

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL**

**Principal Bench, New Delhi**

**O.A No. 117/2014**

**With**

**O.A No. 499/2014**

**With**

**O.A No. 102/2014**

**In The Matter of:-**

**Shantanu Sharma**

**Applicant(s)**

**Vs.**

**Union of India & Ors.**

**Respondent (s)**

**With**

**Anupam Raghav & Anr.**

**Applicant(s)**

**Vs.**

**Union of India & Ors.**

**Respondent(s)**

**With**

**Sandplast (India) Ltd. & Ors.**

**Applicant(s)**

**Vs.**

**MoEF & Ors.**

**Respondent(s)**

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**(Nazimuddin)**  
Additional Director  
Central Pollution Control Board  
Parivesh Bhawan, East Arjun Nagar  
Delhi- 110032

Dated: - 04.09.2020

Place: - Delhi

# Report of the Central Pollution Control Board

In compliance of the Order dated 27.01.2020 of Hon'ble National Green Tribunal, Principal Bench, (uploaded on NGT website on 12.02.2020) in O.A. 117/2014, O.A. 499/2014 & O.A. 102/2014

## 1. Directions to CPCB in Order dated 27.01.2020

Hon'ble National Green Tribunal, Principal Bench passed the Order dated 27.01.2020, in Original Applications O.A. 117/2014 Shantanu Sharma Versus Union of India & Ors, O.A. 499/2014 Anupam Raghav & Anr. Versus Union of India & Ors and & O.A. 102/2014 Sandplast (India) Ltd. & Ors. Versus MoEF & Ors, which is be read with the earlier order dated 20.11.2018.

Hon'ble NGT in the Order dated 27.01.2020:

- i) examined the notification of Government of India related to thermal power plant ash utilisation dated 14.09.1999 and its successive amendments dated 27.08.2003, 03.11.2009 and 27.01.2016 in Para 4, Para 6 to 12, and Para 15 of the Order dated 27.01.2020, and concluded in Para 25 and Para 31 that as per the notification and its successive amendments, 100% ash utilisation was to be ensured by all plants by 31.12.2017 and that the Polluter Pays principle has to be applied from the cut-off date of 31.12.2017,
- ii) perused the report and recommendations of Committee formed by earlier order dated 20.11.2018 in Para 22 and Para 23 of the Order dated 27.01.2020, and accepted the Environmental Compensation formula suggested by the Committee with certain modifications (Para 24),
- iii) directed CPCB that "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" and "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", in Para 32b) and c) of the Order dated 27.01.2020

## 2. Compliance of the order for computation and levying EC

In compliance of the above order CPCB obtained ash utilisation data from thermal power plants, which is available in terms of financial year, and based on the data received from the plants computed Environmental Compensation (EC) for plants which were observed to have not achieved 100% ash utilisation for years 2018 (2018-19) and 2019 (2019-20) and informed the concerned 112 thermal power plants vide letter dated 02.07.2020 about the computation for individual plants on the following format and asked them to deposit the Environmental Compensation amount to CPCB within 30 days:

Capacity 2018-19 (MW)	% Ash Utilization in 2018-19	EC for 2018 (2018-19), (in Rs.)	Capacity 2019-20 (MW)	% Ash Utilization in 2019-20	EC for 2019 (2019-20), (in Rs.)	Total EC for 2018 (2018-19) & 2019 (2019-20), (in Rs.)

Out of the concerned 112 plants, 2 plants have deposited the Environmental Compensation. 102 plants have requested for exempting from depositing the Environmental Compensation based on various grounds, which include stay granted by Hon`ble Supreme Court in some cases, and 8 plants have not responded. CPCB has compiled the responses of the plants in a table which is annexed as **Annexure-I**.

- a) four plants which did not submit ash utilisation data earlier but submitted it subsequently informing 100% ash utilisation are also mentioned in the list of 116 (112+4) at S. No. 3, 4, 77 and 94
- b) the two plants which have deposited EC are mentioned at S. No. 90 and 91
- c) four plants mentioned at S. No. 33, 36, 87 and 113, have informed that there were some mistake in the data submitted earlier and the utilisation was actually 100%
- d) two plants at S. No. 32 and 105 have requested to modify the computation of EC on grounds which are acceptable (difference in plants capacity in first case and interchange of 2017-18 and 2018-19 data in the second case)
- e) the eight plants which have not responded are mentioned at S. No. 2, 29, 48, 66, 76, 86, 92 and 101

It is submitted that no action is needed on part of CPCB in case of the four and two plants mentioned at a) and b) above, whereas CPCB shall issue letters regarding revoking EC and modifying EC to the four and two plants, respectively, mentioned at c) and d) above.

It is further submitted that CPCB has examined the responses of the remaining plants also which have requested for exempting from depositing the Environmental Compensation based on various grounds and prepared comments on salient common points of the responses. CPCB is sending these comments to the concerned remaining 96 plants vide letters dated 04.09.2020. Copy of CPCB's comments and letter to 96 plants are collectively annexed as **Annexure-II**

### **3. Compliance on other directions**

#### **Para 32. c.**

It is submitted that the Task Force has identified and finalised a list of 21 abandoned mines of CIL and SCCL which are available for offer for backfilling purpose (**Annexure-III**).

#### **Para 32. f. & g.**

It is submitted that the reports of the committees are under finalisation.

#### **Para 32. h.**

It is submitted that CPCB has monitored the ash utilisation status for 2018-19 and 2019-20 and computed and levied EC as per directions of Hon`ble NGT.

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## List of TPPs and details of EC Levied on TPPs by CPCB

Sl. No.	Name	State	Capacity 2018-19 (MW)	% Ash Utilization in 2018-19	EC for 2018 (2018-19), (in Rs.)	Capacity 2019-20 (MW)	% Ash Utilization in 2019-20	EC for 2019 (2019-20), (in Rs.)	Total EC for 2018 (2018-19) & 2019 (2019-20), (in Rs.)	Salient common responses #	Additional part in plant's response, if any	Letter/E-mail Dated
1	Vijaywada, APPGCL, Dr. NTPS	Andhra Pradesh	1760	103.90	0	1760	98.70	984248	984248	-	APGENCO has decided to file petition in SC to get stay on EC imposed by CPCB.	24.08.2020
2	Rayalseema, APPGCL	Andhra Pradesh	1650	84.06	11273631	1650	86.40	9619734	20893365	-	Plant has not submitted response to CPCB letter.	
3	Simhapuri TPS	Andhra Pradesh	600	100.00	0	600	N.O.	0	0	NA	NA	NA
4	Thamminapatnam, Meenakshi Energy Pvt. Ltd.	Andhra Pradesh	300	621.81	0	300	N.O.	0	0	NA	NA	NA
5	Damodaran Sanjeeviah TPS	Andhra Pradesh	1600	65.31	23785771	1600	51.41	33316961	57102733	3, 4	-	04.08.2020
6	Sembcorp Eenergy India Ltd. (Sembcorp Gayatri TPP)	Andhra Pradesh	1320	69.05	17511563	1320	50.47	28019315	45530878	2	-	23.07.2020
7	M/s. Sembcorp Energy India Limited, Painampuram	Andhra Pradesh	1320	75.33	13954469	1320	79.17	11785586	25740054	2	-	23.07.2020
8	Vizag TPP, Hinduja NPCL	Andhra Pradesh	1040	256.55	0	1040	44.23	24857674	24857674	2	-	24.07.2020

9	Bongaigaon Thermal Power Project, NTPC	Assam	500	30.76	14837283	750	45.39	17553443	32390726	1	-	22.07.2020
10	Kahalgaon, NTPC	Bihar	2340	48.36	51788588	2340	76.53	23536060	75324648	1	-	25.07.2020
11	Muzaffarpur, NTPC	Bihar	610	40.56	15539269	610	75.68	6358818	21898087	1	-	22.07.2020
12	Barh, NTPC	Bihar	1320	50.07	28245010	1320	67.01	18664189	46909199	1	-	22.07.2020
13	Nabi Nagar TPS, BRBCL	Bihar	750	34.42	21080529	750	49.82	16130879	37211407	1	-	22.07.2020
14	Nabi Nagar Power G.C.	Bihar	0	NA	0	660	51.09	13835454	13835454	1	-	22.07.2020
15	Barauni TPS, NTPC	Bihar	720	15.00	26228550	720	18.00	25301411	51529961	1	-	22.07.2020
16	Hasdeo Thermal Power Station, Korba West	Chhattisgarh	1340	50.72	28301727	1340	100.06	0	28301727	2, 3, 4, 5	-	20.08.2020
17	Korba, NTPC	Chhattisgarh	2600	51.09	54503470	2600	67.01	36764658	91268128	1	-	25.07.2020
18	Korba, EAST CSPGCL	Chhattisgarh	240	108.85	0	240	64.80	3620850	3620850	2, 3, 4, 5	Didn't comply with action plan for year 2019-20.	20.08.2020
19	Marwa, CSPGCL	Chhattisgarh	1000	24.99	32148537	1000	59.35	17419767	49568304	2, 3, 4, 5	Didn't comply with action plan for year 2019-20.	14.08.2020
20	Sipat, NTPC	Chhattisgarh	2980	49.54	64448200	2980	49.10	65007687	129455887	1	-	30.07.2020
21	Lara STPP, NTPC	Chhattisgarh	800	100.00	0	800	0.29	34185375	34185375	1	-	22.07.2020

22	Lanco Amarkantak	Chhattisgarh	600	50.05	12844844	600	68.11	8200484	21045328	2, 3	-	05.08.2020
23	Kasaipalli, ACB	Chhattisgarh	270	100.00	0	270	96.51	403269	403269	3, 4	FAU for last 4 years was >100% and even up to Feb 2020 but due to COVID19 pandemic it was slightly less. As per NGT order dated 12.02.2020, a storage of 90 days is allowed and plant is complying with this.	17.08.2020
24	D B Power Ltd.	Chhattisgarh	1200	72.49	14147581	1200	83.81	8328376	22475957	1, 2	-	12.08.2020
25	Akaltara, Mahanadi Power	Chhattisgarh	1800	91.02	6930109	1800	108.54	0	6930109	2, 3, 6, 9	-	14.08.2020
26	Uchpinda, RKM Power	Chhattisgarh	1080	90.54	4377450	1440	95.34	2873392	7250842	1, 3, 4, 8, 9	-	08.08.2020
27	Raipur Energen (GMR) Adani	Chhattisgarh	1370	91.20	5166894	1370	100.16	0	5166894	2, 3	-	11.08.2020
28	Maruti Clean Coal & Power Ltd.	Chhattisgarh	300	100.00	0	300	97.44	328645	328645	-	Plant sought account details for depositing EC amount.	25.08.2020
29	SCPL Ratija, Spectrum Coal & Power	Chhattisgarh	100	99.37	26909	100	96.59	146149	173058	-	Plant has not submitted response to CPCB letter.	
30	Nawapara TPS, TRN Energy	Chhattisgarh	600	74.25	6622410	600	67.89	8258078	14880488	2, 4, 6	CPCB has considered installed capacity instead of operating capacity. Most of the time in these 2 years, only 1 unit was operating.	30.07.2020

31	Dr. Shyama Prasad Mukherjee TPS, Korba	Chhattisgarh	500	32.81	14398026	500	34.01	14141230	28539256	2, 3, 4, 5	Didn't comply with action plan for year 2019-20.	20.08.2020
32	SKS Ispat, Binjkote TPS	Chhattisgarh	1200	90.91	4676247	1200	100.00	0	4676247	3, 4, 7(a), 11(b)	Mistake in submission of information about installed capacity. Installed capacity is 600 MW, instead of 1200 MW.	24.07.2020
33	Gandhinagar, GSPCL	Gujarat	630	92.17	2114234	630	456.51	0	2114234	11(a)	Mistake in submission of data earlier. Actually complies with 100% utilization during year 2018-19 also.	16.07.2020
34	Ukai, GSPCL	Gujarat	1110	82.41	8369400	1110	85.34	6972986	15342386	3, 4, 5	-	20.07.2020
35	Wanakbori, GSPCL	Gujarat	1470	93.10	4347826	2270	112.92	0	4347826	3, 4, 5	-	23.07.2020
36	Sabarmati TPP, Torrent	Gujarat	362	80.72	2991293	362	135.66	0	2991293	11(a)	Mistake in submission of data earlier. Actually 100% utilization during year 2018-19 also.	20.07.2020 & 07.08.2020
37	GSECL, Bhavnagar TPP	Gujarat	500	87.33	2714883	500	96.52	745557	3460440	3	BECL was merged with GSECL in Aug 2018. Fly ash using sectors are not available around the plant.	23.07.2020
38	OPG Power Gujarat Ltd, Bhadreshwar VPL	Gujarat	300	99.12	113386	300	80.05	2565552	2678937	3, 6	-	19.08.2020
39	Mundra, Tata Power, Coastal	Gujarat	4150	93.89	10864369	4150	112.76	0	10864369	2, 5	-	21.07.2020

40	Rajeev Gandhi TPS, Hissar	Haryana	1200	60.89	20112715	1200	106.96	0	20112715	1	A petition has been filed in SC on 26.08.2020 against NGT order and EC imposed by CPCB.	26.08.2020
41	Bokaro A & B, DVC	Jharkhand	710	39.48	18415583	710	156.64	0	18415583	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	25.08.2020
42	Tenughat Thermal Power Station	Jharkhand	420	130.61	0	420	66.02	6115510	6115510	3, 9	FA generation data for year 2018-19 and 2019-20 was calculated considering 40% ash content in coal, whereas it has been observed from CIMFR report that the ash content during this period was less. Revised data for 2 years is submitted.	29.07.2020
43	Chandrapura, DVC	Jharkhand	630	97.42	696371	630	97.68	627085	1323457	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	26.08.2020
44	Koderma, DVC	Jharkhand	1000	99.32	292629	1000	92.07	3398789	3691418	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	25.08.2020
45	Mahadeo Prasad STPP, Adhunik Power	Jharkhand	540	85.00	3471456	540	97.77	516473	3987929	3, 4	-	21.07.2020
46	JOJOBERA T.P.CO.	Jharkhand	427.5	87.93	2211712	427.5	128.35	0	2211712	2	-	25.07.2020
47	Raichur, KPCL	Karnataka	1720	70.15	22006421	1720	81.71	13480023	35486444	3, 4, 5	Didn't comply with action plan for year 2019-20.	26.08.2020

48	Bellari, KPCL	Karnataka	1700	147.40	0	1700	72.17	20275851	20275851	-	Plant has not submitted response to CPCB letter.	
49	NTPC Kudgi	Karnataka	2400	64.65	36360023	2400	100.45	0	36360023	1	-	25.07.2020
50	Yermarus TPP	Karnataka	1600	N.O.	0	1600	8.37	62833931	62833931	3	Both the units of plant were under long S/D during year 2019-20. Only Unit-1 operated during Feb & Mar 2020 after re-commissioning of this unit due to boiler modification work. Due to this dry ash evacuation was not done and ash was stored in wet form. Plant is under stabilization phase.	30.07.2020
51	Amarkantak, MPPGCL	M.P	210	66.42	3021867	210	100.84	0	3021867	1	-	31.07.2020
52	Birsingpur, MPPGCL, Sanjay Gandhi TPS	M.P	1340	71.96	16102100	1340	99.59	235604	16337704	1	-	23.07.2020
53	Satpura, MPPGCL	M.P	1330	30.43	39657526	1330	63.72	20677954	60335480	1	-	24.07.2020
54	Vindhyachal, NTPC	M.P	4760	32.12	138475198	4760	32.07	138571807	277047006	1	-	24.07.2020
55	Gadarwara STPP, NTPC	M.P	800	NA	0	800	0.54	34102085	34102085	1	-	22.07.2020
56	Khargone STPS, NTPC	M.P	0	NA	0	660	6.64	26406970	26406970	1	-	22.07.2020
57	Sasan, RPL	M.P	3960	29.68	119349798	3960	52.37	80841040	200190839	2	-	27.07.2020
58	Mahan, Essar Power MP	M.P	1200	86.42	6984899	1200	78.79	10909617	17894515	2	-	25.08.2020
59	Bina, J P Power	M.P	500	87.99	2572735	500	87.15	2753035	5325770	2	-	25.07.2020

60	SHREE SINGAJI MPPGCL	M.P	1860	12.17	70012864	2520	18.19	88355392	158368256	1	-	18.07.2020
61	Nigrie, J P Associates	M.P	1320	88.62	6436367	1320	109.57	0	6436367	1, 2	-	07.08.2020 & 25.08.2020
62	Jhabua Seioni TPS	M.P	600	70.24	7651732	600	83.13	4338331	11990063	1, 2, 7(a)	-	24.08.2020
63	Trombay, Tata Power	Maharashtra	750	100.00	0	750	98.97	329488	329488	3, 4	FAU got affected due to COVID19 since 22.03.2020 only. Achieved 100% FAU for last 20 years and in this year till 21 March.	27.07.2020
64	Khaperkheda, Mahagenco	Maharashtra	1340	28.48	41074670	1340	55.96	25293049	66367719	3, 4	Fly ash utilization is less due to having cluster of TPPs in this area.	03.08.2020
65	Koradi, Mahagenco	Maharashtra	2400	29.19	72837685	2400	42.56	59085339	131923023	3, 4	-	03.08.2020
66	Bhusawal, Mahagenco	Maharashtra	1210	95.44	2362699	1210	101.12	0	2362699	-	Plant has not submitted response to CPCB letter.	
67	Chandrapur Super TPS, Chandrapur	Maharashtra	2920	24.35	94676402	2920	21.75	97921351	192597753	3, 4	Fly ash utilization is less due to having cluster of TPPs in this area.	11.08.2020
68	Paras, Mahagenco	Maharashtra	500	68.76	6693273	500	112.43	0	6693273	3, 4	-	18.08.2020

69	Sai Wardha, Warora	Maharashtra	540	104.17	0	540	34.76	15099045	15099045	3, 4	Plant has operated for only 2 months during year 2019-20 after completion of resolution from NCLT. FAU was less during this period due to COVID19 pandemic, which has been further >100% in first 2 quarters of current year.	16.08.2020
70	JSW Ratnagiri, Nandiwade	Maharashtra	1200	100.53	0	1200	99.49	261661	261661	3, 4	FAU got marginally affected due to COVID19 only. APP has filed petition on 22.06.2020 in SC for the exemption in this year.	25.07.2020
71	Mouda, NTPC	Maharashtra	2320	90.21	9736305	2320	100.61	0	9736305	1	-	04.08.2020
72	Tirora, Adani Power	Maharashtra	3300	84.45	21995391	3300	90.87	12908222	34903614	2, 3	-	29.07.2020
73	Talcher Kaniha, NTPC	Odisha	3000	50.19	64046718	3000	67.28	42073375	106120092	1	-	22.07.2020
74	IB Valley, Jharsuguda (U-1,2)	Odisha	420	33.86	11904350	420	66.50	6029495	17933845	1	OPGC Ltd. filed petition in SC and on 24.08.2020 it got interim stay.	29.08.2020
75	IB Valley, Jharsuguda (U-3,4)	Odisha	0	NA	0	1320	17.34	46759638	46759638	1	OPGC Ltd. filed petition in SC and on 24.08.2020 it got interim stay.	29.08.2020
76	Derang, JIPL	Odisha	1200	68.99	15947447	1200	65.97	17501125	33448572	-	Plant has not submitted response to CPCB letter.	
77	Ropar PPCL, Guru Gobind Singh TPS	Punjab	840	313.62	0	840	428.06	0	0	NA	NA	NA

78	Lehra Mohabbat, PPCL	Punjab	920	86.32	5394832	920	114.88	0	5394832	1, 2	-	24.08.2020
79	Rajpura, Nabha Power	Punjab	1400	90.70	5577239	1400	139.69	0	5577239	1, 2,	Unutilized fly ash is stored temporarily which is within permissible quantity as per order (90 days).	13.08.2020
80	Goindwal Sahib, GVK Power	Punjab	540	100.00	0	540	79.65	4708480	4708480	3	Dry FAU was 100% but bottom ash utilization was not possible due to its spread in large area of ash pond, from which ash retrieval is not possible as it can damage LDPE lining.	20.07.2020
81	Kota TPS, RRVUNL	Rajasthan	1240	100.03	0	1240	84.62	8172066	8172066	3, 4, 7(b)	Achieving >100% FAU for last 5 years but due to some local problems failed to achieve in 2019-20.	16.07.2020 & 06.08.2020
82	Chhabra TPS, RRVUNL	Rajasthan	1000	104.14	0	1000	81.30	8012641	8012641	3, 4	FAU was >100% during 2016-17, 2017-18 and 2018-19 but during 2019-20 it was less due to a long rainy season which adversely affected construction activities and cement production in the region.	19.08.2020
83	Chhabra SCTPP, RRVUNL	Rajasthan	660	100.00	0	1320	33.50	37619837	37619837	1, 3,	FAU is low due to being a new plant. During 2019-20 a long rainy season adversely affected construction activities and cement production in the region.	24.08.2020

84	North-Chennai, Tangedco, NCTPS	Tamilnadu	630	66.16	9136815	630	121.55	0	9136815	3	Plant has deposited a penalty amount of Rs. 16.461 crore with TNPCB in compliance to the directions of NGT in a separate case (O.A. 8 of 2016) for the same cause i.e. destruction of environment from Nov 2004 to Nov 2019, which consists of the penalised year (2018-2019). Requested to drop the penalty as it will cause repetition of EC.	25.08.2020
85	North-Chennai, Tangedco, Stage -II	Tamilnadu	1200	103.70	0	1200	97.31	1385948	1385948	3, 9	-	05.08.2020
86	Mettur TPS	Tamilnadu	840	81.72	6580681	840	104.05	0	6580681	-	Plant has not submitted response to CPCB letter.	
87	Mettur Extn. Tangedco	Tamilnadu	600	94.49	1416687	600	90.21	2518530	3935217	11(a)	Utilization is as same as generation as there is no wet ash handling and ash generated is utilized completely. The difference is generation and utilization is due to the difference in theoretical and actual generation of ash after burning 6 different varieties of coals. Requested to consider utilisation as 100% and waive off EC as no ash is stored or unutilized.	28.07.2020 & 21.08.2020

88	Neyveli Lignite, NLC TPS-1	Tamilnadu	500	66.34	7212287	500	61.41	8269810	15482097	3, 7(b)	Plant is going through decommissioning and only 2 out of 9 units are operational now, which will also be retired by Sept 2020. Accumulated ash is stored in ash pond and will be used for backfilling of mines in near future.	22.07.2020
89	Vallur, NTPC	Tamilnadu	1500	67.53	20871097	1500	121.02	0	20871097	1	Stay on EC has been directed by SC on 10.08.2020 for the plant.	11.08.2020
90	Mutiara, Coastal Energy	Tamilnadu	1200	100.26	0	1200	99.98	10832	10832	-	Plant deposited EC amount with CPCB.	24.08.2020
91	IL&FS TPP, Cuddalore	Tamilnadu	1200	99.22	400379	1200	102.73	0	400379	-	Plant deposited EC amount with CPCB.	10.07.2020
92	Kothagudem O&M TPS, TSGENCO (1-4 stage)	Telangana	720	41.42	18075458	720	34.43	20233453	38308911	-	Plant has not submitted response to CPCB letter.	
93	Kothagudem V Stage TPS, TSGENCO	Telangana	500	19.24	17305248	500	112.63	0	17305248	3, 4	-	31.08.2020
94	Kothagudem VI Stage TPS, TSGENCO	Telangana	500	105.34	0	500	100.00	0	0	NA	NA	NA
95	SINGARENI TPP	Telangana	1200	102.71	0	1200	98.90	563377	563377	3, 4	FAU got affected due to COVID19 since Feb 2020 only.	14.07.2020

96	Kakatiya, TSGENCO	Telangana	1100	101.33	0	1100	94.31	2683107	2683107	3, 4	FAU got affected due to COVID19 in last quarter which was otherwise supposed to be >100% in absence of lockdown because major ash users take fly ash during this time.	23.07.2020
97	Singrauli, NTPC	Uttar Pradesh	2000	35.21	55537327	2000	39.24	52078177	107615504	1	-	25.07.2020
98	Anpara A, B & D, UPVUNL	Uttar Pradesh	2630	5.29	106754945	2630	3.90	108317861	215072805	1	UPRVUNL has also filed petition in SC on 08.08.2020 in the same matter.	24.08.2020
99	Rihand, NTPC	Uttar Pradesh	3000	37.10	80871807	3000	43.18	73048312	153920119	1	-	24.07.2020
100	Unchahar, NTPC	Uttar Pradesh	1550	117.98	0	1550	90.37	6395376	6395376	3, 4	FAU got affected due to COVID19 in Mar 2020, otherwise would have achieved 110% FAU.	21.07.2020
101	Parichha, UPVUNL	Uttar Pradesh	1140	72.20	13581050	1140	100.44	0	13581050	-	Plant has not submitted response to CPCB letter.	
102	Obra B, UPVUNL	Uttar Pradesh	1000	11.59	37890660	1000	7.94	39454554	77345215	1	UPRVUNL has also filed petition in SC on 08.08.2020 in the same matter.	24.08.2020
103	Harduaganj, UPVUNL	Uttar Pradesh	610	96.64	878549	610	97.87	556078	1434627	3	Extension unit of 660 MW is under construction, for which same ash pond will be used. Hence, modification work and utilization both are getting affected.	24.07.2020
104	Anpara C, Lanco Power	Uttar Pradesh	1200	22.03	40099031	1200	22.71	39749245	79848276	2	-	27.07.2020

105	Prayagraj Power Generation C, Ltd	Uttar Pradesh	1980	73.15	22785444	1980	90.13	8373624	31159068	2, 3, 7(a), 10	Claiming 73.15% utilization during year 2018-19, whereas CPCB considered 2017-18 data as that of 2018-19	23.07.2020
106	NTPC Meja, MUNL	Uttar Pradesh	660	0.22	28222857	660	0.02	28280129	56502986	1	-	11.08.2020
107	Farakka, NTPC	West Bengal	2100	79.03	18870296	2100	128.61	0	18870296	1	-	22.07.2020
108	Mezia, DVC	West Bengal	2340	73.90	26176020	2340	70.09	29993629	56169649	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	25.08.2020
109	Durgapur Steel TPS, DVC	West Bengal	1000	73.48	11365324	1000	65.72	14690728	26056052	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	25.08.2020
110	Durgapur TPS, DVC	West Bengal	210	7.66	8310307	210	7.95	8284704	16595011	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	26.08.2020
111	Raghunathpur, DVC	West Bengal	1200	9.76	46408680	1200	12.89	44798073	91206752	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	25.08.2020
112	Durgapur Projects Ltd.	West Bengal	550	87.29	2996838	550	92.23	1830579	4827417	3, 4, 9	FAU submitted for 2018-19 & 2019-20 were provisional data, whereas, audited report are having higher FAU, which should be considered actual data. Plant going through financial restructuring.	16.07.2020

113	Santaldih, WBDCL	West Bengal	500	101.25	0	500	86.62	2867775	2867775	11(a)	Submitted modified utilisation data for 2019-20 as 100.31%. Utilisation in land filling was missed earlier.	29.07.2020
114	Sagardighi, WBDCL	West Bengal	1600	186.76	0	1600	74.19	17698508	17698508	3, 4	A contract was issued in Dec 2018 to M/s HCC to evacuate 9 Lakh m3 fly ash during 2019-20 for utilizing same in construction of NH34. However, due to some issues being faced by the company along with NHAI it could lift only 1.7 lakh m3 of ash. Due to this problem target FAU could not be achieved.	05.08.2020
115	Bakreshwar, WBDCL	West Bengal	1050	116.98	0	1050	96.98	1360841	1360841	3, 4	FAU is almost >100% since year 2014-15 but due to COVID19 pandemic it is marginally low in year 2019-20.	30.07.2020
116	Bandel, WBDCL	West Bengal	335	89.23	1546113	335	101.83	0	1546113	3, 4	During year 2018-19 FAU was 98% till Dec 2018 and only 8654 m3 ash was unutilized and stored in ash pond with cumulative ash amount of 31420 m3 in 7.45 lakh m3 storage ash pond. As tenders for lifting of ash is issued if significant ash is available in ash pond, new tender could be issued in April 2019.	03.08.2020



## E-MAIL

B-33014/7/2020/IPC-II/TPP/

September 04, 2020

To,

(As per list enclosed - 1)

**Sub: Levying Environmental Compensation for non-utilization of 100% fly ash by Thermal Power Plants according to Hon'ble NGT order dt. 12.02.2020 in O.A. No. 117/2014 - reg.**

Sir,

Please refer to CPCB's letter dated 02.07.2020 levying Environmental Compensation (EC) on Thermal Power Plants (TPPs) for non-utilization of 100% fly ash during years 2018 (i.e. 2018-19) and 2019 (i.e. 2019-20) according to Hon'ble NGT order dt. 12.02.2020 in O.A. No. 117/2014. Various TPPs didn't deposit EC with CPCB and instead submitted responses mentioning their various points.

It is to inform that CPCB has examined the responses submitted by TPPs. Salient common points of responses received from TPPs and CPCB's comments on these points are enclosed herewith for information and necessary action. CPCB is also submitting a report to NGT informing that these comments are being sent to the concerned plants.

Encl: as above

Yours faithfully,

[Nazimuddin]

Divisional Head-IPC-II

Copy to:

1. Sh. A N Singh, Additional Director (HSM Division)  
Ministry of Environment, Forest & Climate Change  
Jal Wing, Indira Paryavaran Bhawan  
Jor Bagh Road, New Delhi - 110 003
2. The Member Secretary,  
(As per list enclosed - 2)

**List of TPPs-1**

Sl. No.	Name	State	Salient common responses #	Additional part in plant's response, if any	Letter/E-mail Dated
1	Vijaywada, APPGCL, Dr. NTPPS	Andhra Pradesh	-	APGENCO has decided to file petition in SC to get stay on EC imposed by CPCB.	24.08.2020
2	Damodaran Sanjeeviah TPS	Andhra Pradesh	3, 4	-	04.08.2020
3	Sembcorp Eenergy India Ltd. (Sembcorp Gayatri TPP)	Andhra Pradesh	2	-	23.07.2020
4	M/s. Sembcorp Energy India Limited, Painampuram	Andhra Pradesh	2	-	23.07.2020
5	Vizag TPP, Hinduja NPCL	Andhra Pradesh	2	-	24.07.2020
6	Bongaigaon Thermal Power Project, NTPC	Assam	1	-	22.07.2020
7	Kahalgaon, NTPC	Bihar	1	-	25.07.2020
8	Muzaffarpur, NTPC	Bihar	1	-	22.07.2020
9	Barh, NTPC	Bihar	1	-	22.07.2020
10	Nabi Nagar TPS, BRBCL	Bihar	1	-	22.07.2020
11	Nabi Nagar Power G.C.	Bihar	1	-	22.07.2020
12	Barauni TPS, NTPC	Bihar	1	-	22.07.2020
13	Hasdeo Thermal Power Station, Korba West	Chhattisgarh	2, 3, 4, 5	-	20.08.2020
14	Korba, NTPC	Chhattisgarh	1	-	25.07.2020
15	Korba, EAST CSPGCL	Chhattisgarh	2, 3, 4, 5	Didn't comply with action plan for year 2019-20.	20.08.2020
16	Marwa , CSPGCL	Chhattisgarh	2, 3, 4, 5	Didn't comply with action plan for year 2019-20.	14.08.2020
17	Sipat, NTPC	Chhattisgarh	1	-	30.07.2020
18	Lara STPP, NTPC	Chhattisgarh	1	-	22.07.2020
19	Lanco Amarkantak	Chhattisgarh	2, 3	-	05.08.2020

20	Kasaipalli, ACB	Chhattisgarh	3, 4	FAU for last 4 years was >100% and even up to Feb 2020 but due to COVID19 pandemic it was slightly less. As per NGT order dated 12.02.2020, a storage of 90 days is allowed and plant is complying with this.	17.08.2020
21	D B Power Ltd.	Chhattisgarh	1, 2	-	12.08.2020
22	Akaltara, Mahanadi Power	Chhattisgarh	2, 3, 6, 9	-	14.08.2020
23	Uchpinda, RKM Power	Chhattisgarh	1, 3, 4, 8, 9	-	08.08.2020
24	Raipur Energen (GMR) Adani	Chhattisgarh	2, 3	-	11.08.2020
25	Maruti Clean Coal & Power Ltd.	Chhattisgarh	-	Plant sought account details for depositing EC amount.	25.08.2020
26	Nawapara TPS, TRN Energy	Chhattisgarh	2, 4, 6	CPCB has considered installed capacity instead of operating capacity. Most of the time in these 2 years, only 1 unit was operating.	30.07.2020
27	Dr. Shyama Prasad Mukherjee TPS, Korba	Chhattisgarh	2, 3, 4, 5	Didn't comply with action plan for year 2019-20.	20.08.2020
28	Ukai, GSPCL	Gujarat	3, 4, 5	-	20.07.2020
29	Wanakbori, GSPCL	Gujarat	3, 4, 5	-	23.07.2020
30	GSECL, Bhavnagar TPP	Gujarat	3	BECL was merged with GSECL in Aug 2018. Fly ash using sectors are not available around the plant.	23.07.2020
31	OPG Power Gujarat Ltd, Bhadreshwar VPL	Gujarat	3, 6	-	19.08.2020
32	Mundra, Tata Power, Coastal	Gujarat	2, 5	-	21.07.2020
33	Rajeev Gandhi TPS, Hissar	Haryana	1	A petition has been filed in SC on 26.08.2020 against NGT order and EC imposed by CPCB.	26.08.2020
34	Bokaro A & B, DVC	Jharkhand	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	25.08.2020

35	Tenughat Thermal Power Station	Jharkhand	3, 9	FA generation data for year 2018-19 and 2019-20 was calculated considering 40% ash content in coal, whereas it has been observed from CIMFR report that the ash content during this period was less. Revised data for 2 years is submitted.	29.07.2020
36	Chandrapura, DVC	Jharkhand	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	26.08.2020
37	Koderma, DVC	Jharkhand	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	25.08.2020
38	Mahadeo Prasad STPP, Adhunik Power	Jharkhand	3, 4	-	21.07.2020
39	JOJOBERA T.P.CO.	Jharkhand	2	-	25.07.2020
40	Raichur, KPCL	Karnataka	3, 4, 5	Didn't comply with action plan for year 2019-20.	26.08.2020
41	NTPC Kudgi	Karnataka	1	-	25.07.2020
42	Yermarus TPP	Karnataka	3	Both the units of plant were under long S/D during year 2019-20. Only Unit-1 operated during Feb & Mar 2020 after re-commissioning of this unit due to boiler modification work. Due to this dry ash evacuation was not done and ash was stored in wet form. Plant is under stabilization phase.	30.07.2020
43	Amarkantak, MPPGCL	M.P	1	-	31.07.2020
44	Birsingpur, MPPGCL, Sanjay Gandhi TPS	M.P	1	-	23.07.2020
45	Satpura, MPPGCL	M.P	1	-	24.07.2020
46	Vindhyachal, NTPC	M.P	1	-	24.07.2020
47	Gadarwara STPP, NTPC	M.P	1	-	22.07.2020
48	Khargone STPS, NTPC	M.P	1	-	22.07.2020
49	Sasan, RPL	M.P	2	-	27.07.2020

50	Mahan, Essar Power MP	M.P	2	-	25.08.2020
51	Bina, J P Power	M.P	2	-	25.07.2020
52	SHREE SINGAJI MPPGCL	M.P	1	-	18.07.2020
53	Nigrie, J P Associates	M.P	1, 2	-	07.08.2020 & 25.08.2020
54	Jhabua Seioni TPS	M.P	1, 2, 7(a)	-	24.08.2020
55	Trombay, Tata Power	Maharashtra	3, 4	FAU got affected due to COVID19 since 22.03.2020 only. Achieved 100% FAU for last 20 years and in this year till 21 March.	27.07.2020
56	Khaperkheda, Mahagenco	Maharashtra	3, 4	Fly ash utilization is less due to having clustrer of TPPs in this area.	03.08.2020
57	Koradi, Mahagenco	Maharashtra	3, 4	-	03.08.2020
58	Chandrapur Super TPS, Chandrapur	Maharashtra	3, 4	Fly ash utilization is less due to having clustrer of TPPs in this area.	11.08.2020
59	Paras, Mahagenco	Maharashtra	3, 4	-	18.08.2020
60	Sai Wardha, Warora	Maharashtra	3, 4	Plant has operated for only 2 months during year 2019-20 after completion of resolution from NCLT. FAU was less during this period due to COVID19 pandemic, which has been further >100% in first 2 quarters of current year.	16.08.2020
61	JSW Ratnagiri, Nandiwade	Maharashtra	3, 4	FAU got marginally affected due to COVID19 only. APP has filed petition on 22.06.2020 in SC for the exemption in this year.	25.07.2020
62	Mouda, NTPC	Maharashtra	1	-	04.08.2020
63	Tirora, Adani Power	Maharashtra	2, 3	-	29.07.2020
64	Talcher Kaniha, NTPC	Odisha	1	-	22.07.2020
65	IB Valley, Jharsuguda (U-1,2)	Odisha	1	OPGC Ltd. filed petition in SC and on 24.08.2020 it got interim stay.	29.08.2020
66	IB Valley, Jharsuguda (U-3,4)	Odisha	1	OPGC Ltd. filed petition in SC and on 24.08.2020 it got interim stay.	29.08.2020

67	Lehra Mohabbat, PPCL	Punjab	1, 2	-	24.08.2020
68	Rajpura, Nabha Power	Punjab	1, 2,	Unutilized fly ash is stored temporarily which is within permissible quantity as per order (90 days).	13.08.2020
69	Goindwal Sahib, GVK Power	Punjab	3	Dry FAU was 100% but bottom ash utilization was not possible due to its spread in large area of ash pond, from which ash retrieval is not possible as it can damage LDPE lining.	20.07.2020
70	Kota TPS, RRVUNL	Rajasthan	3, 4, 7(b)	Achieving >100% FAU for last 5 years but due to some local problems failed to achieve in 2019-20.	16.07.2020 & 06.08.2020
71	Chhabra TPS, RRVUNL	Rajasthan	3, 4	FAU was >100% during 2016-17, 2017-18 and 2018-19 but during 2019-20 it was less due to a long rainy season which adversely affected construction activities and cement production in the region.	19.08.2020
72	Chhabra SCTPP, RRVUNL	Rajasthan	1, 3,	FAU is low due to being a new plant. During 2019-20 a long rainy season adversely affected construction activities and cement production in the region.	24.08.2020
73	North-Chennai, Tangedco, NCTPS	Tamilnadu	3	Plant has deposited a penalty amount of Rs. 16.461 crore with TNPCB in compliance to the directions of NGT in a separate case (O.A. 8 of 2016) for the same cause i.e. destruction of environment from Nov 2004 to Nov 2019, which consists of the penalised year (2018-2019). Requested to drop the penalty as it will cause repetition of EC.	25.08.2020
74	North-Chennai, Tangedco, Stage -II	Tamilnadu	3, 9	-	05.08.2020

75	Neyveli Lignite, NLC TPS-1	Tamilnadu	3, 7(b)	Plant is going through decommissioning and only 2 out of 9 units are operational now, which will also be retired by Sept 2020. Accumulated ash is stored in ash pond and will be used for backfilling of mines in near future.	22.07.2020
76	Vallur, NTPC	Tamilnadu	1	Stay on EC has been directed by SC on 10.08.2020 for the plant.	11.08.2020
77	Kothagudem V Stage TPS, TSGENCO	Telangana	3, 4	-	31.08.2020
78	SINGARENI TPP	Telangana	3, 4	FAU got affected due to COVID19 since Feb 2020 only.	14.07.2020
79	Kakatiya. TSGENCO	Telangana	3, 4	FAU got affected due to COVID19 in last quarter which was otherwise supposed to be >100% in absence of lockdown because major ash users take fly ash during this time.	23.07.2020
80	Singrauli, NTPC	Uttar Pradesh	1	-	25.07.2020
81	Anpara A, B & D, UPVUNL	Uttar Pradesh	1	UPRVUNL has also filed petition in SC on 08.08.2020 in the same matter.	24.08.2020
82	Rihand, NTPC	Uttar Pradesh	1	-	24.07.2020
83	Unchahar, NTPC	Uttar Pradesh	3, 4	FAU got affected due to COVID19 in Mar 2020, otherwise would have achieved 110% FAU.	21.07.2020
84	Obra B, UPVUNL	Uttar Pradesh	1	UPRVUNL has also filed petition in SC on 08.08.2020 in the same matter.	24.08.2020
85	Harduaganj, UPVUNL	Uttar Pradesh	3	Extension unit of 660 MW is under construction, for which same ash pond will be used. Hence, modification work and utilization both are getting affected.	24.07.2020
86	Anpara C, Lanco Power	Uttar Pradesh	2	-	27.07.2020
87	NTPC Meja, MUNL	Uttar Pradesh	1	-	11.08.2020
88	Farakka, NTPC	West Bengal	1	-	22.07.2020

89	Mezia, DVC	West Bengal	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	25.08.2020
90	Durgapur Steel TPS, DVC	West Bengal	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	25.08.2020
91	Durgapur TPS, DVC	West Bengal	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	26.08.2020
92	Raghunathpur, DVC	West Bengal	-	DVC has filed petition in SC on 25.08.2020 vide diary no. 17940/2020 for the stay on EC.	25.08.2020
93	Durgapur Projects Ltd.	West Bengal	3, 4, 9	FAU submitted for 2018-19 & 2019-20 were provisional data, whereas, audited report are having higher FAU, which should be considered actual data. Plant going through financial restructuring.	16.07.2020
94	Sagardighi, WBPDCCL	West Bengal	3, 4	A contract was issued in Dec 2018 to M/s HCC to evacuate 9 Lakh m <sup>3</sup> fly ash during 2019-20 for utilizing same in construction of NH34. However, due to some issues being faced by the company along with NHAI it could lift only 1.7 lakh m <sup>3</sup> of ash. Due to this problem target FAU could not be achieved.	05.08.2020
95	Barkeshwar, WBPDCCL	West Bengal	3, 4	FAU is almost >100% since year 2014-15 but due to COVID19 pandemic it is marginally low in year 2019-20.	30.07.2020
96	Bandel, WBPDCCL	West Bengal	3, 4	During year 2018-19 FAU was 98% till Dec 2018 and only 8654 m <sup>3</sup> ash was unutilized and stored in ash pond with cumulative ash amount of 31420 m <sup>3</sup> in 7.45 lakh m <sup>3</sup> storage ash pond. As tenders for lifting of ash is issued if significant ash is available in ash pond, new tender could be issued in April 2019.	03.08.2020

**CPCB's comments w.r.t.salient common responses received from TPPs**

Sl. No.	Common arguments of TPPs	CPCB's Comments
1	Hon'ble Supreme Court has granted stay on impugned order of Hon'ble NGT dated 12.02.2020 directing CPCB to compute and levy EC on TPPs.	No comments.
2	The order of Hon'ble NGT dated 27.01.2020 is subject to the proceedings pending before Hon'ble Supreme Court	Para 28 plus Para 32j and Para 32 b)& c) dealt different issues and therefore the directions in Para 32 b) and c) was not conditional.
3	Requesting to waive off EC levied.	CPCB has computed EC and issued letters to TPPs to deposit EC as per NGT order and CPCB has no authority to waive off the EC.
4	Explaining the reasons for not achieving 100% utilization and submitting that action is being taken by plant for achieving 100% utilization.	CPCB has computed EC and issued letters to TPPs to deposit EC as per NGT order and CPCB has no authority to waive off the EC.
5	Submitted Action Plan to the Jt. Committee of MoEF&CC to achieve 100% utilization within 2 years.	Notwithstanding the submission of and adherence to the Action Plan, NGT has directed for levying EC for the years 2018 and 2019. CPCB has no authority to waive off the EC.
6	Claiming 100% utilization of fly ash, excluding bottom ash.	MoEF&CC notification dated 03.11.2009 clarifies that the term "fly ash" means and includes all ash generated such as ESP ash, dry fly ash, bottom ash, pond ash and mound ash as the objective is to utilize all the ash".
7	(a). Plant has complied with MoEF&CC notification dated 03.11.2009 for achieving 50, 70, 90 & 100% utilization during 1, 2, 3 & 4 year of operation.  (b). Plant will utilize the unutilized ash of particular year in upcoming years.	Hon'ble NGT has concluded that 31.12.2017 is the cut-off date for achieving 100% utilization and directed for levying EC for year 2018 & 2019. CPCB has accordingly computed and levied EC on non-compliant TPPs.
8	Plant achieved its full capacity in recent years and is required to comply within 4 years of commissioning of full capacity.	Hon'ble NGT has concluded that 31.12.2017 is the cut-off date for achieving 100% utilization and directed for levying EC for year 2018 & 2019. CPCB has accordingly computed and levied EC on non-compliant TPPs.
9	Claiming deviation from data submitted in CPCB's letter/computation. (but CPCB disagrees with the claim)	Computation is based on the fly ash generation and utilization data submitted to CPCB by plants for years 2018-19 and 2019-20, and it is correct.

**No. 9/7/2011-St. Th. (Vol. V)**  
Government of India  
Ministry of Power

Shram Shakti Bhawan, Rafi Marg  
New Delhi dated 06.07.2020

**To,**

Member Secretary,  
CPCB, Parivesh Bhawan,  
East Arjun Nagar, Delhi-110032

**Sub:-** Hon'ble National Green Tribunal (NGT) Orders dated 12.02.2020 on utilisation of fly ash - reg.

**Sir,**

I am directed to refer to para 32(e) of the Hon'ble NGT Orders dated 12.02.2020 in OA No. 117,499,102/2014 in which the Hon'ble Court had directed:

*"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."*

2. It is stated that NTPC is the Convenor of the Task Force which was revitalised by MoP on 10.04.2019 for reviewing and recommending the list of operational mines or abandoned mines/ quarries, for mine backfilling purposes. So far, 21 mines have been identified by CIL and SCCL (copy enclosed) and the same is provided to the Convenor of the Task Force in its 6<sup>th</sup> meeting held on 20.05.2020. These are the only mines presently identified for offer of backfilling. Further, more abandoned mines in the list may be added as and when identified by the coal subsidiaries and provided to MoP, by the Task Force constituted in NTPC.

3. It is requested to take necessary action in the matter.

4. This issues with the approval of Joint Secretary (Thermal).

Yours faithfully,

**Enclosed:** as stated.



(Nishat Kumar)

Under Secretary to the Govt. of India

Tel: 23715507, Ext: 212

e-mail- nishat.kumar@nic.in

List of mines identified for fly ash filling in CIL & SCCL										Annexure-I
S. N.	Company	Admin. Areas	Name of Mine	OC/UG	Distt. And State	Area of OC void (Ha.)	Volume of ash that may be accommodated (Approximate) (Lakh Cum.)	Nearby TPP's	Distance from TPP's (kms.)	Availability of Transport infra
1	WCL	Majri	Telwasa OC	OC	CHANDRAPUR(MH)	80.13	200	GMR power, Warora, SaiWardha Power, Warora	39	Road
2		Majri	Dhorwasa OC	OC	CHANDRAPUR(MH)	51.75	100		39	
3		Majri	NavinKunada OC	OC	CHANDRAPUR(MH)	82.6	250		37	
4	SECL	Korba	Manikpur west OC	OC	Korba/C.G	74	210	NTPC & CSPGCL (MoU Signed with NTPC).	20-30	Road
5		Korba	Surakachhar 3&4 pit	UG	Korba/C.G	0	3.3 (1.5 filled up)	NTPC ( MoU signed)	20-30	Road
6		Bhatgaon	Dugga	OC	Surajpur/C.G	25	170	NTPC, Korba	250	Road
7		Bishrampur	Bishrampur	OC	Surajpur/C.G	9	17	NTPC, Korba	250	Road
8		Sohagpur	ShardaOC (OPQR & Trench T-1 patch)	OC	Shahdol-Anuppur/M.P	6.0 & 9.0	10.0 & 30.0	ATPS	10	Road
9	NCL	Block-B	Gorbi	OC	Singrauli,MP	26	14	NTPC (MoU signed )	35	Road
10	MCL	Jaganath	South Balanda (Q-2 & Q-3)	OC	Angul, Odhisa	63	147.3 (95 % filled up)	NTPC (Ongoing)	10	Pipeline
11			Jaganath OC, Q-IV	OC		36	170 (3 % filled up)	Bhusan steel (Stopped since Feb-2016 -no permits)	20	EC for pipeline
12			Jaganath OC, Quarry VI & VII	OC		29 & 16= 45.0	64.3 & 39.6 =103.90	NTPC (MoU in process)	10	
13			Jaganath OC, Q-VIII	OC		34.326	178.2	NTPC (MoU in process)	22	
14			South Balanda (Q-1)	OC		20	39.7 (7 L Cu.m filled )	NBVL (Stopped since 2013 - no EC)	10	Road

List of mines identified for fly ash filling in CIL & SCCL										Annexure-I
S. N.	Company	Admin. Areas	Name of Mine	OC/UG	Distt. And State	Area of OC void (Ha.)	Volume of ash that may be accommodated (Approximate) (Lakh Cum.)	Nearby TPP's	Distance from TPP's (kms.)	Availability of Transport infra
15		Bharatpur	Bharatpur	OC		90.53	133	NALCO (laying of pipe line in process)	12	Pipeline
16	ECL	Mugma	Bajna/ Pusai	OC	Dhanbad,Jharkhand	6	12	MPL, Maithon	10	Road
17	ECL	Satgram	Nimcha	OC	PaschimBardhaman, W.B	25	50	DTPS, Durgapur / MTPS, Mejia	23	Road
18	CCL	Kathara	Govindpur	UG	Bokaro/Jharkhand		0.85 (Bottom ash)	DVC/STPS	10	Road
19		NK	Dakra (To be available in 2023-24)	OC	Ranchi/Jhrkhand	38.5	214.5	Patratu	45	Road
20	BCCL	WJA	Murulidih (Cluster-XIII)	OC	Dhanbad - Jharkhand	1.6	1.5	CTPP	25	Road
21	SCCL	RG-1	Medapalli OCP (To be closed in 2022-23)	OC	Peddapalli, Telangana	258.31	2164.3	NTPC (Under construction)	5	Road

Item Nos. 02 to 04

Court No. 1

**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)

Versus

Union of India &amp; Ors.

Respondent(s)

WITH

Anupam Raghav &amp; Anr.

Applicant(s)

Versus

U. O. I. &amp; Ors.

Respondent(s)

WITH

Sandplast (India) Ltd. &amp; Ors.

Applicant(s)

Versus

MoEF &amp; 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:

<b>Sr. No.</b>	<b>Percentage Utilization of Fly Ash</b>	<b>Target Date</b>
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 Courts<sup>1</sup> as well as by public authorities<sup>2</sup>."

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:-

<sup>1</sup>Occupational Health and Safety Association v. Union of India &Ors. (2004) 3 SCC 547 ¶12-15  
<sup>2</sup><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?reid=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:

<b>Sl. No.</b>	<b>Capacity of the Thermal Power Plant</b>	<b>Cost of damages</b>
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 [nqt.filing@gmail.com](mailto:nqt.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:*

<b>S. No.</b>	<b>Thermal power plant &amp; Northern Coalfield Mine</b>	<b>Days of Non-compliance</b>	<b>Environmental Compensation in Rupees @ 30000/day</b>
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)**

<b>S.No.</b>	<b>Name of industry (M/s)</b>	<b>EC in Rs.</b>
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 22<sup>nd</sup> 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 Vindhyanagar 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 examine 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:

- (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 and 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 affected 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  
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