achieve the targets of fly ash utilisation as per table-2. The Notification 2009 significantly amended the Notification of 1999 primarily in the field of certainty of availability of fly ash and its higher utilisation by manufacturing or utilising industries to ensure greater consumption of ash/fly ash and to ensure that it does not pollute the air by careless release in the air. It was required to be utilised for filling of mine pits and other major low lying areas, etc.

22. Next, we have to examine as to what extent it is possible to utilise un-burnt coal or ash/fly ash containing high carbon content or coal. The works specified in clause 2 and 3 of the Notification of 1999 as well as 2009 are to be carried on in accordance with prescribed standards. The language of this clause clearly shows that the general utilisation has been excluded by incorporation of specific words and specific standards. Standards are scientifically defined and notified, they are not ambiguous or uncertain. If the fly ash/ash is to be utilised for manufacturing of bricks the ash has to be of specified nature so as to ensure manufacturing of the requisite standards of bricks which can be utilised in terms of construction and other activities. Indian standards dealing with pulverised fuel ash-lime bricks specifications. In terms of clause 6.1, it is stated that pulverised fuel ash (commercially known as fly ash) shall conform of grade-1 or grade-2 of IS-3812. Similarly, clause 6.2 requires that bottom ash is used as replacement sand and it shall not have more than 12% loss of ignition when tested according to IS 1727. Physical characteristics of such bricks have also been explained and defined. For instance, the minimum average wet compressive strength of pulverized fuel ash-lime bricks shall not be less than the one specified in clause 4.1 when tested as described in IS 3495 (Part 1). Indian standards provide for burnt clay fly ash building bricks specifications as well. In terms of clause 5.1 under the head general quality, it is stated that clay, fly ash, brick shall be hand or machine moulded and shall be made from

the admixture of suitable soil and fly ash in optimum soils and fly ash in optimum properties (IS 2117 : 1991). The fly ash used for manufacture of bricks shall conform to grade-1 or grade-2 as per IS 3817 1981.

The brick shall be uniformly burnt, free from cracks and flaws as black coring, nodules of stone and/or free lime and organic matter. In case of non-modular size of bricks, frog dimensions shall be the same as for modular size bricks. (The Indian Standard pulverised fuel ash specifications, third addition (ICS 91.100.10) Part -1 for use as ozolana in cement, cement motor and concrete.) Clause 6.1 of these specifications provide that ash shall conform to chemical requirements given in table-1 and clause 6.2 requires that fly ash may be supplied in dry or moist conditions as mutually agreed. However, in case of dry conditions, the moisture content shall not exceed 2.0% when determined in accordance with annexure-D all tests are to be performed as specified in clause 6.1. Table 1 which explains the chemical requirement categorically says under item no. (viii) that loss of ignition in percent by mass for fly ash is 5.0. Both siliceous or calcareous fly ash is to have specified chemical and physical characteristics. Un-burnt coal neither in common parlance nor scientifically can be termed as ash since they will differ in substance and utilisation both. Even otherwise, bricks or cement can hardly be manufactured from un-burnt coal. Bricks are made after they are compressed and they have to stand pressure even during their use in construction or other activities.

Un-burnt coal normally would not be able to bear such pressure. The onus to show that un-burnt coal per se and scientifically can be used for the activities specified in the Notification and that to in consonance the specifications provided is upon the applicant. The applicant, in our considered view, has failed to discharge such onus. Another aspect of this contention can even be examined with reference to the economical/chemical compliance. The ash/fly ash has to be provided free of costs, in terms of the Notification. Even otherwise there would hardly any be purchaser of the said product. It is mainly used for filling of mine pits etc. Even if it has a value in terms of money, it is extremely low. On the contrary, un-burnt coal has much higher value and utilisation. According to the Thermal Power Plant, they are selling the same at the rate of Rs. 1700 to 2300 per MT as compared to normal coal price of Rs. 800 per MT and it is being used as a source of fuel. Furthermore, the large money that they have collected is being used for up-grading the plants. The simplicitor pond ash or the fly ash even if permitted to be sold cannot be sold for more than Rs. 1.5 per MT or 83 per MT. Even other units are stated to be selling the fly ash/pond ash etc. between Rs. 200 to 450 per MT. Examining from any angle, we are unable to persuade ourselves to hold that the fly ash/ash would take within its ambit un-burnt coal, particularly of higher carbon content, which like the present case is stated to be 12.25% and on analysis have been found even 25% to be having carbon content

and therefore, it would not be covered by the Notification of 1999 as amended in 2009.

23. This case has another very relevant aspect. It is undisputed before us that a new power house has been installed based on coal firing technology which was commissioned in 1989. It is using Stocker Fired Travelling Grate Boilers which is relatively quiet old technology and causes high consumption and generates greater pollution. The coal is fed in the boiler on belts (pieces of 100 mm size) due to which the entire carbon content in the coal cannot be combusted. Resultantly, the coal cinder which remains after production of power still has 14 to 20% un-burnt carbon content as compared to fly ash. By-product resulting from this process is the un-burnt coal of the high carbon content while the fly ash as already noticed would be a waste to be utilised for specific purpose with certain prescribed specifications. The Thermal Power Plant unquestionably is required to upgrade its plant and technology. It has to ensure that it does not cause unnecessary pollution. By use of this technology, the emission from chimney and other collected ash contains higher pollutants. The Pollution Control Board had already required to up-grade the plant and use modern technology which will not only protect the environment but would even be economically more viable. The High Court of Madhya Pradesh while passing interim order, particularly the order dated 19<sup>th</sup> February, 2007, as afore-referred had directed that the persons collecting such ash would pay price subject to the determination of

writ/application. The High Court had earlier restrained the NEPA limited from selling the ash containing high carbon. The Industry has appeared to have collected huge amount on that account and the expenditure of the plant of Rs. 100 crores is required to upgrade the plant and adopt modern technology. They have collected amount of Rs. 35 crores as already stated before the High Court. NEPA limited is expected to take this aspect very seriously. They are to adopt AFBC technology as opposed to Stocker Fired Boiler. One of the grounds taken by NEPA limited is that the application is malafide for the reason that the applicant has a unit within the prescribed distance and wants to secure this ash with a high content carbon. He sells the same and uses the ash for manufacturing purpose. Thus, the intent is to claim payable benefits by taking shelter under the Notification. It is not in dispute that he has a unit and he even sells the fly ash/ash, but we find no need to come into this aspect. Therefore, it is not only the statutory obligation of NEPA limited to ensure that its plant does not cause pollution but is mandated by the Board to up-grade its technology and improve functioning of the plant. Once this is done, there would be no generation of the ash/fly ash with a high content and this issue would stand resolved automatically. Till then NEPA can continue selling the generated ash with high carbon content but subject to the condition that it would do filterisation of the coal, and segregate it from ash. It will dispose of ash in terms of the

Notification of 2009 while the un-burnt coal can be disposed of for consideration.

24. Therefore, in light of the above discussion, we dispose of all the above cases with the following directions:

1. We hold and decline that ash/fly ash containing high carbon content/un-burnt coal of 17 to 25% will not be covered by the Notifications of 1999 and 2009.
2. The Industry-NEPA shall be entitled to sell the un-burnt coal and would adopt due mechanism forthwith for segregating unburnt coal from ash by filters or staining process and all the ash/fly ash generated from any source be it chimney, pond or bottom ash would be given free of cost in terms of Notification of 2009.
3. All amount collected by sale of ash/fly ash with high carbon content, and whatever they will earn in future shall be exclusively utilised for the purpose of upgradation and improvement of technology and ensuring that there is no air or environmental pollution caused by NEPA Limited by running the Thermal Power Plant.
4. The industry has given an undertaking that they will up-grade the plant and technology within six months from today. Their undertaking is accepted and they will strictly abide by it. Even in the case of default, besides other actions the CEO/Managing Director of the industry shall be personally

responsible for the consequences that may follow in law and the Thermal Power Plant shall also be liable to be closed.

5. In the event NEPA limited fails to up-grade its plant and bring the technology AFBC within a period of six months from the date of pronouncement of this judgment, the plant shall be liable to be proceeded against in accordance with the provisions of the environmental laws by the MPSPCB. Besides this, the plant shall be liable to pay and deposit with the MPPCB the entire amount collected by it by selling of un-burnt coal (ash/fly ash /with high carbon content) including a sum of Rs. 85 crore that it has already earned on that account. The amount so paid to the Board shall be utilised by the MPSPCB for prevention and control of pollution and to ensure that the directions issued by the Board are complied with not only in the premises of the Thermal Power Plant but even in surrounding areas. The MPSPCB shall also be entitled to exercise its powers for directing closure of the plant.

25. In light of the above, it is clear that high carbon content is not fit for manufacturing fly ash bricks which again strengthen through hydration chemistry. We are of the view that the above opinion is in consonance with the spirit of Notification of 2009 rather than what has been averred in the reply of the MoEF without any study or data. Out of the two opinions expressed, the letter dated 7<sup>th</sup> October, 2015 is more in consonance with the object, purpose and

practicality of the Notification while the other approach would frustrate the object.

26. Original Application Nos. 10 (T<sub>HC</sub>) of 2013, 11 (T<sub>HC</sub>) of 2013, 12 (T<sub>HC</sub>) of 2013, 13 (T<sub>HC</sub>) of 2013 and 160 of 2014 are disposed of without any order as to costs.



**Justice Swatanter Kumar**  
**Chairperson**

**Justice M.S. Nambiar**  
**Judicial Member**

**D.K. Agrawal**  
**Expert Member**

New Delhi  
10<sup>th</sup> December, 2015

**NGT**