

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 117/2014
WITH
Original Application No. 499/2014
WITH
Original Application No. 102/2014
(M.A. No. 858/2014, M.A. No.872/2014, 42/2015, 287/2015,
694/2015 & 580/2016)

Shantanu Sharma Applicant(s)

Versus

Union of India & Ors. Respondent(s)

WITH

Anupam Raghav & Anr. Applicant(s)

Versus

U.O.I. & Ors. Respondent(s)

WITH

Sandplast (India) Ltd. & Ors. Applicant(s)

Versus

MoEF & Ors. Respondent(s)

Date of hearing: 20.11.2018

CORAM : HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

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ORDER

1. These matters raise concern of management of fly ash generated by the Thermal Power Plants (TPP). We may refer to the pleadings in Original Application No. 117/2014, Shantanu Sharma Vs. Union of India & Ors. Other matters are said to be identical.
2. The applicant claims to be interested in protection of environment and forest. He claims to be aggrieved by non-implementation of Notifications issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC) for proper utilization of fly ash generated by the coal and lignite based TPP.
3. Case of the applicant is that non-utilization and improper disposal of fly ash leads to increase in air pollution and causes severe health problems. It also affects horticulture and agricultural crops. As at present, there are increased ash pond areas and increased height of ash dykes. Apart from air pollution, there is pollution of surface water and ground water. Major pollutants in fly ash are Arsenic and Mercury. Both the said pollutants are injurious for the land and the water bodies. Thus, there is need for 100% utilization of fly ash by all possible means such as conversion to ash based products, preventing its washing away or flying in the air. MoEF&CC has failed to ensure proper monitoring mechanism inspite of issuing notification on the subject.
4. Notification dated 14.09.1999 required use of atleast 25% of the ash for clay bricks or tiles or blocks for use in construction

activities. The Delhi High Court vide judgment dated 05.08.2004 in Writ Petition (C) No. 2145/1999 directed the Government to make use of fly ash mandatory in roads apart from using it in bricks for construction. Land, electricity and water is required to be made available for promoting ash based production units. Vide amendment dated 03.11.2009, provision was made for its use in manufacturing of building material and in construction activity to preserve top soil by restricting excavation for disposal. Since quantum of fly ash has increased, the extent of fly ash required to be used was also increased.

5. In view of more and more concern on account of failure of efficacy of the measures already taken, a working group was constituted by the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Govt. of India. In its report submitted in the year 2011, the said group *inter-alia* observed that increase in generation of fly ash led to increase in the requirement of land and thus target has to be of 100% utilization as against 60% utilization which was happening. The disposal process lacked transparency and it was necessary that each thermal power plant displays complete information. Other measures adopted include policy of financial institutions to require compliance of fly ash as a condition for grant of loan and incentives in rate of excise duty. The applicant has also referred to the report jointly published by the World Bank and the Department of Economic Affairs, Govt. of India pointing out the deficiencies in pro-active government policies on the subject.

6. We may now refer to the Notifications on the subject. Vide Notification dated 14.09.1999, the MoEF&CC issued directions requiring manufacturers of clay bricks or tiles or blocks or construction activities to mix atleast 25% of ash which is to be ensured by the Pollution Control Boards/Committees by

canceling the consent order for brick kilns or mining leases. Every thermal power plant was required to make available such ash and phase out dumping and disposal in three years to the extent of 30%, and in six years the remaining. This applied to plants permissioned subject to Environmental Clearance having such conditions. The remaining are required to phase-out the same in 15 years and compliance was required to be furnished to the Central Pollution Control Board and the concerned State Pollution Control Boards/Committees. The Electricity Boards, NTPC and the management of the power plants are to facilitate making available land, electricity and water for manufacturing activities and also to provide access to the ash lifting area and furnish annual implementation report. Manufacturers of ash based products such as cement, blocks, brick panels were to operate as per the 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. The said authorities are to prescribe the use of ash and ash based products in schedules of specifications. Local authorities are to specify such requirement in building bye-laws.

7. Vide Notification dated 27.08.2003, certain amendments were made particularly to the effect that construction agencies were required to use the fly ash to the extent of 100% in a phased manner upto 31.08.2007.
8. Next Notification is dated 03.11.2009, revising the timelines and the period for implementation. The revised timelines apply to the construction agencies as well as thermal power plants as per

details mentioned in the said Notification. The said Notification also provided for shifting of the fly ash by filling empty mined voids by stowing.

9. The report of the Working Group of Cement Industries for 12th Five Year Plan (2012-2017) by the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry goes into the extent of the problems and challenges in tackling the issue. The report shows that if the fly ash generated is not consumed, the cost on the economy by way of disposal risks and threat to health will be very high. Thus, to conserve top soil and prevent dumping and disposal on land, proper disposal of fly ash was significant. It was recommended that the Ministry of Power, Govt. of India should make proper assessment of the level of fly ash generation. The fly ash need not be required to be supplied free by the cement manufacturers to small bricks manufacturers and should be utilized by the cement plants for their own consumption. If the cement plants are required to purchase the fly ash at a cost, it will require transportation and add to the cost unnecessarily.

10. We now note the stand of the respondents. The Ministry of Finance and Revenue, Govt. of India in its reply has stated that the excise duty is 2% without CENVAT credit and 6% with CENVAT credit. Fly ash products are covered by SSI exemption. No excise duty is payable upto a clearance value of Rs. 1.5 crores.

11. The Reserve Bank of India has stated that the Banks have been advised to have an appropriate policy in this regard in the matter of giving loans.

12. The MoEF&CC has referred to the Notifications issued from time to time to deal with the problem. In respect of thermal power

stations in its operation before 03.11.2009, extent of fly ash utilizations is as per following table:

Sr. No.	Percentage Utilization of Fly Ash	Target Date
1.	At least generation 50% of fly ash	One year from the date of issue of this notification.
2.	At least generation 60% of fly ash	Two years from the date of issue of this notification.
3.	At least generation 75% of fly ash	Three years from the date of issue of this notification
4.	At least generation 90% of fly ash	Four years from the date of issue of this notification
5.	At least generation 100% of fly ash	Five years from the date of issue of this notification

13. For those commissioned thereafter, the extent of fly ash utilization is as follows:

Sr. No.	Percentage Utilization of Fly Ash	Target Date
1.	At least generation 50% of fly ash	One year from the date of issue of commissioning.
2.	At least generation 70% of fly ash	Two years from the date of issue of commissioning.
3.	At least generation 90% of fly ash	Three years from the date of issue of commissioning.
4.	At least generation 100% of fly ash	Four years from the date of issue of commissioning.

14. Conditions prescribed for utilization of fly ash are as follows:

“(a) the pond ash should be made available free of cost 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.

(b) at least 20% of dry ESP fly ash shall be made available free of cost 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.”

15. Under the above notification, a Monitoring Committee is to be constituted in every State/Union Territory under the Chairmanship of the Secretary, Department of Environment with representatives from Department of Power, Department of Mining, Road and Building Construction Department and State Pollution Control Board. The Committee is required to deal with

any unresolved issue by Dispute Settlement Committee in addition to the monitoring and facilitating the implementation of the notification.

16. Monitoring Committee constituted by the MoEF&CC is to have members from Ministry of Coal., Ministry of Power., Central Pollution Control Board., Central Electricity Authority., Head, Fly Ash Unit of the Department of Science and Technology and Building Material Technology Promotion Council.

17. It is further stated, in the affidavit of the MoEF&CC, that as per the information received from Central Electricity Authority (CEA), during a meeting, the fly ash generation from 138 thermal power plants is reported to be 163.56 million tons during the year 2012-13. The overall utilization of fly ash was 100.73 million ton, which is about 61.37% of the total fly ash generated. During the year 2012-13, out of 138 (one hundred thirty-eight) thermal power stations for which data was received, 66 (sixty-six) power stations have achieved the targets of fly ash utilization as stipulated in the notification dated 03.11.2009. The remaining 33 (thirty-three) plants have achieved the level of fly ash utilization up to 75%. The 19 (nineteen) plants have achieved the level of fly ash utilization up to 60%.

18. CPCB has given a chart showing progress of fly ash generation and utilization from 1996 to 2012. Some of the State Pollution Control Boards/Committees have filed their affidavits indicating the extents to which utilization of fly ash has taken place.

19. Vide Notification dated 25.01.2016, further amendment was made to the Notification dated 14.09.1999 mainly to the effect that the area within which the fly ash is to be utilized has been increased to 300 kms. The time period to comply with the requirements of 100% utilization of fly ash was extended to 31.12.2017.

20. The matter has been considered on several dates in the last four and a half years. Reference may be made to some of the orders passed.
21. Vide order dated 06.01.2016, the MoEF&CC, the State Governments/Union Territories were required to furnish the details of the Monitoring Committees and if such Committees were not constituted as per the mandate of the Notification, the same were directed to be constituted.
22. On 03.01.2018, the States/Union Territories were directed to furnish their action plans for utilization of fly ash produced and generated by thermal power plants in accordance with the Notifications.
23. On 16.02.2018, it was noted that only eight States have submitted their action plans. MoEF&CC was directed to expedite the collection of action plans from the concerned States.
24. On 20.03.2018, the Chief Secretaries of the States, who had failed to submit action plans, were again required to do so.
25. On 12.07.2018, it was stated that 20 States have submitted their action plans out of which 13 were not complete or satisfactory. The MoEF&CC was directed to monitor the compliance of the earlier orders referred to above and submit a status report.
26. Accordingly, status report has been filed before this Tribunal on 07.09.2018 by the MoEF&CC stating that no fly ash is generated in 15 States/UTs namely Goa, Himachal Pradesh, Jammu & Kashmir, Kerala, Manipur, Mizoram, Nagaland, Sikkim, Tripura, Andaman and Nicobar, Chandigarh, Daman & Diu, Dadra & Nagar Haveli, Lakshadweep and Pondicherry. Accordingly, the said States and Union Territories and their authorities be deleted from the array of parties.
27. Twenty States have given their action plans. Only State of Arunachal Pradesh has not furnished any action plan. Since there is nothing to show that there is any fly ash generation in the said

State, the said State or its authorities are also deleted from array of parties. We do not understand why deletion of unnecessary parties was never sought.

28. The position of each of the remaining twenty States has been mentioned. It may be noted that though the last date for achieving 100% utilization was 31.12.2017 and the said date has not been extended, the States have sought extension of time by 2 to 5 years upto the year 2023 which is wholly uncalled for. This Tribunal has no jurisdiction to grant any extension of time in conflict with the mandate of notification under the Environment (Protection) Act, 1986, particularly when such extension will enable harm to environment, in violation of statutory scheme. It is also stated by some of the States that action plans to achieve 100% utilization of fly ash has not even been furnished by some of the Thermal Power Plants.

29. We may also note that the NITI Aayog, vide order dated 12.06.2018, constituted a Committee headed by Joint Secretary, MoEF&CC, Govt. of India, to develop a focused strategy for best utilization of fly ash to manufacture end products. Issues to be gone into by the Committee are:- revisiting existing notifications / guidelines, transportation of fly ash, better utilization in MSME Sector, cement and allied industries, use of mobile app in data base, guidelines for ash parks, regulation of red bricks, incentives for 100% utilization, incentives to TPPs for new innovations. Draft report was circulated by MoEF&CC on 16.10.2018. The Committee noted that the existing notification needed review and the same were not being fully implemented.

30. In view of the above, only question for consideration is the directions to be issued on account of failure of 100% utilization of fly ash which has admitted adverse impact on public health and to give effect to the 'Precautionary Principle' and the 'Polluter Pays'

Principle to be applied under Section 20 the National Green Tribunal Act, 2010.

31. Since non-utilization of 100% fly ash, especially after 31.12.2017, the date fixed in the Notification of the MoEF&CC dated 25.01.2016, invites penal consequences under the provisions of the Environment Protection Act, 1986, liability in this regard is not only of the persons responsible for non-utilization but also for generators of the fly ash. The generator cannot avoid responsibility for due disposal of any residue pollutants on account of its activity. The principle of 'extended producer's liability' is well recognized as part of 'Sustainable Development'. Applying the 'Precautionary Principle', the permission to dump fly ash in the mined voids has to be subject to all precautionary measures necessary for environment protection. Area of utilization of fly ash has been extended to 300 kms, which may call for more stringent conditions to avoid damage to the environment.

32. The adverse effect of fly ash mismanagement is well acknowledged in decision of Courts¹ as well as by public authorities².

33. We are of the view that a Joint Committee of the representatives of the Ministry of Environment, Forest and Climate Change, Central Pollution Control Board and IIT Roorkee and any other member considered necessary by MoEF&CC needs to be forthwith constituted to finalize action plan covering all aspects so as to not only achieve 100% utilization of fly ash but also to ensure its scientific and environmentally sound disposal. The Committee will also be required to determine the amount of damages to be paid for the violation of requirement of utilization of fly ash. Needless to say that statutory authorities under the Environment

¹ Occupational Health and Safety Association v. Union of India & Ors. (2004) 3 SCC 547 ¶12-15

² <http://pib.nic.in/PressReleaseDetail.aspx?PRID=1520080>, <https://economictimes.indiatimes.com/news/politics-and-nation/pmo-asks-agencies-to-increase-usage-of-fly-ash-by-10-times/articleshow/65814656.cms>, <https://energy.economictimes.indiatimes.com/news/power/from-coal-production-to-renewable-power-obligations-niti-aayog-lays-down-its-3-year-agenda-for-indias-energy-sector/58486230>, <http://pib.nic.in/newsite/PrintRelease.aspx?relid=179785>

(Protection) Act, 1986, the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974 are entitled to assess and recover damages on 'Polluter Pay's Principle' in exercise of incidental powers to protect environment. The Committee may determine any other allied or incidental issue.

34. Accordingly, we direct constitution of such a Committee by the MoEF&CC forthwith. The Committee may give its report within two months from the date of its assuming charge to the MoEF&CC.

35. The report of the Committee may be complied with by all concerned, subject to any challenge to such report, in accordance with law.

36. Pending submissions of such report, we direct all Thermal Power Stations who have failed to dispose of 100% fly ash up to 31.12.2017, to deposit damages for environment restoration as follows:

Sl. No.	Capacity of the Thermal Power Plant	Cost of damages
1.	Thermal Power Plants upto the capacity of 500 MW	Rs. 1 Crore
2.	Thermal Power Plants upto the capacity of 1000 MW	Rs. 3 Crores
3.	Thermal Power Plants beyond the capacity of 1000 MW	Rs. 5 Crores

37. The above amount may be deposited with the CPCB within one month from today, failing which interest @ 12% p.a. will be payable for the delayed period. The amount may be spent on restoration and restitution of the environment.

38. No damages will be payable by the Thermal Power Plants which have utilized 100% of the ash generated by it in accordance with law up to 31.12.2017 and disposing it in scientific manner. In case, any such claim is found to be false by the Committee, the amount of penalty payable may be up to five times.

39. The MoEF&CC may furnish an action taken report to this Tribunal on or before 31.03.2019 by e-mail at ngt.filing@gmail.com. All the applications are disposed of.

40. Report may be put up for consideration on 9th April, 2019.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

November 20, 2018
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