

**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, FINANCE CENTRE
KOLKATA**

(By Hybrid Mode)

Original Application No. 104/2021/EZ

Tribunal on its own motion - **regarding
effluent discharge by the Raghunathpur
Thermal Power Plant (T-WBHRC)**

Versus

District Magistrate & Collector Purulia & Ors.

Date of hearing: 10.04.2023

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE MR. JUSTICE B. AMIT STHALEKAR, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

Respondent: Mr. Sudip Kumar Dutta, Advocate for R-1 & 4 (in Virtual Mode),
Mr. Dipanjan Ghosh, Advocate for R-2
Mr. Prithwish Basu, Advocate for R-3
Mr. Samrat Sen, Senior Advocate a/w Mr. Swarajit Dey, Advocate for
R-5 & 6 (in Virtual Mode)

ORDER

1. Proceedings in this matter were initiated *suo motu* vide order dated 12.11.2021 on receiving a reference from the West Bengal Human Rights Commission with reference to media report dated 9.7.2021 in Bengali Daily Newspaper "Gana Shakti". Media report was that effluents were being discharged by Raghunathpur Thermal Power Plant on agricultural lands in Villages Ghutitora, Lachhiara, Valdubi, Asta, Pathuriadanga and Khairabad in District Purulia, West Bengal resulting in damage to agricultural fields which were covered by the fly ash.

2. On consideration of the matter, the Tribunal constituted a fact-finding Committee comprising (i) District Magistrate & Collector, Purulia District; (ii) A Senior Official from Central Pollution Control Board, Regional Office, Kolkata; (iii) A Senior Official from West Bengal Pollution Control Board; and (iv) Superintending Engineer, Irrigation and Waterways Department, Govt. of West Bengal to visit the site and to (i) Assess the extent of damage to agriculture land specially with reference to soil fertility; (ii) Assess the quality of polluted water flowing out from the Dumdumi Power Plant (RTPS) with regard to PH, BoD, CoD, TC, FC, heavy metals and other effluents; (iii) Assess the pollution control measures adopted by the Dumdumi Power Plant (RTPS) towards abatement of pollution; (iv) Assess the environmental compensation cost on account of alleged leakage of pollutants by the Dumdumi Power Plant (RTPS) on the agriculture land; (v) Suggest remedial measures for restitution of the environment. Notice was also issued to Damodar Valley Corporation, Kolkata - the Project Proponent (PP) operating the said power plant.

3. In pursuance of above, inspection report was filed alongwith affidavit dated 15.02.2022 by the State PCB finding the violations of environmental norms by the PP. Extracts from the report are as follows:

“8.0 Field Visit and Observations:

8.1 Raghunathpur Thermal Power Station (DVC) has two (02) coal fired Boilers of electricity generation capacity 600 MW each and during inspection total Electricity generation was 772.949 MW. Visible emission was noticed from stack. Stack monitoring has been conducted and results obtained are as given below:

- a. Concentration of Particulate matter in Unit:1 - 88.09 mg/Nm³*
- b. Concentration of Particulate matter in Unit: 2 - 64.14 mg/Nm³*

Both the values are beyond permissible limit (50.0 mg/Nm³).

8.2 Raw water for the unit is sourced from Panchet reservoir & it is drawn through pipeline from a distance of 11 Km. Raw water is

stored in 2 nos. reservoirs with total capacity of 15 lac m³. After treatment it is distributed in various industrial operations purpose i.e. Cooling Tower, D.M.Plant , Ash handling & Domestic purpose.

8.3 Sources of industrial waste water generation are mainly from D.M. Plant regeneration, Boiler blow down, Cooling Tower blow down. As stated, the industrial waste water is stored in guard pond inside the plant premises. Guard pond water is utilized in ash slurry make up only.

8.4 During inspection, it was observed that entire effluent is discharged through an outlet located on eastern end boundary of the plant. Large volume of effluent was noticed to be discharged from this point outside the boundary. As stated by the local villagers the water flows upto a stretch of 2 km through an earthen nullah before meeting at Uthalajore which ultimately meets river Damodar after 8 km (approx.). Effluent samples have been collected from 03(three) locations for analysis. Results obtained are attached as Annexure I. Effluent parameter TC (Total Coliform) has exceeded permissible limit with respect to river water standard which might have happened due to discharge of domestic effluent. Value of pH has also exceeded permissible limit (8.5) at all sampling locations.

8.5 Unit has proposed for recirculation of entire effluent from this outlet and also proposed that excess effluent will be discharged outside after treatment through it's own drain. During visit it was noticed that the unit has installed one recirculation pump at it's plant discharge location and the same was in operation for recirculation of effluent. However, the unit has not yet achieved zero liquid discharge.

8.6 There are two Ash ponds with ash holding capacity 68.0 lac MT and 46.0 lac MT respectively as stated.

Ash ponds are located on north western side of the unit about 5 km away from unit boundary. Presently one of the Ash ponds is in use. The other Ash pond is filled up with water. Ash pond overflow is recycled through clarifier and utilised in ash slurry preparation. No discharge was observed from any of the Ash ponds.

8.7 Dry fly ash is stored in 2 (two) nos. of Silos of capacity 1500 Ton each. Dry fly ash is despatched to cement plants and flyash brick manufacturers. Presently ash utilization is about 10% as stated. Unit has proposed to set up dry fly ash bagging & despatch facility near ESP (Electro Static Precipitator) in recent future.

8.8 The only Automatic ambient air quality monitoring station installed inside the plant premises was found to be functional during inspection for measurement of PM_{2.5}, PM₁₀, SO₂ & NO_x.

8.9 The online stack monitoring facility was in operation for measurement of PM, SO₂ & NO_x.

8.10 Inspecting team visited Guard Pond, CAAQMS, Cooling Tower area etc.

8.11 Inspection team met & spoke to few local people of village Ghutitora, Pathuriadanga, Khudirmahal & other villages. The main allegation was that they are unable to do cultivation in their lands due to discharge of waste water from the plant through their lands. Inspection was carried out to few such areas along with them. Growth of bushes & grasses were noticed in lands just adjacent to cropped lands. Hence it is quite apparent that the lands with bushes & grasses were not cultivated by the land owners for long period.

8.12 The unit has obtained 'Consent to Operate' which is valid upto 31.10.2023.

9.0 Site Specific Observations:

9.1 Plant final discharge location:

This is the final discharge location of entire effluent. During early hours of inspection very high discharge was noticed from this point. Later the discharge quantity had drastically reduced. On enquiry with plant personnel it was understood that due to regeneration (Backwash) of Automatic Valve less Gravity Filter (Figure 1) and domestic effluent, large quantity of waste water was discharged in early hours. The boundary wall at final discharge location was totally damaged (Figure 2). Sample 1 was collected from beneath the culvert/causeway (Figure 3) and thereafter the effluent (Figure 4) is flowing downstream towards Uthalajore.

9.2 Sampling location at Bhaldubi:

The 2nd effluent sample was collected at Bhaldubi area through which the earthen channel is passing. Villagers were met during visit. It was alleged by the local people that the agricultural crops around the discharge channel have been damaged due to discharge of pollutants along with flyash from the industry & the farmers could not grow crops since inception of the project. The District Magistrate, Purulia had instructed the Officials of Agriculture Department of Govt. of West Bengal to conduct soil analysis in & around the affected area and assess the extent of damage to agricultural land specially with reference to soil fertility (Report annexed as Annexure – III).

9.3 Sampling location at Lachyara:

The 3rd effluent sample had been collected from this area through which the earthen channel is passing. Discussion held with local people. Similar allegation was heard from the local people as per 2nd location. Growth of bushes were noticed around the area.

10.0 Remarks:

10.01 As per report submitted by the Agriculture Department of Govt. of West Bengal, it may be noted that value obtained for the parameters are not critical for germination.

10.2 Values obtained of Total Coliform (TC) & pH at all effluent samples are found to be beyond permissible limit.

10.3 Particulate matter concentration at both the stacks are found to be beyond permissible limit.

10.4 Environmental compensation calculation is as follows:

Considering above mentioned violation of emission standard committee suggested to impose environmental compensation based on methodology given in "Report of the CPCB In-house Committee on Methodology for Assessing Environmental Compensation and Action Plan to Utilize the Fund" formulated in response to OA No. 593/2017(PB), for an industry can be assessed using the following formulae:

$$EC = P \times N \times R \times S \times LF$$

Where,

EC is Environmental Compensation in (Rs.)

PI = Pollution Index of industrial sector

N = Number of days of violation took place

R = A factor in Rupees (Rs.) for EC

S = Factor for scale of operation

LF = Location factor

The above formulae incorporate the anticipated severity of environmental pollution in terms of Pollution Index, duration of violation in terms of number of days, scale of operation in terms of micro & small/medium/large industry and location in terms of proximity to large habitations.

As per "Final Document on Revised Classification of Industrial Sectors Under Red, Orange, Green and White Categories (February 29, 2016)" normalised score of pollution index of Thermal Power Plant is 85.

PI = f (Water Pollution Score, Air Pollution Score & HW Generation Score)

Further, N is the number of days of violation. In this matter the no. of days considered between **the date of news published i.e. 09/07/2021 in newspaper ("Gana Shakti"- Hon'ble NGT vide Order Dt 12/11/2021- Para 1) reg. environmental pollution by mentioned unit and the date of inspection by NGT committee i.e. 14/12/21.** Therefore N is 159 days.

R is a factor in rupees for estimating environmental compensation which as per CPCB guidelines is taken as Rs. 250.

S is a factor representing the scale of operation of the industry (small scale = 0.5, medium scale = 1.0 and large scale = 1.5). Since power generation capacity of existing unit is more than 500 MW so it was considered as large scale and therefore S = 1.5

LF is the location factor depending on the population of the area as per recent census 2011 is below 1 million, so LF may be taken as 1 following CPCB's guidelines.

S .N o.	Populatio n* (million)	Locati on Factor # (LF)
1	1 to <5	1.25
2	5 to <10	1.5
3	10 and above	2.0
<p>*Population of the city/town as per the latest Census of India #LF will be 1.0 in case unit is located >10km from municipal boundary LF is presumed as 1 for city/town having population less than one million</p>		

Now, using formulae (1), environmental compensation is:

$$EC = P1 \times N \times R \times S \times LF$$

$$EC = 85 \times 159 \times 250 \times 1.5 \times 1$$

$$= \text{INR } 50,68,125 \text{ (Rupees Fifty Lakhs Sixty Eight Thousand One Hundred Twenty Five Only)}$$

10.5 Under no circumstances the unit should discharge effluent to private lands outside. The unit should take proper action to prevent discharge of effluent & entire effluent should be recycled.

10.6 Necessary action to be taken by Raghunathpur Thermal Power Station (DVC) to develop the marshy land on which the flow of effluent has been passing to make the land cultivable for agriculture.

10.7 The Directions and Execution of Bank Guarantee (BG) of Rs. 20,00,000/- (Rupees twenty lakh) as imposed upon the unit for non-compliance by West Bengal Pollution Control Board on 26/11/2021.”

4. Response of the PP is that following steps have been taken in the matter:

“9. DVC, RTPS has already taken the following actions which are follows:

a. The CAAQMS system for monitoring of Ambient Air Quality and stack emission on line has been installed and commissioned successfully. The data from the system is being transmitted directly to SPCB & CPCB.

b. Dry Fly Ash (DFA) utilisation is being enhanced by entering into contracts with end users like cement and bricks manufacturers for taking DFA from Silos. Tender for transportation of DFA through bagging from Electrostatic Precipitator Hoppers has been floated. I crave leave to refer to the tender documents and e-auction documents at the time of hearing, if necessary.

c. To arrest the discharge of surface water drain through the outlet located at the eastern side of the near Ghutitora More, a permanent scheme has been set up and put in place by DVC. The work order for same has been awarded to M/s Dascon Sourav Commercial Pvt. Ltd. on 21.01.2022. The site has been mobilized and the completion period of the same is 4 months. However, the water discharge has been arrested by installation of three numbers of high capacity submersible pumps within the plant boundary and the water is being reused in ash water system inside the plant.

d. The ash water recovery system is fully functional and no ash water is discharged outside the plant at all.

e. There is absolutely no discharge water from the ash pond to nearby agricultural lands. This has been ensured by installing a running ash water recovery system.

f. The installation of FGD for both the units is in progress. The expected commissioning date of unit I is December 2022 and for unit II is May 2023.

g. A Bank Guarantee being No. 17212ILG000222 dated 10.01.2022 issued by Punjab National Bank for a sum of Rs. Twenty Lakhs has been submitted to WBPCB vide letter dated 12.01.2022 issued by DVC having validity of one year. In this regard, a copy of the letter dated 12.01.2022 along with copy of the bank guarantee is annexed hereto and marked with the letter 'E'.

10. The respondent No. 3, being the WBPCB has filed an affidavit purportedly affirmed by one Subrata Ghosh on 15.02.2022 (hereinafter referred to as the said affidavit). DVC reserves its right to deal with the aforesaid affidavit in details, subject to leave by this Hon'ble Tribunal. However, for the moment, it is submitted as follows:

(a) The environmental compensation assessed by the Committee has no basis whatsoever. DVC, RTPS has not violated any environmental norms. DVC, RTPS has not polluted the environment and as such DVC, RTPS cannot be saddled with environmental compensation, whether to the extent as awarded or otherwise or at all.

(b) The water analysis report filed by the WBPCB dated 24.12.2021 as Annexure I is not true and correct. The report does not mention any permissible limit of the parameters. From the report it does not appear that any of the parameters are not within the permissible limits. However, in the inspection report at paragraph 8.4, WBPCB has stated that TC (Total Coliform) and pH has purportedly exceeded permissible limits. With regard to TC, WBPCB has further stated that TC has exceeded due to discharge of domestic effluent. I say that there is no domestic effluent discharged from the RTPS plant. DVC, RTPS has submitted herein the Test Reports dated 12.01.2022 issued by a reputed NABL

accredited agency wherefrom it would appear that all the parameters are within the permissible limits and the permissible limits are categorically mentioned in such reports. As per the report filed by DVC, the permissible limit for pH is 9 and I deny that the permissible limit for pH is 8.5 as stated by WBPCB in paragraph 8.4 of the inspection report. It is stated that no environmental compensation can be or should be levied upon DVC, RTPS in the given facts and circumstances mentioned above.

(c) The analysis reports of gaseous emission filed by WBPCB as Annexure II are also not true and correct. The real time stack emission data consists of Sox, NOx and particulate matter and the same are monitored by CPCB and WBPCB through online transmission on regular basis. I say that RTPS is maintaining the requisite parameters. I crave leave to refer to the documents in this regard at the time of hearing, if necessary.

(d) Moreover, the committee has not assessed the extent of purported damage to agricultural land especially with reference to soil fertility. The committee has relied upon a soil analysis report issued by the Office of the Agricultural Chemist; Government of West Bengal dated 31.12.2021. The report nowhere states that the lands are not fit for agriculture. In fact, the Committee, at page 7 of the Report, has recorded that the value obtained with regard to the parameters are not critical for germination. It is respectfully submitted that no pollutant has been leaked to the agricultural land and the committee has specifically stated in its report that the values obtained after the soil analysis are not critical for germination. Therefore, it is submitted that no environmental compensation can be or should be levied on the answering respondent.

(e) Even assuming for the sake of argument alone, but not admitting that there has been any effluence caused by DVC, RTPS, it is stated that the formula used by the committee has no basis and also that the values taken on account of pollution index, number of days of alleged violation, factor in rupees, factor for scale of operation and location factor are not supported by any evidence. The committee has not given any basis as to why such values have been taken by the Committee to be appropriate.

11. It is reiterated that DVC, RTPS has taken all requisite steps as per the directions of the WBPCB and also deposited the Bank Guarantee of Rs. 20 lakhs.”

5. In pursuance of further orders of the Tribunal on specific issues, the PP filed affidavit dated 18.10.2022 that remedial steps were being taken, including installing of FGD and utilizing the fly ash.

Consideration and directions

6. We have heard learned appearing Counsel and considered the matter.

7. While some steps have been taken preventing discharge of polluted water on lands, the same cannot be held to be adequate. While it is stated that a settling pond has been set up to prevent fly ash, it is not clear where the excess fly ash/water is being taken. It is also not clear how affected farmers have been compensated for the loss in not being able to cultivate the land for long period, as noted in the report quoted above. These aspects need to be addressed by a joint Committee headed by Additional Chief Secretary, Environment, West Bengal with State PCB, District Magistrate, Purulia, CPCB and Director, Agriculture, West Bengal as Members. The State PCB will be the nodal agency for coordination and compliance. The joint Committee may meet within two weeks and after interacting with the farmers and associating the PP may determine reasonable compensation for the farmers and verify effectiveness of preventive measures.

8. Apart from above, since accumulated fly ash is a constant source of air pollution, water pollution, land pollution and contamination of ground water, steps to utilise fly ash at the earliest are required. Cost of storing fly ash to the environment is much higher than financial benefits awaited by sale. Selling fly ash may be time consuming but its free supply may outweigh advantages of storing. This requires change in attitude and policy.

9. In this regard, we may refer to the order of this Tribunal dated 18.01.2022 in OA No. 164/2018, *Ashwani Kumar Dubey vs. Union of India & Ors.* in continuation of earlier procedure which were pending since 2014. It was noted that legacy ash stored till 31.03.2021 in the said thermal

power plants was to the extent of 1670.602 Million Tonnes. Such heavy quantum of fly ash was source of serious pollution of air, water and land in the area including contamination of groundwater. The fact-finding Committee appointed by the Tribunal made recommendations which were directed to be followed. Operative part of the order is reproduced below:

“Conclusions and Way forward:

16. *From the above, it is seen that there is a long way to go for protecting environment and public health. The failures of the TPPs are alarming. We find no reason not to accept all the recommendations and to direct remedial action. Thus, all recommendations are accepted and further remedial action is directed to be taken by the statutory regulators which also be overseen by the joint Committees of CPCB, State PCB and the jurisdictional District Magistrates, with CPCB and State PCBs being nodal agencies. Quarterly reports may now be filed with the MoEF&CC to be considered by the Coordinating Committee being hereby constituted.*

Compensation for past violations, including breach of Rihand reservoir and flyash pond of Sasan Power:

17. *With regard to past violations generally, we leave the issue of compensation determination to the joint Committees of CPCB, State PCB and District Magistrate within next three months, following due process. Compensation determination must be based on principles laid down inter alia in M.C.Mehta, (1987) 1 SCC 395, Sterlite (2013) 4 SCC 575 and Goel Ganga (2018) 18 SCC 257, having regard to the period of violation and financial capacity of the unit. Mere days of violations are not conclusive without reference to financial capacity of the units. Directions already issued on the subject will be treated as final as far as this Tribunal is concerned, subject to final orders of the Hon’ble Supreme Court in appeals filed by the concerned units, if any.*

Compliance of recommendations of the Committees and road map for Future:

18. *In the light of alarming situation found on verification of the ground situation, it is clear that serious violations are continuing in failure to prevent air and water pollution by the TPPs. Requisite air pollution control devices (FGD) are not being installed, CAQMS are not being installed at proper locations and connected to CPCB server, huge accumulated flyash is not being utilised nor scientifically stored, the ponds/dykes are not properly maintained resulting in polluting water sources, air and land, apart from adverse health effects and damage to the flora and fauna. Singrauli and Sonebhadra industrial areas prominently figure in the CEPI index prepared by CPCB in respect of polluted industrial areas. This Tribunal has already issued directions to take remedial measures in respect of such areas to achieve the laid down norms for air, water and soil in OA No. 1038/2018, News item published in “The Asian Age” Authored by Sanjay Kaw Titled “CPCB to rank industrial units on pollution levels”. Though the appeals are*

pending before the Hon'ble Supreme Court against some of the directions, consistent with the interim orders of the Hon'ble Supreme Court, steps need to be taken to enforce environmental norms in the said areas. The said directions be complied and the statutory regulators may maintain constant vigil against any violations. Further, as responsible corporate organizations, the PPs need to discharge corporate social responsibility to honour dignity of human life and the environment. Bottlenecks in remedying the situation of not utilising accumulated flyash need to be tackled on war footing. Concerted and coordinated joint efforts by the PPs and the statutory regulators at highest levels are required. The process in which fly ash can be utilized include backfilling of mines, construction of roads, brick kilns and cement companies. It is stated during the hearing that the TPP may be prepared to provide fly ash to the brick kilns but the unresolved issue is of transportation. Such issue is not unsurmountable and can be resolved by coordination with brick kiln owners association and other stake holders. Suggested to permit brick making at or close to the site of storage of fly ash may need consideration. There is need to lay down siting, design and engineering standards for the location, disposal, maintenance and regulation of Ash Ponds as breach of a fly ash ponds result in great disaster. There is also need to undertake public health and risk impact assessment in the areas of operation of TPPs and generators of fly ash. Another obstacle pointed out is advisory issued by the Ministry of Power dated 22.9.2021 that instead of being given free, flyash should be sold which is not viable as there are no buyers perpetuating storage to the detriment of environment and public health and cost. Not only such advisory is unmindful of disastrous consequences, it is also against recent statutory notification of MoEF&CC dated 31.12.2021. We find it to be so and direct that being detrimental to environment, the same will not be enforced. In compelling circumstances, to protect environment, we find it necessary to constitute a high-level Coordination Committee in exercise of our powers under section 15 of the NGT Act to be called the 'Flyash Management and Utilization Mission'. Details follow in later part of the order.

Notification dated 31.12.2021 issued by the MoEF&CC extending time for utilisation of flyash:

19. The TPPs have referred to notification dated 31.12.2021 extending timeline for utilisation of legacy flyash for 10 years, subject to scientific management and subject to 100% utilisation on average of three years and not less than 80% in any given year. We are not called upon to express any opinion about the validity of Notification dated 31.12.2021. It may appear to be a retrograde step in the face of quantity of fly ash noted earlier and continuing damage to the environment and public health unless the notification is properly understood and interpreted so as to remedy the situation. The object of the notification is not to nullify the mandate of the Air Act or standards of air quality or other norms but to provide further opportunity beyond the earlier timelines, consistent with the mandate of complying with laid down environmental norms which are part of right to life. Violation of laid down air quality and other norms cannot and is not sought to be condoned. Nor there is any bar against remedying deteriorated environment of polluted industrial areas, in

the light of recommendations based on ground verification. Thus, issue of violation of norms due to unscientific management and handling of fly ash remains including action against persons responsible for pollution and accidents, apart from issue of compliance of specific conditions of notification dated 31.12.2021 remains.

20. *As noted earlier, situation caused by failure of the TPPs to manage fly ash scientifically and to utilize the same within reasonable time is highly detrimental to public health and emergency measures in Mission Mode are required. Even the Notification dated 31.12.2021 recognizes the alarming situations which is clear from the text of the Notification itself quoted below:*

“S.O. 5481(E).—Whereas by notification of the Government of India in the erstwhile Ministry of Environment and Forests vide S.O.763 (E), dated the 14th September, 1999, as amended from time to time, the Central Government, issued directions for restricting the excavation of top soil for manufacturing of bricks and promoting the utilisation of fly ash in the manufacturing of building materials and in construction activity within a specified radius of three hundred kilometres from the coal or lignite based thermal power plants;

And whereas, to implement the aforesaid notification more effectively based on the polluter pays principle (PPP) thereby ensuring 100 per cent utilisation of fly ash by the coal or lignite based thermal power plants and for the sustainability of the fly ash management system, the Central Government reviewed the existing notification; and whereas environmental compensation needs to be introduced based on the polluter pays principle;

And whereas, there is a need to conserve top soil by promoting manufacture and mandating use of ash based products and building materials in the construction sector;

And whereas, there is a need to conserve top soil and natural resources by promoting utilisation of ash in road laying, road and flyover embankments, shoreline protection measures, low lying areas of approved projects, backfilling of mines, as an alternative for filling of earthen materials;

And whereas, it is necessary to protect the environment and prevent the dumping and disposal of fly ash discharged from coal or lignite based thermal power plants on land;

And whereas, in the said notification the phrase 'ash', has been used which includes both fly ash as well as bottom ash generated from the Coal or Lignite based thermal power plants;

And whereas, the Central Government intends to bring out a comprehensive framework for ash utilisation including

system of environmental compensation based on polluter pays principle;

And whereas, a draft notification on ash utilisation by coal or lignite thermal power plants in supersession of the notification of the Government of India, Ministry of Environment and Forests published in the Gazette of India, Extra Ordinary part II, section 3, sub-section (i) vide S.O.763 (E), dated the 14th September, 1999, by notification in exercise of the powers conferred under 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, was published in the Gazette of India, Extraordinary, Part II, section 3, sub-section (i), vide G.S.R. 285(E), dated the 22nd April, 2021 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 provisions were made available to the public;

And, whereas all the objections and suggestions received from all persons likely to be affected thereby in respect of the said draft notification have been duly considered by the Central Government;

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, and in supersession of the Notification S.O.763 (E), dated the 14th September, 1999 except as respect things done or omitted to be done before such supersession, the Central Government hereby issues the following notification on ash utilisation from coal or lignite thermal power plants which shall come into force on the date of the publication of this notification, namely:-

A. Responsibilities of thermal power plants to dispose fly ash and bottom ash.-

(1) Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall be primarily responsible to ensure 100 per cent utilisation of ash (fly ash, and bottom ash) generated by it in an eco-friendly manner as given in sub-paragraph (2);

(2) The ash generated from coal or lignite based thermal power plants shall be utilised only for the following eco-friendly purposes, namely:-

- (i) Fly ash based products viz. bricks, blocks, tiles, fibre cement sheets, pipes, boards, panels;*
- (ii) Cement manufacturing, ready mix concrete;*
- (iii) Construction of road and fly over embankment, Ash and Geo-polymer based construction material;*
- (iv) Construction of dam;*
- (v) Filling up of low lying area;*

- (vi) Filling of mine voids;
- (vii) Manufacturing of sintered or cold bonded ash aggregate;
- (viii) Agriculture in a controlled manner based on soil testing;
- (ix) Construction of shoreline protection structures in coastal districts;
- (x) Export of ash to other countries;
- (xi) Any other eco-friendly purpose as notified from time to time.

(3) A committee shall be constituted under the chairmanship of Chairman, Central Pollution Control Board (CPCB) and having representatives from Ministry of Environment, Forest and Climate Change (MoEFCC), Ministry of Power, Ministry of Mines, Ministry of Coal, Ministry of Road Transport and Highways, Department of Agricultural Research and Education, Institute of Road Congress, National Council for Cement and Building Materials, to examine and review and recommend the eco-friendly ways of utilisation of ash and make inclusion or exclusion or modification in the list of such ways as mentioned in Subparagraph (2) based on technological developments and requests received from stakeholders. The committee may invite State Pollution Control Board or Pollution Control Committee, operators of thermal power plants and mines, cement plants and other stakeholders as and when required for this purpose. Based on the recommendations of the Committee, Ministry of Environment, Forest and Climate Change (MoEFCC) may publish such eco-friendly purpose.

(4) Every coal or lignite based thermal power plant shall be responsible to utilise 100 per cent ash (fly ash and bottom ash) generated during that year, however, in no case shall utilisation fall below 80 per cent in any year, and the thermal power plant shall achieve average ash utilisation of 100 per cent in a three years cycle:

Utilisation percentages of thermal power plants	First compliance Cycle to	Second compliance cycle
>80 per cent	3 years	3 years
60-80 per cent	4 years	3 years
<60 per cent	5 years	3 years

Provided that the three years cycle applicable for the first time is extendable by one year for the thermal power plants where ash utilisation is in the range of 60-80 per cent, and two years where ash utilisation is below 60 per cent and for the purpose of calculation of percentage of ash utilisation, the percentage quantity of utilisation in the year 2021- 2022 shall be taken into account as per the table below:

Provided further that the minimum utilisation percentage of 80 per cent shall not be applicable to the first year and first two years of the first compliance cycle for the thermal power plants under the utilisation category of 60-80 per cent and

Provided also that 20 per cent of ash generated in the final year of compliance cycle may be carried forward to the next cycle which shall be utilised in the next three years cycle along with the ash generated during that cycle.

(5) The unutilised accumulated ash i.e. legacy ash, which is stored before the publication of this notification, shall be utilised progressively by the thermal power plants in such a manner that the utilization of legacy ash shall be completed fully within ten years from the date of publication of this notification and this will be over and above the utilisation targets prescribed for ash generation through current operations of that particular year:

Provided that the minimum quantity of legacy ash in percentages as mentioned below shall be utilised during the corresponding year and the minimum quantity of legacy ash is to be calculated based on the annual ash generation as per installed capacity of thermal power plant.

<i>Year from date of publication</i>	<i>1st</i>	<i>2nd</i>	<i>3rd - 10th</i>
<i>Utilisation of legacy ash (in percentage of Annual ash)</i>	<i>At least 20 per cent</i>	<i>At least 35 per cent</i>	<i>At least 50 per cent</i>

Provided further that the legacy ash utilisation shall not be required where ash pond or dyke has stabilised and the reclamation has taken place with greenbelt or plantation and the concerned State Pollution Control Board shall certify in this regard. Stabilisation and reclamation of an ash pond or dyke including certification by the Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall be carried out within a year from the date of publication of this notification. The ash remaining in all other ash ponds or dykes shall be utilised in progressive manner as per the above mentioned timelines.

Note: The obligations under sub-paragraph (4) and (5) above for achieving the ash utilisation targets shall be applicable from 1st April, 2022.

(6) Any new as well as operational thermal power plant may be permitted an emergency or temporary ash pond with an area of 0.1 hectare per Mega Watt (MW). Technical specifications of ash ponds or dykes shall be as per the guidelines of Central Pollution Control Board (CPCB) made in consultation with Central Electricity Authority (CEA) and these guidelines shall also lay down a procedure for annual certification of the ash pond or dyke on its safety, environmental pollution, available volume, mode of disposal, water consumption or conservation in disposal, ash water recycling and greenbelt, etc., and shall be put in place within three months from the date of publication of this notification.

(7) Every coal or lignite based thermal power plant shall ensure that loading, unloading, transport, storage and disposal of ash is done in an environmentally sound manner and that all precautions to prevent air and water pollution are taken and status in this regard shall be reported to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in Annexure attached to this notification.

(8) Every coal or lignite based thermal power plant shall install dedicated silos for storage of dry fly ash silos for at least sixteen hours of ash based on installed capacity and it shall be reported upon to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in the Annexure and shall be inspected by Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) from time to time.

(9) Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall provide real time data on daily basis of availability of ash with Thermal Power Plant (TPP), by providing link to Central Pollution Control Board's web portal or mobile phone App for the benefit of actual user(s).

(10) Statutory obligation of 100 per cent utilisation of ash shall be treated as a change in law, wherever applicable.

B. For the purpose of utilisation of ash, the subsequent sub-paras shall apply.—

(1) All agencies (Government, Semi-government and Private) engaged in construction activities such as road laying, road and flyover embankments, shoreline protection structures in coastal districts and dams within 300 kms from the lignite or coal based thermal power plants shall mandatorily utilise ash in these activities:

Provided that it is delivered at the project site free of cost and transportation cost is borne by such coal or lignite based thermal power plants.

Provided further that thermal power plant may charge for ash cost and transportation as per mutually agreed terms, in case thermal power plant is able to dispose the ash through other means and those agencies makes a request for it and the provisions of ash free of cost and free transportation shall be applicable, if thermal power plant serves a notice on the construction agency for the same.

(2) The utilisation of ash in the said activities shall be carried out in accordance with specifications and guidelines laid down by the Bureau of Indian Standards, Indian Road Congress, Central Building Research Institute, Roorkee, Central Road Research Institute, Delhi, Central Public Works Department, State Public Works Departments and other Central and State Government Agencies.

(3) It shall be obligatory on all mines located within 300 kilometres radius of thermal power plant, to undertake backfilling of ash in mine voids or mixing of ash with external Overburden dumps, under Extended Producer Responsibility (EPR). All mine owners or operators (Government, Public and Private Sector) within three hundred kilometres (by road) from coal or lignite based thermal power plants, shall undertake measures to mix at least 25 per cent of ash on weight to weight basis of the materials used for external dump of overburden, backfilling or stowing of mine (running or abandoned as the case may be) as per the guidelines of the Director General of Mines Safety (DGMS):

Provided that such thermal power stations shall facilitate the availability of required quantity of ash by delivering ash free of cost and bearing the cost of transportation or cost or transportation arrangement decided on mutually agreed terms and mixing of ash with overburden in mine voids and dumps shall be applicable for the overburden generated from the date of publication of this notification and the utilisation of ash in the said activities shall be carried out in accordance with guidelines laid down by the Central Pollution Control Board, Director General of Mines Safety and Indian Bureau of Mines.

Explanation.- For the purpose of this sub-paragraph, it is also clarified that the provisions of ash free of cost and free transportation shall be applicable, if thermal power plants serve a notice on the mine owner for the same and the mandate of using 25 per cent of ash for mixing with overburden dump and filling up of mine voids shall not be applicable unless a notice is served on the mine owner by thermal power plant.

(4) (i) All mine owners shall get mine closure plans (progressive and final) to accommodate ash in the mine voids and the concerned authority shall approve mine plans for disposal of ash in mine voids and mixing of ash with overburden dumps. The Ministry of Environment, Forest and Climate Change (MoEFCC) has issued guidelines on 28th August, 2019 regarding exemption of requirement of Environmental Clearance of thermal power plants and coal mines along with the guidelines to be followed for such disposal.

(ii) The Ministry in consultation with Central Pollution Control Board (CPCB), Director General of Mine Safety (DGMS) and Indian Bureau of Mines (IBM) may issue further guidelines time to time to facilitate ash disposal in mine voids and mixing with overburden dumps and it shall be the responsibility of mine owners to get the necessary amendments or modifications in the permissions issued by various regulatory authorities within one year from the date of identification of such mines.

(5) (i) There shall be a committee headed by Chairperson, Central Pollution Control Board (CPCB) with representatives from Ministry of Environment, Forest and Climate Change, Ministry of Power, Ministry of Mines, Ministry of Coal, Director General of Mine Safety and Indian Bureau of Mines for identification of mines for backfilling of mine voids with ash or

mixing of ash with overburden dump including examination of safety, feasibility (not economic feasibility) and aspects of environmental contamination and the committee shall get updated quarterly reports prepared regarding identified mines (both underground and opencast) for the stakeholder Ministries or Departments and the committee shall start identifying the suitable mines immediately after the publication of this notification.

(ii) Thermal power plants or mines shall not wait for disposal of ash till the identification is done by the above mentioned committee, to meet the utilisation targets mandated as above.

(6) Filling of low lying areas with ash shall be carried out with prior permission of the State Pollution Control Board or Pollution Control Committee for approved projects, and in accordance with guidelines laid down by Central Pollution Control Board (CPCB) and the State Pollution Control Board or Pollution Control Committee (PCC) shall publish approved sites, location, area and permitted quantity annually on its website.

(7) Central Pollution Control Board after engaging relevant stakeholders, shall put in place the guidelines within one year for all types of activities envisaged under this notification including putting in place time bound online application process for the grant permission by State Pollution Control Boards (SPCBs) or Pollution Control Committees (PCCs).

(8) All building construction projects (Central, State and Local authorities, Govt. undertakings, other Govt. agencies and all private agencies) located within a radius of three hundred kilometres from a coal or lignite based thermal power plant shall use ash bricks, tiles, sintered ash aggregate or other ash based products, provided these are made available at prices not higher than the price of alternative products.

(9) Manufacturing of ash based products and use of ash in such products shall be in accordance with specifications and guidelines laid down by the Bureau of Indian Standards, Indian Road Congress, and Central Pollution Control Board.

C. Environmental compensation for non-compliance-

(1) In the first two years of a three years cycle, if the coal or lignite based thermal power plant (including captive or co-generating stations or both) has not achieved at least 80 per cent ash (fly ash and bottom ash) utilisation, then such non-compliant thermal power plants shall be imposed with an environmental compensation of Rs. 1000 per ton on unutilised ash during the end of financial year based on the annual reports submitted and if it is unable to utilise 100 per cent of ash in the third year of the three years cycle, it shall be liable to pay an environmental compensation of Rs. 1000 per ton on the unutilised quantity on which environmental compensation has not been imposed earlier:

Provided that the environmental compensation shall be estimated and imposed at the end of last year of the first compliance cycle as per the various utilisation categories as mentioned in sub-paragraph (4) of Para A.

(2) Environmental compensation collected by the authorities shall be deposited in the designated account of Central Pollution Control Board.

(3) In case of legacy ash, if the coal or lignite based thermal power plant (including captive or co-generating stations or both) has not achieved utilisation equivalent to at least 20 per cent (for the first year), 35 per cent (for the second year), 50 per cent (for third to tenth year) of ash generated based on installed capacity, an environmental compensation of Rs. 1000 per ton of unutilised legacy ash during that financial year shall be imposed and if the utilization of legacy ash is not completed at the end of 10 years, an environmental compensation of Rs.1000 per ton shall be imposed on the remaining unutilised quantity which has not been imposed earlier.

(4) It shall be the responsibility of the transporters or vehicle owner to deliver ash to authorised purchaser or user agency and if it is not complied, then an environmental compensation of Rs. 1500 per ton on such quantity as mis-delivered to unauthorised users or non- delivered to authorised users will be imposed besides prosecution of such non-compliant transporters by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC).

(5) It is the responsibility of the purchasers or user agencies to utilise ash in an eco-friendly manner as laid down at para B of this notification and if it is not complied, then an environmental compensation of Rs. 1500 or per ton shall be imposed by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC).

(6) If the user agencies do not utilise ash to the extent obligated under para B or the extent to which they have been intimated through Notice(s) served under sub-paragraph (1) of para D, whichever is lower, they shall be liable to pay Rs. 1500 per ton of ash for the quantity they fall short off:

Provided that the environmental compensation on building constructions shall be levied at Rs.75/- per square feet of built up area of construction.

(7) (i) The environmental compensation collected by Central Pollution Control Board from the thermal power plants and other defaulters shall be used towards the safe disposal of the unutilised ash and the fund may also be utilised for advancing research on use of ash including ash based products.

(ii) The liability of ash utilisation shall be with thermal power plants even after imposition of environmental compensation on unutilised quantities and in case thermal power plant achieves the ash utilisation of any particular cycle after imposition of

environmental compensation in subsequent cycles, the said amount shall be returned to thermal power plant after deducting 10 per cent of the environmental compensation collected on the unutilised quantity during the next cycle and deduction of 20 per cent, 30 per cent, and so on, of the environmental compensation collected is to be made in case of utilisation of ash in subsequent cycles.

D. Procedure for supply of ash or ash based products.—

(1) The owner of thermal power plants or manufacturers of ash bricks or tiles or sintered ash aggregate shall serve written notice to persons or agencies who are liable to utilise ash or ash based products, offering for sale, or transport or both.

(2) Persons or user agencies who have been served notices by owner of thermal power plants or manufacturers of ash bricks or tiles or sintered ash aggregate, if they have already tied up with other agencies for the purpose of utilisation of ash or ash products, shall inform the thermal power plant accordingly, if they cannot use any ash or ash products or use reduced quantity.

E. Enforcement, Monitoring, Audit and Reporting.—

(1) The Central Pollution Control Board (CPCB) and the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall be the enforcing and monitoring authority for ensuring compliance of the provisions and shall monitor the utilisation of ash on quarterly basis. Central Pollution Control Board shall develop a portal for the purpose within six months of date of publication of the notification. The concerned District Magistrate shall have concurrent jurisdiction for enforcement and monitoring of the provisions of this notification.

(2) (i) Thermal power plants shall upload monthly information regarding ash generation and utilisation by 5th of the next month on the web portal. Annual implementation report (for the period 1st April to 31st 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 Pollution Control Committee (PCC), Central Electricity Authority (CEA), and concerned Integrated Regional Office of Ministry of Environment, Forest and Climate Change by the coal or lignite based thermal power plants. Central Pollution Control Board and Central Electricity Authority shall compile the annual reports submitted by all the thermal power plants and submit to Ministry of Environment, Forest and Climate Change by 31st May.

(ii) All other user agencies shall submit consumption or utilisation or disposal of ash and use of ash based products as mandated in this notification in the compliance report of Environmental Clearance (EC) issued by Ministry of Environment, Forest and Climate Change or State Level

Environment Impact Assessment Authority (SEIAA) or Consent to Operate (CTO) issued by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC), whichever is applicable. The Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall publish annual report of ash utilisation of all other agencies except thermal power plants to review the effective implementation of the provisions of the notification.

(3) For the purpose of monitoring the implementation of the provisions of this notification, a committee shall be constituted under the Chairperson, Central Pollution Control Board (CPCB), with members from Ministry of Power, Ministry of Coal, Ministry of Mines, Ministry of Environment, Forest and Climate Change, Ministry Road Transportation and Highways, Department of Heavy Industry as well as any concerned stakeholder(s), to be nominated by the Chairman of the committee. The committee may make recommendations for effective and efficient implementation of the provisions of the notification. The committee shall meet at least once in six months and review annual implementation reports and the committee shall also hold stakeholder consultations for monitoring of ash utilisation as mandated by this notification by inviting relevant stakeholder(s) at least once in six months. The committee shall submit the six monthly report to Ministry of Environment, Forest and Climate Change (MoEFCC).

(4) For the purpose of resolving disputes between thermal power plants and users of ash or manufacturer of ash based products, the State Governments or Union territory administration constitute a Committee within three months from the date of publication of this notification under the Chairman, State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) with representatives from Department of Power, and one representative from the Department which deals with the subject of concerned agency with which dispute is made.

(5) The compliance audit for ash disposal by the thermal power plants and the user agency shall be conducted by auditors, authorised by Central Pollution Control Board (CPCB) and audit report shall be submitted to Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) by 30th November every year. Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall initiate action against non-compliant thermal power plants within fifteen days of receipt of audit report.”

Directions:

21. In the light of above discussion, it is patent that remedial measures are required in terms of recommendations set out in para 15 above in respect of individual TPPs or other projects as well as general issues applicable to all the TPPs such as timely installation of air pollution control and monitoring devices, timely utilisation and

disposal of fly ash, scientific designing of fly ash dykes and safety norms, addressing public health issues, steps for restoration of deteriorated environment by bringing down CEPI scores in the entire area, restoration of Rihand Reservoir and other damaged/degraded areas, providing arrangement for public health facilities, including water supply and by coordinated and concerted efforts and high level monitoring. The PP are to be accountable for past violations and are under obligation to remedy the violations and follow the norms for future. The regulators are to enforce the same and higher authorities are to oversee. Accordingly, following direction are issued:

- i. We direct constitution of a fly ash management and utilization Mission to be jointly headed by the Secretaries, MoEF&CC, Coal and Power, GoI and Chief Secretaries of UP and MP. The Secretary, MoEF&CC will be the nodal agency for coordination and compliance. The Mission will coordinate and monitor issues relating to handling and disposal of flyash as well as all associated issues in the light of above discussion. It may hold its first meeting within one month to take stock of the situation and to prepare action plan in the light of recommendations of Joint Committees quoted earlier in para 15 above in respect of individual plants as well as road map generally. Thereafter, it may meet atleast once in a month for one year to review the progress. The resolutions of the Mission and quarterly progress may be placed on the website of MoEF&CC for information of the stake holders and inhabitants in the area. The Mission will be free to interact with the concerned Government Departments/ Expert institutions/ individuals/other stakeholders. The Mission may in its first meeting require voluntary financial contribution by all the projects in proportion of the financial capacity of the projects out of CSR funds or otherwise. The contribution, alongwith compensation which may be collected may be credited to a separate environment restoration account for restoration of environment and relief to the victims of damage to the environment in such manner as may be found necessary by the Mission. Any victim or aggrieved party will be free to approach the Mission for providing such relief. The Mission may also consider the safeguards laid down in the Notification dated 31.12.2021, particularly for safety audits of the ash dykes which should be conducted particularly for structural stability, as far as possible within six months. Advisory issued by the Ministry of Power dated 22.9.2021 will not be enforced being against the spirit of notification dated 31.12.2021 and obstructing much needed speedy utilisation/disposal of legacy flyash. The Mission may evolve mechanism for interaction with stake holders, including associations of brick kiln owners. Guidelines be also issued for siting, design and engineering standards for the location, disposal, maintenance and regulation of Ash Ponds as breach of a fly ash ponds result in great disaster. Public health and risk impact assessment in the areas of operation of TPPs and generators of fly ash may be got conducted. The Mission may also monitor scientific management and utilization of fly ash by power projects outside Singrauli and Sonebhadra, in coordination with Chief Secretaries of concerned States and adopting safety measures for ash dykes, installing devices to control air pollution, (including FGDs, OCEMS) in a time bound manner and restoration of environment and public*

health. The Mission may also consider use of beneficiated coal. It may in particular consider on-site and off-site crisis management plans with regard to fly ash ponds and dykes. As noted earlier, legacy fly ash is 1670.602 Million Tonnes as on 31.12.2021 and data of ash generation and utilization of legacy fly ash is as follows:

“Summary of Ash Generation and Utilization during year 2020-21”

No. of Thermal Power Stations	: 191
Capacity (MW)	: 2,13,030 MW
Coal consumed	: 672.130 Million Tonnes
Fly Ash Generation	: 222.789 Million Tonnes
Fly Ash Utilization	: 205.098 Million Tonnes
Percentage Utilization	: 92.06%
Legacy flyash	:1670.602 Million Tonnes

The Committee of Secretaries, in coordination with PPs and statutory regulators, may draw a roadmap for utilization and disposal of entire legacy fly ash for Sonebhadra and Singrauli areas as well as for all the Power Plants located in clusters or standalone with tagging the sources to utilize fly ash on voluntary and compulsion mode for which required mechanism be laid down.

- ii. With regard to past violations, the PPs remain liable and the Joint Committee of CPCB, State PCB and jurisdictional District Magistrates may determine compensation following due process, on the principles laid down inter alia in M.C. Mehta, (1987) 1 SCC 395, Sterlite (2013) 4 SCC 575 and Goel Ganga (2018) 18 SCC 257, having regard to the period of violation and financial capacity of the unit. The PPs may take remedial measures as per recommendations of the Committee and as per law, failing with coercive measures for continuing or future violations be taken by concerned authorities.
- iii. Statutory regulators may take action in terms of need for compliances in the light of recommendations with regard to individual Plants as well as generally so as to require the concerned PPs to comply, failing which coercive measures be taken by the statutory regulators in accordance with law.
- iv. In respect of incident dated 10.04.2020, compensation paid to heirs of the deceased at the rate of Rs. 10 lakhs per death is increased to Rs. 15 lakhs on principles laid down inter alia in Sarla Verma (2009) 6 SCC 121 and Uphaar Cinema (2011) 14 SCC 481. We direct the remaining amount to be paid within one month. This order will not debar the heirs of the victims to claim higher compensation by approaching appropriate forum. If the salaries to persons appointed as compensation to the victims are below minimum wages, the PP may ensure compliance of law on the subject which may be also looked into by the concerned Labour Departments of the State of UP and MP. The statutory regulators may take further remedial action in terms of recommendations of the Committee in OA 148/2020, quoted earlier for restoration of environment and preventing such incidents.

- v. With regard to breach of Rihand Reservoir also, further remedial measures be taken in terms of recommendations on the subject, quoted in para 15 above.”*

10. Thus, further action has to be taken in the light of above order and further observations in paras 7 and 8 above. An action taken report in the matter may be filed within four months with the Registrar of NGT, Eastern Zone Bench by e-mail preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF. If found necessary, the matter may be placed before the bench for further consideration.

Subject to above, the application is disposed of.

A copy of this order be forwarded to Additional Chief Secretary, Environment, West Bengal, State PCB, District Magistrate, Purulia, CPCB and Director, Agriculture, West Bengal by e-mail for compliance.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

B. Amit Sthalekar, JM

Dr. A. Senthil Vel, EM

April 10, 2023
OA No. 104/2021/EZ
DV&A