<u>Annexure-I</u> Additional Conditions

- 1. This Consent for Operation is issued for the Period from 01.07.2021 to 30.06.2026.
- 2. This CFO is issued for the production of Electricity of capacity 860 MW/Hr.
- 3. The authorities have paid Rs 1,27,60,000/- as Consent fee for 5 years based on the CI of Rs.3346 Crores/-. The applicant shall pay the balance fee, if any, after the final notification of revised consent fee and as per the affidavit submitted by the industry.
- 4. The applicant shall comply with the quantity of water consumption, waste water generation and treatment and disposal of treated water for Power generation plant as per the following table

Sl. No	Type of Effluents	Consumption of water in KLD	Waste water generated in KLD	Mode of Disposal
1	Domestic Purpose	90.0	72	The domestic sewage generated from the industry shall be treated in 2 Nos. of Reed bed sewage treatment plant of capacity 30 KLD and 50 KLD respectively and the treated water shall be used on land for gardening within the premises after confirming to the standards stipulated as Annexure-A
2	Cooling Water	49265	7613	Shall be treated in RO plant and Maximum quantity of treated water shall be used back for Cooling purposes and the balance treated water shall be collected in Guard Pond and used for Ore Beneficiation Plant.
3	Manufacturing Process	612	281	The water shall be used for Process Boilers and Auxiliaries after treating in Neutralization Plant and after treatment the treated water shall be used for ash conditioning Purposes.
	Total	49967	7966	

- 5. The domestic sewage generated from the industry shall be treated in 2 Nos. of Reed bed sewage treatment plant of capacity 30 KLD and 50 KLD respectively and the treated water shall be used on land for gardening within the premises after confirming to the standards stipulated as **Annexure-A**-.
- 6. The applicant shall not change or alter either the quality or the quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.

- 7. The applicant shall not dig the new Bore wells within the premises.
- 8. The applicant shall take suitable steps so that there will be reduction of the fresh water consumption as well as waste water generation from the industry.
- 9. The industry shall cover the coal which is used for CPP Power Plant and ensure that there shall not be any fugitive emission.
- 10. The industry shall store all the scrap materials in a designated separate scrap yard and all type of scraps shall be stored in this dedicated area only.
- 11. The industry shall maintain the housekeeping all round the industry.
- 12. The industry shall store all types of hazardous wastes in a covered shed with proper labelling on the container.

B. DISCHARGE OF EMISSIONS UNDER THE AIR ACT:-

- 1 The discharge of emissions from the premises of the applicant shall pass through the air pollution control equipment and discharged through stacks/chimneys mentioned in **Annexure-B** where from the Board shall be free to collect the samples at any time in accordance with the provisions of the Act and Rules made there under.
- 2 Applicant shall provide water sprinkling system to suppress dust for coal unloading from the wagons coal handling area, and coal rejected yard at all the time
- 3 The applicant shall at his own cost get the samples of emissions collected and get them analyzed once a month for the parameters stipulated.
- 4 The applicant shall keep daily record of the readings of Sox and NOx from the continuous online recorder and average-2 daily readings shall be computed once in a month and reported along with the manual monitoring results and the data shall be analyzed, and reported to the Board Office.
- 5 The applicant shall carryout the ambient air quality monitoring and submit the report to the Regional Office of the Board. The AAQM stations shall be carried out in all the established stations as per the requirement under the National Ambient Air Quality Monitoring Standards stipulated in Environmental (Protection) Rules, 1986. Monitoring shall include the parameters, PM2.5, PM10 sulphur dioxide, Nitrogen Oxide, Hydrocarbons, carbon monoxide, and H2S. Additional stations shall be established as and when directed by the Board.
- 6 The industry shall furnish statistical analysis for annual average of pollutants at all the locations per Ambient Air Quality standards Notification once in a year.
- 7 The applicant shall provide and maintain at his own cost a meteorological station to collect the data on wind velocity, directions, temperature, humidity, rainfall etc., and the daily reading shall be recorded and the extract be sent to the Board once in a year.
- 8 Fugitive emission near manufacturing area has to be controlled by adopting advance technology. Progress made in this regard shall be furnished.
- 9 If there is going to be any new air pollution sources in future, the project authorities shall apply and obtain consent for establishment for the same from the Board.

C. HAZARDOUS WASTES (MANAGEMENT, HANDLING & TRANSBOUNDRY MOVEMENT) RULES 2016:

- The industry shall apply and obtain authorization under Hazardous Wastes (Management, Handling & Transboundry Movement) Rules 2016, and comply with the conditions of the authorization. The applicant shall comply with the terms and conditions stipulated in authorization.
- 2. The applicant shall dispose the empty raw material cans back to the supplier and shall maintain the manifesto to this process. The details shall be submitted to the Board

D. GENERAL CONDITIONS

- 1. The applicant shall submit the Environmental Statement every year for the period ending 31st March in Form V of Rule as per Rule 14 of Environment (Protection) Rule 1986 on or before 30th September.
- 2. The applicant shall not allow the discharge from the other premises to mix with the discharge from his premises. Storm water shall not be allowed to mix with the effluents on the upstream of the terminal manhole where the flow measuring devices are installed.
- 3. The Noise generated in the factory shall be within the prescribed limits of 75 dB (A) leq. During day time and 70 dB (A) leq during night time.
- 4. There shall not be any complaint against the industry on water, air, noise pollution from the surrounding general public.
- 5. The applicant shall carryout intensive plantation/ thick vegetation all round, especially towards residential apartment to minimize air & noise pollution. The action taken report shall be submitted to the Board immediately.
- The applicant shall adhere to the directions contained in the fly ash utilization Notification issued by Ministry of Environment and Forest Government of India vide No.S.O.763(E), dated 14.09.1999 and No. SO 979 (E), dated 17.08.2003 & 03.11.2009.

SI. No.	Category	Quantity	Disposal Details		
	2 x 300MW Plant				
1	Bottom Ash	342 TPD	Collected in dry form in water impounded hopperand this as after grinding should be transported to ash pond area.		
2	Fly Ash	1370 TPD	Collected in dry form in ash silo and made available for Cement Plants, brick manufacturing industries etc., The ash shall be transported closed pipe conveyor pneumatically (up to fly ash silos).		
	2 x 130MW	Plant			
1	Bottom Ash	36TPD	Collected in dry form in water impounded hopperand this ash after grinding should be transported to ash pond area.		
2	Fly Ash	324 TPD	Collected m dry form in ash silo and made available for Cement Plants, brick manufacturing industries etc., The ash shall be transported closed pipe conveyor pneumatically (up to fly ash silos).		

7. The ash & solid waste shall be handled & disposed as below.

- 8. 100% fly ash shall be collected in dry form and its full utilization shall be achieved in accordance with the notification on fly ash utilization S.O. 763E dated 14.09.1999 and the amendment made there on from time to time.
- 9. The applicant shall provide with water sprinkling arrangement in ash pond area to avoid any fugitive emission due to wind.

- 10. The power plant should make available dry ash to end users and provide uninterrupted access.
- 11. The applicant shall comply with the guidelines under Corporate Environmental Responsibilities for Environment protection issued by Ministry of Environmental Forests and CPCB.

For and on behalf of the KSPCB

SENIOR ENVIRONMENTAL OFFICER

ANNEXURE -A

Standards for using the treated sewage on land for irrigation/green belt development:

SI No	Characteristics	Standards	
1	pH	6.5 to 9.0	
2	BOD, mg/l , (3 days at 270 C)	10	
3	COD, mg/l	50	
4	TSS, mg/l	20	
5	Ammonical Nitrogen, mg/l	5	
6	Total Nitrogen, mg/l	10	
7	Fecal Coli form, MPN/100ml	< 100	

Note: All efforts should be made to remove colour and unpleasant odour as far as practicable.

TABLE HYDRAULIC LOADING APPLICABLE FOR DIFERENT SOILS

Sl. No.	Soil Texture	Loading rate in M ³ /Hec/day
1	Sandy	225 to 280
2	Sandy Loam	170 to 225
3	Loam	110 to 170
4	Clay Loam	055 to 110
5	Clayey	035 to 055

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The Air pollution sources, Chimney height and the control equipments provided by the industry shall be as below and the Air pollution sources mentioned in the main consent at Page No: 5 shall be replaced with this **Annexure-B**

SI. No.	Chimney Attached to	Minimum Chimney Height to be Provided	Constituents to be controlled in the emission.	Tolerance limits Mg/NM3	Air Pollution Control equipment to be installed, in addition to Chimney height as per Col (3)	Date of which air pollution Control equipments shall be provided to achieve the stipulated tolerance limits and chimney heights conforming to stipulated heights.	Remarks
1	Boiler- 415 TPH x 2	115 m AGL	PM	100	With individual ESP	At All Times	1. The emission rate of all chimneys shall be reported within 30 days.
5	(2x130MW – Coal and Byproduct/Wa ste Mixed Gas)		SO2	-			2. Details of D.G. Sets if any like KVA rating fuel consumption in Kg/hr., Chimney height above roof level and dia to be furnished within 30 days. D.G. Sets and other noise generating machinery to be provided with Silencers /Mufflers to reduce the noise pollution.
2	Boiler- 1015 TPH x 2 (2x300MW - Coal and	275 m AGL	PM SO2	100	With individual ESP	At All Times	
	Byproduct/Wa ste Mixed Gas)						3. There shall be no smell or odour nuisance from the industry.
3	DG Sets- 750 KVA x 2 Nos	13 m AGL	SO2		With Acoustic Enclosure	At All Times	4. There shall be no other sources of air pollution.
4	DG Set 350 KVA x 2 Nos	6 m ARL	SO2		With Acoustic Enclosure	At All Times	

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