WEST BENGAL POLLUTION CONTROL BOARD
(Department of Environment, Govt. of West Bengal)
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Memo No. 2158-344/WPB(HRO)-K/2011(Part-IV) Date: 25/03/2014

D I R E C T I O N

WHEREAS, M/s. Kolaghat Thermal Power Station (WBPDCL) (hereinafter referred to as the industry), located at Mecheda, P.S.- Kolaghat, Dist.- Purba Medinipur, Pin – 721 137 is a coal based thermal power plant of capacity 1260 MW (6 X210MW). Each power generating unit has individual ESP as air pollution control device (APCD) and unit no. 1, 2 & 3 are connected to individual stack of height 120 m. and unit 4, 5 & 6 are connected to individual stack of height 220 m.

AND WHEREAS, total ash generated by the industry is approx.7000 MT/day. The generated ash is stored at 5 nos. ash silos and transported through (i) 5 nos. ash slurry lines for 20% of generated ash mainly constituted of bottom ash from the boilers and (ii) 6 nos. dry ash transportation lines from ESPs attached to six units of the plant for handling of fly ash through vacuum driven system. The ash is finally utilized for land filling, cement and asbestos manufacturing industries. The industry has also fly ash brick manufacturing unit with a production capacity of 25-30 lac bricks per year. However the industry is not operating the same at present. The source of trade effluent are ash slurry, DM plant discharge, Boiler blow down, effluent from steam cooling system. The trade effluent is treated in 6 nos. Ash ponds and ETP of physico-chemical type. Part of the treated effluent from ETP is recycled to form Ash slurry and the rest is discharged into local canals and river.

AND WHEREAS, the thermal power station continued to fail to comply with the emission standard with emission of high level of particulate matter from the stacks of the boilers. The stack samplings carried out on 20/07/2012, 23/07/2012, 24/07/2012, 26/11/2012, 27/11/2012, 10/01/2013, 11/01/2013, 25/04/2013, 26/04/2013, 08/07/2013, 09/07/2013 show a highly non-complying PM level which are tabulated below:-

Date of sampling	Sample collected from	Parameters	Results obtained (mg/Nm^3)	Permissible limit (mg/Nm^3)
20/07/2012	Stack attached to Unit no. #5 (Pass A)	PM	**3379.41**	150
	Stack attached to Unit no. #5 (Pass B)		**3149.17**	
	Stack attached to Unit no. #6 (Pass A)		**973.5**	
	Stack attached to Unit no. #6 (Pass B)		**1122.13**	
23/07/2012	Stack attached to Unit no. #2		**731.17**	
	Stack attached to Unit no. #4 (Pass A)		49.64	
	Stack attached to Unit no. #4 (Pass B)		**169.64**	
24/07/2012	Stack attached to Unit no. #1		**775.37**	
	Stack attached to Unit no. #3		**280.68**	
26/11/2012	Stack attached to Unit no. #4 (Pass A)		85.30	
	Stack attached to Unit no. #4 (Pass B)		72.58	
	Stack attached to Unit no. #5 (Pass A)		**244.1**	
	Stack attached to Unit no. #5 (Pass B)		**251.96**	
	Stack attached to Unit no. #6 (Pass A)		**366.97**	
	Stack attached to Unit no. #6 (Pass B)		**329.71**	
27/11/2013	Stack attached to Unit no. #1		**1081.91**	
	Stack attached to Unit no. #2		**1729.9**	
	Stack attached to Unit no. #3		121.99	

Date of sampling	Sample collected from	Parameters	Results obtained (mg/Nm^3)	Permissible limit (mg/Nm^3)
10/01/2013	Stack attached to Unit no. #4 (Pass A)	PM	**231.89**	150
	Stack attached to Unit no. #4 (Pass B)		**287.36**	
	Stack attached to Unit no. #5 (Pass A)		**2276.77**	
	Stack attached to Unit no. #5 (Pass B)		**1940.93**	
11/01/2013	Stack attached to Unit no. #1		**693.21**	
	Stack attached to Unit no. #2		**516.15**	
	Stack attached to Unit no. #3		**432.16**	
25/04/2013	Stack attached to Unit no. #5 (Pass A)		**406.26**	
	Stack attached to Unit no. #5 (Pass B)		**547.66**	
	Stack attached to Unit no. #6 (Pass A)		**684.98**	
	Stack attached to Unit no. #6 (Pass B)		**954.62**	
26/04/2013	Stack attached to Unit no. #1		**1325.67**	
	Stack attached to Unit no. #3		**1809.35**	
08/07/2013	Stack attached to Unit no. #5 (Pass A)		**432.25**	
	Stack attached to Unit no. #5 (Pass B)		**469.07**	
	Stack attached to Unit no. #6 (Pass A)		**280.53**	
	Stack attached to Unit no. #6 (Pass B)		**384.97**	
09/07/2013	Stack attached to Unit no. #1		**377.94**	
	Stack attached to Unit no. #3		**800.39**	
	Stack attached to Unit no. #4 (Pass A)		46.91	
	Stack attached to Unit no. #4 (Pass B)		52.1	
12/11/2013	Stack attached to Unit no. #4 (Pass A)		**274.77**	
	Stack attached to Unit no. #4 (Pass B)		**227.73**	
	Stack attached to Unit no. #6 (Pass A)		**1228.54**	
	Stack attached to Unit no. #6 (Pass B)		**1199.62**	
13/11/2013	Stack attached to Unit no. #1		**2599.62**	
	Stack attached to Unit no. #3		**1471.17**	

AND WHEREAS, the **WEST BENGAL POLLUTION CONTROL BOARD** (hereinafter referred to as the Board) imposed a Pollution Cost of Rs.10 lakhs vide Memo No. 1496-344/WPB(HRO)-(Pt-III)-K/2011 dated 30/07/2012. The industry submitted the PC amount.

AND WHEREAS, the industry was called for a hearing on 09.01.14 at the head office of the board for emitting high level of particulate matter through the stacks of the boilers as observed during successive inspections by the Board officials. A public complaint against KTPS was also lodged by the Secretary, Krishak Sangram Parishad, East Medinipur alleging huge emission through the chimneys of the boilers especially during night hours and discharge of ash laden water into Denan canal, Banpur canal resulting in siltation of the canals.

AND WHEREAS, the complainants appearing in the hearing stated that the industry is continuously discharging dense black emission through the chimneys of the boilers especially during night hours causing severe health hazards to the residents of the area. They are also facing problem due to flying of ash during its handling and transportation. They also pointed out that Denal canal was last excavated by the industry in 2011 and the canal is again silted with thick layer of ash.

AND WHEREAS, the representatives of the industry appearing in the hearing agreed with the above mentioned observations of the Board. They submitted that up-gradation/modification of the ESPs of unit nos. 1, 2 & 3. They also submitted that unit no. 4 is under annual maintenance since December 2013 and they are planning to start maintenance work of ESPs for unit 5 & 6. They also stated that they would ensure proper covering of the ash carrying vehicles to prevent spillage of ash during its transportation. The Technical Committee verbally directed M/s. KTPS to submit a time bound action plan regarding completion of upgradation/modification work of ESPs within ten days. Subsequently, M/s. KTPS has submitted a time

bound action plan on 16/01/2014 mentioning that they are in the process of the upgradation/modification of the ESPs of Unit 1, 2 & 3 in phased manner and the said work will be completed by 2017. They also submitted that they are planning to carry out maintenance work including replacement of defective GD screen and discharge electrodes of the ESPs of unit 5 & 6 during 25/06/2014 to 28/06/2014 and 20/08/2014 to 14/09/2014 respectively. They will start dredging/desilting of the affected stretch (1 KM) of Banpur Canal prior to monsoon.

NOW, THEREFORE, considering the public complaints as well as repeated non-compliance in meeting PM emission standard, **M/s. Kolaghat Thermal Power Station (WBPDCL)** located at Mecheda, P.S.- Kolaghat, Dist.- Purba Medinipur, Pin – 721 137 is hereby directed as follows :

1. **That,** the industry shall complete the overhauling work of the ESPs of unit nos. 4, 5 & 6 by September 2014 so as to maintain the PM level within stipulated standard.

2. **That,** the industry shall complete the upgradation/modification work of the ESPs of unit nos. 1, 2 & 3 by the year 2017.

3. **Tha**t, the industry shall excavate both Denan Canal and Banpur Canal immediately to maintain free flow of water in the canals.

4. **That,** the industry shall carry out transportation of ash from ash ponds in properly covered vehicles to avoid spillage of ash.

5. **That,** the industry shall ensure that no secondary emission of dust is occurred during excavation, loading, unloading and transportation of ash.

6. **That**, the industry shall undertake extensive plantation program in and around the unit premises.

7. **That,** the industry shall execute a **Bank Guarantee** (proforma enclosed) of **Rs. 10,00,000/-** (Rupees ten lakh) only valid for twelve (12) months within fifteen [15] days from the date of issuance of this direction in favour of the **West Bengal Pollution Control Board** as an assurance to comply with the above direction.

The Environmental Engineer, Haldia Regional Office of the State Board is requested to keep strict vigil on the industry and if the industry is found to violate the direction of the Board, stricter regulatory order will be issued.

This direction is issued in exercise of the powers conferred under provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986 and Rules made thereunder after being approved by the Competent Authority.

By Order,

Sd/-
Chief Engineer
Operation & Execution Cell
West Bengal Pollution Control Board