

**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. 168/2019, M.A. No. 12/2020 & M.A. No. 13/2020)

(With report dated 10.01.2020)

Shantanu Sharma

Applicant(s)

Union of India & Ors.

Versus

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: 27.01.2020

Date of uploading on the website: 12.02.2020

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

ORDER

1. This order may be read in continuation of order dated 20.11.2018 on the subject of management of fly ash generated by the Thermal Power

Plants (TPPs). This Tribunal considered impact of non-utilization and proper disposal of fly ash by the TPPs on air quality, surface water, ground water, health and environment. After considering the notifications issued by the Ministry of Environment and Forest & Climate Change (MoEF&CC) requiring 100% utilization of fly ash by 31.12.2017 and applicable norms for utilization of fly ash, this Tribunal directed preparation of action plans to achieve 100% utilization of fly ash and for its scientific disposal. The Committee comprising MoEF&CC, CPCB and IIT Roorkee was to determine the liability of the TPPs for damages on 'Polluter Pays' principle.

2. We may note only the case set out by the applicant in O.A. No. 117/2014 as the grievance in other connected matters is identical. It is submitted 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 is an increase in 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.
3. In substance, case of the applicant is that air pollution and water pollution is continuing against mandate of law for which no remedial action was being taken. MoEF&CC has failed to ensure proper monitoring and compliance mechanism inspite of issuing notification

on the subject. This is also resulting in failure to enforce the mandate of law under Air Act, 1981; Water Act, 1974 and Environment (Protection) Act, 1986 (EP Act), apart from damage caused to the environment and public health. This is also infringement of 'Sustainable Development' and 'Precautionary' principles. As a consequence of continuing air and water pollution, 'Polluter Pays' principle also needs to be invoked.

4. Notification dated 14.09.1999 was issued by the MoEF&CC which 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. Since quantum of fly ash has increased, the extent of fly ash required to be used in terms of above notification was also increased.

5. In view of the rising 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 has led to increase in requirement of land and thus target has to be of 100% utilization as against 60%. The disposal process lacked

transparency and it was necessary that each thermal power plant displays complete information in terms of compliance to environmental norms. Other measures adopted include policy of financial institutions to require compliance of fly ash as a condition for grant of loan and incentives in terms 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. We have already mentioned that 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 the remaining in six years. This applied to plants permissions being issued subject to Environmental Clearance prescribing such conditions. The remaining are required to be phased-out in 15 years compliance regarding which made necessary 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. In its reply, 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 requirement 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

10. For those commissioned after 03.11.2009, the extent of requirement 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.

11. 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.”

12. 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. 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.
13. 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%.

14. 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.
15. Vide Notification dated 27.01.2016, 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.
16. The matter has been considered on several dates in the last five and a half years. Reference may be made to some of the orders passed.
17. Vide order of this Tribunal 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. 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 Notification. 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. On 20.03.2018, the Chief Secretaries of the States, who had failed to submit action plans, were again required to do so. 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.

18. The matter was thereafter reviewed on 20.11.2018 in the light of the status report filed by MoEF&CC on 07.09.2018. The Tribunal observed as follows:-

“1to25 xxx

xxx

xxx

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."*

19. After above consideration, the Tribunal constituted a joint Committee to finalise action plan to achieve 100% utilization of fly ash and to determine the amount of damages to be paid for the violation by the TPPs and also directed interim compensation for the TPPs who are failed to dispose of 100% fly ash upto 31.12.2017. The operative part of the order is:-

¹Occupational 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>

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 (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.”*

20. We may note that vide order dated 13.12.2018 in Diary No. 46100/2018, *Association of Power Producers v. Sandplast (India) Ltd. & Ors.*, the Hon'ble Supreme Court gave liberty to the Association of Power Producers to move this Tribunal. This led to filing of M.A. No. 1798/2018 etc. for recall of order dated 20.11.2018 on the ground that some of the TPPs had not completed period of five years which was permissible for disposal of the fly ash. This plea was rejected in the light of the Notification dated 27.01.2016 fixing 31.12.2017 as outer limit for disposal of the fly ash, irrespective of date of commissioning of power plant. The applications were accordingly disposed of on 03.01.2019. M.A. No. 08/2019 etc. were disposed of on 22.01.2019 giving liberty to the TPPs in question to move the Committee for being heard on the quantum of compensation. M.A. No. 50/2019 and other applications were disposed of on 12.03.2019 giving liberty to the TPPs to move the Committee constituted by this Tribunal. Similar further order was passed on 02.05.2019 in M.A. Nos. 108/2019 to 119/2019.

21. Pursuant to order dated 20.11.2018, the joint Committee has filed its report on 20.12.2019 on the subject of action plan to achieve 100% fly ash utilization by the TPPs and liability of the TPPs to pay compensation. The report mentions the meetings held for the purpose and consideration of the enhanced utilization of fly ash by way of Ash based building construction material such bricks/blocks/tiles; road, flyover embankment construction, Development of low- laying areas,

Reclamation of abandoned mine voids, Ash utilization as soil conditioners of agriculture. As per CPCB, about 77% of total fly ash generated per annum is utilized. This indicates a gap in terms of 23% which needs immediate action. In terms of legacy waste, the total quantum is 1647 million tonnes as on 31.03.2019.

22. The Committee recommended one year time to achieve 100% utilization of fly ash where the utilization currently was more than 85% and two years for the remaining. The action plans of 118 individual units have been annexed. The compliance status is to be reviewed quarterly and on annual basis. On the subject of environmental compensation, it is recommended that compensation should be imposed only on non-pit head TPPs.

It has been recommended by the Committee that raising of ash dyke of ash pond may be considered as fly ash utilization during initial five years. Thereafter, TPPs can use fly ash for strengthening of ash dyke as per engineering requirement but can claim only 5-7% of fly ash generation as utilization.

With regard to breach sites at Vidhyanchal TPP and Essar TPP in Singrauli area, the Committee has recommended that MP Pollution Control Board to ensure effective restoration/remediation of affected sites urgently.

With regard to utilization of unutilized accumulated fly ash (pond ash), the recommendation is to permit three years for non-pit head TPPs and four years for pit head TPPs apart from current utilization w.e.f. April 2021. The recommendations pertaining to

Ministry of Power; Ministry of Coal; NTPC; CPCB; Central Electricity Authority; NHAI; MoEF&CC; Ministry of Housing and Urban Affairs; Ministry of Human Resource Development; Bureau of Indian Standards (BIS); Department of Consumer Affairs and IRC have been separately given. The Ministry of Power has also given its recommendations.

23. The Committee has given a mechanism for assessment of environmental compensation for non-compliance of targeted fly ash utilization by thermal power plant vide Annexure A-II of the said report and has proposed the scenarios viz. EC for plants commissioned before 03.11.2009 and EC for plants commissioned after 03.11.2009. The formula suggested by the joint Committee is as follows:-

3. Determination of Environmental Compensation (EC)

3.1 CPCB on the direction of the Hon'ble National Green Tribunal (NGT), Principal Bench in the matter of OA No. 593/2017 (WP (CIVIL) No. 375/2012, Paryavaran Suraksha Samiti & Anr. Vs. Union of India & Ors. has formulated following formula for levying the environmental compensation penalty due to non-compliance of the environmental standards/ violation of any directions by industries;

$$EC = PI \times R \times N \times F \times LF$$

$$= ₹ 30000 \text{ per day } (80 \times 250 \times 1.5) \times N \times LF$$

EC = Environmental compensation/penalty (₹);

PI = Pollution Index of industrial sector (80 for red category of industries)

R = Rs in per day (₹ 250)

N = Number of days of violations.

F = Scale of operation of industrial sector, small 0.5, medium 1.0 and large 1.5

LF = Location factor, 1.5 if industry is located in critically polluted area/urban area/ ecologically sensitive area; otherwise

1

3.2 In light of the above environmental compensation (₹ 30000 per day×330 days per year = ₹ 9900000, say 1 crore per year), it is proposed that, EC may be imposed based on annual basis for compliance of flyash notification after December 31st, 2017 as below:

3.2.1 EC for plants commissioned before 3.11.2009

A: EC for year 2018 and 2019

$$EC = ₹ 1 \text{ crore/ year} \times C \times P \times LF$$

C : Capacity factor 1 for 500 MW and MW/500 for other capacity

P : Non-compliance during the year i.e. (100-% utilization during the year/100)

LF = Location factor, 1.5, if industry is located in critically polluted area/ urban area/ecologically sensitive area; otherwise 1

B: Annual EC for year 2020 onwards

$$EC = ₹ 1 \text{ crore/year} C \times P' \times LF$$

P' : Overall non-compliance in terms of multiple factor of annual generation i.e. total accumulated flyash at the end of year divided by annual flyash generation at full capacity.

LF : Location factor, 1.5 if industry is located in critically polluted area/urban area/ ecologically sensitive area; otherwise 1

3.2.2 EC for plants commissioned after 3.11.2009

A : EC for year 2018

$$EC = ₹ 1 \text{ crore/year} C \times P \times LF$$

C : Capacity factor 1 for 500 MW and MW/500 for other capacity

P : Non-compliance during the year i.e. (100-% utilization during the year/100)

LF : Location factor, 1.5 if industry is located in critically polluted area/urban area/ ecologically sensitive area; otherwise 1

B: Annual EC for year 2019 onwards

$$EC = ₹ 1 \text{ crore/year} C \times P' \times LF$$

P' : Overall non-compliance in terms of multiple factor of annual generation i.e. total accumulated flyash at the end of year divided by annual flyash generation at full capacity.

LF : Location factor, 1.5 if industry is located in critically polluted area/urban area/ ecologically sensitive area; otherwise 1

3.3 Temporary storage upto 90 days of generation of fly ash shall be allowed and no environmental compensation will be imposed for accumulated quantity.

24. We may now consider the above report and further course of action.

In the first instance, the mechanism for assessment of Environmental Compensation has over looked certain scientific aspects and hence cannot be agreed to in totality. Location factor should be taken to 1.5 for all situations as the principal contributor to the environment degradation in the area is the TPP. Further, the Capacity Factor has been taken 1 for 350 MW and MW/350 for other capacity, instead of taking 500 MW as a base. Thus, the formula needs to be revised as follows:-

$$EC = PI \times R \times N \times F \times LF$$
$$= ₹ 30000 \text{ per day } (80 \times 250 \times 1.5) \times N \times LF$$

EC = Environmental compensation/penalty (₹)
PI = Pollution Index of industrial sector (80 for red category of industries)
R = Rs in per day (₹ 250)
N = Number of days of violations.
F = Scale of operation of industrial sector, small 0.5, medium 1.0 and large 1.5
LF = Location factor, 1.5 for all situations as the principal contributor to environmental degradation in area is TPP.

Therefore, for 330 days per year, the said figure would come to ₹ 9900000 or say ₹ 1 crore per annum. In addition to above, the EC may be imposed on the basis of compliance of Fly Ash Notification after 31.12.2017 as below:

EC for 2018 & 2019:

$$EC = ₹ 1 \text{ crore/ year } \times C \times P \times LF$$

C : Capacity factor 1 for 350 MW and MW/350 for other capacity instead of taking 500 MW as a base.

P : Non-compliance during the year i.e. (100-% utilization during the year/100)

LF = Location factor, 1.5 for all situations as the principal contributor to environmental degradation in area is TPP.

EC for 2020:

EC = ₹ 1 crore/year × C × P' × LF

P' : Overall non-compliance in terms of multiple factor of annual generation i.e. total accumulated fly ash at the end of year divided by annual fly ash generation at full capacity

LF = Location factor, 1.5 for all situations as the principal contributor to environmental degradation in area is TPP.

Note: Temporary storage upto 90 days of generation of fly ash shall be allowed and no environmental compensation will be imposed for accumulated quantity.

25. Secondly, since as per applicable binding regime in terms of notification dated 27.01.2016 mentioned above, 100% fly ash utilization has to be ensured by 31.12.2017, there cannot be any time limit in conflict with the statutory notification. Further, there cannot be unlimited time for disposal of accumulated fly ash (legacy fly ash). Provisions of the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974 certainly attracted, apart from concepts of Sustainable Development, Precautionary and Polluter Pays principles, which are to be enforced under Section 20 of the National Green Tribunal Act, 2010 (NGT Act) but also are part of right to clean environment and, thus, right to life. While compensation has to be recovered for the damage caused, there cannot be any right to continue to damage the environment. Activity causing damage to the environment has to be prohibited, apart from action for prosecution for the violators of law,

including the Chief Executive Officers of the TPPs in question for continued violations.

26. Thirdly, we may also note that this Tribunal has noticed repeated and continuous defaults by the TPPs resulting in damage to the environment and public health for which compensation has been assessed by the experts under orders of the Tribunal.

In O.A. No. 453/2019, vide order dated 11.10.2019, this Tribunal considered reports of the MPPCB and UPPCB in respect of pollution by the TPPs in districts Singrauli and Sonebhadra respectively. It was found that damage was being caused to the water bodies including Rihand reservoir, surface and ground water and rivers like Son, Renu, Bijul, Kanhar, Gopad, Pankagan, Kathauta Kachan, etc. and streams/nalas like Ballia Nala, Chatka Nala, Kahuwa Nala, Tippa Jharia, Dongia Nala, etc. water was contaminated by toxic effluents discharged and was not fit for consumption.

MPPCB furnished its report dated 21.08.2019 recording a finding that pollution was taking place and recommending compensation as follows:-

“Details of imposed Environmental compensation

*As per the Environmental Compensation guidelines framed by CPCB in compliance of order 31.08.2018 in O.A. 593/2017 the maximum environmental compensation is Rs. 30,000/- per day of non-compliance. The total amount of **56,08,50,000/- (Fifty Six Crore Eight Lac Fifty thousand rupees)** may be imposed upon the 03 TPP & 08 NCL mining project against the non-compliance of the major notification, direction & recommendations issued since 2014.*

Summary of the days of non-compliance & Environmental compensation therefore is as tabulated below:

S. No.	Thermal power plant & Northern Coalfield Mine	Days of Non-compliance	Environmental Compensation in Rupees @ 30000/day
1.	M/s Essar Power MP Limited, Singrauli, MP	01	30,000/-
2.	M/s Sasan Power Limited, Singrauli, MP	1247	3,74,10,000/-
3.	M/s NTPC, Vindhyachal, Singrauli, MP	1389	4,16,70,000/-
4.	NCL, Nigahi, Singrauli	1825	5,47,50,000/-
5.	NCL, Gorbi Block-B, Singrauli	1843	5,52,90,000/-
6.	NCL, Khadia Project,	1825	5,47,50,000/-
7.	NCL, Amlohri area, Singrauli	2185	6,55,50,000/-
8.	NCL, Bina project	1825	5,47,50,000/-
9.	NCL, Dudhichua area	1825	5,47,50,000/-
10.	NCL, Jayant Project	2455	7,36,50,000/-
11.	NCL, Jhingurda area	2275	6,82,50,000/-

Likewise, UPPCB also found pollution by the TPPs in its report dated 28.08.2019 and compensation was recommended as follows:-

“Abridged Status of Environmental Compensation (EC)

S.No.	Name of industry (M/s)	EC in Rs.
1.	NTPC Thermal Power Plant, at Shaktinagar, Sonebhadra (U.P)	27,00,000
2.	Northern Coal Fields Limited (NCL) Project Dudhichua, Sonebhadra (U.P.)	1,30,20,000
3.	Northern Coal Fields Limited (NCL) Project Khadia, Sonebhadra (U.P.)	1,24,80,000
4.	Northern Coal Fields Limited (NCL) Project Krishnashila, Sonebhadra (U.P.)	6,11,40,000
5.	Northern Coal Fields Limited (NCL) Project Bina, Sonebhadra (U.P.)	64,50,000

6.	Northern Coal Fields Limited (NCL) Project Kakri, Sonebhadra (U.P.)	64,50,000
	NTPC Thermal Power Plant at Rihandnagar, Sonebhadra (U.P.)	45,90,000
7.	U.P. Power Corporation Ltd, Thermal Power Plant, Obra, Sonebhadra (U.P.)	6,11,40,000
8.	U.P. Power Corporation Ltd, Thermal Power Plant, Anpara, Sonebhadra (U.P.)	6,11,40,000
10.	LANCO Anpara Power Ltd, Thermal Power Plant, Anpara, Sonebhadra (U.P.)	23,70,000

Apart from recommendation for compensation, the UPPCB also recommended remediation measures and study of carrying capacity as follows:-

“11. Recommendations

In order to suitably address the critical issues of potential concerns to environment in the Singrauli Area, the Committee proposes following Recommendations subject to approval of Hon'ble NGT:

- a. *In keeping with the strict compliance of this referenced Order of Hon'ble NGT, the Statutory Authorities may take note of the findings of this report and ensure appropriate action for recovery of Environmental Compensation due to damage caused to environment.*
- b. *Considering complexity of study components and required expertise in related field / discipline, estimation of environmental damage and cost of remediation be worked out by a consortium of reputed institutions namely National Institute of Hydrology (NIH), Roorkee, National Geophysical Research Institute (NGRI), Hyderabad; National Institute of Occupational Health (NIOH), Ahmedabad; National Botanical Research Institute (NBRI), Lucknow and Indian Institute of Toxicology Research (IITR), Lucknow or such other institutions*

of repute. U.P. Pollution Control Board and M.P. Pollution Control Board may be nodal agencies for execution of the above activities in their respective jurisdiction.

- c. Irrigation Department in U.P. State is required to come out with status of silting in the reservoir impacting adversely on the water holding capacity of the reservoir and possible threat (if any) on the structure of the Rihand dam as the latter was designed to hold water column and is expected to practically holding a significant column of silt due to discharge of industrial effluents.
- d. Environmental carrying capacity in Singrauli area must be worked out to take a decision on new / expansion projects and also to devise an environment friendly strategy on pollution control by the industries in the area.”

27. In O.A. No. 164/2019, with reference to breach of fly ash dyke of ESSAR Thermal Power Plant and NTPC, Vindhya Nagar at Singrauli, M.P., the Committee appointed by this Tribunal headed by Justice Rajes Kumar, former Judge of Allahabad High Court, in its report dated 03.11.2019 observed:-

“(2) By persuasion and monitoring, the Fly Ash disposal by the Thermal Power Plants has been increased but 100% disposal could not be achieved. Disposal of stocked Fly Ash has not yet been started. An exclusive meeting of the Thermal Power Plants has been held on 22nd October, 2019. The meeting was very successful. Some positive suggestions have come out to deal with the Fly Ash. Copy of the Minutes has already been sent by email. It is stated that the Fly Ash is the main cause of the air pollution in the Singrauli-Sonbhadra area. Since the installation of the Thermal Power Plant(s) from the year 1981 onwards, no sincere effort was made by the Thermal Power Plants for the disposal of Fly Ash. It is only because of the sincere effort made by the Committee and regular monitoring, the Thermal Power Plants have started taking steps for disposal of Fly Ash.

(3) Construction of the Fly Ash Dyke and its maintenance was not found technically sound and proper. Recently, two Fly Ash Dykes – one of ESSAR Thermal Power Plant and another of NTPC, Vindhyanagar were

breached, causing heavy environmental damages. The Committee has taken serious note about this happening and has given direction to all Thermal Power Plants to get the certificate of the third party expert about the construction and stability of the Fly Ash Dyke. The Committee is seriously monitoring.

(4) Since long, the industrial effluents have been drained in the Rihand Reservoir. The Fly the Fly Ash has also been drained by some of the Thermal Power Plants, Ash travelled to the Rihand Reservoir, polluting the water of the Rihand Reservoir, which is only source of water. The committee has taken a very serious note of this issue and directed the U.P. Pollution Control Board to prepare a DPR for de-silting of sludge in order to purify the water and to increase the capacity of the Rihand Reservoir which has been substantially reduced due to drainage of affluents and fly ash.

(8) Shri Ashwani Kumar Dubey has filed one Application seeking the various reliefs on account of the environmental damages being cause by the breach of Fly Ash Dyke of ESSAR Thermal Power Plant. The enquiry in pursuance thereof is going on. Shri Ashwani Kumar Dubey has also filed a second Application seeking various reliefs on account of the breach of the Fly Ash Dyke of NTPC Vindhyanager causing environmental damages. The enquiry in this regard is going on and is pending.”

28. While the above report is yet to be considered, the matter was examined on 05.11.2019 with reference to an earlier report as follows:-

“Generation and storage of Fly-ash in Thermal Power Plants is becoming a great cause of concern affecting the environment. Due to the regular storage of Fly-ash in Fly-ash Dykes since long, affecting air pollution, has led the Ministry of Environment, Forest and Climate Change, Government of India to declare the Sonbhadra and Singrauli area as a most critically polluted area. No proper roadmap has been presented for its proper disposal by the Thermal Power Plants.

It has been noticed that in recent times there had been breach of Ash Dykes of two Thermal Power Plants in Singrauli district of Madhya Pradesh, which has resulted in discharge of Ash slurry to the river as well as to Rihand Reservoir adversely affecting their water quality. These Ash Dyke pertains to Thermal Power Plants (TPPs) namely Mjs Essar Power Ltd and NTPC, Vindhya Nagar. These incidence are of serious concern and indicates improper and non scientific design of Ash Dykes. The Oversight Committee constituted by Hon'ble NGT has taken this matter very seriously and also discussed in the previous meeting. In this regard a meeting of the Committee is convened on October 22, 2019 at 11:00 AM in Circuit House at

Prayagraj to discuss various issues related to handling of Ash and their disposal. The agenda of the meeting is as below: -

All Thermal Power Plants have to talk about the structural design of their Ash Dykes to prove that their Ash Dykes are proper and scientifically designed.

1. To discuss with all the Thermal Power Plants about structural details of their Ash Dykes and their adequacy for handling of Fly Ash generated. Whether submitted the details of ash dykes to SPCBs and taken permissions from SPCBs.

2. All Thermal Power Plants have to talk about the structural design of their Ash Dykes to prove that their Ash Dykes are proper and scientifically designed.

Submission of affidavit by TPPs in compliance of decisions taken in the last meeting of Committee regarding adequacy of Fly Ash Dyke. The status will also be shared about the action taken by TPPs for third party assessment of Ash Dyke of their plants through expert institutions like NEERVIITs.

3. Thermal Power Plants may submit their roadmap for the future disposal of the stored Fly-Ash as well as the currently generated Fly-Ash.

4. What effort has been made to fill up the Fly-Ash in the abandoned Coal Mines and Stone Mines? Whether any letter has been written to the Mine-owners or to the concerned Authority in this regard, seeking permission in light of the discussion in the earlier meeting(s)?

5. To provide opinion about option of developing mounts of Ash Dyke as done by NTPC Thermal Power Plant, Dadri, where green cover has been developed by covering it with the top soil.

6. Submission of status by NTPC Vindhya Nagar about necessary clearance from Madhya Pradesh Pollution Control Board about Gorbi mines and disposal of Fly Ash.

7. Preparation of DPR for project of desilting the Rihand Reservoir and bearing of such expenditure by Thermal Power Plants of the area on polluter pay principle.

All the Thermal Power Plants situated in the State of U.P. and M.P., Members of the Committee, District Magistrate of concerned districts may be informed to attend the meeting with relevant information as per Agenda."

“8. The deliberations of the Committee have been summed up as under:

“Thermal Power Plants — Ash Utilization:

NTPC-Vindhyanager: Shri V.K. Maurya, Deputy General Manager (Civil_Design) NTPC, New Delhi along with Shri Debashis Sen, Executive Director (Vindhyanager) states that they could not comply the direction given by the Committee in the earlier meeting and could not submit the affidavit till today. They could not file any reply to the points raised in the Agenda of notice. However, Shri V.K. Maurya tried to explain that their Fly Ash Dyke was constructed in accordance to the norms and time to time, when the height of the Dyke was raised, the technical advices were also taken from the experts. However, no evidence in this regard has been produced before us. Despite asking from us that whether they have brought any reply to the points detailed in the agenda, Mr. Jain another officer states that they have everything. The periodical inspection has been made by the various internal department officers but he admitted that no assessment or report by third party agency has been obtained with regard to Fly Ash Dyke. **Prima facie, the Committee is off the view that the officers of the NTPC are still not serious.** They have not complied with the direction given by the Committee in the earlier meeting. The affidavit has not been filed. **Recently, we came to know that there was a breach of Fly Ash Dyke on 06.10.2019 due to which huge quantity of fly ash slurry travelled alongwith the ground causing damage to crops and the fly ash travelled up to the Rihand Reservoir.** If as per the version of Mr. Jain and Mr. Maurya everything was perfectly all right and time to time dykes have been checked why this incident happened. The incident itself shows that there was some deficiency in the construction of Fly Ash Dyke. The whole purpose for asking the affidavit in the earlier meeting was to get their dykes checked properly from the third party experts inasmuch as these dykes were originally constructed much earlier, in the present case in the year 1981. **Plant is not able to produce any roadmap for the disposal of the stocked Fly Ash and the currently generated Fly Ash. A continuous process of stocking the Fly Ash is going on, which is causing environmental effect every day. In this view of the matter, the Committee is of the view that the Plant is liable for the compensation/penalty for causing environmental damage every day.**

Later on, at the end, they have provided an affidavit. **The averments made in the affidavit are vague and casual. The paragraphs are sworn on the 'personal knowledge' and not on the basis of documents. We**

are not satisfied with the averments made in the affidavit. Sri Jain submitted that some time may be allowed to get the Fly Ash Dyke inspected by the third party agencies. He prays and is allowed one month time to get the Fly Ash Dyke inspected by the third party agencies like IIT or any other agencies, who are experts on the subject. He further submitted that he may be allowed a week's time thereafter to give the reply of each and every point of the agenda of the meeting.

NTPC Shaktinagar: Shri Debashish Chattopadhyay, Chief General Manager submitted an affidavit in respect of the Fly Ash Dyke. From perusal of the affidavit it appears that the averments are vague and general in nature. The averments are sworn on the basis of personal knowledge and not on the basis of the documents. The Committee is not satisfied with the affidavit. Let the Plant may file a fresh affidavit after getting the report from the third party technical agency. He further submitted that due to the breach of the Fly Ash Dyke of NTPC Vindhyanagar and on account of the heavy pressure, their recycled water pipeline has been damaged resulting overflow of the water from the Dyke. **He fairly admitted that some quantity of the over-flown water is going to Rihand Reservoir.** He, however, assured that within a week the recycled water pipeline will be repaired and they may also get the technical structural stability report about their Fly Ash Dyke from third party agencies namely IIT etc. He submitted that he will submit the Affidavit within a period of one month giving reply of each and every point raised in the agenda.

NTPC Rihand: Shri Ranjan Kumar, G.M. NTPC Rihand submitted an affidavit. The averments made in the affidavit are vague and casual. The paragraphs are sworn on the 'personal knowledge' and not on the basis of documents. **We are not satisfied with the averments made in the affidavit.** He states that their Plant has already engaged IIT, Kanpur for the inspection and report in respect of the Fly Ash Dykes. The report may likely be obtained within one month. **The Committee is of the view that let one opportunity may be given to the Plant to file a better affidavit along with the documents to demonstrate the action taken by the Plant in this regard and also the report of the third party agency in regard to the structural stability of the Fly Ash Dykes.**

Lanco Anpara & U.P. State Power Corporation Ltd.:

An affidavit has been submitted by the Anpara Thermal Project, a Unit of U.P. State Power Corporation Ltd. The affidavit is vague and general in nature. In support of the averments in the affidavit, no document has been annexed. There is no report of the third party technical

agency. They are directed to give a better and detailed affidavit. It is stated that they have only one Fly Ash Dyke in which their fly ash as well as the fly ash of Lanco are being drained. The maintenance of the said Fly Ash Dyke is the responsibility of the Anpara Thermal Project, U.P. State Power Corporation Ltd. In this way, so far as the construction, stability and maintenance of the Fly Ash Dyke is concerned, Lanco is not responsible. The entire responsibility is upon U.P. State Power Corporation Ltd. The officer of U.P. State Power Corporation Ltd. submitted a report of 2018 wherein the structural stability of the Fly Ash Dyke has been examined. In the said report, it is approved that their Fly Ash Dyke is suitable for further raising of height up to 5 meters. The copy of the said report has been submitted before us. The Committee is of the view that after raising the height, the Plant may get a further report in respect of structural stability in order to overrule any possibility of technical flaw. Shri A.K. Rai, Executive Engineer states that in the Fly Ash Dyke the rainy water of the catchment area also flows and in such a situation during the rainy season when the Fly Ash Dyke is full of water due to heavy rainfall etc. **Sometimes the fly ash along with the water also flows to Rihand Reservoir. The Management of the Plant is very serious about this issue and has asked the District Administration to divert the Nala of the catchment area to somewhere to avoid any flow of fly ash in the Rihand Reservoir.** The District Magistrate, Sonbhadra states that the Administration is very serious and taking all possible steps to get the Nala diverted. The work is likely to be completed within two months. Both Lanco and U.P. State Power Corporation Ltd. are directed to furnish their reply by filing a fresh affidavit in regard to each and every point of the agenda of the meeting.

Essar Power: The officers of the Company submitted the affidavit regarding their Fly Ash Dykes. They submitted that 80% of the fly ash which had flown due to the breach of the Fly Ash Dyke have been removed and 20% fly ash lying on the earth shall be removed within a period of one month. They submitted that for the assessment of the environmental damage they have engaged NEERI, Nagpur. The document relating to their engagement has been produced before the Committee. They stated that NEERI has asked for six months time to assess the environmental damage. They further submitted that for the structural stability of the Dyke and making it technically sound they have taken the advices from two professors of the IIT Roorkee, namely, Prof. K.S. Hariprasad and Prof. Narendra K. Samadhia. They have visited the spot. They are likely to give their report within a period of fifteen days. On the basis of their report, they may proceed to reconstruct their Fly Ash Dyke. It has also

been informed to the Committee that there was a joint inspection done by the officers of the Central Pollution Control Board and the officers of the M.P. Pollution Control Board and on the inspection the report has been submitted wherein they found that the Plant has removed 80% fly ash and they are in the process of removing the remaining 20% of the fly ash. **The Committee directs the Plant to submit the report of the IIT within fifteen days and thereafter also submit the progress report, of the steps being taken to reconstruct the Dyke. On the report being received from NEERI, the environmental compensation shall be assessed. Let the Company may give detailed reply of each and every point of the agenda of the meeting by filing an affidavit within one month.**

Shasan Power Ltd.: The representative of the Plant submitted the affidavit. **However, the report of the third party agency certifying the structural stability of the Fly Ash Dykes has not been submitted. They have also not submitted the reply of each and every point raised in the agenda. The representative states that they will get the report about the structural stability of the Fly Ash Dykes and give the reply of each and every point raised in the agenda within one month.**

Hindalco Industries — Mahan Aluminum Project: The Company is engaged in the manufacturing of Aluminum from Alumina and has a Power Plant of 900 MW capacity. It is submitted that they have 02 Fly Ash Dykes, one dyke has been completely filled to the capacity and the other is being used now. For the purposes of raising height of the Fly Ash Dykes they have engaged the BHU for technical advice and on the basis of the advice they will proceed further in the matter. **The Committee is of the view that they may also get the report from the third party agency about the initial structural stability of the two Fly Ash Dykes.** The Company has submitted an affidavit. The averments in the affidavit are general in nature. They are also directed to file a fresh affidavit giving reply of each and every point raised in the agenda within one month.

Bajaj Energy: The representative of the Plant stated that they have received copy of the agenda very late. Therefore, they could not collect the necessary documents. They sought time to furnish the details. **Let the Plant may submit an affidavit relating to the structural stability of the Fly Ash Dykes and also give the reply of each and every point raised in the agenda, supported by the certificate from third party agency in this regard.** They are directed to give the reply of each

and every point of the agenda within a period of one month.

M.P. Power Generating Co. Ltd.: There are 04 (four) Units of this Company, namely:-

- (1) ATPS, Chachai, District Anuppur, established in 2007.
- (2) SGTPS, Birsinghpur, District Umariya, established in 2015.
- (3) STPS, Sarni, District Betul — two Plants established in 2013 and 2017.
- (4) SSTPP, Dongalia, District Khandwa, established in 2018.

A consolidated Paper Book has been submitted in respect of all the Units. However, they have not submitted any Affidavit with regard to the Fly Ash Dykes and also the Certificate of the third party agency who are the Technical expert. The officers of the Company pray for one month time to submit the affidavit and the certificate. They have also submitted a roadmap for the disposal of the Fly Ash. A perusal of the roadmap reveals that in comparison to the other Power Plants, their Unit-wise disposal are quite satisfactory.

However, they admit that even after more than 90% disposal, the stock of Fly Ash still remains and they are making efforts to dispose it by negotiating with the Cement Plants and approaching the Government for permission to fill the Fly Ash in the abandoned Mines. It is submitted that they are hopeful to achieve the target shortly. Let the Company may file the affidavit and the certificate in respect of the structural stability of the Fly Ash Dykes within one month.

MB Power (Madhya Pradesh) Ltd.: The Company has submitted a presentation in the form of small paper book. However, they have not submitted any Affidavit with regard to the Fly Ash Dykes and also the Certificate of the third party agency who are Technical expert. The officers of the Company pray for one month time to submit the affidavit and the certificate. The representative of the Company states that their disposal of Fly Ash is at present more than 100% and there is very little stock of Fly Ash lying in the Plant. For the further disposal of Fly Ash, they have approached the Southern Coalfields Ltd., Bilaspur to provide abandoned Mines for the purposes of filling of the Fly Ash. He stated that they are continuously approaching the Southern Coalfields Ltd., Bilaspur but they are not giving any reply. A copy of the letter has also been given to the Ministry of Coal, Govt. of India and also

to the Madhya Pradesh Pollution Control Board. Sri Hemant Sharma, Director, MPPCL states that he will look into the matter and do the needful. The Committee further directs the Southern Coalfields Ltd., Bilaspur to look into the request of the Plant and if it is feasible and there is no impediment, they may allow the filling of their Fly Ash in the abandoned Mines. Let the Company may file the affidavit and the certificate in respect of the structural stability of the Fly Ash Dykes within one month.

Obra Thermal Power Plant, Obra: The representative of the Plant submitted an affidavit in pursuance of the direction given by the Committee in the earlier meeting. We have perused the affidavit. The manner in which the affidavit has been submitted is not acceptable. It is, in fact, not an affidavit and nothing has been stated properly, supported by any document, as required by the Committee. Let the Company may file a fresh affidavit stating that their Fly Ash Dykes are structurally stable and there is no possibility of any breach, and also annexing the certificate in respect of the structural stability of the Fly Ash Dykes from a third party technical agency. The representative submitted that the Plant is raising the height of the Fly Ash Dykes after taking the advice from the IIT Roorkee. Committee directs that after the completion of the work, they will further get their Dykes inspected by the third party technical agency, namely, NEERI to get the certificate that the Dyke is fully structurally stable and there is no possibility of any breach. He submitted that although, at present, the Fly Ash Dykes is not operational but the Plant has negotiated with the NHAI and also got allotment of abandoned mines from the concerned Authorities. After getting the N.O.C. from the Department, they will fill the Fly Ash in the abandoned mines. In this way, they will be able to dispose off sufficient quantity of the Fly Ash. Let the Company may file a fresh affidavit, supported by documents, stating their Fly Ash Dykes are structurally stable and technically sound and also submit reply of the issues raised in the agenda within one month.

Prayagraj Thermal Power Plant: The representative states that although they have two Fly Ash Dykes but since their disposal of Fly Ash is at present 100%, there is no occasion to store the Fly Ash. The Plant is not facing any problem with regard to the Fly Ash Dyke. The Plant is, however, not operating in full capacity due to lack of coal in adequate quantity. Since their disposal of Fly Ash is to the nearby Industries, there may not be much problem of storage of fly ash in the Dykes.

Jaypee Bina Thermal Power Plant: The representative of the Company filed an affidavit. We have perused the affidavit. Let the Company may file a fresh affidavit

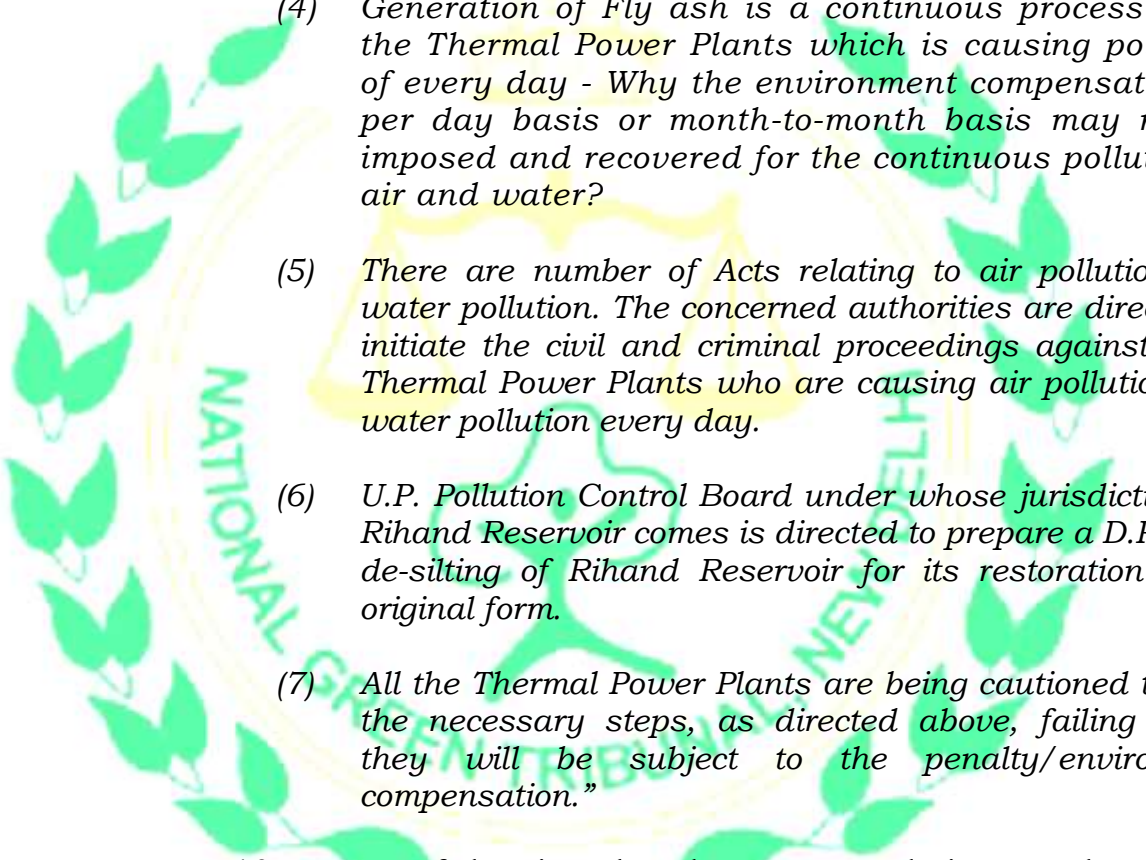
within one month enclosing the certificate from the third party technical agency that their Fly Ash Dykes are structurally stable and there is no possibility of any breach. They may also submit the reply to each and every point of the agenda in the said affidavit.

Jaypee Nigrie Thermal Power Plant: The representative of the Company states that there is 100% disposal of the Fly Ash. There is no stock of Fly ash in the Dykes. Only bottom ash is filled in the Fly Ash Dykes. At present, there may be about 3.9 Lac MT bottom ash in the dykes. He stated that they have sought permission from the concerned Authority to fill up the old lying Ash for filling up in 04 abandoned Stone mines, which are also leased out to them for the quarry of stone. The total capacity of the mines is about 15 lac MT. On the permission being granted, they will be able to consume the entire stock of the bottom fly ash stored in the Fly Ash Dykes. Let the Company may file a fresh affidavit within one month enclosing the certificate from the third party technical agency that their Fly Ash Dykes are structurally stable and there is no possibility of any breach. They may also submit the reply to each and every point of the agenda in the said affidavit.

NTPC Meja : The representative of the Plant stated that their Plant has been commissioned in the year 2019. After commissioning of the Plant, the production of the Plant has not been properly carried on initially, for the shortage of the coal and at present due to technical fault. The production may likely to start very soon. Therefore, they are not facing any problem relating to the Fly Ash.

NTPC Dadri : The representative of the Plant states that there is no Fly Ash Dyke in their Plant. In the Plant premises, they have developed a huge Fly Ash Mount wherein they are directly sending dried fly ash from the Plant to the Fly Ash Mount through the pipeline. The permissible height of the Fly Ash Mount is 55 Meters. The Fly Ash Mount is full of trees which works as a binding of fly ash and avoids any damage during the rainy season. The creation of the Fly Ash Mount is a continuous process. There is no effect of Fly Ash effluents and affecting any air pollution and environment. On the contrary, due to heavy growth of plantation, which is about 2,00,000, over the Fly Ash Mount, the entire area is full of greenery and creates a better environment.”

“9. In view of above, the Committee observed that the fly ash could be managed by developing a fly ash mount. The Committee has made following recommendations:

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- (1) All the Thermal Power Plants are directed to get their Fly Ash Dykes inspected by the third party agencies who are Technical expert to certify that their Fly Ash Dykes are technically sound and structurally sustainable and file an affidavit in this regard along with the certificate of the third party agencies.
- (2) All the Thermal Power Plants may make a serious effort for 100% disposal of the currently generated Fly Ash and also for the disposal of the stocked Fly Ash.
- (3) All the Thermal Power Plants may approach the District Administration with the request to allot abandoned mines (stone and coal) to them for the permission to fill the Fly Ash.
- (4) Generation of Fly ash is a continuous process in all the Thermal Power Plants which is causing pollution of every day - Why the environment compensation on per day basis or month-to-month basis may not be imposed and recovered for the continuous pollution of air and water?
- (5) There are number of Acts relating to air pollution and water pollution. The concerned authorities are directed to initiate the civil and criminal proceedings against these Thermal Power Plants who are causing air pollution and water pollution every day.
- (6) U.P. Pollution Control Board under whose jurisdiction the Rihand Reservoir comes is directed to prepare a D.P.R. for de-silting of Rihand Reservoir for its restoration to its original form.
- (7) All the Thermal Power Plants are being cautioned to take the necessary steps, as directed above, failing which they will be subject to the penalty/environment compensation.”

10. We are of the view that the recommendations on the subject of development of fly ash mounds and filling up of abandoned mines are issues which need to be examined by experts with regard to the safeguards necessary in the process, after studying the impact of environment. It is only after such a study that the development of mounds and filling up of abandoned mines can be undertaken. If there are pre-existing guidelines of MoEF&CC/CPCB on the subject, the same may be followed.

11. **As regards desilting of Rihand reservoir, the same needs to be undertaken on scientific basis and cost recovered in the manner apportioned by CPCB. Apart from desilting, structural improvement of the dykes needs to be simultaneously taken up. CPCB may ensure**

that an action plan is prepared by the power plants whose dykes have breached. The issue of developing fly ash mounts and filling up of abandoned mines may also be got examined by the CPCB from its Expert Committee.

- 12. The CPCB has given report dated 26.09.2019 in response to order dated 19.07.2019. The CPCB has recommended payment of compensation of Rs. 155,42,85,300/- (One hundred fifty five crore forty lac eighty five thousand three hundred). Since it is pointed out that vide order dated 04.11.2019 the Hon'ble Supreme Court has directed deferment of the proceedings, we defer the proceedings till the matter is decided by the Hon'ble Supreme Court."**

In view of above, while the matter has to be taken seriously and directions are necessary to be issued, the present order will be subject to any proceedings pending before the Hon'ble Supreme Court and where there is stay in operation, this order will not operate till such stay continues and thereafter abide by orders of Hon'ble Supreme Court.

29. This Tribunal has to enforce the mandate Section 20 of the NGT Act and require compliance of principle of Sustainable Development, Precautionary and Polluter Pays principles.

30. We have considered the written submissions filed by the individual TPPs. In view of earlier orders dealing with the contentions of the TPPs, there is no merit in the stand that the said plants are not liable for 100% fly ash disposal. Difficulties pointed out are of no relevance as the same are to be resolved by the administration and not by the victims of pollution whose rights are being affected. Environment cannot be violated against statutory norms. Violation of statutory notifications needs to be visited sternly in terms of enforcing the same, recovering compensation and prosecuting the violators.

Whatever be the individual circumstances, it cannot be a ground to disobey law and to commit criminal offence under the Water Act, Air Act and EP Act. There is no discretion available with this Tribunal to dispense with the mandate of law. Statutory provisions are binding on every TPP without any exception. It is, thus, not necessary to go into the justification or otherwise of such impermissible defence of the TPPs.

31. In view of above, all TPPs must take prompt measures for disposal of both current and accumulated fly ash. In respect of non-compliant TPPs, Polluter Pays principle has to be applied from the cut-off date of 31.12.2017, apart from other statutory consequences for continued violations.

32. Thus, our directions are as follows:-

- a. The TPPs may take prompt steps for scientific disposal of fly ash in accordance with the statutory notification issued by the MoEF&CC under the provisions of EP Act requiring 100% utilization and disposal of fly ash.
- b. For the non-compliant TPPs, environmental compensation needs to be determined w.e.f. the cut-off date of 31.12.2017 as stipulated in the Notification dated 27.01.2016.
- c. CPCB may accordingly compute and levy Environmental Compensation in accordance with the formula referred to above w.r.t. individual TPPs in accordance with law and

submit compliance report to this Tribunal before the next date.

- d. CPCB Guidelines of May 2019 for Utilization/Disposal of Fly ash for Reclamation of Low Lying Areas and in Stowing/Back filling of Abandoned Mines/Quarries may be complied.
- e. Task Force of Ministry of Power and Ministry of Coal may recommend list of abandoned mines/quarries for mine back filling purposes to the CPCB. CPCB may notify the same accordingly for use by the TPPs as per applicable guidelines and permission from State PCBs/PCCs.
- f. A Committee comprising of CPCB and IIT Roorkee may assess the environmental damage with regard to the breach sites at Vidhyanchal TPP an Essar TPP in Singrauli area and submit its recommendation within three months. CPCB shall be at liberty to engage any other technical expert for this purpose.
- g. The Committee comprising of Collector, CPCB and Member Secretary of MP State Pollution Control Board may assess the damage with regard to the breach sites at Vidhyanchal TPP and Essar TPP in Singrauli area to the crop and agricultural productivity and ensure effective restoration/remediation of affective sites within three months.
- h. CPCB may ensure implementation of action plans approved by it in accordance with timeline as provided in the statute.

- i. A joint Committee comprising of MoEF&CC, CPCB, IIT Roorkee and any other member considered necessary may submit quarterly progress report on recommendations of Expert Committee of Niti Aayog for enhanced utilization of fly ash in various sectors: mines, roads, cement, industries and bricks etc., along with its implementation status.
- j. The present order is subject to proceedings pending before the Hon'ble Supreme Court and where stay is operative, this order will not operate till stay continues and thereafter abide by orders of Hon'ble Supreme Court.

Copy of this order may be conveyed to MoEF&CC, Ministry of Power, Ministry of Coal, CPCB, IIT Roorkee and MP State Pollution Control Board. CPCB may put the order on its website and communicate the same to all concerned TPPs.

List for further consideration on 08.07.2020.

Adarsh Kumar Goel, CP

S.P Wangdi, JM

Dr. Nagin Nanda, EM

February 12, 2020
O.A. No. 117/2014 & other connected matters
A