#### POWERPLUS TRADERS PRIVATE LIMITED

(Joint Venture of Orissa Metaliks Pvt Ltd, Rashmi Cement Ltd & Shyam Steel Manufacturing Ltd)

**CORPORATE OFFICE**: Premlata Building, 39 Shakespeare sarani,  $6^{\text{th}}$  Floor, Kolkata-700017, India Tel: +91-33 2289 4255 /4266, FAX NO.: +91 33 2289-4254,

E-mail: <u>powerplustrade@gmail.com</u>

CIN: U10100WB2012PTC183435

Date: 28/11/2023

Letter No. PTPL/JAG-B/EC-Com.Rep/December 2023

To,

Regional Office,

Ministry of Environment, Forests & Climate Change, Bhubaneswar

A/3, Chandersekharpur, Bhubaneswar – 751023

And

Sub office, Kolkata

(Under Regional Office, MoEF&CC, Bhuvneshwar)

IB - 198, Sector-III, Salt Lake City-Kolkata 700106

West Bengal

Subject: Six Monthly (December-2023) Compliance Report (Period: April 2023 to September

2023) for "Jaganathpur-B Underground Coal Mine" by "Powerplus Traders Private Limited".

Ref.: Environmental Clearance Identification No. EC22A042WB110977 dated 01/09/2022 issued

vide File No. IA-J-11015/27/2021-IA-II(M)

Dear Sir,

With reference to the above subject we would like to inform you that we have obtained Environment Clearance vide Environmental Clearance Identification No. EC22A042WB110977 issued vide File No. IA-J-11015/27/2021-IA-II(M) dated 01/09/2022 for "Jaganathpur-B Underground Coal Mine" having production capacity of 0.8MTPA/1.2MTPA (Normative/Peak) and mine lease area of 856.68 ha, located at JL No- 4 to 11, 13 of PS: Kanksa, J.L. No.-7 to 9, 25 to 27 of P.S.: Faridpur-Durgapur, in villages Sandipur, Basudevpur, Binodpur, Rajhat, Sashipur, Dubrajpur, Majhidanga, Dandeswarpur, Ranipur, Shyamsunderpur, Jot Balarampur, Shrikrishnapur, Amdahi, Jagannathpur, Kalinagar, Tehsil: Faridpur-Durgapur and Kanksa, in Paschim Bardhaman District of West Bengal State.

Therefore the project is not operational and after obtaining CTE from WBPCB development works for underground mining purpose.

We are hereby submitting the six-monthly compliance reports for period from (April 2023 to September 2023). We assure that we will comply all the conditions laid down in the consent letter and also abide to follow all the Rules & Regulations.

Hope you will find the same in order.

Thanking You

Your Sincerely

For Powerplus Traders Private Limited

Authorized Signatory

C.C:- The Member Secretary, West Bengal Pollution Control Board, Parivesh Bhawan, 10A Block – LA, Sector – III, Kolkata, West Bengal

#### Encl:-

- 1. Half Yearly Environmental Clearance Compliance Report
- 2. Environmental Monitoring Report is attached as Annexure-I
- 3. Copy of P.O. for installation of Sewage Treatment Plan is attached as *Annexure-II*.
- 4. The confirmation letter from WBPCB in favour of Powerplus Traders Private Limited regarding installation of CAAQMS is attached as *Annexure-III*.

### **COMPLIANCE REPORT**

(Compliance Period: April, 2023 to September, 2023)

Of

## **ENVIRONMENTAL CLEARANCE**

Granted by Ministry of Environment Forest & Climate Change (MoEF&CC) vide EC identification no. EC22A042WB110977 dated 01/09/2022 issued vide File No-IA-J-11015/27/2021-IA-I II (M)

**FOR** 

## JAGANATHPUR-B UNDERGROUND COAL MINE

Located at

JL No- 4 to 11, 13 of PS: Kanksa,

J.L. No.-7 to 9, 25 to 27 of P.S.: Faridpur-Durgapur,
in Villages Sandipur, Basudevpur, Binodpur, Rajhat, Sashipur,
Dubrajpur, Majhidanga, Dandeswarpur, Ranipur,
Shyamsunderpur, Jot Balarampur, Shrikrishnapur, Amdahi,
Jagannathpur, Kalinagar, Tehsil: Faridpur-Durgapur and
Kanksa, District: Paschim Bardhaman

State: West Bengal

Production Capacity: 0.8 MTPA/ 1.2 MTPA (Normative/Peak)
Mine Lease Area: 856.68 ha

# Name of Project Proponent

## M/S POWERPLUS TRADERS PVT. LTD.

Registered Office: Premlata Building, 39 Shakespeare Sarani, 6<sup>th</sup> Floor, Kolkata-700017



Your application has been Submitted with following details			
Proposal No	IA/WB/CMIN/210433/2021		
Compliance ID	26111687		
Compliance Number(For Tracking)	EC/M/COMPLIANCE/26111687/2023		
Reporting Year	2023		
Reporting Period	01 Dec(01 Apr - 30 Sep)		
Submission Date	28-11-2023		
IRO Name	ARTATRANA MISHRA		
IRO Email	jhk109@ifs.nic.in		
State	WEST BENGAL		
IRO Office Address  Budgam			
Note:- SMS and E-Mail has been sent to ARTATRANA MISHRA, WEST	BENGAL with Notification to Project Proponent.		











#### **View Compliance Report at Project Proponent**

**Proposal Details** 

Proposal No IA/WB/CMIN/210433/2021 Category Coal Mining

**Proposal Name** Jaganathpur-B Underground Coal Mine

Plot / Survey/ Khasra Village(s)

No.

Sub-District(s)

State WEST BENGAL District PASCHIM?BARDHAMAN

MoEF File No IA-J- 11015/27/2021-IA-II(M) Name of the Powerplus Traders Private Limited

Entity/
Corporate
Office

Entity's PAN NA

Entity Name as NA Entity details Agree

per PAN mentioned above is

correct?

**Covering Letter** 

**Covering Letter** Click to View

**Compliance Reporting Details** 

**Reporting Year** 2023 **Reporting** 01 Dec(01 Apr - 30 Sep)

Period

Remark(if any) Six Monthly Environmental Clearance Compliance Report

**Details of Production and Project Area** 

**Date of** 18-10-2022

Commencement

of

**Project/Activity** 

,					
	Project Area as per EC Granted(ha.)	Actual Project Area in Possession(ha.)			
Private	630.64				
Revenue Land	0				
Forest	0				
Others	226.04				
Total	0	0			

	PRODUCTION CAPACITY						
Sr.No.	Name of the Product	Units	As per EC Granted	As per CTO Granted	CTO ID	Valid Up To	Production during last financial year
1	Coal	Million Tons per Annum (MTPA)	0.8 (Normative)/1.2 (Peak)	CTO Not obtained yet	CTO Not obtained yet		0

#### Conditions

#### **Specific Conditions**

Sr.No.	Condition Type	Condition Details	Status of Compliance, Remarks/Reason and Supporting Documents	
1	Statutory compliance	PP to obtain the CTO for 0.8/1.20 MTPA capacity after grant of EC.	PPs Submission	Agreed & will be complied Consent to Establish (CTE) has been obtained from West Bengal Pollution Control Board (WBPCB) vide NOC No- 172012 dated 18.10.2022 issued vide memo no. 525-2N-11/2022(E). We will obtain Consent to Operate before starting of the coal production. Copy of the CTE is already submitted to competent authority in EC compliance (Dec-2022) vide letter no-PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022.  Being Complied Attachment: NA
2	Statutory compliance	PP shall obtain No Objection Certificate from Central Ground Water Authority for extraction of ground water within six months and submitted to IRO, Ranchi.	PPs Submission	Complied In the state of West Bengal, ground water extraction is not being regulated by Central Ground Water Authority (CGWA) as per notification of? Ministry of Jal Shakti? Gazette notification vide S.O. No. 3289(E) dated 24th Sept.,2020. The ?No Objection Certificate? has been taken from component authority i.e. ?State Water Investigation Department, West Bengal (SWID)? for extractions of ground water vide their permit no. P2209008004920000001TSE dated 30-11-2021. Copy of GWA NOC from SWID is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022. Complied Attachment: NA
3	Statutory compliance	PP to complete the estimated allocated budgetary	PPs Submission	Agree and being complied in a time bound manner in parallel with implementation of the project.

		expenditure for EMP capital cost of Rs. 41.52 Cr & Recurring cost of Rs. 9.26 Cr per year as per its letter no PTPL/JAG-B/EC-Delhi/03/22-23 dated 26.07.2022. Further capital cost for environmental monitoring is Rs. 300 Lakhs and recurring cost is Rs. 157.00 Lakhs/year Capital EMP budget shall be completed within strict timeline.	PPs Submission	Environmental Monitoring has been done by the NABL/WBPCB/MoEFCC Accredited Laboratory. The monitoring reports of Air, Water, Soil, Noise and Vehicular Emission are attached as Annexure-1. Being Complied Attachment: Click to View  Agree and being complied in a time bound manner in parallel with implementation of the project. Environmental Monitoring has been done by the NABL/WBPCB/MoEFCC Accredited Laboratory. The monitoring reports of Air, Water, Soil, Noise and Vehicular Emission are attached as Annexure-1. Being Complied Attachment: NA
4	Statutory compliance	PP shall develop 2 nos. of rain water harvesting pond (100 m, width will be 10 m and the depth will be 3 m) as proposed by PP near the villages in consultation with Gram Panchayat within 1 year. Also, Indicator aquatic species shall be planted in this water bodies to see the environmental quality. PP shall own water bodies/pond currently present in project area, maintain and regularly monitor the quality for its long term protection.	PPs Submission	Agreed and will be complied. Agreed to Comply Attachment: NA
5	Statutory compliance	PP shall to implement Water distribution system in Binodpur, Sashipur, Rajhat, Jot Balrampur villages with an estimate Cost of Rs. 185.7065 Lakhs as in Letter no. PTPL/JAG-B/EC-Delhi/03/22-23 dated 26.07.2022. A proper water distribution network shall be devised to meet the demands of formers related to irrigation and recharging of	PPs Submission	Agreed and will be complied Water distribution system will be implemented in parallel with implementation of the project Agreed to Comply Attachment: NA

		ponds, wherever required.		
6	Statutory compliance	PP shall explore the use of Ukhra Railway siding or Durgapur Railway siding for coal transportation in future and coal transportation through road shall be stopped accordingly.	PPs Submission	Agreed Durgapur railway siding will be used for transportation of coal. Coal transported via road from mine site to railway siding will be through covered vehicles.  Agreed to Comply Attachment: NA
		A report in this regard to be submitted to IRO within 1 year to justify the adequacy.		
7	Statutory compliance	PP shall install ~191 water sprinklers for dedicated road from mining to Deul and 100 number along the separate transportation route	PPs Submission	Agreed Water sprinklers and fog canons will be installed in parallel with operation of mine to reduce the fugitive dust emission.  Agreed to Comply Attachment: NA
		as per Letter no. PTPL/JAG-B/EC- Delhi/03/22-23 dated 26.07.2022. In addition, 5 nos of fog cannons of at least 40 mtrs throw shall be installed at coal storage yard and in nearby villages.		
8	Statutory compliance	PP shall transport the coal by trucks of fleet size 35-40 tons and no village road shall be used for transportation of coal.	PPs Submission	Agreed Transportation of coal will be done by trucks of fleet size 35-40 tons and no village road will be used for transportation of coal during coal production phase.  Agreed to Comply  Attachment: NA
9	Statutory compliance	PP shall maintain at least 10 mtrs width tree plantation of broad leaves and wind break/greenshield of about 10 mts height along the boundary of coal storage yard.	PPs Submission	Being Complied Greenbelt being developed in parallel with construction/development of the project. In financial year 2023-24 till September, 2023 16100 nos of saplings has been planted and total 22000 nos of saplings has been planted with 83% survival rate. Being Complied Attachment: NA
10	Statutory compliance	PP to plant additional 1,00,000 plants with three tier plantation along the transportation route,	PPs Submission	Being complied with 22000 nos. of saplings of native species already planted till September, 2023 with 83% survival rate. For greenbelt development dedicated manpower is engaged for

		if not completed, and identified areas with consent to the gram panchayat within two year and plant for remaining within 2 years for their proper growth in additional already committed to plant to plantation in 8.49 ha project area.		regular monitoring & gap filling. We are regularly planting trees, status of the same will be given in next compliance period.  Being Complied Attachment: NA
11	Statutory compliance	PP shall follow the recommendation of subsidence study and monitor the degree of subsidence regularly and shall be submitted to IRO-Ranchi.	PPs Submission	Agreed, we will follow the recommendation of subsidence study and monitor the degree of subsidence regularly and same will be informed to IRO Kolkata. Agreed to Comply Attachment: NA
12	Statutory compliance	PP to accomplish the recruitment of a full - fledged qualified manpower with Environmental Engineer/ Environment Science degree background in Environment Management Cell etc. within six months and same shall be reported to IRO, MOEF&CC.	PPs Submission	Complied with. Full - fledged qualified manpower with Environmental Engineer degree background in Environment Management Cell is already recruited. Organizational structure for environment management is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022. Complied Attachment: NA
13	Statutory compliance	PP to fulfil all the commitment made to address the public hearing (Total amount of Rs. 473 lakhs to be completed within three years as in EIA) issued in time bound manner as committed in EIA EMP report and a progressive report to be furnished to IRO with every six monthly	PPs Submission	Being complied with. All the commitment made to address the public hearing being adhered in time bounde manner. In current financial year 2023-24 till September amount of ?5,20,000 has been spent on distribution of dustbins and school bags under CSR/CER.  Being Complied Attachment: NA
14	Statutory compliance	compliance report.  PP shall implement Effluent Treatment Plant for wastewater generated from workshop and Sewage Treatment Plan (of MBR technology as proposed) for its	PPs Submission	Agreed, water treatment plant for wastewater generated from workshop and domestic sewage will be constructed. No untreated water will be discharged from mine boundaries to ponds / nallah / river. Order for installation of Sewage Treatment Plan is issued vide P.O. no. PP23978195 dated 24.07.2023. Copy of P.O. is attached as Annexure-II.

		colony. No untreated water shall be discharged from mine boundaries to ponds / nallah / river.		Being Complied Attachment: Click to View
15	Statutory compliance	PP to maintain the transportation road properly to minimize the dust emission. PP to also develop pucca/concrete roads by seeking consent from the panchayat with widening of roads especially roads inter linking the villages within the	PPs Submission	Agreed Water sprinklers will be installed along the road to reduce fugitive dust emission. Widening of roads and development of pucca/concrete roads in consultation with gram panchayat will be carried out in a time bound manner, if required.  Agreed to Comply Attachment: NA
		study area of 10 km radius buffer zone.		
16	Statutory compliance	PP to monitor the water quality of the ground water and surface water body located within the core zone and 5 km radius from the periphery of the mine boundary as per procedure laid down by CPCB.	PPs Submission	Being Complied The monitoring of ground and surface water quality has been carried out by the NABL accredited environmental laboratory. All the parameters are found within the prescribed limit. The monitoring reports are attached as Annexure-1.  Being Complied Attachment: Click to View
17	Statutory compliance	PP to install 1 continuous ambient air quality monitoring stations at suitable locations preferably village side with consultation of SPCB. The real time data so generated shall be uploaded on company website and linked it with website of CPCB & SPCB. In addition, data should	PPs Submission	Being complied with. Continuous Ambient Air Quality Monitoring Station (CAAQMS) is installed at the designation site after getting site approval from WBPCB. The confirmation letter from WBPCB in favour of Powerplus Traders Private Limited regarding installation of CAAQMS is attached as Annexure-III. Also data is being displayed digitally at entry and exit gate of mine lease area for public display. Being Complied Attachment: Click to View
		also be displayed digitally at entry and exit gate of mine lease area for public display.		
18	Statutory compliance	PP must explore innovative technology to recover methane from gases extracted from underground mine while venting.	PPs Submission	Noted and the condition will be explored in future for its feasibility.  Agreed to Comply  Attachment: NA

19	Statutory compliance	PP to install solar lights along the road used for transportation of minerals to avoid the accidents at night and also seek its maintenance. PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10 km radius buffer zone	PPs Submission	Agreed We will install solar lights along the road and in rural areas identified as per Need based assessment & SIA in various villages i.e. Nababpur, Shrikrishnapur, Amdahi, Sandipur, Baidyanathpur. Agreed to Comply Attachment: NA
20	Statutory compliance	within one year.  Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check - ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented. The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.	PPs Submission	Being Complied Attachment: NA
21	Statutory compliance	Persons of nearby villages shall be given training on livelihood and skill development	PPs Submission	Agreed Training on livelihood and skill development to nearby villagers employable will be given during development and operation phase under

		to make them employable with its proper records.		CER/ CSR scheme. Agreed to Comply Attachment: NA
22	Statutory compliance	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/ night hours.	PPs Submission	Being Complied with. The noise level at project site is within the prescribed limits for day light/ night hours by taking various mitigative measures. In order to ensure the effectiveness of mitigative measures the monitoring of noise level has been done by NABL Accredited Laboratory and found the noise level within the prescribed limit. The monitoring report are attached as Annexure-1.  Being Complied Attachment: Click to View
23	Statutory compliance	PP shall pay to farmers of agricultural land if there is any loss due to pollution found by concerned District Commissioner as per extent rules or norms. PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be	PPs Submission	Agreed A dedicated team to oversee environment management is being set up for monitoring of air, water quality parameters on routine basis. Any noncompliance or infringement will be reported to the concerned authority. Being Complied Attachment: NA
		setup which should be comprise of Environment Engineers, Laboratory chemist and staff for		

		monitoring of air, water quality parameters on routine basis. Any non- compliance or infringement should be reported to the concerned authority.		
24	Statutory compliance	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non- forest purpose involved in the project.	PPs Submission	Not applicable, as coal washery project is not proposed. Not Complied Attachment: NA
25	Statutory compliance	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	PPs Submission	Not applicable, as coal washery project is not proposed. Not Complied Attachment: NA
26	Statutory compliance	The project proponent shall prepare a Site - Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site - Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six - monthly compliance report. (incase of the presence of schedule - I species in the study area).	PPs Submission	Not applicable, as coal washery project is not proposed. Not Complied Attachment: NA
27	Statutory compliance	The project proponent shall obtain Consent to Establish / Operate under the provisions	PPs Submission	Not applicable, as coal washery project is not proposed. Not Complied Attachment: NA
		of Air (Prevention &		

		Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board / Committee.		
28	Statutory compliance	The project proponent shall obtain the necessary permission from the Central Ground Water Authority.	PPs Submission	Not applicable, as coal washery project is not proposed. Not Complied Attachment: NA
29	Statutory compliance	Solid waste / hazardous waste generated in the washery needs to addressed in accordance to the Solid Waste Management Rules, 2016/ Hazardous & Other Waste Management Rules, 2016.	PPs Submission	Not applicable, as coal washery project is not proposed. Not Complied Attachment: NA
30	Statutory compliance	Coal beneficiation practices shall be carried out under strict adherence to provisions of the Factories Act, 1957 and subordinate legislations made there under.	PPs Submission	Not applicable, as coal washery project is not proposed. Not Complied Attachment: NA
31	AIR QUALITY MONITORING AND PRESERVATION	Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO? and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Monitoring of heavy	PPs Submission	Not applicable Not Complied Attachment: NA

		metals such as Hg, As, Ni, Cd, Cr, etc. carried out at least once in six months.		
32	AIR QUALITY MONITORING AND PRESERVATION	Continuous ambient air quality monitoring stations as prescribed in the statue be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM10, PM2.5, SO? and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB.  Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc. to be carried out at least once in six months.	PPs Submission	Not applicable Not Complied Attachment: NA
33	AIR QUALITY MONITORING AND PRESERVATION	Transportation of coal by road shall be carried out by covered trucks/conveyors. The transportation of clean coal and rejects shall be by rail with wagon loading through silo. Effective measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulates such as roads, belt conveyors	PPs Submission	Not applicable Not Complied Attachment: NA

		, loading / unloading and transfer points . Fugitive dust emissions from all sources shall be controlled at source. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central / State Pollution Control Board.		
34	AIR QUALITY MONITORING AND PRESERVATION	All approach roads shall be black topped and internal roads shall be concreted. The roads shall be regularly cleaned. Coal transportation shall be carried out by covered trucks.	PPs Submission	Not applicable Not Complied Attachment: NA
35	AIR QUALITY MONITORING AND PRESERVATION	Covered trucks shall be engaged for mineral transportation outside the washery up to the railway siding, shall be optimally loaded to avoid spillage enroute. Trucks shall be adequately maintained and emissions shall be below notified limits.	PPs Submission	Not applicable Not Complied Attachment: NA
36	AIR QUALITY MONITORING AND PRESERVATION	Facilities for parking of trucks carrying raw material from linked mine shall be created within the unit.	PPs Submission	Not applicable Not Complied Attachment: NA
37	AIR QUALITY MONITORING AND PRESERVATION	Vehicular emissions shall be kept under control and regularly monitored. The vehicles having 'PUC' certificate from authorized pollution testing centres shall be deployed for washery operations.	PPs Submission	Not applicable Not Complied Attachment: NA
38	AIR QUALITY MONITORING AND PRESERVATION	Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag	PPs Submission	Not applicable Not Complied Attachment: NA

		filters/ mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.		
39	AIR QUALITY MONITORING AND PRESERVATION	The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site (s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.	PPs Submission	Not applicable Not Complied Attachment: NA
40	AIR QUALITY MONITORING AND PRESERVATION	The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such sites.	PPs Submission	Not applicable Not Complied Attachment: NA
41	WATER QUALITY MONITORING AND PRESERVATION	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742(E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.	PPs Submission	Not applicable Not Complied Attachment: NA
42	WATER QUALITY MONITORING AND PRESERVATION	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/ 2006-1A.II(M) dated	PPs Submission	Not applicable Not Complied Attachment: NA

		27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for compliance.		
43	WATER QUALITY MONITORING AND PRESERVATION	Industrial waste water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time.	PPs Submission	Not applicable Not Complied Attachment: NA
44	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the washery. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side stabilised with plantation so as to withstand the peak water pressure preventing any chance of inundation.	PPs Submission	Not applicable Not Complied Attachment: NA
45	WATER QUALITY MONITORING AND PRESERVATION	Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.	PPs Submission	Not applicable Not Complied Attachment: NA
46	WATER QUALITY MONITORING AND PRESERVATION	The rejects should preferably be utilized in FBC power plant or disposed off through sale for its gainful utilization. If the coal	PPs Submission	Not applicable Not Complied Attachment: NA

		washery rejects are to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and post closure arrangement to avoid water pollution due to leachate from rejects and surface run of from reject dumping sites.		
47	WATER QUALITY MONITORING AND PRESERVATION	An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river / rivulet / pond / lake etc. with impact of coal washing activities on it, shall be prepared, submitted to MoEFCC and implemented.	PPs Submission	Not applicable Not Complied Attachment: NA
48	WATER QUALITY MONITORING AND PRESERVATION	Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.	PPs Submission	Not applicable Not Complied Attachment: NA
49	WATER QUALITY MONITORING AND PRESERVATION	Rainwater harvesting in the washery premises shall be implemented for conservation and augmentation of ground water resources in consultation with Central Ground Water Board.	PPs Submission	Not applicable Not Complied Attachment: NA
50	WATER QUALITY MONITORING AND PRESERVATION	No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority (CGWA) or MoEFCC. The make - up water requirement of washery should not exceed 1.5 m3 / tonne of raw coal.	PPs Submission	Not applicable Not Complied Attachment: NA

51	WATER QUALITY MONITORING AND PRESERVATION	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre - monsoon, monsoon, post - monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC / RO.	PPs Submission	Not applicable Not Complied Attachment: NA
52	WATER QUALITY MONITORING AND PRESERVATION	Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change / Regional Office.	PPs Submission	Not applicable Not Complied Attachment: NA
53	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall take all precautionary measures to ensure riverine / riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine / riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation/ water resource department in the state government.	PPs Submission	Not applicable Not Complied Attachment: NA

54	Noise Monitoring & Prevention	Adequate measures shall be taken for control of noise levels as per noise pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/ muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be	PPs Submission	Not applicable Not Complied Attachment: NA
55	Noise Monitoring & Prevention	monitored.  The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry / RO on six - monthly basis.	PPs Submission	Not applicable Not Complied Attachment: NA
56	MISCELLANEOUS	Coal stacking plan shall be prepared separately for raw coal, clean coal, middling and rejects.	PPs Submission	Not applicable Not Complied Attachment: NA
57	MISCELLANEOUS	Efforts should be made to reduce energy consumption by conservation, efficiency improvements and use of renewable energy.	PPs Submission	Not applicable Not Complied Attachment: NA
58	GREENBELT	Three tier greenbelt comprising of a mix of native species, of minimum 30 m width shall be developed all along the washery area to check fugitive	PPs Submission	Not applicable Not Complied Attachment: NA

		dust emissions and to render aesthetic to neighbouring stakeholders. A 3-tier green belt comprising of a mix of native species or tree species with thick leaves shall be developed along vacant areas, storage yards, loading / transfer points and also along internal roads/ main approach roads.		
59	GREENBELT	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the direction of Hon?ble Supreme Court with regard to acquiring grazing land.	PPs Submission	Not applicable Not Complied Attachment: NA
60	PUBLIC HEARING	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & its RO on six-monthly basis.	PPs Submission	Not applicable Not Complied Attachment: NA
61	PUBLIC HEARING	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular	PPs Submission	Not applicable Not Complied Attachment: NA

		periodic health check - up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any. as amended time to time.		
62	PUBLIC HEARING	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.	PPs Submission	Not applicable Not Complied Attachment: NA
63	PUBLIC HEARING	Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.	PPs Submission	Not applicable Not Complied Attachment: NA
64	PUBLIC HEARING	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/57/2014-IA.II(M) dated 29th October, 2014, titled 'Impact of mining activities on habitations- issues related to the mining	PPs Submission	Not applicable Not Complied Attachment: NA

		projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area?.		
65	Corporate Environmental Responsibility	Fund allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65 /2017-IA.III dated 30th September 2020 and based on commitment made during public consultation process for incorporating in EIA-EMP for deliberation of EAC.	PPs Submission	Not applicable Not Complied Attachment: NA
66	Corporate Environmental Responsibility	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any Infringements / deviation / violation of the environmental forest wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	PPs Submission	Not applicable Not Complied Attachment: NA

67	Corporate Environmental Responsibility	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	PPs Submission	Not applicable Not Complied Attachment: NA
68	Corporate Environmental Responsibility	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/ Regional Office along with the Six Monthly Compliance Report.	PPs Submission	Not applicable Not Complied Attachment: NA
69	Corporate Environmental Responsibility	Self - environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	PPs Submission	Not applicable Not Complied Attachment: NA

#### **General Conditions**

Sr.No.	Condition Heading	Condition Details	Status of Compliance Documents	e,Remarks/Reason and Supporting
1	Statutory compliance	The environmental clearance shall be subject to orders of Hon?ble Supreme	PPs Submission	Agreed & Noted Agreed to Comply Attachment: NA
		Court of India, Hon? ble High Courts, NGT and any other Court of Law, from		

		time to time, and as applicable to the project.		
2	Statutory compliance	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.	PPs Submission	No forest land is involved. A certificate mentioned ?no forest land involved? also issued by Divisional Forest Officer, Durgapur and Burdwan Division separately vide their memo no. 3359 dated 01/11/2021 and 2010/8 dated 24/08/2021. Copy of the same is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022. Complied Attachment: NA
3	Statutory compliance	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	PPs Submission	The Wild Life (Protection) Act, 1972 is not applicable for this project. The project does not falls in and any Eco Sensitive Zone (ESZ) of National Park, Wild Life Sanctuary, Conservator Reserve, etc. A certificate also issued in this regards by The Principal Chief Conservator of Forest, WL & CWLW, West Bengal vide their memo no. 2729/WL/2W-167/2016 dated 13/09/2022. Copy of the same is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022. Complied Attachment: NA
4	Statutory compliance	The project proponent shall prepare a Site - Specific Conservation Plan/Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six - monthly	PPs Submission	Not applicable Not Complied Attachment: NA

		compliance report. (in case of the presence of schedule-1 species in the study area).		
5	Statutory compliance	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.	PPs Submission	Consent to Establish (CTE) under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 has been obtained from West Bengal Pollution Control Board (WBPCB) vide NOC No- 172012 dated 18.10.2022 issued vide memo no. 525-2N-11/2022(E). We will obtain Consent to Operate before starting of coal production. Copy of NOC is already submitted to competent authority in EC compliance (Dec-2022) vide letter no-PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022. Being Complied Attachment: NA
6	Statutory compliance	The project proponent shall obtain the necessary permission from the Central Ground Water Authority.	PPs Submission	Reply to the subject condition is already made in point no-ii of specific condition.  Complied  Attachment: NA
7	Statutory compliance	Solid waste / hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste	PPs Submission	Agreed. The sludge generated from water treatment plant and STP will be used for gardening and green belt development. The sludge generated from ETP will be send to Common Hazardous Waste Treatment, Storage and Disposal Facility (CHWTSDF) as per HZW Rules, 2016. Agreed to Comply Attachment: NA
		Management Rules, 2016.		
8	AIR QUALITY MONITORING AND PRESERVATION	Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO2, and NOx. Location of the stations shall be decided based on the meteorological data, topographical	PPs Submission	Being complied with Continuous Ambient Air Quality Monitoring Station (CAAQMS) is installed at the designation site after getting site approval from WBPCB. The confirmation letter from WBPCB in favour of Powerplus Traders Private Limited regarding installation of CAAQMS is attached as Annexure-III. Also data is being displayed digitally at entry and exit gate of mine lease area for public display. In order to ensure the effectiveness of mitigation method adopted third party monitoring from NABL accredited laboratory has been done. The monitoring reports are attached as Annexure-1.

		features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc. to be carried out at least once in six months. Online ambient air quality monitoring station / stations may also be installed in addition to the regular air monitoring stations as per the requirement and/ or in consultation with the SPCB.		Agreed to Comply Attachment: Click to View
9	AIR QUALITY MONITORING AND PRESERVATION	The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742(E) dated 25.9.2000 and as amended from time to time by the Central Pollution	PPs Submission	Being complied with Effective measures will be implemented to ensure Ambient Air Quality parameters be within as per Coal Industry Standards notified vide GSR 742(E) dated 25.9.2000. In order to ensure the effectiveness of mitigation method adopted third party monitoring from NABL accredited laboratory has been done. The monitoring reports are attached as Annexure-1.  Being Complied Attachment: Click to View
		Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry / Regional Office and to the CPCB / SPCB.		
10	AIR QUALITY MONITORING AND PRESERVATION	Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks / conveyors. Effective control measures such as regular water sprinkling / rain gun / mist sprinkling etc., shall be carried out in	PPs Submission	Agreed Effective control measures will be implemented in critical areas prone to air pollution and will be ensured emission parameter to be in norms prescribed by CPCB/SPCB. The steps to be adopted are:  a) Covered trucks/conveyors will be used for transportation of the mineral/ material. b) Installing ~191 water sprinklers for dedicated road from mining to Deul More and 100 numbers along the separate transportation route. c) 05 nos of fog cannons of at least 40 mtrs throw shall be

		critical areas prone to air pollution with higher level of particulate matter all through the coal transport roads, loading / unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central / State Pollution Control Board.		installed at coal storage yard and in nearby villages. d) 10 mtrs width tree plantation of broad leaves and wind break/green-shield of about 10 mts height along the boundary of coal storage yard.  Agreed to Comply  Attachment: NA
11	AIR QUALITY MONITORING AND PRESERVATION	Major approach roads shall be black topped and properly maintained.	PPs Submission	Agreed. As per approved mining plan, a metalled approachable road will be constructed from deul more to mine infrastructure area of a distance of 6.5 km length. Proper maintenance will be taken cares. Also water sprinklers at fixed interval will be installed to supress dust emission during movement of vehicles. Photograph showing construction of haul road is given below:  Agreed to Comply Attachment: NA
12	AIR QUALITY MONITORING AND PRESERVATION	The transportation of coal shall be carried out as per the provisions and route proposed in the approved mining plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed that the impact of sound, dust and accidents could be appropriately mitigated.	PPs Submission	Agreed Coal will be transported only by the route as mentioned and proposed in approved mining plan. Agreed to Comply Attachment: NA
13	AIR QUALITY MONITORING AND	Vehicular emissions shall be kept under	PPs Submission	Being complied with Only PUC certified vehicles is being engaged in mining and

	PRESERVATION	control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining? PUC? certificate from the authorized pollution testing centres.		allied activities. Regular maintenance of engaged vehicles is being carried out. Being Complied Attachment: NA
14	AIR QUALITY MONITORING AND PRESERVATION	Coal stock pile / crusher / feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.	PPs Submission	Agreed. Adequate dust suppression system will be installed in critical areas prone to air pollution. Agreed to Comply Attachment: NA
15	AIR QUALITY MONITORING AND PRESERVATION	Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.	PPs Submission	Agreed Adequate measures like regular water sprinkling / rain gun, use of movable water tanker, vacuum sweeper machine, fog mist waster canon system etc. will be adopted to control fugitive dust emission, which will be environmental friendly. Agreed to Comply Attachment: NA
16	WATER QUALITY MONITORING AND PRESERVATION	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742(E) dated 25.9.2000 and as amended from time to time by the	PPs Submission	Agreed. Water treatment plant of adequate capacity will be installed to treat mine water. No untreated water will be discharged from mine boundaries to pond / nallah / river. In order to ensure the efficiency of treatment plant monitoring of inlet & outlet water from NABL/ WBPCB/ MoEF accredited laboratory will be carried out in a time bound manner and report will be submitted to competent authority. Agreed to Comply Attachment: NA

		Central Pollution Control Board.		
17	WATER QUALITY MONITORING AND PRESERVATION	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-IA.II (M) dated	PPs Submission	Being complied with. Data is being displayed at entry and exit gate of mine lease area for public display. Also Six monthly EC compliance is being uploaded on company?s website http://www.powerplustraders.com/EHS.php Being Complied Attachment: NA
		27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.		
18	WATER QUALITY MONITORING AND PRESERVATION	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times year i.e. pre - monsoon, monsoon, post - monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.	PPs Submission	Being complied with The monitoring of ground water levels will be carried out by NABL/ WBPCB/ MoEF accredited laboratory four times a year i.e. pre? monsoon, monsoon, post? monsoon and winter. The monitoring of ground water quality has been done by the NABL accredited environmental laboratory. All the parameters are found within the prescribed limit. The monitoring reports are attached as Annexure-1. Being Complied Attachment: NA
19	WATER QUALITY MONITORING AND PRESERVATION	Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of	PPs Submission	Being complied with The monitoring of water quality upstream and downstream of water bodies has been done by the NABL accredited environmental laboratory. All the parameters are found within the prescribed limit. The monitoring reports are attached as Annexure-1.  Being Complied  Attachment: Click to View

		Environment, Forest and Climate Change / Regional Office.		
20	WATER QUALITY MONITORING AND PRESERVATION	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.	PPs Submission	Agreed No ground water will be extracted during the mining operation excluding mine water. 02 nos. Rainwater harvesting structure to be constructed to conserve and reuse of rain water.  Agreed to Comply  Attachment: NA
21	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river / nallah flowing near or adjacent to the mine. The embankment constructed along the river / nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side, stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation.	PPs Submission	Agreed. No alteration will be carried out. Agreed to Comply Attachment: NA
22	WATER QUALITY MONITORING AND PRESERVATION	Garland drains (of suitable size, gradient and length) around the critical areas i.e. mine shaft and low lying areas, shall be designed keeping at least 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. The	PPs Submission	Agreed A garland drains has been constructed in the low lying area at mine site keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites.  Being Complied Attachment: NA

		sump capacity shall also provide adequate retention period to allow proper settling of silt material of the surface runoff.		
23	WATER QUALITY MONITORING AND PRESERVATION	The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz, watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.	PPs Submission	Agreed A Water Treatment Plant is proposed for pump out mine water. After treatment the water will be utilized for various industrial purposes i.e. construction and maintenance of roads, green belt development, dust suppression, irrigation purpose for villagers, etc. Agreed to Comply Attachment: NA
24	WATER QUALITY MONITORING AND PRESERVATION	Industrial waste water from coal handling plant and mine water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made thereunder, and as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluent. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste water.	PPs Submission	Agreed Water, effluent and sewage treatment plant with integrated oil and grease tarp of adequate capacity is proposed to be installed for treatment of generated polluted waste water.  Agreed to Comply  Attachment: NA
25	WATER QUALITY MONITORING AND PRESERVATION	Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village (s) in	PPs Submission	Agreed RWH structure will be constructed, rainwater will reuse for industrial purpose. Treated mine water will be used for industrial purpose and provided to the nearby villagers for irrigation and recharging of ponds, wherever required. We will fulfil water requirement of nearby village (s) in case the village wells go dry due to dewatering of mine.

		case the village wells go dry due to dewatering of mine.		Agreed to Comply Attachment: NA
26	WATER QUALITY MONITORING AND PRESERVATION	AND drainage plan	PPs Submission	Agreed Renovation of pond will be carried out in consultation with concern gram panchayat, in the following villages: Dhabani, Parulia, Jamgara, Laudoha, Banagram, Sahapur & Jaganathpur. There is no proposal for any diversion of natural water courses and in this regard no approval is required from concerned State / Gol Authority. Agreed to Comply Attachment: NA
		/ lake etc., with impact of mining activities on it, and implemented by the project proponent. The surface drainage plan and / or any diversion of natural water courses shall be as per the provisions of the approved Mining Plan / EIA EMP submitted to this Ministry and the same should be done with due approval of the concerned State / GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved mining plan and as per the permission of DGMS.		
27	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall take all precautionary measures to ensure reverian / riparian ecosystem in and around the coal mine upto a distance of 5 km. A revarian / riparian ecosystem conservation and	PPs Submission	Agreed & Noted. Bio indicator species will be planted all along project area up to a distance of 5 km. Though all types of sensitive species can be used in monitoring pollution, most useful and commonly used plants include sensitive species of lichens, mosses, plankton algae, aquatic ferns and angiosperms, other ferns, conifers oaks and many crop plants. Examples of some common types of plants useful as pollution monitors are Sphagnum acutifolia, Fontinalis antipyretica, F. squamosa, Microcystis, Scendesmus, Chlorella,

		management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.		Hydrodictyon, Cladophora, Stigoclonium, Diatoms Azolla, Salvinia. Some of the parameters which will be studied in post EC monitoring of the ponds and aquatic bodies found in the study area are decrease in the densities of sensitive species and increase in the density of tolerant species, absence of highly sensitive species, changes in the species composition of vegetation and distribution pattern of populations in the area. Such studies indicate the type and concentration of pollutant(s) as well as the spread of the pollution problem in the area.  Agreed to Comply Attachment: NA
28	Noise Monitoring & Prevention	Adequate measures shall be taken for control of noise levels below 85 dB (A) in the work environment.  Workers engaged in underground mining operations, operation of HEMM, etc. shall be provided with personal protective equipments (PPE) like ear plugs / muffs in conformity with the prescribed norms / guidelines in this regard.	PPs Submission	Agreed Regular maintenance, oil and greasing of machineries will be carried out during production of coal. Usage of PPE?s kit will be made compulsory inside the mine and will be monitored. Appropriate PPE?s kit like ear plugs / muffs in conformity with the prescribed norms / guidelines will be provided during mining operation.  Agreed to Comply Attachment: NA
		Progress in usage of such accessories to be monitored. Adequate awareness programme for users to be conducted.		
29	Noise Monitoring & Prevention	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the	PPs Submission	Being complied with Noise level survey is being carried out by NABL accredited laboratory and found the noise level within the prescribed limit. The monitoring reports are attached as Annexure-1.  Being Complied Attachment: Click to View
		Ministry / RO on six - monthly basis.		

30	MINING PLAN	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there - under as applicable.	PPs Submission	Agreed and Noted Agreed to Comply Attachment: NA
31	MINING PLAN	No change in mining method i.e. UG to OC, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).	PPs Submission	Noted and agreed Agreed to Comply Attachment: NA
32	MINING PLAN	Mining shall be carried out as per the approved mining plan (including mine closure plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).	PPs Submission	Agreed Mining will be done as per approved mining plan, and during operation all relevant coal mining laws and circulars of DGMS will be followed. Agreed to Comply Attachment: NA
33	MINING PLAN	Underground work place environmental conditions shall be rendered ergonomic and air breathable with adequate illumination in conformance with DGMS standards.	PPs Submission	Agreed We?ve proposed to install one mechanical Ventilator of high capacity on surface through evacuee. The exhaust fan will have the provision of variable pitch of blades to improve the quantity of air required in future.  Agreed to Comply  Attachment: NA
34	MINING PLAN	No mining activity shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest	PPs Submission	No mining activity shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.  Complied Attachment: NA

		Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.		
35	MINING PLAN	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.	PPs Submission	Agreed a. Solar panels, electric vehicles for conveyance will be deployed to reduce energy and fuel consumption. b. Solar panels will be installed for surface infrastructure and workshop, and electric vehicles will be preferred instead of petrol/diesel for conveyance of staff/mine workers. c. If possible in future, electric heavy vehicles will be preferred for transportation of coal.  Agreed to Comply Attachment: NA
36	LAND RECLAMATION	Digital Survey of entire lease hold area / core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land	PPs Submission	Agreed Digital Survey will be carried out at least once in three years for monitoring land use pattern from recognised consultant and report in 1 : 50,000 scale or as notified by Ministry of Environment, Forest and Climate Change (MOEFCC) will be submitted to MOEF&CC/RO.  Agreed to Comply Attachment: NA
		use pattern and report in 1 : 50,000 scale or as notified by Ministry of Environment, Forest and Climate Change (MOEFCC) from time to time shall be submitted to MOEFCC/ Regional Office (RO).		
37	LAND RECLAMATION Post-mining land be rendered usable for agricultural / forestry purposes and shall be handed	PPs Submission	Agreed After post mining the land will be rendered as per the approved mine closure plan.  Agreed to Comply  Attachment: NA	
	over to the respective State Government, as specified in the Guidelines for Preparation of Mine Closure Plan, issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.			

38	LAND RECLAMATION	Regular monitoring of subsidence movement on the surface over and around the working areas and its impact on natural drainage pattern, water bodies, vegetation, structure, roads and surroundings shall be continued till	PPs Submission	Agreed. Regular detailed monitoring of subsidence movement will be carried out. In case of observation of any high rate of subsidence beyond the limit prescribed, appropriate effective mitigation measures shall be taken to avoid loss of life and materials. Cracks should be effectively plugged in with ballast and clay soil / suitable material.  Agreed to Comply Attachment: NA
		movement ceases completely. In case of observation of any high rate of subsidence beyond the limit prescribed, appropriate effective mitigation measures shall be taken to avoid loss of life and materials. Cracks should be effectively plugged in with ballast and clay soil / suitable material.		
39	LAND RECLAMATION	Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling or stowing of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.	PPs Submission	Approved mine closure plan will be followed. Agreed to Comply Attachment: NA

40	LAND RECLAMATION	A separate team for subsidence monitoring and surface mitigation measures shall be constituted and continuous monitoring & implementation of mitigation measures be carried out.	PPs Submission	Agreed. We?ll prepare a separate team for subsidence monitoring and implementation of mitigation measures. The following subsidence aspects and remedial measures are proposed for the safety of surface structures and mining operation: 1) There are number of villages and surface structures within the coal block. Hence, AoD of 220 was taken into account for design of all proposed panels to err on the side of the safety. The influence of subsidence would not affect any surface structure. 2) Maximum anticipated subsidence of 4098 mm would affect the surface topography after mining. Suitable drainage should be made to avoid any water logging in the centre of subsidence troughs. 3) The cumulative predicted maximum compressive strain and tensile strain at the surface of 10.0 mm/m and 9.1 mm/m respectively would lead to development of cracks with crevices of 60 to 100 mm at the surface. The surface cracks formed during extraction should immediately be filled in with soil/mitti to prevent breathing of air and inflow of water to the underground workings. 4) Embankment with an elevation above HFL is advisable be erected on the west side of the Ajay river subject to actual ground topography. This exercise will be conducted within a span of 10 years.  Agreed to Comply Attachment: NA
41	LAND RECLAMATION	Thorough inspection of the mine lease area for any cracks developed at the surface due to mining activities below ground shall be carried out to prevent inrush of	PPs Submission	Agreed During the mining operation in underground, regular monitoring of surface will be carried out by a monitoring team to prevent inrush of water in the mine.  Agreed to Comply Attachment: NA
42	LAND RECLAMATION	water in the mine.  Native tree species shall be selected and planted over areas affected by subsidence.	PPs Submission	Agreed Native tree species along with pollution indicative species/ bio indicator species will be selected and planted for fast growing over area affected by subsidence.  Agreed to Comply Attachment: NA

43	LAND RECLAMATION	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon? ble Supreme Court with regard to acquiring grazing land.	PPs Submission	Noted. Agreed to Comply Attachment: NA
44	GREENBELT	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered flora / fauna, if any, spotted / reported in the study area. Action plan, in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.	PPs Submission	Agreed No endangered flora / fauna/ Schedule -I is found during collection of baseline data. Even then we?ll take all precautionary measures during mining operation for conservation and protection of native flora / fauna. Being Complied Attachment: NA
45	GREENBELT	Greenbelt, consisting of three- tier plantation, of width not less than 7.5 m, shall be developed all along the mine lease area in a phased manner. The green belt comprising of a mix of native species shall be developed all along the major approach roads / coal transportation roads.	PPs Submission	Being Complied with. ? 10 mtrs width tree plantation of broad leaves and wind break/green-shield of about 10 mts height along the boundary of coal storage yard. ? Total 22000 nos. of saplings of native species already planted in project area till September, 2023 with 83% survival rate. For greenbelt development dedicated manpower is engaged for regular monitoring, gap filling and their proper growth. ? 3500 nos of saplings is distributed among the nearby villages in the project area under CSR/CER activity. ? On the occasion of ?Environment Day? on 5th June, 2023 a total 1500 nos of fruit bearing saplings is distributed among the

				school children and nearby villagers. Being Complied Attachment: NA
46	PUBLIC HEARING	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored.	PPs Submission	Being complied with. Lighting facilities in night is being setup at all places of mine site wherever is required. Being Complied Attachment: NA
47	PUBLIC HEARING	The Project Proponent shall undertake Occupational Health survey for initial and Periodical medical examination of the workers engaged in the Project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS Circulars. Besides carrying out regular periodic health check - up of their workers, 20 % of the workers engaged in active mining operations shall be subjected to health check - up for occupational diseases and hearing impairment, if any.	PPs Submission	Being Complied. Occupational health of staff and workers carried out at pre-entry level and later on regular medical check-up in this respect extended on an annual basis to detect early incidence of diseases and for prompt remedial medical interventions in this respect. Necessary personal data cards in this respect is maintained for effective monitoring and application of medical services required in the matter. All occupational health and safety activities is being done as per DGMS guidelines. Safety matters will be reviewed once in 15 days by safety officer regularly so as to take urgent and effective measures to prevent unsafe operations and practices with a view to prevent accidents, injuries, etc. Being Complied Attachment: NA
48	PUBLIC HEARING	Personnel (including outsourcing employees) working in dusty areas shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.	PPs Submission	Being complied with The Personal Protective Equipment (PPE?s) will be provided to the workers working in the dusty areas and will be regularly monitored. Training and information will be provided for safety and health aspects. Being Complied Attachment: NA
49	PUBLIC HEARING	Skill training as per safety norms specified by DGMS shall be provided to all workmen including the	PPs Submission	Being Complied with. Safety officer is hired for providing skill training as per safety norms specified by DGMS to all workers including the outsourcing employees to ensure high safety standards at mine site.

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		outsourcing employees to ensure high safety standards in mines.		Being Complied Attachment: NA
50	PUBLIC HEARING	Effective arrangement shall be made to provide and maintain at suitable points conveniently situated, a sufficient supply of drinking water for all the	PPs Submission	Complied. Adequate drinking water facility is provided to all the persons employed during construction phase, also provided during operation phase.  Being Complied Attachment: NA
51	PUBLIC HEARING	Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project	PPs Submission	Agreed A time bound action plan has been prepared for addressing all the issues raised during the Public Hearing and will be implemented within the time frame.  Agreed to Comply  Attachment: NA
		Proponent shall undertake all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing. Land oustees shall be compensated as per the norms laid out R & R Policy of the Company / or the National R&R Policy / R&R Policy of the State Government, as applicable.		
52	PUBLIC HEARING	The project proponent shall follow the mitigation measures provided in this Ministry's OM No. Z-11013/5712014-	PPs Submission	Agreed We?II follow the mitigation measures stated in this Ministry's OM No. Z-11013/5712014-IA.II (M) dated 29th October, 2014. Agreed to Comply Attachment: NA
		IA.II(M) dated 29th October, 2014, titled 'Impact of mining activities on habitations - issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are		

		surrounded by the mine lease area.		
53	PUBLIC HEARING	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements.	PPs Submission	Complied Company has well laid down environmental policy duly approve by the Board of Directors. Copy of Environmental Policy is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022. The environment policy is dully approved by the board of the company. Copy of the board resolution is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022. Complied Attachment: NA
	infringements / deviation / violation of the environmental forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six - monthly			
54	PUBLIC HEARING  A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	PPs Submission	Complied. A separate Environmental cell both at project and company head quarter is in place.  Complied  Attachment: NA	
		under the control of senior Executive, who will directly to the head of the		
55	PUBLIC HEARING	Action plan for implementing EMP and environmental conditions along with responsibility	PPs Submission	Being Complied with. Appropriate fund is allocated under the head of EMP capital cost of Rs. 41.52 Cr & Recurring expenditure is envisaged as Rs. 9.26

		matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry / Regional Office along with the Six Monthly Compliance Report.		Crores/year. Further capital cost for environmental monitoring is Rs. 300 Lakhs and recurring cost is Rs. 157.00 Lakhs/year. In current financial year 2023-24 till September, 2023 the amount spent for implementation of EMP has been done on the following heads: 1. Installation of Continuous Ambient Air Quality Monitoring Station (CAAQMS): ? 35,80,044/- 2. Greenbelt Development: ? 16,62,500/- 3. CSR/CER: 5,20,000/- 4. Environmental Monitoring: ?1,06,200/- 5. Sewage Treatment Plant (STP): ?14,00,000/- 6. Fog Mist Water Canon System: ? 6,50,000/- A total amount of ?79.18 Lac has been spent for implementing the EMP. Year wise progress of implementation of action plan is being submitted along with the Six Monthly Compliance Report. Being Complied Attachment: NA
56	PUBLIC HEARING	Self Environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	PPs Submission	Agreed & Noted. Agreed to Comply Attachment: NA
57	MISCELLANEOUS	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	PPs Submission	Complied Public notice for grant of Environmental Clearance has been given in to local newspaper that are widely circulated in the region are: ? ?AJKAL? in vernacular language (Bengali) dated 02.09.2022 and ? ?THE ECHO OF INDIA? in English language on dated 02.09.2022 Copy of both the newspaper advertisement is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022. Complied Attachment: NA
58	MISCELLANEOUS	The copies of the environmental clearance shall be submitted by the	PPs Submission	The copies of the environmental clearance have been submitted to the Heads of local bodies, Panchayat and Municipal Bodies

and to the relevant offices. The details area project proponents to the Heads of as: 1. DM, Paschim Bardhaman, vide Letter local bodies, No.: PTPL/JAG-B/ODM/WB/01/22-23 dated Panchayats and 02-09-2022. 2. ADM, Paschim Bardhaman, Municipal Bodies in vide Letter No.: PTPL/JAGaddition to the B/ODM/WB/02/22-23 dated 02-09-2022. 3. relevant offices of Sub-Divisional Officer, Durgapur Subthe Government Division, vide Letter No.: PTPL/JAGwho in turn has to B/OSDO/WB/01/22-23 dated 05-09-2022. display the same for 4. BDO, Durgapur-Faridpur Block, vide 30 days from the Letter No.: PTPL/JAG-B/OBDOdate of receipt. DFB/WB/01/22-23 dated 05-09-2022. 5. BDO, Kanksa Block, vide Letter No.: PTPL/JAG-B/OBDO-KB/WB/01/22-23 dated 05-09-2022. 6. GM, D.I.C., Paschim Bardhaman, vide Letter No.: PTPL/JAG-B/DIC/WB/01/22-23 dated 05-09-2022. 7. Sabhadhipati, Paschim Bardhaman Zila Parishad, vide Letter No.: PTPL/JAG-B/ZP/WB/01/22-23 dated 02-09-2022. 8. Sabhapati, Durgapur-Faridpur Panchayat Samity, vide Letter No.: PTPL/JAG-B/ODFPS/WB/01/22-23 dated 05-09-2022. 9. Kanksa Panchayat Samity, vide Letter No.: PTPL/JAG-B/OKPS/WB/01/22-23 dated 05-09-2022. 10. Gour Bazar Gram Panchayat, vide Letter No.: PTPL/JAG-B/OGBGP/WB/01/22-23 dated 05-09-2022. 11. Bidbehar Bazar Gram Panchayat, vide Letter No.: PTPL/JAG-B/OBBGP/WB/01/22-23 dated 05-09-2022. 12. Pratappur Bazar Gram Panchayat, vide Letter No.: PTPL/JAG-B/OPBGP/WB/01/22-23 dated 05-09-2022. Copy of the intimation letter is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022. Complied Attachment: NA 59 **MISCELLANEOUS** The project PPs Submission Being complied with The environmental proponent shall clearance and status of compliance of the upload the status of stipulated environment clearance compliance of the conditions, including results of monitored stipulated data is/ will be uploaded on the website of environment the company clearance http://www.powerplustraders.com/EHS.php conditions, Being Complied including results of Attachment: NA monitored data on their website and update the same on half-yearly basis. 60 **MISCELLANEOUS** The project PPs Submission Being complied with. The criteria pollutants proponent shall level namely; PM10, PM2.5, SO2, NOx monitor the criteria (ambient levels) is being monitored by pollutants level CAAQMS. Value of pollutants is being

		namely; PM10, SO?, NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.		displayed on board as per CPCB format at entry and exit gate of mine lease area for disclosure to the public and also uploaded on the website of the company http://www.powerplustraders.com/EHS.php Being Complied Attachment: NA
61	MISCELLANEOUS	The project proponent shall submit six - monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	PPs Submission	Being Complied In compliance to this point, this report is being submitted. The last compliance report for the period October, 2023 to March, 2023 has been submitted to MoEF&CC vide our letter no. PTPL/JAG-B/EC-Com.Rep/June 2023 Date: 30/5/2023 and also uploaded on the website of the MoEF&CC at environment clearance portal.  Being Complied Attachment: NA
62	MISCELLANEOUS	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II(M) dated 29th October, 2014, titled "Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area?.	PPs Submission	Being complied with. We?ll follow the mitigation measures stated in this Ministry's OM No. Z-11013/5712014-IA.II (M) dated 29th October, 2014 Being Complied Attachment: NA
63	MISCELLANEOUS	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed	PPs Submission	Agreed We?ll submit the environmental statement for each financial year in Form-V to the WBPCB as prescribed under the Environment (Protection) Rules, 1986 post operation of the mine.  Agreed to Comply Attachment: NA

		under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.		
64	MISCELLANEOUS	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.	PPs Submission	Agreed The project is in development/construction phase. CTE and other statutory clearance are obtained from competent authority. We?ll inform to the Regional Office of the MOEFCC before starting of mining operations.  Agreed to Comply Attachment: NA
65	MISCELLANEOUS	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	PPs Submission	Noted All the relevant stipulations made by the West Bengal Pollution Control Board and the State Government will be complied. In this connection CTE and other statutory clearance are obtained from competent authority. Agreed to Comply Attachment: NA
66	MISCELLANEOUS	The project proponent shall abide by all the commitments and recommendations made in the EIA / EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	PPs Submission	Noted and is being complied in a time bound manner. Being Complied Attachment: NA
67	MISCELLANEOUS	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.	PPs Submission	Agreed Agreed to Comply Attachment: NA
68	MISCELLANEOUS	Concealing factual data or submission of false / fabricated data may result in revocation of this environmental	PPs Submission	Noted Agreed to Comply Attachment: NA

		clearance and attract action under the provisions of Environment (Protection) Act, 1986.		
69	MISCELLANEOUS	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	PPs Submission	Noted & Agreed Agreed to Comply Attachment: NA
70	MISCELLANEOUS	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	PPs Submission	Agreed & Noted. Agreed to Comply Attachment: NA
71	MISCELLANEOUS	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.	PPs Submission	Agreed & Noted. Agreed to Comply Attachment: NA
72	MISCELLANEOUS	The above conditions shall be enforced, inter - alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution ) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with	PPs Submission	Agreed & Noted. Agreed to Comply Attachment: NA

		their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.		
73	MISCELLANEOUS	The proponent shall abide by all the commitments and recommendations made in the EIA / EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.	PPs Submission	Agreed, we?II abide all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee. Agreed to Comply Attachment: NA
74	MISCELLANEOUS	The proponent shall obtain all necessary clearances / approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.	PPs Submission	Agreed & Noted. Agreed to Comply Attachment: NA
75	MISCELLANEOUS	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	PPs Submission	Noted. Agreed to Comply Attachment: NA
76	MISCELLANEOUS	The coal company/project	PPs Submission	Agreed & Noted. Agreed to Comply

		proponent shall be		Attachment: NA
		liable to pay the compensation against the illegal mining, if any, and as raised by the respective State Governments at any point of time, in terms of the orders dated 2nd August, 2017 of Hon?ble Supreme Court in WP (Civil) No. 114/2014 in the matter of ?Common Cause Vs Union of India & others.		
77	MISCELLANEOUS	The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any,	PPs Submission	Agreed & Noted. Agreed to Comply Attachment: NA
		is paid by the project proponent through their respective Department of Mining & Geology, in strict compliance of the judgement of Hon?ble Supreme Court.		
78	MISCELLANEOUS  This Environmental Clearance shall not be operational till such time the	PPs Submission	Agreed & Noted. Agreed to Comply Attachment: NA	
	project proponent complies with the above said judgement of Hon? ble Supreme Court, as applicable, and other statutory requirements.			

Document Upload

Last Site Visit NA
Report (if
available)

Last Site Visit Report Date (if available) Additional Click to View
Attachment (if any)

Additional Remarks (if any)

I 'Powerplus Traders Private Limited' hereby give undertaking that the data and information given in the filed compliance and enclosures are true to be best of my knowledge and belief and I am aware that if any part of the data and information found to be false or misleading at any stage, the clearance given to the project will be revoked at our risk and cost. In addition to above, I hereby give undertaking that no activity such as change in project layout, construction, expansion, etc. has been taken up without due approval.

**Cover Letter From IRO** 

Cover Letter From IRO

NA

## Pointwise compliance report of Environmental Clearance for Jaganathpur-B Underground Coal Mine are as:

Spec	pecific Condition:		
Sr. No.	Condition	Reply	
i.	PP to obtain the CTO for 0.8/1.20 MTPA capacity after grant of EC.	Agreed & Being Complied. Consent to Establish (CTE) has been obtained from West Bengal Pollution Control Board (WBPCB) vide NOC No- 172012 dated 18.10.2022 issued vide memo no. 525-2N-11/2022(E). We will obtain Consent to Operate before starting of the coal production.  Copy of the CTE is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022. Recent Photographs of the Mine Site is enclosed.	
		POWERPLUSTRADERS PVT. LTD.	











ii. PP shall obtain No Objection Certificate from Central Ground Water Authority for extraction of ground water within six months and submitted to IRO, Ranchi.

## Complied

In the state of West Bengal, ground water extraction is not being regulated by Central Ground Water Authority (CGWA) as per notification of "Ministry of Jal Shakti" Gazette notification vide S.O. No. 3289(E) dated 24<sup>th</sup> Sept.,2020.

The "No Objection Certificate" has been taken from component authority i.e. "State Water Investigation Department, West Bengal (SWID)" for extractions of ground water vide their permit no. P22090080049200000011SE



		1 . 120 11 2021
		dated 30-11-2021.
		Copy of GWA NOC from SWID is already submitted to competent authority in EC compliance (Dec-2022) vide letter no-PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022.
iii.	PP to complete the estimated allocated	Agree and being complied in a time bound
	budgetary expenditure for EMP capital cost	manner in parallel with implementation of the
	of Rs. 41.52 Cr & Recurring cost of Rs.	project.
	9.26 Cr per year as per its letter no	Environmental Manitarina has been done by
	PTPL/JAG-B/EC-Delhi/03/22-23 dated 26.07.2022. Further capital cost for	Environmental Monitoring has been done by the NABL/WBPCB/MoEFCC Accredited
	environmental monitoring is Rs. 300 Lakhs	Laboratory. The monitoring reports of Air,
	and recurring cost is Rs. 157.00 Lakhs/year	Water, Soil, Noise and Vehicular Emission are
	Capital EMP budget shall be completed	attached as <i>Annexure-1</i> .
	within strict timeline.	
iv.	PP shall develop 2 nos. of rain water	Agreed and will be complied.
	harvesting pond (100 m, width will be 10 m	-
	and the depth will be 3 m) as proposed by	
	PP near the villages in consultation with	
	Gram Panchayat within 1 year. Also,	
	Indicator aquatic species shall be planted in	
	this water bodies to see the environmental quality. PP shall own water bodies/pond	
	currently present in project area, maintain	
	and regularly monitor the quality for its	
	long term protection.	
v.	PP shall to implement Water distribution	Agreed and will be complied
	system in Binodpur, Sashipur, Rajhat, Jot	
	Balrampur villages with an estimate Cost of	Water distribution system will be implemented
	Rs. 185.7065 Lakhs as in Letter no.	in parallel with implementation of the project
	PTPL/JAG-B/EC-Delhi/03/22-23 dated	
	26.07.2022. A proper water distribution	
	network shall be devised to meet the	
	demands of formers related to irrigation and recharging of ponds, wherever required.	
vi.	PP shall explore the use of Ukhra Railway	Agreed
٧١.	siding or Durgapur Railway siding for coal	Durgapur railway siding will be used for
	transportation in future and coal	transportation of coal. Coal transported via
	transportation through road shall be stopped	road from mine site to railway siding will be
	accordingly. A report in this regard to be	through covered vehicles.
	submitted to IRO within 1 year to justify	
	the adequacy.	
vii.	PP shall install ~191 water sprinklers for	Agreed
	dedicated road from mining to Deul and	Water sprinklers and fog canons will be
	100 number along the separate	installed in parallel with operation of mine to
	transportation route as per Letter no. PTPL/JAG-B/EC-Delhi/03/22-23 dated	reduce the fugitive dust emission.
	26.07.2022. In addition, 5 nos of fog	
	cannons of at least 40 mtrs throw shall be	
	camons of at least to mits thow shall be	CERS ON

	installed at coal storage yard and in nearby	
viii.	villages.  PP shall transport the coal by trucks of fleet size 35-40 tons and no village road shall be used for transportation of coal.	Agreed Transportation of coal will be done by trucks of fleet size 35-40 tons and no village road will be used for transportation of coal during coal production phase.
ix.	PP shall maintain at least 10 mtrs width tree plantation of broad leaves and wind break/green-shield of about 10 mts height along the boundary of coal storage yard.	Being Complied with.  Greenbelt being developed in parallel with construction/development of the project.  In financial year 2023-24 till September, 2023 16100 nos of saplings has been planted and total 22000 nos of saplings has been planted with 83% survival rate.

x. PP to plant additional 1,00,000 plants with three tier plantation along the transportation route, if not completed, and identified areas with consent to the gram panchayat within two year and plant for remaining within 2 years for their proper growth in additional already committed to plant to plantation in 8.49 ha project area.

Being complied with

22000 nos. of saplings of native species already planted till September, 2023 with 83% survival rate. For greenbelt development dedicated manpower is engaged for regular monitoring & gap filling.

We are regularly planting trees, status of the same will be given in next compliance period.







xi. PP shall follow the recommendation of subsidence study and monitor the degree of subsidence regularly and shall be submitted to IRO-Ranchi.

Agreed, we will follow the recommendation of subsidence study and monitor the degree of subsidence regularly and same will be informed to IRO Kolkata.

Kolkata

xii.	PP to accomplish the recruitment of a full - fledged qualified manpower with Environmental Engineer/ Environment Science degree background in Environment Management Cell etc. within six months and same shall be reported to IRO, MOEF&CC.	Complied with.  Full - fledged qualified manpower with Environmental Engineer degree background in Environment Management Cell is already recruited.  Organizational structure for environment management is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022.
xiii.	PP to fulfil all the commitment made to address the public hearing (Total amount of Rs. 473 lakhs to be completed within three years as in EIA) issued in time bound manner as committed in EIA EMP report and a progressive report to be furnished to IRO with every six monthly compliance report.	Being complied with.  All the commitment made to address the public hearing being adhered in time bounde manner.  In current financial year 2023-24 till September amount of ₹5,20,000 has been spent on distribution of dustbins and school bags under CSR/CER.
xiv.	PP shall implement Effluent Treatment Plant for wastewater generated from workshop and Sewage Treatment Plan (of MBR technology as proposed) for its colony. No untreated water shall be discharged from mine boundaries to ponds / nallah / river.	Agreed, water treatment plant for wastewater generated from workshop and domestic sewage will be constructed.  No untreated water will be discharged from mine boundaries to ponds / nallah / river.  Order for installation of Sewage Treatment Plan is issued vide P.O. no. PP23978195 dated 24.07.2023. Copy of P.O. is attached as Annexure-II.
XV.	PP to maintain the transportation road properly to minimize the dust emission. PP to also develop pucca/concrete roads by seeking consent from the panchayat with widening of roads especially roads inter linking the villages within the study area of 10 km radius buffer zone.	Agreed Water sprinklers will be installed along the road to reduce fugitive dust emission.  Widening of roads and development of pucca/concrete roads in consultation with gram panchayat will be carried out in a time bound manner, if required.
xvi.	PP to monitor the water quality of the ground water and surface water body located within the core zone and 5 km radius from the periphery of the mine boundary as per procedure laid down by CPCB.	Being Complied The monitoring of ground and surface water quality has been carried out by the NABL accredited environmental laboratory. All the parameters are found within the prescribed limit. The monitoring reports are attached as <i>Annexure-1</i> .



xvii. PP to install 1 continuous ambient air quality monitoring stations at suitable locations preferably village side with consultation of SPCB. The real time data so generated shall be uploaded on company website and linked it with website of CPCB & SPCB. In addition, data should also be displayed digitally at entry and exit gate of mine lease area for public display.

Being complied with.

Continuous Ambient Air Quality Monitoring Station (CAAQMS) is installed at the designation site after getting site approval from WBPCB. The confirmation letter from WBPCB in favour of Powerplus Traders Private Limited regarding installation of CAAQMS is attached as *Annexure-III*.

Also data is being displayed digitally at entry and exit gate of mine lease area for public display.







PP must explore innovative technology to recover methane from gases extracted from underground mine while venting.

Noted and the condition will be explored in future for its feasibility.

PP to install solar lights along the road used for transportation of minerals to avoid the accidents at night and also seek its maintenance. PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10 km radius buffer zone within one year.

Agreed

We will install solar lights along the road and in rural areas identified as per Need based assessment & SIA in various villages i.e. Nababpur, Shrikrishnapur, Amdahi, Sandipur, Baidyanathpur.

Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records

Being complied.

	accordingly; also, Occupational health check - ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented. The prevention measure for burns, malaria and provision of anti- snake venom including all other paramedical safeguards may be ensured before initiating the mining activities.	
xxi.	Persons of nearby villages shall be given training on livelihood and skill development to make them employable with its proper records.	Agreed Training on livelihood and skill development to nearby villagers employable will be given during development and operation phase under CER/ CSR scheme.
xxii.	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/ night hours.	Being Complied with.  The noise level at project site is within the prescribed limits for day light/ night hours by taking various mitigative measures.  In order to ensure the effectiveness of mitigative measures the monitoring of noise level has been done by NABL Accredited Laboratory and found the noise level within the prescribed limit.  The monitoring report are attached as Annexure-1.
xxiii.	PP shall pay to farmers of agricultural land if there is any loss due to pollution found by concerned District Commissioner as per extent rules or norms. PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup which should be comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis. Any non-compliance or infringement should be reported to the concerned authority.	Agreed A dedicated team to oversee environment management is being set up for monitoring of air, water quality parameters on routine basis. Any non-compliance or infringement will be reported to the concerned authority.

STAT	TUTORY COMPLIANCE-STANDARD EC C	ONDITION APPLICABLE FOR COAL
	HERY	
	tatutory Compliance:	
Sr.	Conditions	Reply
No		
i.	The project proponent shall obtain forest	Not applicable, as coal washery project is
	clearance under the provisions of Forest	not proposed.
	(Conservation) Act, 1986, in case of the	
	diversion of forest land for non- forest purpose	
	involved in the project.	
ii.	The project proponent shall obtain clearance	Not applicable, as coal washery project is not proposed.
	from the National Board for Wildlife, if	not proposed.
•••	applicable.	NT . 1' 11 1 1 1 1
iii.	The project proponent shall prepare a Site -	Not applicable, as coal washery project is not proposed.
	Specific Conservation Plan / Wildlife	not proposed.
	Management Plan and approved by the Chief Wildlife Warden. The recommendations of the	
	approved Site - Specific Conservation Plan /	
	Wildlife Management Plan shall be	
	implemented in consultation with the State	
	Forest Department. The implementation report	
	shall be furnished along with the six - monthly	
	compliance report. (incase of the presence of	
	schedule - I species in the study area).	
iv.	The project proponent shall obtain Consent to	Not applicable, as coal washery project is
	Establish / Operate under the provisions of Air	not proposed.
	(Prevention & Control of Pollution) Act, 1981	
	and the Water (Prevention & Control of	
	Pollution) Act, 1974 from the concerned State	
	pollution Control Board / Committee.	
v.	The project proponent shall obtain the	Not applicable, as coal washery project is
	necessary permission from the Central Ground	not proposed.
	Water Authority.	
vi.	Solid waste / hazardous waste generated in the	Not applicable, as coal washery project is
	washery needs to addressed in accordance to	not proposed.
	the Solid Waste Management Rules, 2016/	
	Hazardous & Other Waste Management Rules,	
	2016.	
vii.	Coal beneficiation practices shall be carried	Not applicable, as coal washery project is
	out under strict adherence to provisions of the	not proposed.
	Factories Act, 1957 and subordinate	
(b) A	legislations made there under.  ir quality monitoring and preservation:	
i.	Adequate ambient air quality monitoring	Not applicable
1.	Adequate amorem an quanty monitoring	of RS Par

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	stations shall be established in the core zone as	
	well as in the buffer zone for monitoring of	
	pollutants, namely particulates, SO <sub>2</sub> and NO <sub>x</sub> .	
	Location of the stations shall be decided based	
	on the meteorological data, topographical	
	features and environmentally and ecologically	
	sensitive receptors in consultation with the	
	State Pollution Control Board. Monitoring of	
	heavy metals such as Hg, As, Ni, Cd, Cr, etc.	
	carried out at least once in six months.	
ii.	Continuous ambient air quality monitoring	Not applicable
	stations as prescribed in the statue be	
	established in the core zone as well as in the	
	buffer zone for monitoring of pollutants,	
	namely PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NO <sub>x</sub> . Location	
	of the stations shall be decided based on the	
	meteorological data, topographical features	
	and environmentally and ecologically sensitive	
	targets in consultation with the State Pollution	
	Control Board. Online ambient air quality	
	monitoring stations may also be installed in	
	addition to the regular monitoring stations as	
	per the requirement and/or in consultation with	
	1 -	
	the SPCB. Monitoring of heavy metals such as	
	Hg, As, Ni, Cd, Cr, etc. to be carried out at least once in six months.	
iii.	Transportation of coal by road shall be carried	Not applicable
111.	out by covered trucks/conveyors. The	Not applicable
	transportation of clean coal and rejects shall be	
	by rail with wagon loading through silo.	
	Effective measures such as regular water	
	sprinkling shall be carried out in critical areas	
	prone to air pollution and having high levels of	
	particulates such as roads, belt conveyors,	
	loading / unloading and transfer points.	
	Fugitive dust emissions from all sources shall	
	be controlled at source. It shall be ensured that	
	the ambient air quality parameters conform to	
	the norms prescribed by the Central / State	
	Pollution Control Board.	
iv.	All approach roads shall be black topped and	Not applicable
	internal roads shall be concreted. The roads	
	shall be regularly cleaned. Coal transportation	
	shall be carried out by covered trucks.	

V.	Covered trucks shall be engaged for mineral transportation outside the washery up to the railway siding, shall be optimally loaded to avoid spillage en-route. Trucks shall be adequately maintained and emissions shall be below notified limits.	Not applicable
vi.	Facilities for parking of trucks carrying raw material from linked mine shall be created within the unit.	Not applicable
vii.	Vehicular emissions shall be kept under control and regularly monitored. The vehicles having 'PUC' certificate from authorized pollution testing centres shall be deployed for washery operations.	Not applicable
viii.	Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag filters/ mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.	Not applicable
ix.	The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site (s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.	Not applicable
х.	The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such sites.	Not applicable
(c) V	Vater quality monitoring and preservation	
i.	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742(E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.	Not applicable
ii.	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/ 2006-1A.II(M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this	Not applicable

iii. Industrial waste water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time.  iv. The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/mallah flowing near or adjacent to the washery. The embankment constructed along the river/mallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side stabilised with plantation so as to withstand the peak water pressure preventing any chance of inundation.  v. Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.  vi. The rejects should preferably be utilized in FBC power plant or disposed off through sale for its gainful utilization. If the coal washery rejects are to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and post closure arrangement to avoid water pollution due to leachate from rejects and surface run of from reject dumping sites.  vii. An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river / rivulet / pond / lake etc. with impact of coal washing activities on it, shall be prepared, submitted to MoEFCC and implemented.  viii. Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.  ix. Rainwater harvesting in the washery premises shall be implemented for conservation and augmentation of ground water resources in consultation with Central Ground Water Board.  x. No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority (CGWA) or MoEFCC. The make - up water requirement of washery should not exceed 1.5 m3/ tonne of raw coal.  xi. Regular monitoring of ground		ragged for compliance	
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quality shall be carried out in and around the	xi.		Not applicable
		quality shall be carried out in and around the	SERSON

	mine lease area by establishing a network of	
	existing wells and constructing new	
	piezometers during the mining operations. The	
	monitoring of ground water levels shall be	
	carried out four times a year i.e. pre -	
	monsoon, monsoon, post - monsoon and	
	winter. The ground water quality shall be	
	monitored once a year, and the data thus	
	collected shall be sent regularly to MOEFCC /	
	RO.	
xii.	Monitoring of water quality upstream and	Not applicable
AII.	downstream of water bodies shall be carried	Not applicable
	out once in six months and record of	
	monitoring data shall be maintained and	
	submitted to the Ministry of Environment,	
	Forest and Climate Change / Regional Office.	
xiii.	The project proponent shall take all	Not applicable
	precautionary measures to ensure riverine /	
	riparian ecosystem in and around the coal mine	
	up to a distance of 5 km. A riverine / riparian	
	ecosystem conservation and management plan	
	should be prepared and implemented in	
	consultation with the irrigation/ water resource	
	department in the state government.	
(d) N	Noise and Vibration Monitoring and Prevention	
i.	Adequate measures shall be taken for control	Not applicable
1.	of noise levels as per noise pollution Rules,	Two applicable
	2016 in the work environment. Workers	
	engaged in blasting and drilling operations,	
	operation of HEMM, etc shall be provided	
	with personal protective equipments (PPE) like	
	ear plugs/ muffs in conformity with the	
	prescribed norms and guidelines in this regard.	
	Adequate awareness programme for users to	
	be conducted. Progress in usage of such	
	accessories to be monitored.	
ii.	The noise level survey shall be carried out as	Not applicable
	per the prescribed guidelines to assess noise	
	exposure of the workmen at vulnerable points	
	in the mine premises, and report in this regard	
	shall be submitted to the Ministry / RO on six -	
	monthly basis.	
(e) C	Coal Beneficiation	
i.	Coal stacking plan shall be prepared separately	Not applicable
	for raw coal, clean coal, middling and rejects.	
ii.	Efforts should be made to reduce energy	Not applicable
	consumption by conservation, efficiency	**
	improvements and use of renewable energy.	
(f) (	Green Belt	
i.	Three tier greenbelt comprising of a mix of	Not applicable
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	native species, of minimum 30 m width shall	
	be developed all along the washery area to	
	check fugitive dust emissions and to render	
	aesthetic to neighbouring stakeholders. A 3-	
	tier green belt comprising of a mix of native	
	species or tree species with thick leaves shall	
	be developed along vacant areas, storage	
	yards, loading / transfer points and also along	
	internal roads/ main approach roads.	
ii.	The project proponent shall make necessary	Not applicable
11.	alternative arrangements, if grazing land is	Two applicable
	involved in core zone, in consultation with the	
	· ·	
	State government to provide alternate areas for	
	livestock grazing, if any. In this context, the	
	project proponent shall implement the	
	direction of Hon'ble Supreme Court with	
	regard to acquiring grazing land.	
(g) P	ublic Hearing and Human Health Issues	
i.	Adequate illumination shall be ensured in all	Not applicable
	mine locations (as per DGMS standards) and	
	monitored weekly. The report on the same	
	shall be submitted to this ministry & its RO on	
	six-monthly basis.	
ii.	The project proponent shall undertake	Not applicable
	occupational health survey for initial and	
	periodical medical examination of the	
	personnel engaged in the project and maintain	
	records accordingly as per the provisions of the	
	Mines Rules, 1955 and DGMS circulars.	
	Besides regular periodic health check - up,	
	20% of the personnel identified from	
	workforce engaged in active mining operations	
	shall be subjected to health check-up for	
	occupational diseases and hearing impairment,	
iii.	if any, as amended time to time.	Not applicable
111.	Personnel (including outsourced employees)	Not applicable
	working in core zone shall wear protective	
	respiratory devices and shall also be provided	
	with adequate training and information on	
	safety and health aspects.	<b>N</b> T . 11 11
iv.	Implementation of the action plan on the issues	Not applicable
	raised during the public hearing shall be	
	ensured. The project proponent shall undertake	
	all the tasks/measures as per the action plan	
	submitted with budgetary provisions during the	
	public hearing. Land oustees shall be	
	compensated as per the norms laid down in the	
	R&R policy of the company/State	
	Government/Central Government, as	
	applicable.	
v.	The project proponent shall follow the	Not applicable

mitigation measures provided in this Ministry's OM No.Z · 1013/87/2014-IAI(IM) dated 29th October, 2014, titled 'Impact of mining activities on habitations- issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area?  (h) Corporate Environment Responsibility  a) Fund allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65 /2017-IA.III dated 30th September 2020 and based on commitment made during public consultation process for incorporating in EIA-EMP for deliberation of EAC.  b) The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any Infringements / deviation / violation of the environmental forest wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders, The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.  c) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.  d) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/ Regional Office along with the Six Monthly Compliance Report.  e) Self - environmental audit shall be conducted annually. Every			
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Gran	t of EC Is Further Subject To Compliance of T	The Standard EC Conditions As Under:
a)	Statutory Compliance	
i.	The environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Courts, NGT and any other Court of Law, from time to time, and as applicable to the project.	Agreed & Noted
ii.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.	No forest land is involved. A certificate mentioned "no forest land involved" also issued by Divisional Forest Officer, Durgapur and Burdwan Division separately vide their memo no. 3359 dated 01/11/2021 and 2010/8 dated 24/08/2021.
		Copy of the same is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022.
iii.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	The Wild Life (Protection) Act, 1972 is not applicable for this project. The project does not falls in and any Eco Sensitive Zone (ESZ) of National Park, Wild Life Sanctuary, Conservator Reserve, etc. A certificate also issued in this regards by The Principal Chief Conservator of Forest, WL & CWLW, West Bengal vide their memo no. 2729/WL/2W-167/2016 dated 13/09/2022.
		Copy of the same is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022.
iv.	The project proponent shall prepare a Site - Specific Conservation Plan/ Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six - monthly compliance report. (in case of the presence of schedule-1 species in the study area).	Not applicable
V.	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State	Consent to Establish (CTE) under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 has been obtained from West Bengal

	Pollution Control Board / Committee.	Pollution Control Board (WBPCB) vide NOC No- 172012 dated 18.10.2022 issued vide memo no. 525-2N-11/2022(E). We will obtain Consent to Operate before starting of coal production.  Copy of NOC is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated
vi.	The project proponent shall obtain the necessary permission from the Central Ground	24.11.2022.  Reply to the subject condition is already made in <i>point no-ii of specific condition</i> .
vii.	Water Authority.  Solid waste / hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016.	Agreed. The sludge generated from water treatment plant and STP will be used for gardening and green belt development. The sludge generated from ETP will be send to Common Hazardous Waste Treatment, Storage and Disposal Facility (CHWTSDF) as per HZW Rules, 2016.
<b>b</b> )	Air Quality Monitoring and Preservation	
i.	Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO <sub>2</sub> , and NO <sub>x</sub> . Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc. to be carried out at least once in six months. Online ambient air quality monitoring station / stations may also be installed in addition to the regular air monitoring stations as per the requirement and/ or in consultation with the SPCB.	Being complied with Continuous Ambient Air Quality Monitoring Station (CAAQMS) is installed at the designation site after getting site approval from WBPCB. The confirmation letter from WBPCB in favour of Powerplus Traders Private Limited regarding installation of CAAQMS is attached as Annexure-III.  Also data is being displayed digitally at entry and exit gate of mine lease area for public display.  In order to ensure the effectiveness of mitigation method adopted third party monitoring from NABL accredited laboratory has been done. The monitoring reports are attached as Annexure-1.
ii.	The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742(E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to	Being complied with Effective measures will be implemented to ensure Ambient Air Quality parameters be within as per Coal Industry Standards notified vide GSR 742(E) dated 25.9.2000.  In order to ensure the effectiveness of mitigation method adopted third party

	the Ministry / Regional Office and to the CPCB / SPCB.	monitoring from NABL accredited laboratory has been done. The monitoring reports are attached as <i>Annexure-1</i> .
iii.	Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks / conveyors. Effective control measures such as regular water sprinkling / rain gun / mist sprinkling etc., shall be carried out in critical areas prone to air pollution with higher level of particulate matter all through the coal transport roads, loading / unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central / State Pollution Control Board.  Major approach roads shall be black topped and properly maintained.	Effective control measures will be implemented in critical areas prone to air pollution and will be ensured emission parameter to be in norms prescribed by CPCB/SPCB. The steps to be adopted are:  a) Covered trucks/conveyors will be used for transportation of the mineral/material. b) Installing ~191 water sprinklers for dedicated road from mining to Deul More and 100 numbers along the separate transportation route. c) 05 nos of fog cannons of at least 40 mtrs throw shall be installed at coal storage yard and in nearby villages. d) 10 mtrs width tree plantation of broad leaves and wind break/green-shield of about 10 mts height along the boundary of coal storage yard.  Agreed. As per approved mining plan, a metalled
		approachable road will be constructed from deul more to mine infrastructure area of a distance of 6.5 km length. Proper maintenance will be taken cares. Also water sprinklers at fixed interval will be installed to supress dust emission during movement of vehicles. Photograph showing construction of haul road is given below:
v.	The transportation of coal shall be carried out as per the provisions and route proposed in the	Agreed Coal will be transported only by the route
	approved mining plan. Transportation of the	as mentioned and proposed in approved
	coal through the existing road passing through	mining plan.

vi.	any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed that the impact of sound, dust and accidents could be appropriately mitigated.  Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining	Being complied with Only PUC certified vehicles is being engaged in mining and allied activities. Regular maintenance of engaged vehicles is
	'PUC' certificate from the authorized pollution testing centres.	being carried out.
vii.	Coal stock pile / crusher / feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.	Agreed.  Adequate dust suppression system will be installed in critical areas prone to air pollution.
viii.	Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.	Agreed Adequate measures like regular water sprinkling / rain gun, use of movable water tanker, vacuum sweeper machine, fog mist waster canon system etc. will be adopted to control fugitive dust emission, which will be environmental friendly.
c)	Water Quality Monitoring and Preservation	·
i.	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742(E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.	Agreed. Water treatment plant of adequate capacity will be installed to treat mine water. No untreated water will be discharged from mine boundaries to pond / nallah / river.  In order to ensure the efficiency of
		treatment plant monitoring of inlet & outlet water from NABL/ WBPCB/ MoEF accredited laboratory will be carried out in a time bound manner and report will be submitted to competent authority.
ii.	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment. Forest and	Being complied with.  Data is being displayed at entry and exit gate of mine lease area for public display.
	issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.	Also Six monthly EC compliance is being uploaded on company's website <a href="http://www.powerplustraders.com/EHS.php">http://www.powerplustraders.com/EHS.php</a>
iii.	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The	Being complied with The monitoring of ground water levels will be carried out by NABL/ WBPCB/ MoEF accredited laboratory four times a year i.e. pre – monsoon, monsoon, post – monsoon

monitoring of ground water levels shall be and winter. carried out four times year i.e. pre - monsoon, The monitoring of ground water quality has monsoon, post - monsoon and winter. The been done by the NABL accredited laboratory. ground water quality shall be monitored once a environmental All year, and the data thus collected shall be sent parameters are found within the prescribed regularly to MOEFCC/RO. limit. The monitoring reports are attached as Annexure-1. Monitoring of water quality upstream and Being complied with iv. downstream of water bodies shall be carried The monitoring of water quality upstream out once in six months and record of and downstream of water bodies has been monitoring data shall be maintained and done by the **NABL** accredited submitted to the Ministry of Environment, environmental laboratory. A11 Forest and Climate Change / Regional Office. parameters are found within the prescribed limit. The monitoring reports are attached as Annexure-1. Ground water, excluding mine water, shall not Agreed be used for mining operations. Rainwater No ground water will be extracted during harvesting shall be implemented the mining operation excluding mine water. 02 nos. Rainwater harvesting structure to conservation and augmentation of ground be constructed to conserve and reuse of rain water resources. water. The project proponent shall not alter major Agreed. vi. water channels around the site. Appropriate embankment shall be provided along the side No alteration will be carried out. of the river / nallah flowing near or adjacent to the mine. The embankment constructed along the river / nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side, stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation. vii. Garland drains (of suitable size, gradient and Agreed length) around the critical areas i.e. mine shaft A garland drains has been constructed in and low lying areas, shall be designed keeping the low lying area at mine site keeping 50% at least 50% safety margin over and above the safety margin over and above the peak peak sudden rainfall and maximum discharge sudden rainfall and maximum discharge in in the area adjoining the mine sites. The sump adjoining the mine area capacity shall also provide adequate retention Photographs of garland drain is given period to allow proper settling of silt material below: of the surface runoff. viii. The water pumped out from the mine, after Agreed

siltation, shall be utilized for industrial purpose A Water Treatment Plant is proposed for viz, watering the mine area, roads, green belt pump out mine water. After treatment the development etc. The drains shall be regularly water will be utilized for various industrial desilted particularly after monsoon and purposes i.e. construction and maintenance maintained properly. of roads, green belt development, dust suppression, irrigation purpose for villagers, etc. Industrial waste water from coal handling plant ix. Agreed and mine water shall be properly collected and Water, effluent and sewage treatment plant treated so as to conform to the standards with integrated oil and grease tarp of prescribed under the Environment (Protection) adequate capacity is proposed to be Act, 1986 and the Rules made thereunder, and installed for treatment of generated polluted as amended from time to time. Oil and grease waste water. trap shall be installed before discharge of workshop effluent. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste water. Adequate groundwater recharge measures shall Agreed be taken up for augmentation of ground water. structure will be constructed, RWH The project authorities shall meet water rainwater will reuse for industrial purpose. requirement of nearby village (s) in case the Treated mine water will be used for village wells go dry due to dewatering of mine. industrial purpose and provided to the nearby villagers for irrigation and recharging of ponds, wherever required. We will fulfil water requirement of nearby village (s) in case the village wells go dry due to dewatering of mine. The surface drainage plan including surface Agreed Renovation of pond will be carried out in water conservation plan for the area of influence affected by the said mining consultation with concern gram panchayat, operations shall be prepared, considering the in the following villages: Dhabani, Parulia, presence of any river / rivulet / pond / lake etc., Jamgara, Laudoha, Banagram, Sahapur & with impact of mining activities on it, and Jaganathpur. implemented by the project proponent. The surface drainage plan and / or any diversion of There is no proposal for any diversion of natural water courses shall be as per the natural water courses and in this regard no provisions of the approved Mining Plan / EIA approval is required from concerned State / EMP submitted to this Ministry and the same GoI Authority. should be done with due approval of the concerned State / GoI Authority. construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved mining plan and as per the permission of DGMS. project proponent xii. The shall take Agreed & Noted. Bio indicator species will be planted all precautionary measures to ensure reverian / along project area up to a distance of 5 km. riparian ecosystem in and around the coal mine upto a distance of 5 km. A revarian / riparian Though all types of sensitive species can be ecosystem conservation and management plan used in monitoring pollution, most useful should be prepared and implemented in and commonly used plants include consultation with the irrigation / water

	resource department in the state government.	sensitive species of lichens, mosses, plankton algae, aquatic ferns and angiosperms, other ferns, conifers oaks and many crop plants. Examples of some common types of plants useful as pollution monitors are Sphagnum acutifolia, Fontinalis antipyretica, F. squamosa, Microcystis, Scendesmus, Chlorella, Hydrodictyon, Cladophora, Stigoclonium, Diatoms Azolla, Salvinia.
		Some of the parameters which will be studied in post EC monitoring of the ponds and aquatic bodies found in the study area are decrease in the densities of sensitive species and increase in the density of tolerant species, absence of highly sensitive species, changes in the species composition of vegetation and distribution pattern of populations in the area. Such studies indicate the type and concentration of pollutant(s) as well as the spread of the pollution problem in the area.
d)	Noise and Vibration Monitoring and Preventi	1
i.	Adequate measures shall be taken for control of noise levels below 85 dB (A) in the work environment. Workers engaged in underground mining operations, operation of HEMM, etc. shall be provided with personal protective equipments (PPE) like ear plugs / muffs in conformity with the prescribed norms / guidelines in this regard. Progress in usage of such accessories to be monitored. Adequate awareness programme for users to be conducted.	provided during mining operation.
ii.	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry / RO on six monthly basis.	Being complied with Noise level survey is being carried out by NABL accredited laboratory and found the noise level within the prescribed limit. The monitoring reports are attached as  Annexure-1.
<u>e)</u>	Mining Plan	A d NJ - 4 - d
i.	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there - under as applicable.	Agreed and Noted
ii.	No change in mining method i.e. UG to OC, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).	Noted and agreed

iv.	Mining shall be carried out as per the approved mining plan (including mine closure plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).  Underground work place environmental conditions shall be rendered ergonomic and air breathable with adequate illumination in conformance with DGMS standards.	Agreed Mining will be done as per approved mining plan, and during operation all relevant coal mining laws and circulars of DGMS will be followed.  Agreed We've proposed to install one mechanical Ventilator of high capacity on surface through evacuee. The exhaust fan will have the provision of variable pitch of blades to improve the quantity of air required in future.
V.	No mining activity shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.	No forest land is involved.
vi.	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.	Agreed  a. Solar panels, electric vehicles for conveyance will be deployed to reduce energy and fuel consumption.  b. Solar panels will be installed for surface infrastructure and workshop, and electric vehicles will be preferred instead of petrol/diesel for conveyance of staff/mine workers.  c. If possible in future, electric heavy vehicles will be preferred for
	T 1D 1 (1	transportation of coal.
<u>f)</u>	Land Reclamation	A 1
i.	Digital Survey of entire lease hold area / core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1: 50,000 scale or as notified by Ministry of Environment, Forest and Climate Change (MOEFCC) from time to time shall be submitted to MOEFCC/ Regional Office (RO).	Agreed Digital Survey will be carried out at least once in three years for monitoring land use pattern from recognised consultant and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change (MOEFCC) will be submitted to MOEF&CC/RO.
ii.	Post-mining land be rendered usable for agricultural / forestry purposes and shall be handed over to the respective State Government, as specified in the Guidelines for Preparation of Mine Closure Plan, issued by the Ministry of Coal dated 27 <sup>th</sup> August, 2009 and subsequent amendments.	Agreed After post mining the land will be rendered as per the approved mine closure plan.
iii.	Regular monitoring of subsidence movement on the surface over and around the working areas and its impact on natural drainage	Agreed. Regular detailed monitoring of subsidence movement will be carried out.

pattern, water bodies, vegetation, structure, roads and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence beyond the limit prescribed, appropriate effective mitigation measures shall be taken to avoid loss of life and materials. Cracks should be effectively plugged in with ballast and clay soil / suitable material.

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iv. Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3<sup>rd</sup> November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling or stowing of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.

Approved mine closure plan will be followed.

v. A separate team for subsidence monitoring and surface mitigation measures shall be constituted and continuous monitoring & implementation of mitigation measures be carried out.

#### Agreed.

We'll prepare a separate team for subsidence monitoring and implementation of mitigation measures. The following subsidence aspects and remedial measures are proposed for the safety of surface structures and mining operation:

- 1) There are number of villages and surface structures within the coal block. Hence, AoD of 22° was taken into account for design of all proposed panels to err on the side of the safety. The influence of subsidence would not affect any surface structure.
- 2) Maximum anticipated subsidence of 4098 mm would affect the surface topography after mining. Suitable drainage should be made to avoid any water logging in the centre of subsidence troughs.
- 3) The cumulative predicted maximum compressive strain and tensile strain at the surface of 10.0 mm/m and 9.1 mm/m respectively would lead to development of cracks with crevices of 60 to 100 mm at the surface. The surface cracks formed during extraction should immediately be filled.

		in with soil/mitti to prevent breathing of air and inflow of water to the underground workings.
		4) Embankment with an elevation above HFL is advisable be erected on the west side of the Ajay river subject to actual ground topography. This exercise will be conducted within a span of 10 years.
vi.	Thorough inspection of the mine lease area for any cracks developed at the surface due to mining activities below ground shall be carried out to prevent inrush of water in the mine.	Agreed During the mining operation in underground, regular monitoring of surface will be carried out by a monitoring team to prevent inrush of water in the mine.
vii.	Native tree species shall be selected and planted over areas affected by subsidence.	Agreed Native tree species along with pollution indicative species/ bio indicator species will be selected and planted for fast growing over area affected by subsidence.
viii.	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.	Noted.
g)	Green Belt	
i.	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered flora / fauna, if any, spotted / reported in the study area. Action plan, in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.	found during collection of baseline data.
ii.	Greenbelt, consisting of three-tier plantation, of width not less than 7.5 m, shall be developed all along the mine lease area in a phased manner. The green belt comprising of a mix of native species shall be developed all along the major approach roads / coal transportation roads.	Being Complied with



- 10 mtrs width tree plantation of broad leaves and wind break/green-shield of about 10 mts height along the boundary of coal storage yard.
- Total 22000 nos. of saplings of native species already planted in project area till September, 2023 with 83% survival rate. For greenbelt development dedicated manpower is engaged for regular monitoring, gap filling and their proper growth.



• 3500 nos of saplings is distributed among the nearby villages in the project area under CSR/CER activity.





• On the occasion of "Environment Day" on 5<sup>th</sup> June, 2023 a total 1500 nos of fruit bearing saplings is distributed among the school children and nearby villagers.



## h) Public Hearing and Human Health Issues

i. Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored.

Being complied with.

Lighting facilities in night is being setup at all places of mine site wherever is required.

Kolkata

ii.	The Project Proponent shall undertake Occupational Health survey for initial and Periodical medical examination of the workers engaged in the Project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS Circulars. Besides carrying out regular periodic health check - up of their workers, 20 % of the workers engaged in active mining operations shall be subjected to health check - up for occupational diseases and hearing impairment, if any.	Being Complied.  Occupational health of staff and workers carried out at pre-entry level and later on regular medical check-up in this respect extended on an annual basis to detect early incidence of diseases and for prompt remedial medical interventions in this respect. Necessary personal data cards in this respect is maintained for effective monitoring and application of medical services required in the matter. All occupational health and safety activities is being done as per DGMS guidelines. Safety matters will be reviewed once in 15 days by safety officer regularly so as to take urgent and effective measures to prevent unsafe operations and practices with a view to prevent accidents, injuries, etc.
iii.	Personnel (including outsourcing employees) working in dusty areas shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.	Being complied with The Personal Protective Equipment (PPE's) will be provided to the workers working in the dusty areas and will be regularly monitored. Training and information will be provided for safety and health aspects. Photograph of Personals wear PPE's is given below:
iv.	Skill training as per safety norms specified by	Being Complied with.

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	DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.	Safety officer is hired for providing skill training as per safety norms specified by DGMS to all workers including the outsourcing employees to ensure high safety standards at mine site.
V.	Effective arrangement shall be made to	Complied.
٧٠	provide and maintain at suitable points	Adequate drinking water facility is
	conveniently situated, a sufficient supply of	provided to all the persons employed
	drinking water for all the persons employed.	during construction phase, also provided
	and the property of the proper	during operation phase. Photograph of
		drinking water facility is given below:
vi.	Implementation of Action Plan on the issues	Agreed
	raised during the Public Hearing shall be	A time bound action plan has been
	ensured. The Project Proponent shall undertake	prepared for addressing all the issues raised
	all the tasks as per the Action Plan submitted	during the Public Hearing and will be
	with budgetary provisions during the Public	implemented within the time frame.
	Hearing. Land oustees shall be compensated as	
	per the norms laid out R & R Policy of the	
	Company / or the National R&R Policy / R&R Policy of the State Government, as applicable.	
vii.	The project proponent shall follow the	Agreed
V 11.	mitigation measures provided in this Ministry's	We'll follow the mitigation measures stated
	OM No. Z-11013/5712014-IA.II(M) dated 29 <sup>th</sup>	in this Ministry's OM No. Z-
	October, 2014, titled 'Impact of mining	11013/5712014-IA.II (M) dated 29 <sup>th</sup>
	activities on habitations - issues related to the	October, 2014.
	mining projects wherein habitations and	
	villages are the part of mine lease areas or	
	habitations and villages are surrounded by the	
	mine lease area.	
<u>i)</u>	Corporate Environment Responsibility	~
i.	The company shall have a well laid down	Complied
	environmental policy duly approve by the	Company has well laid down
	Board of Directors. The environmental policy	environmental policy duly approve by the
	should prescribe for standard operating procedures to have proper checks and balances	Board of Directors.
	and to bring into focus any infringements /	Copy of Environmental Policy is already
	deviation / violation of the environmental	submitted to competent authority in EC
	forest / wildlife norms / conditions. The	compliance (Dec-2022) vide letter no
L		

ii.	holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six - monthly report.  A separate Environmental Cell both at the project and company head quarter level, with	The environment policy is dully approved by the board of the company. Copy of the board resolution is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022.  Complied.  A separate Environmental cell both at
	qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	project and company head quarter is in place.
	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry / Regional Office along with the Six Monthly Compliance Report.	Being Complied with.  Appropriate fund is allocated under the head of EMP capital cost of Rs. 41.52 Cr & Recurring expenditure is envisaged as Rs. 9.26 Crores/year. Further capital cost for environmental monitoring is Rs. 300 Lakhs and recurring cost is Rs. 157.00 Lakhs/year.  In current financial year 2023-24 till September, 2023 the amount spent for implementation of EMP has been done on the following heads:  1. Installation of Continuous Ambient Air Quality Monitoring Station (CAAQMS): ₹35,80,044/-  2. Greenbelt Development: ₹16,62,500/-  3. CSR/CER: 5,20,000/-  4. Environmental Monitoring: ₹1,06,200/-  5. Sewage Treatment Plant (STP): ₹14,00,000/-  6. Fog Mist Water Canon System: ₹6,50,000/-  A total amount of ₹79.18 Lac has been spent for implementing the EMP.  Year wise progress of implementation of action plan is being submitted along with the Six Monthly Compliance Report.
	Self Environmental audit shall be conducted	Agreed & Noted.
	annually. Every three years third party environmental audit shall be carried out.	
	Miscellaneous	
i.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by	Complied Public notice for grant of Environmental Clearance has been given in to local newspaper that are widely circulated in the

prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. region are:

- "AJKAL" in vernacular language (Bengali) dated 02.09.2022 and
- "THE ECHO OF INDIA" in English language on dated 02.09.2022

Copy of both the newspaper advertisement is already submitted to competent authority in EC compliance (Dec-2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

The copies of the environmental clearance have been submitted to the Heads of local bodies, Panchayat and Municipal Bodies and to the relevant offices. The details area as:

- 1. DM, Paschim Bardhaman, vide Letter No.: PTPL/JAG-B/ODM/WB/01/22-23 dated 02-09-2022.
- ADM, Paschim Bardhaman, vide Letter No.: PTPL/JAG-B/ODM/WB/02/22-23 dated 02-09-2022.
- 3. Sub-Divisional Officer, Durgapur Sub-Division, vide Letter No.: PTPL/JAG-B/OSDO/WB/01/22-23 dated 05-09-2022.
- 4. BDO, Durgapur-Faridpur Block, vide Letter No.: PTPL/JAG-B/OBDO-DFB/WB/01/22-23 dated 05-09-2022.
- BDO, Kanksa Block, vide Letter No.: PTPL/JAG-B/OBDO-KB/WB/01/22-23 dated 05-09-2022.
- GM, D.I.C., Paschim Bardhaman, vide Letter No.: PTPL/JAG-B/DIC/WB/01/22-23 dated 05-09-2022
- Sabhadhipati, Paschim Bardhaman Zila Parishad, vide Letter No.: PTPL/JAG-B/ZP/WB/01/22-23 dated 02-09-2022.
- 8. Sabhapati, Durgapur-Faridpur Panchayat Samity, vide Letter No.: PTPL/JAG-B/ODFPS/WB/01/22-23 dated 05-09-2022.
- Kanksa Panchayat Samity, vide Letter No.: PTPL/JAG-B/OKPS/WB/01/22-23 dated 05-09-2022.
- 10. Gour Bazar Gram Panchayat, vide Letter No.: PTPL/JAG-B/OGBGP/WB/01/22-23 dated 05-09-2022.
- 11. Bidbehar Bazar Gram Panchayat, vide Letter No.: PTPL/JAG-B/OBBGP/WB/01/22-23 dated 05-09-2022.
- 12. Pratappur Bazar Gram Panchayat, vide Letter No.: PTPL/JAG-B/OPBGP/WB/01/22-23 dated 05-09-2022.

Copy of the intimation letter is already submitted to competent authority in EC compliance (Dec-2022) vide letter no-



		PTPL/JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022.
iii.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Being complied with The environmental clearance and status of compliance of the stipulated environment clearance conditions, including results of monitored data is/ will be uploaded on the website of the company <a href="http://www.powerplustraders.com/EHS.php">http://www.powerplustraders.com/EHS.php</a>
iv.	The project proponent shall monitor the criteria pollutants level namely; $PM_{10}$ , $SO_2$ , $NO_x$ (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Being complied with. The criteria pollutants level namely; PM10, PM2.5, SO <sub>2</sub> , NOx (ambient levels) is being monitored by CAAQMS. Value of pollutants is being displayed on board as per CPCB format at entry and exit gate of mine lease area for disclosure to the public and also uploaded on the website of the company <a href="http://www.powerplustraders.com/EHS.php">http://www.powerplustraders.com/EHS.php</a>
V.	The project proponent shall submit six - monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Being Complied In compliance to this point, this report is being submitted.  The last compliance report for the period October, 2023 to March, 2023 has been submitted to MoEF&CC vide our letter no. PTPL/JAG-B/EC-Com.Rep/June 2023 Date: 30/5/2023 and also uploaded on the website of the MoEF&CC at environment clearance portal.
vi.	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II(M) dated 29 <sup>th</sup> October, 2014, titled "Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area".	Being complied with.
vii.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Agreed We'll submit the environmental statement for each financial year in Form-V to the WBPCB as prescribed under the Environment (Protection) Rules, 1986 post operation of the mine.
viii.	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.	Agreed The project is in development/ construction phase. CTE and other statutory clearance are obtained from competent authority.

		We'll inform to the Regional Office of the MOEFCC before starting of mining operations.
ix.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Noted All the relevant stipulations made by the West Bengal Pollution Control Board and the State Government will be complied.
		In this connection CTE and other statutory clearance are obtained from competent authority.
х.	The project proponent shall abide by all the commitments and recommendations made in the EIA / EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Noted and is being complied in a time bound manner.
xi.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.	Agreed
xii.	Concealing factual data or submission of false / fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted
xiii.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted & Agreed
xiv.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agreed & Noted.
XV.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.	Agreed & Noted.
xvi.	The above conditions shall be enforced, interalia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the	Agreed & Noted.

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	subject matter.	
5	The proponent shall abide by all the	Agreed, we'll abide all the commitments
	commitments and recommendations made in	and recommendations made in the
	the EIA / EMP report and also that during	EIA/EMP report, commitment made during
	presentation to the EAC. All the commitments	Public Hearing and also that during their
	made on the issues raised during public	presentation to the Expert Appraisal
	hearing shall also be implemented in letter and	Committee.
	spirit.	
6	The proponent shall obtain all necessary	Agreed & Noted.
	clearances / approvals that may be required	
	before the start of the project. The Ministry or	
	any other competent authority may stipulate	
	any further condition for environmental	
	protection. The Ministry or any other	
	competent authority may stipulate any further	
	condition for environmental protection.	
7	Any appeal against this environmental	Noted.
	clearance shall lie with the National Green	
	Tribunal, if preferred, within a period of 30	
	days as prescribed under Section 16 of the	
	National Green Tribunal Act, 2010.	
8	The coal company/project proponent shall be	Agreed & Noted.
	liable to pay the compensation against the	
	illegal mining, if any, and as raised by the	
	respective State Governments at any point of	
	time, in terms of the orders dated 2 <sup>nd</sup> August,	
	2017 of Hon'ble Supreme Court in WP (Civil)	
	No. 114/2014 in the matter of 'Common Cause	
	Vs Union of India & others.	
9	The concerned State Government shall ensure	Agreed & Noted.
	no mining operations to commence till the	
	entire compensation for illegal mining, if any,	
	is paid by the project proponent through their	
	respective Department of Mining & Geology,	
	in strict compliance of the judgement of	
	Hon'ble Supreme Court.	
10	This Environmental Clearance shall not be	Agreed & Noted.
10	operational till such time the project proponent	
	complies with the above said judgement of	
	Hon'ble Supreme Court, as applicable, and	
	other statutory requirements.	
	outer statutory requirements.	

\*\*\*\*\*\*







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DOC NO: QLS/SAMP/08-A/00

### TEST REPORT

Name & Address of the Customer:

M/S Powerplus Traders Private Limited

Premlata Building, 39 Shakespeare Sarani

6th Floor, Kolkata- 700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

: QLS/P-107/22-23/C/01

Date : 15.02.2023

Sample No. : QLS/P-107/22-23/01

Sample Description : Ambient Air

Date of Performance : 08.02.2023-15.02.2023

Ref No. Date

: PTPL/QLS/001/2022-23, Dated-31.01.2023

### **Analysis Result**

Location: Gopedanga (AAQ2)

Sampling Done by: S.Ghosh

Longitude & Latitude : 23° 37' 56 80"N 87° 22' 6 54"F

Date of sampling: 07.02.2023-08.02.2023

Sampling done as per: CPCB Guidelines (Volume-1)

SI. No.	POLLUTANT	RESULT	LIMIT	METHOD OF TEST REFERENCE
1	Particulate matter (<10μm) in μg/m <sup>3</sup>	70.1	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (<2.5μm) in μg/m <sup>3</sup>	31.2	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in μg/m <sup>3</sup>	8.2	80	IS: 5182 (Part-2)-2001, (RA-2017)
.4	Nitrogen dioxide (NO <sub>2</sub> ) in μg/m <sup>3</sup>	12.6	80	IS: 5182 (Part- 6)- (RA-2017)
5	Carbon Monoxide (CO) in µg/m³	938	2000	IS: 5182 (Part- 10)- (RA-2017)
6	Ammonia (NH <sub>3</sub> ) in μg/m <sup>3</sup>	21.5	400	Air Sampling, 3 <sup>rd</sup> Edn -Method-401
7	Ozone (O <sub>3</sub> ) in μg/m <sup>3</sup>	35.1	180	Air Sampling, 3 <sup>rd</sup> Edn -Method-411
8	Lead (Pb) in μg/m <sup>3</sup>	0.13	1	EPA IO-3.2 & 5.0
9	Nickel (Ni) in ng/m <sup>3</sup>	<4.0	20	EPA IO-3.2
10	Arsenic (As) in ng/m³	<1.0	6	Air Sampling , 3rd Edn.Method 402 and APHA 23rd Edition - 2017 Part 3114B
11	Benzene (C <sub>6</sub> H <sub>6</sub> ) in μg/m <sup>3</sup>	<2.08	5	IS: 5182 (Part- 11)
12	Benzo (a) pyrene in ng/m³	<0.4	1	IS: 5182 (Part- 12)
13	Mercury (Hg) in ng/ m <sup>3</sup>	<2.0		USEPA IO-5.0. June:1999
14	Cadmium (Cd) in μg/m³	<0.02	-	USEPA IO-3.2, June:1999
15	Chromium (Cr) in µg/m <sup>3</sup>	<0.05	-	USEPA IO-3.2, June:1999

Report Prepared By:

Ox:

for Qualissure Laboratory Services
Reviewed & Authorized By

Benimadhab Gorai, Chemist (Authorized Signatory)

The results relate only to the item(s) tested.

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DOC NO: QLS/SAMP/08-A/00

### TEST REPORT

Name & Address of the Customer: M/S Powerplus Traders Private Limited

Premlata Building, 39 Shakespeare Sarani

6th Floor, Kolkata-700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

: QLS/P-107/22-23/C/02

Date

: 15.02.2023

Sample No.

: QLS/P-107/22-23/02

Sample Description

: Ambient Air

Date of Performance

: 08.02.2023-15.02.2023

Ref No. Date

: PTPL/QLS/001/2022-23, Dated-31.01.2023

### **Analysis Result**

Location: Kotagram (AAQ3)

Date of sampling: 06.02.2023-07.02.2023

Sampling done as per : CPCB Guidelines (Volume-1)

Sampling Done by: S.Ghosh Longitude & Latitude: 23° 42' 12.76"N, 87° 24' 41.07"E

SI. No.	POLLUTANT	RESULT	LIMIT	METHOD OF TEST REFERENCE
1	Particulate matter (<10μm) in μg/m <sup>3</sup>	72.1	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (<2.5μm) in μg/m <sup>3</sup>	31.3	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in μg/m <sup>3</sup>	8.7	80	IS: 5182 (Part-2)-2001, (RA-2017)
4	Nitrogen dioxide (NO <sub>2</sub> ) in μg/m <sup>3</sup>	20.2	80	IS: 5182 (Part- 6)- (RA-2017)
5	Carbon Monoxide (CO) in µg/m³	869	2000	IS: 5182 (Part- 10)- (RA-2017)
6	Ammonia (NH <sub>3</sub> ) in μg/m <sup>3</sup>	24.4	400	Air Sampling , 3 <sup>rd</sup> Edn -Method-401
7	Ozone (O <sub>3</sub> ) in μg/m <sup>3</sup>	40.4	180	Air Sampling, 3 <sup>rd</sup> Edn -Method-411
8	Lead (Pb) in μg/m <sup>3</sup>	0.06	1	EPA IO-3.2 & 5.0
9	Nickel (Ni) in ng/m <sup>3</sup>	<4.0	20	EPA IO-3.2
10	Arsenic (As) in ng/m <sup>3</sup>	<1.0	6	Air Sampling, 3rd Edn.Method 402 and APHA 23 <sup>rd</sup> Edition-2017 Part 3114B
11	Benzene (C <sub>6</sub> H <sub>6</sub> ) in μg/m <sup>3</sup>	<2.08	5	IS: 5182 (Part- 11)
12	Benzo (a) pyrene in ng/m³	<0.4	1	IS: 5182 (Part- 12)
13	Mercury (Hg) in ng/ m <sup>3</sup>	<2.0		USEPA IO-5.0. June:1999
14	Cadmium (Cd) in μg/m <sup>3</sup>	<0.02		USEPA IO-3.2, June:1999
15	Chromium (Cr) in µg/m <sup>3</sup>	<0.05	_	USEPA IO-3.2, June:1999

Report Prepared By:

for Qualissure Laboratory Services

Reviewed & Authorized By

Benimadhab Gorai, Chemist (Authorized Signatory)

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DOC NO: QLS/SAMP/08-A/00

### TEST REPORT

Name & Address of the Customer: M/S Powerplus Traders Private Limited Premlata Building, 39 Shakespeare Sarani

6<sup>th</sup> Floor, Kolkata- 700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

: QLS/P-107/22-23/C/03

Date : 15.02.2023

Sample No. : QLS/P-107/22-23/03

Sample Description : Ambient Air

Date of Performance : 08.02.2023-15.02.2023

Ref No. Date : PTPL/QLS/001/2022-23, Dated-31.01.2023

### **Analysis Result**

Location: Tarapur (AAQ4)

Sampling Done by: S.Ghosh

Longitude & Latitude: 23° 41' 6.91"N, 87° 26' 55,79"E

Date of sampling: 06.02.2023-07.02.2023

Sampling done as per: CPCB Guidelines (Volume-1)

SI. No.	POLLUTANT	RESULT	LIMIT	METHOD OF TEST REFERENCE
1	Particulate matter (<10μm) in μg/m <sup>3</sup>	69.1	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (<2.5μm) in μg/m <sup>3</sup>	34.2	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in μg/m <sup>3</sup>	7.0	80	IS: 5182 (Part-2)-2001, (RA-2017)
4	Nitrogen dioxide (NO <sub>2</sub> ) in μg/m <sup>3</sup>	24.8	80	IS: 5182 (Part- 6)- (RA-2017)
5	Carbon Monoxide (CO) in μg/m <sup>3</sup>	812	2000	IS: 5182 (Part- 10)- (RA-2017)
6	Ammonia (NH <sub>3</sub> ) in μg/m <sup>3</sup>	19.6	400	Air Sampling , 3 <sup>rd</sup> Edn -Method-401
7	Ozone (O <sub>3</sub> ) in μg/m <sup>3</sup>	34.1	180	Air Sampling , 3 <sup>rd</sup> Edn -Method-411
8	Lead (Pb) in μg/m <sup>3</sup>	0.02	1	EPA IO-3.2 & 5.0
9	Nickel (Ni) in ng/m <sup>3</sup>	<4.0	20	EPA IO-3.2
10	Arsenic (As) in ng/m³	<1.0	6	Air Sampling , 3rd Edn.Method 402 and APHA 23 <sup>rd</sup> Edition-2017 Part 3114B
11	Benzene (C <sub>6</sub> H <sub>6</sub> ) in μg/m <sup>3</sup>	<2.08	5	IS: 5182 (Part- 11)
12	Benzo (a) pyrene in ng/m³	<0.4	1	IS: 5182 (Part- 12)
13	Mercury (Hg) in ng/ m <sup>3</sup>	<2.0	22	USEPA IO-5.0. June:1999
14	Cadmium (Cd) in μg/m <sup>3</sup>	<0.02	**	USEPA IO-3.2, June:1999
15	Chromium (Cr) in μg/m <sup>3</sup>	<0.05	_	USEPA IO-3.2, June:1999

Report Prepared By:

for Qualissure Laboratory Services Reviewed & Authorized By

Benimadhab Gorai, Chemist (Authorized Signatory)

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DOC NO: QLS/SAMP/08-A/00

### **TEST REPORT**

Name & Address of the Customer: M/S Powerplus Traders Private Limited Premlata Building, 39 Shakespeare Sarani

6th Floor, Kolkata- 700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

: QLS/P-107/22-23/C/04

Date

: 15.02.2023

Sample No.

: QLS/P-107/22-23/04

Sample Description

: Ambient Air

Date of Performance

: 08.02.2023-15.02.2023

Ref No. Date

: PTPL/QLS/001/2022-23, Dated-31.01.2023

### **Analysis Result**

Location : Basudevpur

Sampling Done by: S.Ghosh

Longitude & Latitude: 23° 40' 4 97"N 87° 23' 26 86"F

Date of sampling: 07.02.2023-08.02.2023

Sampling done as per: CPCB Guidelines (Volume-1)

SI. No.	POLLUTANT	RESULT	LIMIT	METHOD OF TEST REFERENCE
1	Particulate matter (<10μm) in μg/m <sup>3</sup>	73.6	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (<2.5μm) in μg/m <sup>3</sup>	32.9	60	USEPA CFR-40,Part-50, Appendix-L
. 3	Sulphur dioxide (SO <sub>2</sub> ) in μg/m <sup>3</sup>	7.6	80	IS: 5182 (Part-2)-2001, (RA-2017)
4	Nitrogen dioxide (NO <sub>2</sub> ) in μg/m <sup>3</sup>	23.7	80	IS: 5182 (Part- 6)- (RA-2017)
5	Carbon Monoxide (CO) in μg/m <sup>3</sup>	881	2000	IS: 5182 (Part- 10)- (RA-2017)
6	Ammonia (NH <sub>3</sub> ) in μg/m <sup>3</sup>	20.8	400	Air Sampling, 3 <sup>rd</sup> Edn -Method-401
7	Ozone (O <sub>3</sub> ) in μg/m <sup>3</sup>	32.6	180	Air Sampling , 3 <sup>rd</sup> Edn -Method-411
8	Lead (Pb) in μg/m <sup>3</sup>	<0.02	1	EPA IO-3.2 & 5.0
9	Nickel (Ni) in ng/m <sup>3</sup>	<4.0	20	EPA IO-3.2
10	Arsenic (As) in ng/m³	<1.0	6	Air Sampling , 3rd Edn.Method 402 and APHA 23rd Edition-2017 Part 3114B
11	Benzene (C <sub>6</sub> H <sub>6</sub> ) in μg/m <sup>3</sup>	<2.08	5	IS: 5182 (Part- 11)
12	Benzo (a) pyrene in ng/m³	<0.4	1	IS: 5182 (Part- 12)
13	Mercury (Hg) in ng/ m <sup>3</sup>	<2.0	777	USEPA IO-5.0. June:1999
14	Cadmium (Cd) in μg/m <sup>3</sup>	<0.02		USEPA IO-3.2, June:1999
15	Chromium (Cr) in µg/m <sup>3</sup>	<0.05	-	USEPA IO-3.2, June:1999

for Qualissure Laboratory Services Reviewed & Authorized By

Benimadhab Gorai, Chemist (Authorized Signatory)

End of the Report----

The results relate only to the item(s) tested.

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DOC NO: QLS/SAMP/08-D/00

### TEST REPORT

Name & Address of the Customer: M/S Powerplus Traders Private Limited Premlata Building, 39 Shakespeare Sarani 6th Floor, Kolkata-700017

Name of Project:

Jaganathpur-B Underground Coal Mine

ULR No. Report No. Date

Sample No. Sample Description Sample Location

**GPS Coordinates** Date of Performance Sample Drawn On

Sampling Method

Ref No. Date

: TC627123000000283F

: QLS/P-107/22-23/C/06 : 15.02.2023

: QLS/ P-107/22-23/06 : Ground Water (GW2)

: Srikrishnapur Bore well : 23°40'2.03"N, 87°21'33.94"E

: 08.02.2023 - 14.02.2023 : 06.02.2023

: IS 1622: 1981 (RA 2019)

IS 3025(Part 1): 1987 (RA 2019)

: PTPL/QLS/001/2022-23, Dated-31.01.2023

#### (A) Microbiological Analysis

SI. No.	Characteristic	Limit as Per IS 10500 :2012 (RA-2018) Amd. 2	Test Method	Result
1.	E.coli/100ml	Not Detectable	IS 15185-2016	Not Detected
2.	Total Coliform Bacteria/100ml	Not Detectable	IS 15185-2016	Not Detected

Report Prepared By:

for Qualissure Laboratory Services Reviewed & Authorized By

Soumy Chakraborty, Microbiologist (Authorized Signatory)

Page 1 of 2

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Report No.	QLS/P-107/22-23/C/06	
Date	15.02.2023	

#### (B) Chemical Analysis

SI. No	Test Parameter	Test Method		IS 10500 :2012 Amd. 1 & 2	
			Acceptable Limit	Permissible Limit	Result
1.	Odour	IS 3025 (Part 5)-1983; RA:2012	Agreeable	Agreeable	Agreeable
2.	pH Value at 25°C	IS 3025 (Part 11)-1984; RA: 2012	6.5-8.5	No Relaxation	7.23
3.	Turbidity in NTU	IS 3025 (Part 10)-1984; RA: 2012	1	5	<1.0
4.	Total Dissolved Solids (as TDS) in mg/l	IS 3025(Part 16)-1984; RA: 2012	500	2000	242
5.	Aluminium (as Al) in mg/l	IS 15302: 2003 (RA 2013)	0.03	0.2	<0.01
6.	Ammonia (as total ammonia – N) in mg/l	IS 3025 (Part 34): 1988;RA:2014	0.5	No Relaxation	<0.1
7.	Anionic Detergents(as MBAS) in mg/l	IS 13428(Annex K)-2005	0.2	1.0	<0.02
8.	Boron(as B) in mg/l	IS 13428-2005,Annex H	0.5	2.4	<0.5
9.	Calcium(as Ca) in mg/l	IS 3025 (Part 40)-1991, RA: 2014	75	200	35.9
10.	Chloride(as CI) in mg/I	IS 3025 (Part 32)-1988, RA: 2014	250	1000	55.9
11.	Copper(as Cu) in mg/l	IS 3025 (Part 42): 1992 ; RA 2014	0.05	1.5	<0.02
12.	Fluoride(as F) in mg/I	APHA 23rd Edition 2017, 4500 F D	1.0	1.5	0.18
13.	Free Residual Chlorine in mg/l	IS 3025 PART(26) 1986 RA: 2014	0.2	1.0	<0.1
14.	Iron (as Fe) in mg/I	IS 3025(Part 53)-1988 RA: 2014	1.0	No Relaxation	0.33
15.	Magnesium(as Mg) in mg/l	IS 3025 (Part 46)-1994 RA: 2014	30	100	9.8
16.	Manganese (as Mn) in mg/l	IS 3025 (Part 59): 2006 RA 2014	0.1	0.3	<0.02
17.	Nitrate (as NO <sub>3</sub> ) in mg/I	IS 3025 (Part 34)-1986 RA: 2014	45	No Relaxation	<0.5
18.	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH) in mg/l	IS 3025 (Part 43)-1992 RA: 2014	0.001	0.002	<0.001
19.	Selenium(as Se) in mg/l	IS 15303-2003; RA: 2013	0.01	No Relaxation	<0.005
20.	Sulphate (as SO <sub>4</sub> ) in mg/l	IS 3025 (Part 24)-1986, RA: 2014	200	400	25.7
21.	Sulphide (as H <sub>2</sub> S) in mg/I	IS 3025 (Part 29): 1991; RA 2014	0.05	No Relaxation	<0.01
22.	Alkalinity(as CaCO₃)in mg/l	IS 3025 (Part 23)- 1986, RA: 2014	200	600	149.6
23.	Total Hardness (as CaCO₃) in mg/l	IS 3025 (Part 21)-1983, RA: 2014	200	600	130.6
24.	Cadmium(as Cd) in mg/l	IS 3025(Part 41)-1992; RA: 2014	0.003	No Relaxation	<0.002
25.	Cyanide(as CN) in mg/I	IS 3025(Part 27)-1986; RA: 2014	0.05	No Relaxation	<0.02
26.	Lead(as Pb) in mg/l	IS 3025(Part 47)-1994; RA: 2014	0.01	No Relaxation	<0.01
27.	Mercury(as Hg) in mg/l	IS 3025(Part 48)-1994; RA: 2014	0.001	No Relaxation	<0.001
28.	Arsenic(as As) in mg/l	IS 3025 (Part 37)-1988, RA- 2014	0.01	No Relaxation	<0.001
29.	Zinc(as Zn) in mg/l	IS 3025(Part 49)-1994; RA: 2014	5	15	<0.01
30.	Total Chromium (as Cr) in mg/l	IS 3025 (Part 52): 2014	0.05	No Relaxation	<0.02

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for Qualissure Laboratory Services
Reviewed & Authorized By

Bishnupriya Banerjee, Chemist (Authorized Signatory)

Page 2 of 2

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DOC NO: QLS/SAMP/08-D/00

### **TEST REPORT**

Name & Address of the Customer: M/S Powerplus Traders Private Limited Premlata Building, 39 Shakespeare Sarani

6th Floor, Kolkata-700017

Name of Project:

Jaganathpur-B Underground Coal Mine

ULR No.

Report No. : QLS/P-107/22-23/C/07

Date : 15.02.2023

Sample No. : QLS/ P-107/22-23/07 Sample Description : Ground Water (GW1)

Sample Location : Sashipur Bore well (in MLA)

**GPS Coordinates** 

Date of Performance Sample Drawn On

Sampling Method

: 06.02.2023 : IS 1622: 1981 (RA 2019)

: 08.02.2023 - 14.02.2023

: TC627123000000284F

IS 3025(Part 1): 1987 (RA 2019)

: 23°39'36.59"N, 87°23'36.48"E

: PTPL/QLS/001/2022-23, Dated-31.01.2023

#### (A) Microbiological Analysis

Ref No. Date

SI. No.	Characteristic	Limit as Per IS 10500 :2012 (RA-2018) Amd. 2	Test Method	Result
1.	E.coli/100ml	Not Detectable	IS 15185-2016	Not Detected
2.	Total Coliform Bacteria/100ml	Not Detectable	IS 15185-2016	Not Detected

Report Prepared By:

for Qualissure Laboratory Services Reviewed & Authorized By

. Chakraliorty Soumy Chakraborty, Microbiologist (Authorized Signatory)

Page 1 of 2

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Report No.	QLS/P-107/22-23/C/07	
Date	15.02.2023	

#### (B) Chemical Analysis

	JE 1			S 10500 :2012 Amd. 1 & 2	Docult
SI. No	Test Parameter	Test Method	Acceptable Limit	Permissible Limit	Result
1.	Odour	IS 3025 (Part 5)-1983; RA:2012	Agreeable	Agreeable	Agreeable
2.	pH Value at 25°C	IS 3025 (Part 11)-1984; RA: 2012	6.5-8.5	No Relaxation	6.97
3.	Turbidity in NTU	IS 3025 (Part 10)-1984; RA: 2012	1	5	<1.0
4.	Total Dissolved Solids (as TDS) in mg/l	IS 3025(Part 16)-1984; RA: 2012	500	2000	284
5.	Aluminium (as Al) in mg/l	IS 15302: 2003 (RA 2013)	0.03	0.2	<0.01
6.	Ammonia (as total ammonia – N) in mg/l	IS 3025 (Part 34): 1988;RA:2014	0.5	No Relaxation	<0.1
7.	Anionic Detergents(as MBAS) in mg/l	IS 13428(Annex K)-2005	0.2	1.0	<0.02
8.	Boron(as B) in mg/l	IS 13428-2005,Annex H	0.5	2.4	<0.5
9.	Calcium(as Ca) in mg/l	IS 3025 (Part 40)-1991, RA: 2014	75	200	34.3
10.	Chloride(as CI) in mg/l	IS 3025 (Part 32)-1988, RA: 2014	250	1000	73.3
11.	Copper(as Cu) in mg/l	IS 3025 (Part 42): 1992 ; RA 2014	0.05	1.5	<0.02
12.	Fluoride(as F) in mg/l	APHA 23rd Edition 2017, 4500 F D	1.0	1.5	0.24
13.	Free Residual Chlorine in mg/l	IS 3025 PART(26) 1986 RA: 2014	0.2	1.0	<0.1
14.	Iron (as Fe) in mg/l	IS 3025(Part 53)-1988 RA: 2014	1.0	No Relaxation	0.39
15.	Magnesium(as Mg) in mg/l	IS 3025 (Part 46)-1994 RA: 2014	30	100	11.8
16.	Manganese (as Mn) in mg/l	IS 3025 (Part 59): 2006 RA 2014	0.1	0.3	<0.02
17.	Nitrate (as NO <sub>3</sub> ) in mg/l	IS 3025 (Part 34)-1986 RA: 2014	45	No Relaxation	0.76
18.	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH) in mg/l	IS 3025 (Part 43)-1992 RA: 2014	0.001	0.002	<0.001
19.	Selenium(as Se) in mg/l	IS 15303-2003; RA: 2013	0.01	No Relaxation	<0.005
20.	Sulphate (as SO <sub>4</sub> ) in mg/l	IS 3025 (Part 24)-1986, RA: 2014	200	400	31.2
21.	Sulphide (as H <sub>2</sub> S) in mg/l	IS 3025 (Part 29): 1991; RA 2014	0.05	No Relaxation	<0.01
22.	Alkalinity(as CaCO <sub>3</sub> )in mg/l	IS 3025 (Part 23)- 1986, RA: 2014	200	600	167.2
23.	Total Hardness (as CaCO <sub>3</sub> ) in mg/l	IS 3025 (Part 21)-1983, RA: 2014	200	600	134.6
24.	Cadmium(as Cd) in mg/l	IS 3025(Part 41)-1992; RA: 2014	0.003	No Relaxation	<0.002
25.	Cyanide(as CN) in mg/l	IS 3025(Part 27)-1986; RA: 2014	0.05	No Relaxation	< 0.02
26.	Lead(as Pb) in mg/l	IS 3025(Part 47)-1994; RA: 2014	0.01	No Relaxation	<0.01
27.	Mercury(as Hg) in mg/l	IS 3025(Part 48)-1994; RA: 2014	0.001	No Relaxation	<0.001
28.	Arsenic(as As) in mg/l	IS 3025 (Part 37)-1988, RA- 2014	0.01	No Relaxation	<0.01
29.	Zinc(as Zn) in mg/l	IS 3025(Part 49)-1994; RA: 2014	5	15	<0.02
30.	Total Chromium (as Cr) in mg/l	IS 3025 (Part 52): 2014	0.05	No Relaxation	< 0.05

Report Prepared By: Col



for Qualissure Laboratory Services Reviewed & Authorized By

Bishnupriya Banerjee, Chemist (Authorized Signatory)

Page 2 of 2

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DOC NO: QLS/SAMP/08-D/00

### TEST REPORT

Name & Address of the Customer:	ULR No.	: TC627123000000285F
M/S Powerplus Traders Private Limited	Report No.	: QLS/P-107/22-23/C/08
Premlata Building, 39 Shakespeare Sarani	Date	: 15.02.2023
6 <sup>th</sup> Floor, Kolkata- 700017	Sample No.	: QLS/ P-107/22-23/08
COLD CONTRACTOR VIOLATION CONTRACTOR CONTRAC	Sample Description	: Ground Water (GW4)
Name of Project:	Sample Location	: Sahapur Bore well
Jaganathpur-B Underground Coal Mine	GPS Coordinates	: 23°39'47.31"N, 87°27'13.36"E
	Date of Performance	: 08.02.2023 - 14.02.2023
	Sample Drawn On	: 06.02.2023
	Sampling Method	: IS 1622: 1981 (RA 2019) IS 3025(Part 1): 1987 (RA 2019)
	Ref No. Date	: PTPL/QLS/001/2022-23, Dated-31.01.2023

#### (A) Microbiological Analysis

SI. No.	Characteristic	Limit as Per IS 10500 :2012 (RA-2018) Amd. 2	Test Method	Result
1.	E.coli/100ml	Not Detectable	IS 15185-2016	Not Detected
2.	Total Coliform Bacteria/100ml	Not Detectable	IS 15185-2016	Not Detected

Report Prepared By:

for Qualissure Laboratory Services Reviewed & Authorized By

S. Chabrationty
Soumy Chakraborty, Microbiologist
(Authorized Signatory)

Page 1 of 2

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Report No.	QLS/P-107/22-23/C/08	
Date	15.02.2023	

#### (B) Chemical Analysis

SI. No	Test Parameter	Total Marks of		S 10500 :2012 Amd. 1 & 2	
		Test Method	Acceptable Limit	Permissible Limit	Result
1.	Odour	IS 3025 (Part 5)-1983; RA:2012	Agreeable	Agreeable	Agreeable
2:	pH Value at 25°C	IS 3025 (Part 11)-1984; RA: 2012	6.5-8.5	No Relaxation	7.17
3.	Turbidity in NTU	IS 3025 (Part 10)-1984; RA: 2012	1	5	<1.0
4.	Total Dissolved Solids (as TDS) in mg/l	IS 3025(Part 16)-1984; RA: 2012	500	2000	292
5.	Aluminium (as Al) in mg/l	IS 15302: 2003 (RA 2013)	0.03	0.2	<0.01
6.	Ammonia (as total ammonia – N) in mg/l	IS 3025 (Part 34): 1988;RA:2014	0.5	No Relaxation	<0.1
7.	Anionic Detergents(as MBAS) in mg/l	IS 13428(Annex K)-2005	0.2	1.0	< 0.02
8.	Boron(as B) in mg/I	IS 13428– 2005,Annex H	0.5	2.4	<0.5
9.	Calcium(as Ca) in mg/l	IS 3025 (Part 40)-1991, RA: 2014	75	200	37.5
10.	Chloride(as Cl) in mg/l	IS 3025 (Part 32)-1988, RA: 2014	250	1000	59.8
11,	Copper(as Cu) in mg/l	IS 3025 (Part 42): 1992 ; RA 2014	0.05	1.5	< 0.02
12.	Fluoride(as F) in mg/l	APHA 23rd Edition 2017, 4500 F D	1.0	1.5	0.15
13.	Free Residual Chlorine in mg/l	IS 3025 PART(26) 1986 RA: 2014	0.2	1.0	<0.1
14.	Iron (as Fe) in mg/l	IS 3025(Part 53)-1988 RA: 2014	1.0	No Relaxation	0.24
15.	Magnesium(as Mg) in mg/l	IS 3025 (Part 46)-1994 RA: 2014	30	100	11.8
16.	Manganese (as Mn) in mg/l	IS 3025 (Part 59): 2006 RA 2014	0.1	0.3	<0.02
17.	Nitrate (as NO <sub>3</sub> ) in mg/l	IS 3025 (Part 34)-1986 RA: 2014	45	No Relaxation	0.58
18.	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH) in mg/l	IS 3025 (Part 43)-1992 RA: 2014	0.001	0.002	< 0.001
19.	Selenium(as Se) in mg/l	IS 15303-2003; RA : 2013	0.01	No Relaxation	< 0.005
20.	Sulphate (as SO <sub>4</sub> ) in mg/l	IS 3025 (Part 24)-1986, RA: 2014	200	400	37.4
21.	Sulphide (as H <sub>2</sub> S) in mg/l	IS 3025 (Part 29): 1991; RA 2014	0.05	No Relaxation	<0.01
22.	Alkalinity(as CaCO <sub>3</sub> )in mg/l	IS 3025 (Part 23)- 1986, RA: 2014	200	600	171.6
23.	Total Hardness (as CaCO <sub>3</sub> ) in mg/l	IS 3025 (Part 21)-1983, RA: 2014	200	600	142.8
24.	Cadmium(as Cd) in mg/l	IS 3025(Part 41)-1992; RA: 2014	0.003	No Relaxation	<0.002
25.	Cyanide(as CN) in mg/I	IS 3025(Part 27)-1986; RA: 2014	0.05	No Relaxation	<0.02
26.	Lead(as Pb) in mg/l	IS 3025(Part 47)-1994; RA: 2014	0.01	No Relaxation	<0.01
27.	Mercury(as Hg) in mg/l	IS 3025(Part 48)-1994; RA: 2014	0.001	No Relaxation	<0.001
28.	Arsenic(as As) in mg/l	IS 3025 (Part 37)-1988, RA- 2014	0.01	No Relaxation	<0.01
29.	Zinc(as Zn) in mg/I	IS 3025(Part 49)-1994; RA: 2014	5	15	<0.02
30.	Total Chromium (as Cr) in mg/l	IS 3025 (Part 52): 2014	0.05	No Relaxation	<0.05

Report Prepared By:

for Qualissure Laboratory Services
Reviewed & Authorized By

Hallanefee
Bishnupriya Banerjee, Chemist
Kom (Authorized Signatory)

-----End of the Report-----

Page 2 of 2

The results relate only to the item(s) tested.

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DOC NO: QLS/SAMP/08-D/00

### **TEST REPORT**

Name & Address of the Customer:	ULR No.	: TC627123000000286F
M/S Powerplus Traders Private Limited	Report No.	: QLS/P-107/22-23/C/09
Premlata Building, 39 Shakespeare Sarani	Date	: 15.02.2023
6th Floor, Kolkata- 700017	Sample No.	: QLS/ P-107/22-23/09
Sample Mar De Contractor Contract	Sample Description	: Ground Water (GW3)
Name of Project:	Sample Location	: Gour Bazar Bore well
Jaganathpur-B Underground Coal Mine	GPS Coordinates	: 23°41'28.81"N, 87°22'46.3"E
Jaganampar B onderground cour wine	Date of Performance	: 08.02.2023 - 14.02.2023
•	Sample Drawn On	: 07.02.2023
	Sampling Method	: IS 1622: 1981 (RA 2019) IS 3025(Part 1): 1987 (RA 2019)
	Ref No. Date	: PTPL/QLS/001/2022-23, Dated-31.01.2023

#### (A) Microbiological Analysis

SI. No.	Characteristic	Limit as Per IS 10500 :2012 (RA-2018) Amd. 2	Test Method	Result
1.	E.coli/100ml	Not Detectable	IS 15185-2016	Not Detected
2.	Total Coliform Bacteria/100ml	Not Detectable	IS 15185-2016	Not Detected

Report Prepared By:



for Qualissure Laboratory Services
Reviewed & Authorized By

Soumy Chakraborty, Microbiologist

(Authorized Signatory)

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Report No.	QLS/P-107/22-23/C/09	
Date	15.02.2023	

#### (B) Chemical Analysis

SI. No	Test Parameter	Test Method		S 10500 :2012 Amd. 1 & 2	Result
POST I PROPERTIES		rest Method	Acceptable Limit	Permissible Limit	
1.	Odour	IS 3025 (Part 5)-1983; RA:2012	Agreeable	Agreeable	Agreeable
. 2.	pH Value at 25°C	IS 3025 (Part 11)-1984; RA: 2012	6.5-8.5	No Relaxation	7.39
3.	Turbidity in NTU	IS 3025 (Part 10)-1984; RA: 2012	1	5	<1.0
4.	Total Dissolved Solids (as TDS) in mg/l	IS 3025(Part 16)-1984; RA: 2012	500	2000	316
5.	Aluminium (as Al) in mg/l	IS 15302: 2003 (RA 2013)	0.03	0.2	<0.01
6.	Ammonia (as total ammonia – N) in mg/l	IS 3025 (Part 34): 1988;RA:2014	0.5	No Relaxation	<0.1
7.	Anionic Detergents(as MBAS) in mg/l	IS 13428(Annex K)-2005	0.2	1.0	<0.02
8.	Boron(as B) in mg/I	IS 13428- 2005,Annex H	0.5	2.4	<0.5
9.	Calcium(as Ca) in mg/I	IS 3025 (Part 40)-1991, RA: 2014	75	200	32.6
10.	Chloride(as CI) in mg/l	IS 3025 (Part 32)-1988, RA: 2014	250	1000	75.2
11.	Copper(as Cu) in mg/l	IS 3025 (Part 42): 1992 ; RA 2014	0.05	1.5	<0.02
12.	Fluoride(as F) in mg/l	APHA 23rd Edition 2017, 4500 F D	1.0	1.5	0.34
13.	Free Residual Chlorine in mg/I	IS 3025 PART(26) 1986 RA: 2014	0.2	1.0	<0.1
14.	Iron (as Fe) in mg/l	IS 3025(Part 53)-1988 RA: 2014	1.0	No Relaxation	0.47
15.	Magnesium(as Mg) in mg/l	IS 3025 (Part 46)-1994 RA: 2014	30	100	5.9
16.	Manganese (as Mn) in mg/I	IS 3025 (Part 59): 2006 RA 2014	0.1	0.3	<0.02
17.	Nitrate (as NO <sub>3</sub> ) in mg/l	IS 3025 (Part 34)-1986 RA: 2014	45	No Relaxation	0.98
18.	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH) in mg/l	IS 3025 (Part 43)-1992 RA: 2014	0.001	0.002	<0.001
19.	Selenium(as Se) in mg/I	IS 15303-2003; RA : 2013	0.01	No Relaxation	<0.001
20.	Sulphate (as SO <sub>4</sub> ) in mg/I	IS 3025 (Part 24)-1986, RA: 2014	200	400	38.6
21.	Sulphide (as H <sub>2</sub> S) in mg/l	IS 3025 (Part 29): 1991; RA 2014	0.05	No Relaxation	<0.01
22.	Alkalinity(as CaCO₃)in mg/l	IS 3025 (Part 23)- 1986, RA: 2014	200	600	189.2
23.	Total Hardness (as CaCO <sub>3</sub> ) in mg/l	IS 3025 (Part 21)-1983, RA: 2014	200	600	106.1
24.	Cadmium(as Cd) in mg/I	IS 3025(Part 41)-1992; RA: 2014	0.003	No Relaxation	<0.002
25.	Cyanide(as CN) in mg/I	IS 3025(Part 27)-1986; RA: 2014	0.05	No Relaxation	<0.02
26.	Lead(as Pb) in mg/I	IS 3025(Part 47)-1994; RA: 2014	0.01	No Relaxation	<0.02
27.	Mercury(as Hg) in mg/l	IS 3025(Part 48)-1994; RA: 2014	0.001	No Relaxation	<0.01
28.	Arsenic(as As) in mg/I	IS 3025 (Part 37)-1988, RA- 2014	0.01	No Relaxation	<0.001
29.	Zinc(as Zn) in mg/l	IS 3025(Part 49)-1994; RA: 2014	5	No Relaxation	<0.01
30.	Total Chromium (as Cr) in mg/l	IS 3025 (Part 52): 2014	0.05	No Relaxation	<0.02

Report Prepared By: ( ',

for Qualissure Laboratory Services Reviewed & Authorized By

Bishnupriya Banerjee, Chemist Ohra (Authorized Signatory)

-----End of the Report-----

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DOC NO: QLS/SAMP/08-D/00

### TEST REPORT

Name & Address of the Customer: M/S Powerplus Traders Private Limited

Premlata Building, 39 Shakespeare Sarani

6th Floor, Kolkata- 700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

Date

: QLS/P-107/22-23/C/10

: 17.02.2023

Sample No. : QLS/ P-107/22-23/10

Sample Description : Surface Water

Sample Location : Ajay River Down Stream (WQ3) GPS Coordinates : 23°41'55.79"N, 87°23'4.18"E

Date of Performance : 08.02.2023 - 14.02.2023

Sample Drawn On : 07.02.2023

Sampling Method : IS 1622: 1981 (RA 2019)

IS 3025(Part 1): 1987 (RA 2019)

Ref No. Date : PTPL/QLS/001/2022-23, Dated-31.01.2023

## **Analysis Result: WQ-3**

#### (A) Microbiological Analysis

SI.No.	Characteristic	Test Method	Surface water quality criteria as per IS: 2296-1982 for Class B	Result
1.	Total Coliform Organisms in MPN/100ml	APHA 23rdEdition: 2017, 9222B	500	120

#### (B) Chemical Analysis

SI. No.	Test Parameter	Test Method	Tolerance Limits For Inland Surface Waters, Class B (IS: 2296-1982)	Result
2	pH Value at 25°C	APHA 23rd Edition-2017, 4500 H+	6.5-8.5	7.21
3	Colour in Hazen Units	IS 3025 (Part 4): 1983 (RA 2012)	300	5
4	Total Dissolved Solids (as TDS) in mg/l	APHA 23rd Edition 2017, 2540 B		174
5	Oil & Grease in mg/I	APHA 23rd Edition-2017, 5520A		<1.4
6	Dissolved Oxygen in mg/l	APHA 23 <sup>rd</sup> Edition-2017, 4500-O-C	5.0 (Min)	6.1
7	Biochemical Oxygen Demand (as BOD) mg/I	IS 3025 (Part 44)-1993, RA:2014	3.0*	<2
8	Anionic Detergents(as MBAS) in mg/l	IS 13428-2005(Annex K)	1.0	< 0.02
9	Chloride(as CI) in mg/I	APHA 23rd Edition 2017, 4500 CI		19.3
10	Copper(as Cu) in mg/l	IS 3025 (Part 42): 1992(RA 2014)		<0.02
11	Fluoride(as F) in mg/l	APHA 23rd Edition 2017, 4500 F D	1.5	0.18
12	Iron (as Fe) in mg/l	IS 3025 (Part 53): 1988(RA 2014)		0.26
13	Nitrate (as NO <sub>3</sub> ) in mg/I	IS 3025 (Part 34): 1988(RA 2014)		<0.5
14	Sulphate (as SO <sub>4</sub> ) in mg/l	APHA 23 <sup>rd</sup> Edition 2017, 4500 SO <sub>4</sub> E		18.2
15	Cadmium(as Cd) in mg/l	IS 3025 (Part 41): 1992(RA 2014)		<0.002
16	Lead(as Pb) in mg/I	IS 3025 (Part 47): 1994 (RA 2014)		<0.01
17	Arsenic(as As) in mg/l	IS 3025 (Part 37): 1988 (RA 2014)	0.2	< 0.01
18	Zinc(as Zn) in mg/l	IS 3025 (Part 49): 1994 (RA 2014)		0.11
19	Hexavalent Chromium (as Cr+6) in mg/l	IS 3025 (Part 52): 2014( RA 2014)	1.0	<0.05
20	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH) in mg/l	IS 3025(Part 43)-1992;Rffm:2009	0.005	<0.001

For 5 Day's BOD at 20°C

Report Prepared By:

for Qualissure Laboratory Services
Reviewed & Authorized By

S. Chakrulierly
Soumy Chakraborty, Microbiologist
(Authorized Signatory)

-----End of the Report-----

for Qualissure Laboratory Services
Reviewed & Authorized By

Bishnupriya Banerjee, Chemist (Authorized Signatory)

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DOC NO: QLS/SAMP/08-D/00

### TEST REPORT

Name & Address of the Customer: M/S Powerplus Traders Private Limited

Premlata Building, 39 Shakespeare Sarani

6th Floor, Kolkata-700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

: QLS/P-107/22-23/C/11

Date : 17.02.2023

Sample No. Sample Description

: Surface Water

Sample Location

: QLS/ P-107/22-23/11

**GPS Coordinates** 

: Ajay River Up Stream (WQ2) : 23°38'16.77"N, 87°25'37.07"E

Date of Performance

: 08.02.2023 - 14.02.2023

Sample Drawn On

: 06.02.2023 : IS 1622: 1981 (RA 2019)

Sampling Method

IS 3025(Part 1): 1987 (RA 2019)

Ref No. Date

: PTPL/QLS/001/2022-23, Dated-31.01.2023

## Analysis Result: WQ-2

#### (A) Microbiological Analysis

SI.No.	Characteristic	Test Method	Surface water quality criteria as per IS: 2296-1982 for Class B	Result
1.	Total Coliform Organisms in MPN/100ml	APHA 23rdEdition: 2017, 9222B	500	170

#### (B) Chemical Analysis

SI. No.	Test Parameter	Test Method	Tolerance Limits For Inland Surface Waters, Class B (IS: 2296-1982)	Result
2	pH Value at 25°C	APHA 23 <sup>rd</sup> Edition-2017, 4500 H <sup>+</sup>	6.5-8.5	7.67
3	Colour in Hazen Units	IS 3025 (Part 4): 1983 (RA 2012)	300	5
4	Total Dissolved Solids (as TDS) in mg/l	APHA 23 <sup>rd</sup> Edition 2017, 2540 B	THE PERSON NAMED IN COLUMN	170
5 .	Oil & Grease in mg/l	APHA 23rd Edition-2017, 5520A	122	<1.4
6	Dissolved Oxygen in mg/I	APHA 23 <sup>rd</sup> Edition-2017, 4500-O-C	5.0 (Min)	5.9
7	Biochemical Oxygen Demand (as BOD) mg/l	IS 3025 (Part 44)-1993, RA:2014	3.0*	2.3
8	Anionic Detergents(as MBAS) in mg/l	IS 13428-2005(Annex K)	1.0	<0.02
9	Chloride(as CI) in mg/l	APHA 23rd Edition 2017, 4500 CI		21.2
10	Copper(as Cu) in mg/l	IS 3025 (Part 42): 1992(RA 2014)		<0.02
11	Fluoride(as F) in mg/l	APHA 23rd Edition 2017, 4500 F D	1.5	0.24
12	Iron (as Fe) in mg/l	IS 3025 (Part 53): 1988(RA 2014)		0.29
13	Nitrate (as NO₃) in mg/l	IS 3025 (Part 34): 1988(RA 2014)		<0.5
14	Sulphate (as SO <sub>4</sub> ) in mg/l	APHA 23 <sup>rd</sup> Edition 2017, 4500 SO <sub>4</sub> E	1-55-0	21.1
15	Cadmium(as Cd) in mg/l	IS 3025 (Part 41): 1992(RA 2014)	F.F.E	< 0.002
16	Lead(as Pb) in mg/l	IS 3025 (Part 47): 1994 (RA 2014)		<0.01
17	Arsenic(as As) in mg/l	IS 3025 (Part 37): 1988 (RA 2014)	0.2	<0.01
18	Zinc(as Zn) in mg/l	IS 3025 (Part 49): 1994 (RA 2014)		0.07
19	Hexavalent Chromium (as Cr+6) in mg/l	IS 3025 (Part 52): 2014( RA 2014)	1.0	< 0.05
20	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH) in mg/l	IS 3025(Part 43)-1992;Rffm:2009	0.005	< 0.001

For 5 Day's BOD at 20°C

Report Prepared By:

for Qualissure Laboratory Services Reviewed & Authorized By

S. Chalaradioity Soumy Chakraborty, Microbiologist (Authorized Signatory)

-----End of the Report-----

for Qualissure Laboratory Services Reviewed & Authorized By

Casane fee Bishnupriya Banerjee, Chemist (Authorized Signatory)

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DOC NO: QLS/SAMP/08-D/00

### TEST REPORT

Name & Address of the Customer: M/S Powerplus Traders Private Limited

Premlata Building, 39 Shakespeare Sarani

6th Floor, Kolkata- 700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

: QLS/P-107/22-23/C/12

Date : 17.02.2023

Sample No.
Sample Description

: QLS/ P-107/22-23/12

Sample Location

: Surface Water

Sample Location

: Tumni Nala (WQ1)

GPS Coordinates

Date of Performance

: 23°39'1.32"N, 87°22'49.23"E

Sample Drawn On

: 08.02.2023 - 14.02.2023

Sample Drawn On

: 07.02.2023 : IS 1622: 1981 (RA 2019)

Sampling Method

IS 3025(Part 1): 1987 (RA 2019)

Ref No. Date

: PTPL/QLS/001/2022-23, Dated-31.01.2023

## Analysis Result: WQ-1

#### (A) Microbiological Analysis

SI.No.	Characteristic	Test Method	Surface water quality criteria as per IS: 2296-1982 for Class B	Result
1.	Total Coliform Organisms in MPN/100ml	APHA 23rdEdition: 2017, 9222B	500	140

#### (B) Chemical Analysis

SI.· No.	Test Parameter	Test Method	Tolerance Limits For Inland Surface Waters, Class B (IS: 2296-1982)	Result
2	pH Value at 25°C	APHA 23rd Edition-2017, 4500 H+	6.5-8.5	7.06
3	Colour in Hazen Units	IS 3025 (Part 4): 1983 (RA 2012)	300	5
4	Total Dissolved Solids (as TDS) in mg/l	APHA 23rd Edition 2017, 2540 B		182
5	Oil & Grease in mg/l	APHA 23rd Edition-2017, 5520A		<1.4
6	Dissolved Oxygen in mg/I	APHA 23 <sup>rd</sup> Edition-2017, 4500-O-C	5.0 (Min)	6.4
7	Biochemical Oxygen Demand (as BOD) mg/l	IS 3025 (Part 44)-1993, RA:2014	3.0*	<2
8	Anionic Detergents(as MBAS) in mg/l	IS 13428-2005(Annex K)	1.0	<0.02
9	Chloride(as CI) in mg/l	APHA 23rd Edition 2017, 4500 CI		25.1
10	Copper(as Cu) in mg/l	IS 3025 (Part 42): 1992(RA 2014)		<0.02
11	Fluoride(as F) in mg/l	APHA 23rd Edition 2017, 4500 F D	1.5	0.21
12	Iron (as Fe) in mg/I	IS 3025 (Part 53): 1988(RA 2014)		0.54
13	Nitrate (as NO₃) in mg/I	IS 3025 (Part 34): 1988(RA 2014)		<0.5
14	Sulphate (as SO <sub>4</sub> ) in mg/I	APHA 23rd Edition 2017, 4500 SO <sub>4</sub> E		19.7
15	Cadmium(as Cd) in mg/l	IS 3025 (Part 41): 1992(RA 2014)		<0.002
16	Lead(as Pb) in mg/l	IS 3025 (Part 47): 1994 (RA 2014)	***	<0.01
17	Arsenic(as As) in mg/l	IS 3025 (Part 37): 1988 (RA 2014)	0.2	<0.01
18	Zinc(as Zn) in mg/l	IS 3025 (Part 49): 1994 (RA 2014)	****)	0.23
19	Hexavalent Chromium (as Cr+6) in mg/l	IS 3025 (Part 52): 2014( RA 2014)	1.0	<0.05
20	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH) in mg/l	IS 3025(Part 43)-1992;Rffm:2009	0.005	<0.001

For 5 Day's BOD at 20°C

Report Prepared By:

for Qualissure Laboratory Services
Reviewed & Authorized By

S. Chakraliarty
Soumy Chakraborty, Microbiologist
(Authorized Signatory)

for Qualissure Laboratory Services
Reviewed & Authorized By

Bishnupriya Banerjee, Chemist
(Authorized Signatory)

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DOC NO: QLS/SAMP/08-D/00

### TEST REPORT

Name & Address of the Customer: M/S Powerplus Traders Private Limited

Premlata Building, 39 Shakespeare Sarani

6<sup>th</sup> Floor, Kolkata- 700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

Date

: QLS/P-107/22-23/C/14

: 17.02.2023

Sample No.
Sample Description

: QLS/ P-107/22-23/14

ample Description

: Surface Water

Sample Location
GPS Coordinates

: Pond Near Jamgara (SW3) : 23°38'29.06"N, 87°20'3.59"E

Date of Performance

: 08.02.2023 - 14.02.2023

Sample Drawn On

: 06.02.2023 : IS 1622: 1981 (RA 2019)

Sampling Method

IS 3025(Part 1): 1987 (RA 2019)

Ref No. Date

: PTPL/QLS/001/2022-23, Dated-31.01.2023

## **Analysis Result: SW-3**

#### (A) Microbiological Analysis

SI.No.	Characteristic	Test Method	Surface water quality criteria as per IS : 2296-1982 for Class B	Result
1.	Total Coliform Organisms in MPN/100ml	APHA 23rdEdition: 2017, 9222B	500	26

#### (B) Chemical Analysis

SI. No.	Test Parameter	Test Method	Tolerance Limits For Inland Surface Waters, Class B (IS: 2296-1982)	Result
2	pH Value at 25°C	APHA 23rd Edition-2017, 4500 H <sup>+</sup>	6.5-8.5	7.11
3	Colour in Hazen Units	IS 3025 (Part 4): 1983 (RA 2012)	300	15
4	Total Dissolved Solids (as TDS) in mg/l	APHA 23 <sup>rd</sup> Edition 2017, 2540 B		224
5	Oil & Grease in mg/l	APHA 23rd Edition-2017, 5520A	222	3.4
6	Dissolved Oxygen in mg/l	APHA 23 <sup>rd</sup> Edition-2017, 4500-O-C	5.0 (Min)	5.4
7	Biochemical Oxygen Demand (as BOD) mg/l	IS 3025 (Part 44)-1993, RA:2014	3.0*	<2
8	Anionic Detergents(as MBAS) in mg/l	IS 13428-2005(Annex K)	1.0	< 0.02
9	Chloride(as CI) in mg/I	APHA 23rd Edition 2017, 4500 CI		50.1
10	Copper(as Cu) in mg/l	IS 3025 (Part 42): 1992(RA 2014)	_	<0.02
11	Fluoride(as F) in mg/I	APHA 23rd Edition 2017, 4500 F D	1.5	0.51
12	Iron (as Fe) in mg/l	IS 3025 (Part 53): 1988(RA 2014)		0.31
13	Nitrate (as NO <sub>3</sub> ) in mg/l	IS 3025 (Part 34): 1988(RA 2014)		0.82
14	Sulphate (as SO <sub>4</sub> ) in mg/l	APHA 23rd Edition 2017, 4500 SO <sub>4</sub> E		17.9
15	Cadmium(as Cd) in mg/l	IS 3025 (Part 41): 1992(RA 2014)	79.74	<0.002
16	Lead(as Pb) in mg/I	IS 3025 (Part 47): 1994 (RA 2014)		<0.01
17	Arsenic(as As) in mg/l	IS 3025 (Part 37): 1988 (RA 2014)	0.2	< 0.01
18	Zinc(as Zn) in mg/l	IS 3025 (Part 49): 1994 (RA 2014)		<0.02
19	Hexavalent Chromium (as Cr+6) in mg/l	IS 3025 (Part 52): 2014( RA 2014)	1.0	<0.05
20	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH) in mg/l	IS 3025(Part 43)-1992;Rffm:2009	0.005	<0.001

\* For 5 Day's BOD at 20°C

Report Prepared By:

for Qualissure Laboratory Services
Reviewed & Authorized By

S. Chakraleorly
Soumy Chakraborty, Microbiologist
(Authorized Signatory)

Reviewed & Authorized By

for Qualissure Laboratory Services

Bishnupriya Banerjee, Chemist
(Authorized Signatory)

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DOC NO: QLS/SAMP/08-D/00

#### TEST REPORT

Name & Address of the Customer: M/S Powerplus Traders Private Limited

Premlata Building, 39 Shakespeare Sarani

6th Floor, Kolkata-700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

Date

: QLS/P-107/22-23/C/15

: 17.02.2023

Sample No.

: QLS/ P-107/22-23/15

Sample Description

: Surface Water

Sample Location

: Pond Near Shibpur (SW4)

**GPS Coordinates** 

: 23°37'46.85"N, 87°25'31.8"E

Date of Performance

: 08.02.2023 - 14.02.2023

Sample Drawn On

: 07.02.2023

Sampling Method

: IS 1622: 1981 (RA 2019)

f No Date

IS 3025(Part 1): 1987 (RA 2019)

Ref No. Date

: PTPL/QLS/001/2022-23, Dated-31.01.2023

### Analysis Result: SW-4

#### (A) Microbiological Analysis

SI.No.	Characteristic	Test Method	Surface water quality criteria as per IS : 2296-1982 for Class B	Result
1.	Total Coliform Organisms in MPN/100ml	APHA 23rdEdition: 2017, 9222B	500	33

#### (B) Chemical Analysis

SI. No.	Test Parameter	Test Method	Tolerance Limits For Inland Surface Waters, Class B (IS: 2296-1982)	Result	
2	pH Value at 25°C	APHA 23 <sup>rd</sup> Edition-2017, 4500 H <sup>+</sup>	6.5-8.5	7.61	
3	Colour in Hazen Units	IS 3025 (Part 4): 1983 (RA 2012)	300	10	
4	Total Dissolved Solids (as TDS) in mg/l	APHA 23rd Edition 2017, 2540 B		119	
5	Oil & Grease in mg/l	APHA 23rd Edition-2017, 5520A		<1.4	
6	Dissolved Oxygen in mg/l	APHA 23 <sup>rd</sup> Edition-2017, 4500-O-C	5.0 (Min)	5.2	
7	Biochemical Oxygen Demand (as BOD) mg/l	IS 3025 (Part 44)-1993, RA:2014	3.0*	2.7	
8	Anionic Detergents(as MBAS) in mg/l	IS 13428-2005(Annex K)	1.0	<0.02	
9	Chloride(as Cl) in mg/l	APHA 23rd Edition 2017, 4500 CI		34.7	
10	Copper(as Cu) in mg/l	IS 3025 (Part 42): 1992(RA 2014)	100	<0.02	
11	Fluoride(as F) in mg/l	APHA 23rd Edition 2017, 4500 F D	1.5	0.34	
12	Iron (as Fe) in mg/l	IS 3025 (Part 53): 1988(RA 2014)		0.27	
13	Nitrate (as NO <sub>3</sub> ) in mg/l	IS 3025 (Part 34): 1988(RA 2014)		<0.5	
14	Sulphate (as SO <sub>4</sub> ) in mg/l	APHA 23rd Edition 2017, 4500 SO <sub>4</sub> E	Keret.	24.7	
15	Cadmium(as Cd) in mg/l	IS 3025 (Part 41): 1992(RA 2014)		<0.002	
16	Lead(as Pb) in mg/l	IS 3025 (Part 47): 1994 (RA 2014)	· · · ·	<0.01	
17	Arsenic(as As) in mg/I	IS 3025 (Part 37): 1988 (RA 2014)	0.2	< 0.01	
18	Zinc(as Zn) in mg/l	IS 3025 (Part 49): 1994 (RA 2014)		<0.02	
19	Hexavalent Chromium (as Cr+6) in mg/l	IS 3025 (Part 52): 2014( RA 2014)	1.0	<0.05	
20	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH) in mg/l	IS 3025(Part 43)-1992;Rffm:2009	0.005	<0.001	

\* For 5 Day's BOD at 20°C

Report Prepared By:

for Qualissure Laboratory Services
Reviewed & Authorized By

Soumy Chakraborty, Microbiologist (Authorized Signatory) for Qualissure Laboratory Services
Reviewed & Authorized By

Bishnupriya Banerjee, Chemist

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DOC NO: QLS/SAMP/08-D/00

### TEST REPORT

Name & Address of the Customer: M/S Powerplus Traders Private Limited

Premlata Building, 39 Shakespeare Sarani

6th Floor, Kolkata- 700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

Date

: QLS/P-107/22-23/C/16

: QLS/ P-107/22-23/16

: 17.02.2023

Sample No.
Sample Description

: Surface Water

Sample Location

: Surrace water

GPS Coordinates

: Pond Near Gour Bazar (SW2) : 23°41'27.84"N, 87°22'22.25"E

Date of Performance

: 08.02.2023 - 14.02.2023

Sample Drawn On

: 07.02.2023

Sampling Method

: IS 1622: 1981 (RA 2019)

IS 3025(Part 1): 1987 (RA 2019)

Ref No. Date

: PTPL/QLS/001/2022-23, Dated-31.01.2023

## Analysis Result: SW- 2

#### (A) Microbiological Analysis

SI.No.	Characteristic	Test Method	Surface water quality criteria as per IS : 2296-1982 for Class B	Result	
1.	Total Coliform Organisms in MPN/100ml	APHA 23rdEdition: 2017, 9222B	500	50	

#### (B) Chemical Analysis

SI. No.	Test Parameter	Test Method	Tolerance Limits For Inland Surface Waters, Class B (IS: 2296-1982)	Result	
2	pH Value at 25°C	APHA 23rd Edition-2017, 4500 H+	6.5-8.5	7.41	
3	Colour in Hazen Units	IS 3025 (Part 4): 1983 (RA 2012)	300	20	
4	Total Dissolved Solids (as TDS) in mg/l	APHA 23 <sup>rd</sup> Edition 2017, 2540 B	222	262	
5	Oil & Grease in mg/l	APHA 23 <sup>rd</sup> Edition-2017, 5520A	200	1.9	
6	Dissolved Oxygen in mg/l	APHA 23 <sup>rd</sup> Edition-2017, 4500-O-C	5.0 (Min)	5.8	
7	Biochemical Oxygen Demand (as BOD) mg/I	IS 3025 (Part 44)-1993, RA:2014	3.0*	<2	
8	Anionic Detergents(as MBAS) in mg/l	IS 13428-2005(Annex K)	1.0	<0.02	
9	Chloride(as CI) in mg/I	APHA 23rd Edition 2017, 4500 CI		38.6	
10	Copper(as Cu) in mg/l	IS 3025 (Part 42): 1992(RA 2014)	S	<0.02	
11	Fluoride(as F) in mg/l	APHA 23rd Edition 2017, 4500 F D	1.5	0.18	
12	Iron (as Fe) in mg/l	IS 3025 (Part 53): 1988(RA 2014)	( main	0.44	
13	Nitrate (as NO₃) in mg/l	IS 3025 (Part 34): 1988(RA 2014)	( www.	0.71	
14	Sulphate (as SO <sub>4</sub> ) in mg/l	APHA 23rd Edition 2017, 4500 SO <sub>4</sub> E	***	20.2	
15	Cadmium(as Cd) in mg/l	IS 3025 (Part 41): 1992(RA 2014)	***	<0.002	
16	Lead(as Pb) in mg/l	IS 3025 (Part 47): 1994 (RA 2014)		<0.01	
17	Arsenic(as As) in mg/I	IS 3025 (Part 37): 1988 (RA 2014)	0.2	<0.01	
18	Zinc(as Zn) in mg/l	IS 3025 (Part 49): 1994 (RA 2014)		0.12	
19	Hexavalent Chromium (as Cr+6) in mg/l	IS 3025 (Part 52): 2014( RA 2014)	1.0	<0.05	
20	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH) in mg/l	IS 3025(Part 43)-1992;Rffm:2009	0.005	<0.001	

For 5 Day's BOD at 20°C

Report Prepared By: 10

^¹.

for Qualissure Laboratory Services
Reviewed & Authorized By

S. Chakral only
Soumy Chakraborty, Microbiologist
(Authorized Signatory)

for Qualissure Laboratory Services
Reviewed & Authorized By

Bishnupriya Banerjee, Chemist
(Authorized Signatory)

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DOC NO: QLS/SAMP/08-D/00

### TEST REPORT

Name & Address of the Customer:
M/S Powerplus Traders Private Limited

Premlata Building, 39 Shakespeare Sarani

6th Floor, Kolkata-700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

: QLS/P-107/22-23/C/13

Date : 17.02.2023

Sample No. : QLS/ P-107/22-23/13

Sample Description : Surface Water

Sample Location

: Pond Near Infrastructure Area in MLA (SW1)

GPS Coordinates : 23°40'7.60"N, 87°23'15.28"E

Date of Performance

: 08.02.2023 - 14.02.2023

Sample Drawn On : 07.02.2023

. . . : IS 1622: 1981 (RA 2019)

Sampling Method IS 3

IS 3025(Part 1): 1987 (RA 2019)

Ref No. Date

: PTPL/QLS/001/2022-23, Dated-31.01.2023

### **Analysis Result: SW-1**

#### (A) Microbiological Analysis

SI.No.	Characteristic	Test Method	Surface water quality criteria as per IS: 2296-1982 for Class B	Result
1.	Total Coliform Organisms in MPN/100ml	APHA 23rdEdition: 2017, 9222B	500	60

### (B) Chemical Analysis

SI. No.	Test Parameter	Test Method	Tolerance Limits For Inland Surface Waters, Class B (IS: 2296-1982)	Result	
2	pH Value at 25°C	APHA 23 <sup>rd</sup> Edition-2017, 4500 H <sup>+</sup>	6.5-8.5	7.74	
3	Colour in Hazen Units	IS 3025 (Part 4): 1983 (RA 2012)	300	20	
4	Total Dissolved Solids (as TDS) in mg/l	APHA 23 <sup>rd</sup> Edition 2017, 2540 B		276	
5	Oil & Grease in mg/l	APHA 23rd Edition-2017, 5520A		2.1	
6	Dissolved Oxygen in mg/I	APHA 23 <sup>rd</sup> Edition-2017, 4500-O-C	5.0 (Min)	5.3	
7	Biochemical Oxygen Demand (as BOD) mg/l	IS 3025 (Part 44)-1993, RA:2014	3.0*	<2	
8	Anionic Detergents(as MBAS) in mg/l	IS 13428-2005(Annex K)	1.0	<0.02	
9	Chloride(as CI) in mg/I	APHA 23rd Edition 2017, 4500 CI		42.4	
10	Copper(as Cu) in mg/l	IS 3025 (Part 42): 1992(RA 2014)	244	<0.02	
11	Fluoride(as F) in mg/l	APHA 23rd Edition 2017, 4500 F D	1.5	0.61	
12	Iron (as Fe) in mg/l	IS 3025 (Part 53): 1988(RA 2014)		0.42	
13	Nitrate (as NO₃) in mg/I	IS 3025 (Part 34): 1988(RA 2014)		0.76	
14	Sulphate (as SO <sub>4</sub> ) in mg/l	APHA 23rd Edition 2017, 4500 SO <sub>4</sub> E		19.3	
15	Cadmium(as Cd) in mg/l	IS 3025 (Part 41): 1992(RA 2014)		<0.002	
16	Lead(as Pb) in mg/l	IS 3025 (Part 47): 1994 (RA 2014)		<0.01	
17	Arsenic(as As) in mg/l	IS 3025 (Part 37): 1988 (RA 2014)	0.2	<0.01	
18	Zinc(as Zn) in mg/l	IS 3025 (Part 49): 1994 (RA 2014)		0.05	
19	Hexavalent Chromium (as Cr+6) in mg/l	IS 3025 (Part 52): 2014( RA 2014)	1.0	<0.05	
20	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH) in mg/I	IS 3025(Part 43)-1992;Rffm:2009	0.005	< 0.001	

\* For 5 Day's BOD at 20°C

Report Prepared By:

for Qualissure Laboratory Services
Reviewed & Authorized By

Soumy Chakraborty, Microbiologist
(Authorized Signatory)

for Qualissure Laboratory Services
Reviewed & Authorized By

Bishnupriya Banerjee, Chemist (Authorized Signatory)

CoBanefice

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- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.





361, Prantick Pally, 45/361, Bose Pukur Road, Kolkata -700107 Email: qualissure@gmail.com; info@qualissure.com: Mob.No. 98312 87086: 9830093976

DOC NO: QLS/SAMP/08-E/00

### **TEST REPORT**

Name & Address of the Customer:

M/S Powerplus Traders Private Limited

Premiata Building 39 Shakespeare Sarani

Premlata Building, 39 Shakespeare Sarani

6th Floor, Kolkata-700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

Date : 17.02.2023

. 17.02

Sample No. : QLS/P-107/22-23/17

Sample Description : Soil

Sample Location : Benodpur (in MLA)

Period Of Analysis : 08.02.2023-17.02.2023

: 23° 40' 5.99" N, 87° 23' 6.64" E

: QLS/P-107/22-23/C/17

GPS Co-ordinates Sample Drawn On

: 07.02.2023

Ref No. Date

: PTPL/QLS/001/2022-23, Dated-31.01.2023

### Analysis Result: SQ-1

Sl.No.	Test Parameter	Test Method	Result
1.	pH at 25 °C	IS 2720 (Part 26): 1987(RA 2011)	7.2
2.	Electrical Conductivity, μS/cm at 25 °C	IS 14767 :2000, RA 2016	316
3.	Organic Carbon, %	Soil Analysis (Soil Science society for America) Part II	0.80
	Texture		Clay Loan
4.	a) Sand, %	SOP No. TPM/QLS/E/S/MA Soil & Plant Analysis, C.S.Piper	37
- 163	b) Silt, %	35. No. 11 My quy c/3/ MA 3511 & Halle Allalysis, c.s. riper	29
	c) Clay, %		34
5.	Zinc (as Zn), in mg/kg	EPA 3050 B: December, 1996, EPA 7000 B: February 2007	39.2
6.	Lead (as Pb), in mg/kg	EPA 3050 B- December, 1996, EPA 7000 B- February, 2007	4.77
7,.	Cadmium (as Cd), in mg/kg	EPA 3050 B- December, 1996, EPA 7000 B- February, 2007	0.29
8	Total Chromium (as Cr), in mg/kg	EPA 3050 B: December, 1996, EPA 7000 B: February 2007	11.2
9.	Potassium (as K), in mg/kg	Soil Analysis (Soil Science society for America) Part II	137
10.	Phosphorus (as P), in mg/kg	Soil Analysis (Soil Science society for America) Part II	42.7
11.	Available Sulphur (as S), mg/kg	IS 2720(Part-27): 1977 (RA 2015)	17.4
12.	Calcium (as Ca) in %	Methods of Soil Analysis (Soil Science society for America) Part II	0.28
13.	Magnesium (as Mg) in %	Methods of Soil Analysis (Soil Science society for America) Part II	0.03
14.	Arsenic (as As), in mg/kg	EPA 3050 B - December, 1996, VGA	<0.25
15.	Fluoride (as F), in mg/kg	Soil Analysis (Soil Science society for America) Part II	3.7
16.	Nickel (as Ni), in mg/kg	EPA 3050 B- December, 1996, EPA 7000 B- February, 2007	5.09
17.	Mercury (as Hg), in mg/kg	USEPA 245.5 – 1974	<0.1
18.	Available Boron (as B), in mg/kg	Soil Analysis (Soil Science society for America) Part II	1.34

Report Prepared By:

gw.

For Qualissure Laboratory Services
Reviewed & Authorized by

Bishnupriya Banerjee, Chemist
(Authorized Signatory)

The results relate only to the item(s) tested.

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DOC NO: QLS/SAMP/08-C/00

### TEST REPORT

Name & Address of the Customer:

M/S Powerplus Traders Private Limited Premlata Building, 39 Shakespeare Sarani

6th Floor, Kolkata- 700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

: QLS/P-107/22-23/C/05

Date

: 15.02.2023

Sample No.

: QLS/P-107/22-23/05

Date Of Performance

: 08.02.2023-15.02.2023

Sample Description

: Noise Monitoring

Ref No. Date

: PTPL/QLS/001/2022-23, Dated-31.01.2023

## **Monitoring Result of Noise**

Sampling Done By: S.Ghosh

Sampling Guideline: As per IS: 9876: 1981 (RA-2001)

Location: Near Project Area in MLA (NQ1)

Date of Monitoring: 07.02.2023-08.02.2023

Time	Lmax dB (A)	Lmin dB (A)	Avg. dB (A)
11.00-12.00	50.2	47.6	48.9
12.00-13.00	53.2	50.2	51.7
13.00-14.00	55.6	53.3	54.4
14.00-15.00	59.2	56	57.6
15.00-16.00	60.5	59.1	59.8
16.00-17.00	64.2	61.2	62.7
17.00-18.00	67.1	63.5	65.3
18.00-19.00	65.6	62.6	64.1
19.00-20.00	64.2	61.5	62.8
20.00-21.00	63.2	60.2	61.7
21.00-22.00	61.7	54.1	57.9
22.00-22.00	60.5	58.2	59.3
23.00-0.00	59.6	57.2	58.4
0.00-1.00	58.5	56.3	57.4
1.00-2.00	57.6	55.3	56.4
2.00-3.00	56.5	54.2	55.3
3.00-4.00	55.2	53.2	54.2
4.00-5.00	54.2	52.5	53.3
5.00-6.00	53.2	51.6	52.4
6.00-7.00	52.5	50.6	51.5
7.00-8.00	51.6	49.5	50.5
8.00-9.00	50.7	48.6	49.6
9.00-10.00	49.6	47.2	48.4
10.00-11.00	48.5	45.2	46.8

Report Prepared By:

(ox:

for Qualissure Laboratory Services
Reviewed & Authorized By

Benimadhab Gorai, Chemist (Authorized Signatory)

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Email: qualissure@gmail.com Mob. No.: 9831287086

9830093976

DOC NO: QLS/SAMP/01-C/00

### **TEST REPORT**

Name & Address of the Customer:

M/S Powerplus Traders Private Limited

Premlata Building, 39 Shakespeare Sarani

6th Floor, Kolkata-700017

Name of Project:

Jaganathpur-B Underground Coal Mine

Report No.

: QLS/P-107/22-23/C/19

Date : 15.02.2023

Sample No. : QLS/P-107/22-23/19

Sample Description : Date of Performance :

: Vehicular Emission : 08.02.2023-15.02.2023

Sample Mark

: Bolero

Ref No. Date

: PTPL/QLS/001/2022-23, Dated-31.01.2023

### Vehicular Emission Analysis Result

SI. No.	Date of Sampling	Location	CO <sub>2</sub> % (v/v)	CO % (v/v)	O <sub>2</sub> (%)
1	07.02.2023	Bolero (WB 39C 2075)	3.2	<0.2	17.0

Remark: 1) Sample was collected from Exhausted point of Bolero.

Report Prepared By :

for Qualissure Laboratory Services

(Benimadhab Gorai, Chemist)

Authorized Signatory

.....End of the Report......

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Reg & Corp. Add:,39,SHAKESPEARE SARANI,PREMLATA,6th FLOOR, KOLKATA,700017

#### GOODS & SERVICE ORDER

**Details of Supplier:** P.O No : PP23978195 **AQUATHERM WATER TREATMENT PVT LTD-900003856** P.O Date : 24.07.2023 Amend No.: 0 9A, SATYEN DUTTA ROAD, **Plant** : PPTL - COAL MINES Amend Dt: KOLKATA-700029 Your Ref No. : 1074/Offer/S RFQ No. State Name: West Bengal **State Code** :19 Your Ref Date RFQ Date : **GSTIN**:19AAECA7084M1Z4 PAN NO :AAECA7084M

**Supply Basis** : Free on Road **E-Mail**:abhiprasun@aquathermindia.org **Contact Details:** 9830050496 : Road

**Supply Type** MSME:

**Contact Person:** Purchaser Name: ALOKE KUMAR GHOSH

**Email ID** : abhiprasun@aquathermindia.org **Email** : alokekumar.ghosh@rashmigroup.com

**Billing To Address** Shipping To Address

Powerplus Traders Pvt. Ltd. Powerplus Traders Pvt. Ltd.

VILL: BAIDYANATHPUR, P.O. AMDAHI DURGAPUR PASCHIM VILL: BAIDYANATHPUR, P.O. AMDAHI DURGAPUR PASCHIM

BARDHAMAN 713381 BARDHAMAN 713381 State Code: 19 State Name

: West Bengal State Code: 19 State Name : West Bengal

**GSTIN** : 19AAGCP6899K2ZD GSTIN/Unique ID: 19AAGCP6899K2ZD

PAN No. : AAGCP6899K CIN No.: U10100WB2012PTC183435 PAN No. : AAGCP6899K CIN No.:U10100WB2012PTC183435

**Contact No** 

**Contact Detail: Contact Detail** :

Name: AQUATHERM WATER **Goods Supplier:** Name: Invoicing Party: 900003856

TREATMENT PVT LTD

: 7980956261

GSTIN: 19AAECA7084M1Z4 CITY: STATE: GSTIN: CITY: KOLKATA STATE: West Bengal

Dear Sir / Madam,

**Contact No** 

: +919830050496

With reference to your above mentioned offer and subsequent discussion we had with you, we are pleased to place our Purchase Order / Service Order in your favour for supply of following items as per terms and conitions mentioned herein:

We do hereby declare and confirm that we satisfy the definition of "buyer" as provided under section 194Q of the Act and hence, we shall withhold taxes on all purchase of goods in excess of INR 50 lacs made from you during the financial year. You are therefore requested not to levy and collect TCS under section 206C(1H) of the Act on the goods sold to us.

SrNo.	Material Code HSN/SAC / PR	Item	Details	UM	Order Qty	Unit Rate (INR)	Total Value (INR)
,	SS610022667	SEWAGE TREATMENT PLANT C	AP-30 KLD	Base Unit		1,400,000.00/	
1	84219900	Item text : SEWAGE TREA CAPACITY-30K	(LD	NOS	1.000	NOS	1,400,000.00
	0100019078/10	sewage and additional wash conditions: Capacity of the The plant is des Inletwater qualit parameters. Parameters PH 6.8 BOD5 COD 5 TSS 1 FOGM	signed for human waste comprising o -water having the following inlet Plant: 30 m³/ day signed as per our undermentioned	f			
		Parameters pH 6. BOD5 COD	Result				
		After the tertiary will be achieved	treatment the following parameters				

ALOKE KUMAR GHOSH					For Powerplus Traders Pvt. Ltd.
Prepared By	HOD/SecHead/ Department	Accounts Head		Exe Direct/President	Authorized Signatory

Reg & Corp. Add:,39,SHAKESPEARE SARANI,PREMLATA,6th FLOOR, KOLKATA,700017

## **GOODS & SERVICE ORDER**



SrNo.	Material Code HSN/SAC / PR		Item Details	UM	Order Qty	Unit Rate (INR)	Total Value (INR)
			in the treated water: Parameters Result pH 6.5 – 7.5 BOD5 < 10 ppm COD < 20 ppm TSS < 5 ppm FOGM < 10 ppm  SCOPE OF SUPPLY – FOR EACH UNIT AND LIST OF EQUIPMENT ATTACHED IN ANNEXURE-I 1 Packaged Treatment Unit, FRP, 4M L x 2M Dia, Make- Hiclear 1 No.  2 Twin-Lobe Air Blower with Motor @ 2.8 mWC , 150 M3/hr, Make- Akash -2 Nos.  3 Raw Sewage Transfer Pump(submersible): @ 15 mWC; 2 M3/hr, Make- Leo/Lubi"-2 Nos.  4 Mechanical Bar Screen, SS-304, 400 mmx400 mm - 1 No. 5 Pipes, Pipe fittings & Valves, Make-Astral/ Supreme uPVC & cPVC as required -PVC, Sch40 -1 Lot 6 Treated Effluent Water Storage Tank-HDPE, Cap 3 KL, Make -Patton-1No. 7. Chlorine Dosing Tank LLDPE, Cap-50L-1 No. 8. Dosing Pump (Make – e-Dose) Cap 0 – 6 LPH, MOC-PP @ 40 mWC - 1 No. 9. Treated Effluent Transfer Pump (horizontal, centrifugal): @ 25 mWC; Cap-1.25 m³/ hr, make KBL/Lubi-2 Nos. 10. Dual Media Filter (FRP) Make Deep Blue/ TATA, 325 mm dia -1 Set 11. Activated Carbon Filter (FRP) Make Deep Blue/ TATA, 325 mm dia -1 Set 11. Activated Carbon Filter (FRP) Make Deep Blue/ TATA, 325 mm dia -1 Set 11. Activated Carbon Filter (FRP) Make Deep Blue/ TATA, 325 mm dia -1 Set 11. Activated Carbon Filter (FRP) Make Deep Blue/ TATA, 325 mm dia -1 Set 12. Pipes, Pipe fittings & Valves Astral/ Supreme, Make PVC, 20Mtr- 1 Lot 13. Level Switch -2 Nos. 14. Control Panel-1 No. 15. Cable 20 mtr-1 Lot				
		Cost Centre Delv Date DEPT	:PPTL1-Coal Mines Others :2023-09-04 :Project				
		Tax Code.	:FC-FI_Input CGST 9% + SGST 9%				
		WBS Element	:00003186:PPTL-Pumps & Others				

ALOKE KUMAR GHOSH					For Powerplus Traders Pvt. Ltd.
Prepared By	HOD/SecHead/ Department	Accounts Head		Exe Direct/President	Authorized Signatory

Reg & Corp. Add:,39,SHAKESPEARE SARANI,PREMLATA,6th FLOOR, KOLKATA,700017

#### GOODS & SERVICE ORDER



SIXTEEN LAKH FIFTY TWO THOUSAND ONLY. In Words -Gross Value 1,400,000.00 CGST 1,26,000.00

> SGST/UGST 1,26,000.00

> Net Order Amount 1,652,000.00

HSN/SAC	Taxable Value	CGST		SGST/UGST		IGST		CESS		CST		TCS	
11011/0/10		Rate	Amt.	Rate	Amt.	Rate	Amt.	Rate	Amt.	Rate	Amt.	Rate	Amt.
84219900	1,400,000.00	9	1,26,000.00	9	1,26,000.00				0.00				
Total	1,400,000.00		1,26,000		1,26,000.00								

#### Total Tax value (In words) TWO LAKH FIFTY TWO THOUSAND RUPEES

- Please quote PURCHASE ORDER reference in Invoice and all correspondence
- \* Please return the accepted copy of this PO duly signed and stamped in each pages as a token of Receipt, if no written order acceptance is given to us within 7 days, we shall deem that the P.O has been accepted by you.
- The supplier shall comply with provision of the E.H.S (Environment Health & Safety) related documents during the supply of material as per Govt.guidelines if applicable.
- \* Please submit all your despatch documents , i.e "Bill/Challan/GST Invoice etc along with supply of material."

#### Commercial Terms and Conditions :-

Terms of Payment

Guarantee/Warranty

**Price Basis** :UPTO JAGANNATHPUR-B, COAL MINE

:GST 18% EXTRA **Delivery Schedule** :WITHIN 6-8 WEEKS

Mode of Payment :By cheque / NEFT / RTGS / DD ( as per our company convenient ). **Mode of Transport** :By Road through reputed Transport Upto JAGANNATHPUR-B COAL MINE.

Packing & Forwarding :Inclusive in above price. All materials should be properly packed to avoid damage in transit.

20% OF BASIC ORDER VALUE AS ADVANCE AGAINST SUBMISSION OF ADVANCE BANK GUARANTEE( AS PER OUR

ENCLOSED FORMAT) FOR EQUIVALENT VALUE, VALID FOR 6 MONTHS FROM THE DATE OF ISSUE.

02) 70% ALONG WITH 100% TAXES & DUTIES SHALL BE RELEASED AGAINST PROOF OF DESPATCH DOCS ON PRO RATA

:BÁSIS AFTER INSPECTIOIN & DESPATCH CLEARNACE BY OSPL.
03) LAST 10% AGAINST RECEIPT OF 100% MATERIALS AT SITE AND SUBMISSION OF PERFORMANCE BANK GUARANTEE ( AS PER OUR ENCLOSED FORMAT) FOR EQUIVALENT VALUE, VALID FOR THE ENTIRE PERIOD OF GUARANTEE, I.E 18 MONTHS FROM THE DATE OF SUPPLY OR 12 MONTHS FROM THE DATE OF COMMISSIONING WHICHEVER IS EARLIER.

THE EQUIPMENT COVERED UNDER THIS CONTRACT IS GUARANTEED FOR SATISFACTORY OPERATION FOR A PERIOD OF 18 MONTHS FROM THE DATE OF SUPPLY OR 12 MONTHS FROM THE DATE OF COMMISSIONING WHICHEVER IS

THE EQUIPMENT SUPPLIED BY M/S: AQUATHERM WATER TREATMENT PVT LTD SHALL BE WARRANTED FOR

SATISFACTORY PERFORMANCE FOR A PERIOD OF 12 MONTHS FROM THE DATE OF COMMISSIONING AT "SITE" OR 18

MONTHS FROM THE DATE OF DISPATCH, WHICHEVER IS EARLIER.

ANY MANUFACTURING DEFECT OBSERVED DURING THE WARRANTEE PERIOD SHALL BE REPAIRED BY AQUATHERM

WATER TREATMENT PVT. LTD. AT OUR "SITE" FREE OF COST.

YOU SHALL DEPUTE YOUR ENGINEER(S) AT OUR PPTL SITE FOR SUPERVISION OF ERECTION & COMMISSIONING OF THE

EQUIPMENT, FREE OF COST.

:NECESSARY FREE BOARDING & LODGING (AT OUR GUEST-HOUSE) INCLUDING LOCAL CONVEYANCE TO YOUR Commissioning

ENGINEER(S) SHALL BE PROVIDED BY US.

MFG. TC SHOULD BE SUBMITTED ALONG WITH SUPPLY OF MATERIAL AND DESPATCH DOCUMETS, I.E. CHALLAN, T.C. / G.C. :INVOICE COPY ETC.

IN SELLERS SCOPE UP TO OUR PLANT SITE JAGANNATHPUR-B, COAL MINE **Transportation & Insurance** THE MATERIALS SHOULD BE BOOKED THROUGH YOUR AUTHORIZED CARRIER FREIGHT PAID BAISIS ONLY.

The Supplier shall be granted a reasonable extension in case of war, epidemic, civil commotion, or Act of God. Such

ALOKE KUMAR GHOSH					For Powerplus Traders Pvt. Ltd.
Prepared By	HOD/SecHead/ Department	Accounts Head		Exe Direct/President	Authorized Signatory

Reg & Corp. Add :,39,SHAKESPEARE SARANI,PREMLATA,6th FLOOR, KOLKATA,700017

### **GOODS & SERVICE ORDER**



extension shall, however apply when said circumstances are of a general nature and affecting supplier's obligation under this order and only when this is confirmed by a certificate of the local accredited chamber of commerce.

#### Risk Purchase

Timely delivery of the material shall be the essence of the contract and any failure on that score will entail the Buyer to Purchaser the material from the market at the prevailing market rate at the cost and risk of the Seller without any prejudice to the right of the Buyer to the cancel of the order. If the supplier fails to deliver the equipment as per the approved billing schedule, leading to delay in execution of the project, purchase reserves the right to procure the items from elsewhere at supplier's cost to complete the project in time. Hence supplier shall take all possible steps to complete the delivery in time to avoid imposition of this clause. However, 2 days grace period may be allowed depending upon the justification with valid reason provided by supplier for such delay in supply, but in no case, the grace period would be extended for more than a week for any particular items. On request of the "PURCHASER", Seller will arrange for necessary insurance of the materials. Any loss or any breakage or damage to the material during any damage during transit due to any cause whatsoever shall be borne by the Seller.

#### Rejection on Quality / Deduction for Inferior Quality:

In case of rejection due to poor quality and / or poor workmanship and / or damages noticed on our inspection at site, the same has to be collected back by supplier at his cost. Otherwise, the charges for returning the rejected quantity shall be deducted from supplier's Bills and/ or In case of non-confirmity to the quality and qty as per this P.O or received in damaged or broken condition or otherwise not satisfactory, owing to any reason thereof, the "PURCHASER" shall be the sole judge and entitled to reject the material, cancel the contract and buy its requirement in the open market on seller's risk & cost. "PURCHASER" shall recover the loss, if any, from the Seller reserving always the right to forfeit the deposit, (if any) placed by the seller for the due fulfillment of the contract. The Seller will make arrangements to remove the rejected materials, otherwise rejected materials will be lying entirely at Seller's risk and responsibility. Any demurrage, wharfage or similar charges which "PURCHASER" have to undergo on account of the Seller's failure to book the goods in accordance with the order or due to late delivery of the L.R, shall be borne by the Seller and / or ln case of any deviation in quality of materials supplied, prorata deduction shall be made from supplier's bill, considering the percentage of deviation.

#### Liquidated Damage (L.D.) Clause:

Liquidated damages for late delivery shall be applicable at a rate of 0.5% per week subject to a maximum of 5% of the undelivered portion from the date of final delivery. Power cuts and power shortages shall not constitute force majeure for late delivery. Further any delay on the part of sub-supplier will also constitute force majeure for late delivery. Any demurrage, wharfage or similar charges which we may have to pay owing to late delivery of RR/LR to us shall be borne by you.

#### Limitation of Liability:

Notwithstanding anything contained in this AGREEMENT, its Appendices or orders to the contrary, with respect to any and all claims arising out of the performance or non-performance of obligations under this AGREEMENT or purchase orders, whether arising in contract, tort, warranty, strict liability or otherwise, Suppliers liability shall not exceed in the aggregate 100% of the order value or payments received whatever is lower.

#### Exclusion of Indirect/Consequential Losses:

Notwithstanding any other provision of the contract, neither party shall, under any circumstances liable to the other for loss of profits, loss of use, loss of opportunity or any consequential or indirect or economic losses.

#### Arbitration:

All disputes which cannot be settled amicable under or in relation to the contract shall be resolve by reference to two Arbitrators under provision of Indian Arbitration and Conciliation Act 1996. Execution of the contract shall be governed by Indian Laws and regulation and subjected to jurisdiction of Law at Kolkata.

#### In Case of Dispute:

Related to this contract none of parties shall allow the effect subsequences or previous contract or any contract with this company and any group of company in between party any matters

#### Alternation / Modification / Amendment:

Any alternation, modification, extension, deletion, amendment or any other change to this Purchase order will not be valid, unless confirmed by us in writing. Unless permitted by us in writing you will not divulge, publish or cause to be publish by any means whatsoever, the details concerning of this order or goods covered thereby.

#### Documentation:

- a) Invoice in Duplicate
- b) Packing List in Duplicate
- c) Transporter Copy of Invoice to be sent with the material.
- d) Warranty Certificate
- e) All necessary Test Certificates including DGMS certificates

POWERPLUS TRADERS PRIVATE LIMITED,

VILL-JAGANNATHPUR-B COAL MINE

P.S.-FARIDPUR & KANKSA, PASCHIM BARDHAMAN,

WEST BENGAL-713381

Delivery

Terms Of Payment :-

Other Contractual stipulations

ALOKE KUMAR GHOSH					For Powerplus Traders Pvt. Ltd.
Prepared By	HOD/SecHead/ Department	Accounts Head		Exe Direct/President	Authorized Signatory

Reg & Corp. Add:,39,SHAKESPEARE SARANI,PREMLATA,6th FLOOR, KOLKATA,700017

#### **GOODS & SERVICE ORDER**



#### ANNEXURE - I

Other Terms and Conditions:

- \* Firm Price: The contract price shall remain firm and binding during the tenure of the contract and shall not be subject to any escalation whatsoever not with-standing any change in the cost of materials/ labour/ transportation cost / otherwise which may take place as per the scope of supply.
- \* Terms of Delivery: Timely delivery of the material shall be the essence of the contract and any failure on that score will entail the Buyer to Purhase the material from the market at the prevailing market rate at the cost and risk of the Seller without any prejudice to the right of the Buyer to the cancel of the order. On request of the "PURCHASER", Seller will arrange for necessary insurance of the materials. Any loss or any breakage or damage to the material during any damange during transit due to any cause whatsoever shall be bourn by the Seller.
- \* Inspection: Inspection from "PURCHASER" shall be held at their own factory and their report shall be final and binding on both the parties and / or In case of forging, casting etc. if any defect is detected during the machining operations such casting/ forging will be rejected on seller's account and / or In case inspection is to be carried out at your site, then at least 10 days advance information to be given to us for sending our inspector(s). Inspected material duly approved by our inspector may be dispatched along with "PURCHASER" inspection certificate or joint inspection report, as the case may be and / or In case any drawing/ sketch is involved in the supply, you should be in position to provide the same to our inspector at the time of inspection for the verification and / or In case any specific test report by any institute/ laboratory is required, same shall accompany the dispatch document, failing which the material will be liable for rejection at our end and / or You shall carry out internal inspection prior to being offered for inspection by "PURCHASER".Records of internal inspection & test certificates shall be submitted to "PURCHASER" based on your internal inspection, we may carry out the inspection at your works or issue you a inspection waiver.
- \* Rejection on Quality / Deduction for Inferior Quality: In case of rejection due to poor quality and / or poor workmanship and / or damages noticed on our inspection at site, the same has to be collected back by supplier at his cost. Otherwise, the charges for returning the rejected quantity shall be deducted from supplier's Bills and/ or In case of non-confirmity to the quality and qty as per this P.O or received in damaged or broken condition or otherwise not satisfactory, owing to any reason thereof, the "PURCHASER" shall be the sole judge and entitled to reject the material, cancel the contract and buy its requirement in the open market on seller's risk & cost. "PURCHASER" shall recover the loss, if any, from the Seller reserving always the right to forfeit the deposit, (if any) placed by the seller for the due fulfillment of the contract. The Seller will make arrangements to remove the rejected materials, otherwise rejected materials will be lying entirely at Seller's risk and responsibility. Any demurrage, wharfage or similar charges which "PURCHASER" have to undergo on account of the Seller's failure to book the goods in accordance with the order or due to late delivery of the L.R, shall be borne by the Seller and / or In case of any deviation in quality of materials supplied, prorata deduction shall be made from supplier's bill, considering the percentage of deviation.
- \* L.D. Clause for delayed Delivery: In case of delay in delivery, for reasons solely attributable to supplier, supplier will pay liquidated damages @ 0.5% total value of this contract, per week of delay, however not exceeding 5% of the total supply order value.

  \* Non Performance: If the supplier fails to deliver the material as per delivery period of this P.O., leading to delay in execution of the company's
- \* Non Performance: If the supplier fails to deliver the material as per delivery period of this P.O., leading to delay in execution of the company's work, "PURCHASER" reserves the right to procure the items from else where at supplier's cost to complete the company's work, such additional cost to be borne by the supplier, limiting to 5% of the total P.O. value.
- \* Dispute, Arbitration & Jurisdiction: All disputes which can not be settled amicable under or in relation to the contract shall be resolve by reference to two Arbitrators under provision of Indian Arbitration and Conciliation Act 1996. Execution of the contract shall be governed by Indian Lawsand regulation and subjected to jurisdiction of Law at Kolkata.
- \* In Case of Dispute: Related to this contract none of parties shall allow the effect subsequences or previous contract or any contract with this company and any group of company in between party any matters
- \* Alternation / Modification / Amendment : Any alternation, modification, extension, deletion, amendment or any other change to this Purchase order will not be valid, unless confirmed by us in writing. Unless permitted by us in writing you will not divulge, publish or cause to be publish by any means whatsoever, the details concerning of this order or goods covered thereby.
- "As per our records you are not MSME. In case you are MSME kindly inform us on urgent and ongoing basis.
- "THE SELLER AGREES TO DO ALL THINGS NOT LIMITED TO PROVIDING GST INVOICES OR OTHER DOCUMENTATION AS PER GST LAW RELATING TO THE ABOVE SUPPLY, PAYMENT OF TAXES, TIMELY FILING OF VALID STATUTORY RETURNS FOR THE TAX PERIOD ON THE GOODS AND SERVICE TAX PORTAL ETC. THAT MAY BE NECESSARY TO ENABLE THE BUYER TO CLAIM INPUT TAX CREDIT IN RELATION TO ANY GST PAYABLE UNDER THIS AGREEMENT OR IN RESPECT OF ANY SUPPLY UNDER THIS AGREEMENT. IN CASE OF VIOLATION / BREACH / DELAY / NON-COMPLIANCE OF ANY OF THE GST PROVISIONS BY THE SELLER WHICH WILL HAVE AN IMPACT ON THE BENEFITS ACCRUING TO THE BUYER UNDER GST, THEN IN SUCH CASE THE SELLER SHALL INDEMNIFY THE BUYER AND THE BUYER WILL HAVE ALL THE RIGHT TO RECOVER SUCH AMOUNT OF BENEFITS FROM THE SELLER ALONG WITH APPLICABLE INTEREST AND PENALTY."
- # For Order related issues,need any support or feedback, You can drop us an e-mail at internal.audit@rashmigroup.com or call on +917477783800 #

ALOKE KUMAR GHOSH					For Powerplus Traders Pvt. Ltd.
Prepared By	HOD/SecHead/ Department	Accounts Head		Exe Direct/President	Authorized Signatory



## WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Government of West Bengal)

Durgapur Regional Office

Sahid Khudiram Sarani, City Centre Durgapur – 713 216, Tele Phone: (0343) 254-6708, 254-4915

Memo no.: 2495-2/WPBD-0c(115)/17.

Date: 11/08/2023.

M/s. Powerplus Traders Pvt. Ltd., Premlata Building, 39, Shakespeare Sarani, 6<sup>th</sup> floor, Kolkata-700017.

'Sub.: Continuous Ambient Air Quality Monitoring Station (CAAQMS) in connection with Jagannathpur-'B' Underground Coal Mine, Dist.- Paschim Bardhaman.

Ref.: Your letter having no. PTPL/JAG-B/WBPCB/01/23-24 dated 05/4/2023

Sir,

With reference to the above, this is to inform you that your proposed location for establishing CAAQMS in Village- Basudevpur, Paschim Bardhaman, which is as per specific condition no. xvii of EC identification no. EC22A042WB110977 dated 01/9/2022, taking into consideration the wind rose diagram, has been noted by the State Board.

In this context it may be mentioned that you are also required to establish adequate ambient air quality monitoring stations as per standard condition no. b(i).

Thanking you.

Yours faithfully,

Environmental Engineer & In-charge, WBPCB, Durgapur Regional Office.