Brief Summary of the Project

1. **Name of the project:**

   Proposed 1 x 500 MW Coal Based Sagardighi Phase III Extension Unit – 5 at Sagardighi Thermal Power Station (SgTPP) in Murshidabad District, West Bengal.

2. **Existing Capacity / Area etc:**

   Existing capacity of Phase – I is 600 MW (2x300MW) presently under operation. In Phase-II , necessary clearances received for 2×500 MW sub-critical units are under construction/commissioning stage. Land area required for the proposed expansion was already acquired during land acquisition for Phase-I.

3. **Location:**

   The proposed unit will be located in the premises of the existing SgTPP in Murshidabad District, West Bengal. SgTPP site is located at Manigram Village, 13 km north of Sagardighi town by the side of the SMGR (Sagardighi-Manigram-Gankar-Raghunathganj) Road at a distance 20 km from National Highway-34 in Murshidabad District, West Bengal. it is around 240 km from Kolkata.

   The approximate latitude and longitude of the project site are as follows:

AREA	LATITUDE	LONGITUDE
Plant Site	24° 22' 20"N	88° 05' 30"E
	24° 22' 38"N	88° 06' 11"E
	24° 21' 47"N	88° 07' 04"E
	24° 21' 19"N	88° 06' 05"E
Ash Pond	24° 22' 06"N	88° 05' 05"E
	24° 23' 08"N	88° 05' 25"E
	24° 22' 38"N	88° 06' 05"E
	24° 22' 20"N	88° 05' 28"E

4. **Nearest railway station / airport along with distance in kms:**

   The nearest rail station is Manigram adjacent to the site on Bandel-Barhawara branch line. Sagardighi Railway Station (6.5 km) on Sainthia – Azimgunj line of Eastern Railway is another railway station. The nearest airport is Netaji Subhas Chandra Bose International Airport at Dum Dum in Kolkata (240km).

5. **Nearest Town, city, District Headquarters along with distance in kms:**

   Nearest town - Sagardighi (13 km), Nearest city – Kolkata (240 km), District Headquarters- Berhampore (42 km).

6. **Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (complete postal addresses with telephone nos. to be given):**

Sagardighi Thermal Power Project, P.O.-Manigram, P.S.-Sagardighi, Manigram Gram Panchayat, PIN-742237, Dist- Murshidabad,West Bengal,Telephone:03483 237003

7. **Temporary used for construction works or housing of construction workers:**

The proposed plant site has adequate space for construction yard. To take care of the housing of construction workers to migrate from outside, proper temporary housing arrangements will be ensured by WBPDCL through contractors. It will be binding on the Contractors to construct Workers' Colony with electricity and piped water while land for the same will be temporarily made available by WBPDCL.

8. **Process of Production and manufacturing:**
Conventional pulverized coal (PC) fired power generation unit with a capacity of 1x500 MW and Subcritical steam parameters.

9. **Facilities for treatment or disposal of solid waste or liquid effluents:**

Each liquid effluent stream will be treated separately and will be finally led to a Guard Pond. Maximum reuse and recycling of liquid effluents to be done. Basic concept of the liquid effluent treatment scheme (Waste Water Management Scheme) will be based on "Minimum Discharge Concept".

The main solid wastes to be generated from the proposed project are :

I. Ash (Bottom ash and Fly ash)
II. Water Pretreatment Plant sludge

Bottom ash will be extracted in wet form and will be disposed in ash disposal area in wet form.

Fly ash will be collected and disposed off in dry form in fly ash silo. The dry fly ash from the silo will be used for fly ash brick manufacturing, lightweight aggregates manufacturing, cement admixtures, etc. **Under exigency**, there would also be a provision of disposal of fly ash lean phase to the ash pond with 100% ash water recycling system.

Other solid waste to be generated from the plant is from water pretreatment plant (sludge from clariflocculator / filtration plant backwash). Quantity of this solid waste will not be much. This may be used as topsoil for green belt development.

10. New road, rail or sea traffic during construction or operation:
All infrastructure facilities of an existing thermal power station exist. Hence no new infrastructure facility is required.

11. Transport of personnel or materials for construction, operation or decommissioning:

    Around 200 O&M personnel will be required during operation phase of the project.

    In addition to the permanent staff, around 150 to 600 persons shall be engaged in construction activities. Most of the unskilled and semi skilled labour shall be from nearby villages and towns. Responsibility of bringing labourers to site will lie with the respective contractors.

    - By road and rail

12. Influx of people to an area in either temporarily or permanently:

    There will be immigration of people in two phases :

    During construction phase there will be an influx of 150 to 600 persons. Most of the unskilled and semi skilled labour shall be from nearby villages and towns. Moreover, workers colony will be provided with electricity, scientific and environmentally accepted drainage & sanitation facilities and drinking water supply systems.

    During operation phase, around 200 personnel will be required.

13. Land especially undeveloped or agricultural land (ha):

The existing plant has enough space within its plant boundary to accommodate the expansion unit and its auxiliaries. No additional land will be required for locating the main plant and its auxiliaries.

14. **Water (expected source & competing users) unit: KLD**

    Around 43200 kld (i.e. 1800 m^3/hr) of raw water will be drawn from river Bhagirathi which is sufficient for all the three phase and clearance for the same has already been obtained.

15. Minerals (MT):

    2.76 million tones of coal per annum(MMTPA) at 85 % PLF.

    Source :

    It is proposed that coal from the Pachwara (N) block would be transported by road dumpers to the dedicated Pakur siding which is presently under construction (about 50 km distance). From there coal would be transported to the plant site through rakes covering a route length of around 87 km and would take approximately 4 hours.

16. Ambient Air quality monitoring station already installed and is in function.