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^{th} Floor, Kolkata-700017, India Tel: +91-33 2289 4255 /4266, FAX NO.: +91 33 2289-4254,

E-mail: powerplustrade@gmail.com

CIN: U10100WB2012PTC183435

Date: 24 /05/2024

Letter No. PTPL/JAG-B/EC-Com.Rep/June 2024

To,

a) Regional Office,

Ministry of Environment, Forests & Climate Change, Bhubaneswar A/3 Chandersekharpur, Bhubaneswar – 751023. Odisha

b) Sub Office, Kolkata

Regional Office, Bhubaneswar, Ministry of Environment, Forest and Climate Change, IB-198, Sector-III, Salt Lake City,

Sub: Six Monthly (June-2024) Compliance Report (Period: October 2023 to March 2024) 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.

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

Here, we would like to inform that the last six monthly compliance report for the period April, 2023-September 2023 was submitted to concerned department vide mail & letter no- PTPL/JAG-B/EC-Com.Rep/December 2023 dated 28.11.2023 on parivesh portal vide Compliance ID: 26111687 dated 28.11.2023

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

Kolkati

EC COMPLIANCE REPORT-JUNE 2024

(Period: October, 2023 to March, 2024)

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, 6th Floor, Kolkata-700017



Your (Environment Clearance) application has been Submitted with following details			
Proposal No	osal No IA/WB/CMIN/210433/2021		
Compliance ID	69620862		
Compliance Number(For Tracking)	EC/M/COMPLIANCE/69620862/2024		
Reporting Year	2024		
Reporting Period	01 Jun(01 Oct - 31 Mar)		
Submission Date	24-05-2024		
IRO Name	ARTATRANA MISHRA		
IRO Email	jhk109@ifs.nic.in		
State	WEST BENGAL		
IRO Office Address	Integrated Regional Offices, Kolkata		
Note:- SMS and E-Mail has been sent to ARTATRANA MISHRA, WEST BENGAL with Notification to Project Proponent.			

Half Yearly Compliance Report 2024 01 Jun(01 Oct - 31 Mar)

Acknowledgment

Proposal Name	Jaganathpur-B Underground Coal Mine
Name of Entity / Corporate Office	Powerplus Traders Private Limited
Village(s)	N/A

District

Proposal No.	IA/WB/CMIN/210433/2021
Plot / Survey / Khasra No.	N/A
State	WEST BENGAL
MoEF File No.	IA-J- 11015/27/2021-IA- II(M)

Category	Coal Mining
Sub-District	N/A
Entity's PAN	NA
Entity name as per PAN	NA

PASCHIM BARDHAMAN

Compliance Reporting Details

Reporting Year 2024

Six Monthly

Remarks (if any) Environmental Clearance

Compliance Report

Reporting Period 01 Jun(01 Oct - 31 Mar)

Details of Production and Project Area

Name of Entity / Corporate Office Powerplus Traders Private Limited

	Project Area as per EC Granted	Annual Project Area in Possession
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	0	0
Total	0	0

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Coal	Million Tons per Annum (MTPA)	N/A	0.8 (Normative)/1.2 (Peak)	0	CTO Not obtained yet

Conditions

Sr.No.	Condition Type	Condition Details	
1	Statutory compliance	PP to obtain the CTO for 0.8/1.20 MTPA capacity af EC.	ter grant of
Agreed & Pollution 525-2N-1 of the CT	Control Board (WBPCB) vide 11/2022(E). We will obtain Con	Establish (CTE) has been obtained from West Bengal NOC No- 172012 dated 18.10.2022 issued vide memo no. sent to Operate before starting of the coal production. Copy etent authority in EC compliance (Dec-2022) vide letter notated 24.11.2022.	Date: 24/05/2024
2	Statutory compliance	Proponent shall appoint an Occupational Health Special Regular and Periodical medical examination of the work in the Project and maintain records accordingly; also, Chealth check - ups for workers having some ailments lidiabetes, habitual smoking, etc. shall be undertaken on months and necessary remedial/preventive measures to accordingly. The Recommendations of National Institution good occupational environment for mine workers shall implemented. The prevention measure for burns, malar provision of anti- snake venom including all other para safeguards may be ensured before initiating the mining	ckers engaged Occupational ke BP, ce in six aken te for ensuring be ia and medical
PPs Su Being co	abmission: Being Complied mplied.		Date: 20/05/2024
3	Statutory compliance	Persons of nearby villages shall be given training on skill development to make them employable with its pr	
Agreed T	abmission: Agreed to Comply Fraining on livelihood and skill development and operation phase	development to nearby villagers employable will be given under CER/ CSR scheme.	Date: 20/05/2024
4	Statutory compliance	The illumination and sound at night at project sites divillages in respect of both human and animal population sleeping disorders and stress may affect the health in the located close to mining operations. Habitations have a darkness and minimal noise levels at night. PPs must embiological clock of the villages is not disturbed; by orient floodlights/ masks away from the villagers and keeping levels well within the prescribed limits for day light/ ni	n. Consequence villages right for ensure that the enting the general the enting the general three entings are noise.
Being Conight hou measures	ars by taking various mitigative is the monitoring of noise level has	project site is within the prescribed limits for day light/ measures. In order to ensure the effectiveness of mitigative as been done by NABL Accredited Laboratory and found t. The monitoring report are attached as Annexure-1.	Date: 20/05/2024
5	Statutory compliance	PP shall pay to farmers of agricultural land if there is to pollution found by concerned District Commissioner rules or norms. PP should establish in house (at project environment laboratory for measurement of environme with respect to air quality and water (surface and grour dedicated team to oversee environment management should be comprise of Environment Engineers, I	as per extensite) nt parameter nd). A nall be setup

		reported to the concerned authority.	
Agreed water q		ronment management is being set up for monitoring of air, . Any non-compliance or infringement will be reported to	Date: 20/05/2024
6	Statutory compliance	The project proponent shall obtain forest clearance uprovisions of Forest (Conservation) Act, 1986, in case diversion of forest land for non-forest purpose involving project.	of the
	Submission: Not Complied plicable, as coal washery project is	not proposed.	Date: 20/05/2024
7	Statutory compliance	The project proponent shall obtain clearance from the Board for Wildlife, if applicable.	e National
	Submission: Not Complied plicable, as coal washery project is	not proposed.	Date: 20/05/2024
8	GREENBELT	Three tier greenbelt comprising of a mix of native sp minimum 30 m width shall be developed all along the to check fugitive dust emissions and to render aestheti neighbouring stakeholders. A 3-tier green belt comprinative species or tree species with thick leaves shall be along vacant areas, storage yards, loading / transfer poalong internal roads/ main approach roads.	washery area c to sing of a mix of e developed
	Submission: Not Complied plicable		Date: 20/05/2024
9	GREENBELT	The project proponent shall make necessary alternat arrangements, if grazing land is involved in core zone with the State government to provide alternate areas for grazing, if any. In this context, the project proponent state direction of Hon'ble Supreme Court with regard to grazing land.	, in consultation or livestock Shall implemen
	Submission: Not Complied plicable		Date: 20/05/2024
10	PUBLIC HEARING	Adequate illumination shall be ensured in all mine lo DGMS standards) and monitored weekly. The report of shall be submitted to this ministry & its RO on six-monitored weekly.	on the same
	Submission: Not Complied plicable		Date: 20/05/2024
11	PUBLIC HEARING	The project proponent shall undertake occupational for initial and periodical medical examination of the pengaged in the project and maintain records according provisions of the Mines Rules, 1955 and DGMS circu regular periodic health check - up, 20% of the persons from workforce engaged in active mining operations subjected to health check-up for occupational diseases impairment, if any, as amended time to time.	ersonnel ly as per the lars. Besides nel identified shall be

	Submission: Not Complied oplicable		Date: 20/05/2024
12	PUBLIC HEARING	Personnel (including outsourced employees) w shall wear protective respiratory devices and sha with adequate training and information on safety	ll also be provided
	Submission: Not Complied oplicable		Date: 20/05/2024
13	PUBLIC HEARING	Implementation of the action plan on the issues public hearing shall be ensured. The project propundertake all the tasks/measures as per the action budgetary provisions during the public hearing. I compensated as per the norms laid down in the R company/State Government/Central Government	oonent shall In plan submitted with Land oustees shall be R&R policy of the
	Submission: Not Complied oplicable		Date: 20/05/2024
14	PUBLIC HEARING	The project proponent shall follow the mitigati provided in this Ministry's OM No.Z- 11013/57/2 29th October, 2014, titled 'Impact of mining activissues related to the mining projects wherein hab are the part of mine lease areas or habitations and surrounded by the mine lease area'.	2014-IA.II(M) date vities on habitations and village.
	Submission: Not Complied oplicable		Date: 20/05/2024
15	AIR QUALITY MONITORING AND PRESERVATION	Hoppers of the coal crushing unit and other wa fitted with high efficiency bag filters/ mist spray system shall be installed and operated effectively operation to check fugitive emissions from crush transfer points of closed belt conveyor systems a transportation roads.	water sprinkling at all times of ing operations,
	Submission: Not Complied oplicable		Date: 20/05/2024
	-	The raw coal, washed coal and coal wastes (rej properly at earmarked site (s) within stockyards breakers/shields. Adequate measures shall be tak stored mineral does not catch fire.	20/05/2024 ects) shall be stacked fitted with wind
Not ap	AIR QUALITY MONITORING AND	properly at earmarked site (s) within stockyards breakers/shields. Adequate measures shall be taken	20/05/2024 ects) shall be stacked fitted with wind
Not ap	AIR QUALITY MONITORING AND PRESERVATION Submission: Not Complied	properly at earmarked site (s) within stockyards breakers/shields. Adequate measures shall be taken	20/05/2024 ects) shall be stacked fitted with wind the to ensure that the Date: 20/05/2024
PPs Not ap	AIR QUALITY MONITORING AND PRESERVATION Submission: Not Complied oplicable AIR QUALITY MONITORING AND	properly at earmarked site (s) within stockyards breakers/shields. Adequate measures shall be tak stored mineral does not catch fire. The temporary reject sites should appropriate p	20/05/2024 ects) shall be stacked fitted with wind the to ensure that the Date: 20/05/2024

	MONITORING AND PRESERVATION	be monitored in terms of the parameters notified under 1974 Coal Industry Standards vide GSR 742(E) dated as amended from time to time by the Central Pollution	25.9.2000 and
	Submission: Not Complied plicable		Date: 20/05/2024
19	WATER QUALITY MONITORING AND PRESERVATION	The monitoring data shall be uploaded on the comparant displayed at the project site at a suitable location. No. J-20012/1/2006-1A.II(M) dated 27.05.2009 issued of Environment, Forest and Climate Change shall also this regard for compliance.	The circular d by Ministry
	Submission: Not Complied plicable		Date: 20/05/2024
20	WATER QUALITY MONITORING AND PRESERVATION	Industrial waste water shall be properly collected and to conform to the standards prescribed under the Envir (Protection) Act, 1986 and the Rules made there under amended from time to time.	onment
	Submission: Not Complied plicable		Date: 20/05/2024
21	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall not alter major water chat the site. Appropriate embankment shall be provided alot the river/nallah flowing near or adjacent to the washery embankment constructed along the river/nallah bounda suitable dimensions and critical patches shall be streng stone pitching on the river front side stabilised with plato withstand the peak water pressure preventing any chinundation.	ong the side of y. The ary shall be of thened by antation so as
	Submission: Not Complied plicable		Date: 20/05/2024
22	WATER QUALITY MONITORING AND PRESERVATION	Heavy metal content in raw coal and washed coal sha once in a year and records maintained thereof.	all be analyse
	Submission: Not Complied plicable		Date: 20/05/2024
23	WATER QUALITY MONITORING AND PRESERVATION	The rejects should preferably be utilized in FBC pow disposed off through sale for its gainful utilization. If the washery rejects are to be disposed off, it should be don sustainable manner with adequate compaction and post arrangement to avoid water pollution due to leachate from surface run of from reject dumping sites.	he coal e in a safe an t closure
	Submission: Not Complied plicable		Date: 20/05/2024
24	WATER QUALITY MONITORING AND PRESERVATION	An Integrated Surface Water Management Plan for the area up to its buffer zone considering the presence of a rivulet / pond / lake etc. with impact of coal washing as shall be prepared, submitted to MoEFCC and impleme	ny river / ctivities on it,

	Submission: Not Complied oplicable		Date: 20/05/2024
25	WATER QUALITY MONITORING AND PRESERVATION	Waste Water shall be effectively treated and recycle either for washery operations or maintenance of gree plant.	
	Submission: Not Complied opplicable		Date: 20/05/2024
26	WATER QUALITY MONITORING AND PRESERVATION	Rainwater harvesting in the washery premises shall for conservation and augmentation of ground water reconsultation with Central Ground Water Board.	
	Submission: Not Complied opplicable		Date: 20/05/2024
27	WATER QUALITY MONITORING AND PRESERVATION	No ground water shall be used for coal washing unleading permitted in writing by competent authority (CGWA). The make - up water requirement of washery should m3 / tonne of raw coal.	or MoEFCC.
	Submission: Not Complied oplicable		Date: 20/05/2024
28	WATER QUALITY MONITORING AND	Regular monitoring of ground water level and qualicarried out in and around the mine lease area by establishment of existing wells and constructing new pieze the mining operations. The monitoring of ground water	olishing a ometers during
	PRESERVATION	carried out four times a year i.e. pre - monsoon, mons monsoon and winter. The ground water quality shall once a year, and the data thus collected shall be sent to MOEFCC / RO.	soon, post - be monitored
		monsoon and winter. The ground water quality shall once a year, and the data thus collected shall be sent	soon, post - be monitored
Not ap	PRESERVATION Submission: Not Complied	monsoon and winter. The ground water quality shall once a year, and the data thus collected shall be sent	Date: 20/05/2024
Not ap	PRESERVATION Submission: Not Complied oplicable WATER QUALITY MONITORING AND	monsoon and winter. The ground water quality shall once a year, and the data thus collected shall be sent in MOEFCC / RO. Monitoring of water quality upstream and downstres bodies shall be carried out once in six months and recommittees and submitted to	Date: 20/05/2024
Not ap	PRESERVATION Submission: Not Complied oplicable WATER QUALITY MONITORING AND PRESERVATION Submission: Not Complied	monsoon and winter. The ground water quality shall once a year, and the data thus collected shall be sent in MOEFCC / RO. Monitoring of water quality upstream and downstres bodies shall be carried out once in six months and recommittees and submitted to	Date: 20/05/2024 eam of water cord of the Ministry of Office. Date: 20/05/2024 contains the management of the Ministry of Office.
PPs Not ap	PRESERVATION Submission: Not Complied oplicable WATER QUALITY MONITORING AND PRESERVATION Submission: Not Complied oplicable WATER QUALITY MONITORING AND	monsoon and winter. The ground water quality shall once a year, and the data thus collected shall be sent a MOEFCC / RO. Moeff CC / RO. Monitoring of water quality upstream and downstrest bodies shall be carried out once in six months and recommonitoring data shall be maintained and submitted to Environment, Forest and Climate Change / Regional The project proponent shall take all precautionary resource riverine / riparian ecosystem in and around the a distance of 5 km. A riverine / riparian ecosystem commanagement plan should be prepared and implement consultation with the irrigation/ water resource depared.	Date: 20/05/2024 eam of water cord of the Ministry of Office. Date: 20/05/2024 contains the management of the Ministry of Office.

		engaged in blasting and drilling operations, operation shall be provided with personal protective equipments plugs/ muffs in conformity with the prescribed norms in this regard. Adequate awareness programme for us conducted. Progress in usage of such accessories to be	s (PPE) like ear and guidelines ers to be
PPs S Not app	Submission: Not Complied plicable		Date: 20/05/2024
32	Noise Monitoring & Prevention	The noise level survey shall be carried out as per the guidelines to assess noise exposure of the workmen at points in the mine premises, and report in this regard submitted to the Ministry / RO on six - monthly basis	vulnerable shall be
PPs S Not app	Submission: Not Complied plicable		Date: 20/05/2024
33	MISCELLANEOUS	Coal stacking plan shall be prepared separately for recoal, middling and rejects.	raw coal, clean
PPs S Not app	Submission: Not Complied plicable		Date: 20/05/2024
34	MISCELLANEOUS	Efforts should be made to reduce energy consumption conservation, efficiency improvements and use of ren	
	Submission: Not Complied plicable		Date: 20/05/2024
35	Statutory compliance	The project proponent shall prepare a Site - Specific Plan / Wildlife Management Plan and approved by the Warden. The recommendations of the approved Site - Conservation Plan / Wildlife Management Plan shall in consultation with the State Forest Department. The report shall be furnished along with the six - monthly report. (incase of the presence of schedule - I species area).	e Chief Wildlif Specific be implemented implementation compliance
	Submission: Not Complied plicable, as coal washery project is not	proposed.	Date: 20/05/2024
36	Statutory compliance	The project proponent shall obtain Consent to Estable under the provisions of Air (Prevention & Control of 1981 and the Water (Prevention & Control of Pollution from the concerned State pollution Control Board / Control Bo	Pollution) Act, on) Act, 1974
	Submission: Not Complied plicable, as coal washery project is not	proposed.	Date: 20/05/2024
	Statutory compliance	The project proponent shall obtain the necessary per the Central Ground Water Authority.	rmission from
37		the Central Ground Water Hathority.	

38	Statutory compliance	addressed in accordance to the Solid Waste Manag 2016/ Hazardous & Other Waste Management Rule	
	Submission: Not Complied plicable, as coal washery project i	s not proposed.	Date: 20/05/2024
39	Statutory compliance	Coal beneficiation practices shall be carried out u adherence to provisions of the Factories Act, 1957 legislations made there under.	
	Submission: Not Complied plicable, as coal washery project i	s not proposed.	Date: 20/05/2024
40	AIR QUALITY MONITORING AND PRESERVATION	Adequate ambient air quality monitoring stations established in the core zone as well as in the buffer monitoring of pollutants, namely particulates, SO ₂ Location of the stations shall be decided bas meteorological data, topographical features environmentally and ecologically sensitive r consultation with the State Pollution Contro Monitoring of heavy metals such as Hg, As, carried out at least once in six months.	zone for and NOx. sed on the s and eceptors in I Board.
	Submission: Not Complied plicable		Date: 20/05/2024
41	AIR QUALITY MONITORING AND PRESERVATION	Continuous ambient air quality monitoring station the statue be established in the core zone as well as for monitoring of pollutants, namely PM10, PM2.5 Location of the stations shall be decided bas meteorological data, topographical features environmentally and ecologically sensitive to consultation with the State Pollution Control ambient air quality monitoring stations may installed in addition to the regular monitoring per the requirement and/or in consultation Monitoring of heavy metals such as Hg, As, to be carried out at least once in six months.	in the buffer zon, SO ₂ and NOx. sed on the s and argets in I Board. Online a also be ng stations as with the SPCB. Ni, Cd, Cr, etc.
	Submission: Not Complied plicable		Date: 20/05/2024
42	AIR QUALITY MONITORING AND PRESERVATION	Transportation of coal by road shall be carried out trucks/conveyors. The transportation of clean coal by rail with wagon loading through silo. Effective regular water sprinkling shall be carried out in critiair pollution and having high levels of particulates conveyors, loading / unloading and transfer points emissions from all sources shall be controlled at so ensured that the ambient air quality parameters con	and rejects shall the measures such as cal areas prone to such as roads, be . Fugitive dust urce. It shall be form to the norm
		prescribed by the Central / State Pollution Control	Board.

			20/05/2024
43	AIR QUALITY MONITORING AND PRESERVATION	All approach roads shall be black topped and internal concreted. The roads shall be regularly cleaned. Coal t shall be carried out by covered trucks.	
	Submission: Not Complied plicable		Date: 20/05/2024
44	AIR QUALITY MONITORING AND PRESERVATION	Covered trucks shall be engaged for mineral transport the washery up to the railway siding, shall be optimally avoid spillage en-route. Trucks shall be adequately matemissions shall be below notified limits.	y loaded to
	Submission: Not Complied plicable		Date: 20/05/2024
45	AIR QUALITY MONITORING AND PRESERVATION	Facilities for parking of trucks carrying raw material mine shall be created within the unit.	from linked
	Submission: Not Complied plicable		Date: 20/05/2024
46	Corporate Environmental Responsibility	Fund allocation for Corporate Environment Responsishall be made as per Ministry's O.M. No. 22-65 /2017-30th September 2020 and based on committee made	IA.III dated
		consultation process for incorporating in EIA-EMP for EAC.	r deliberation
	Submission: Not Complied plicable		Date: 20/05/2024
Not ap	Submission: Not Complied		Date: 20/05/2024 ental policy nave proper gements / fe norms / reporting ntal / forest / e holders. Th
Not ap	Submission: Not Complied plicable Corporate Environmental	The company shall have a well laid down environme duly approve by the Board of Directors. The environm should prescribe for standard operating procedures to hecks and balances and to bring into focus any Infring deviation / violation of the environmental forest wildliconditions. The company shall have defined system of infringements / deviation / violation of the environment wildlife norms / conditions and / or shareholders / stak copy of the board resolution in this regard shall be sub	Date: 20/05/2024 ental policy nave proper gements / fe norms / reporting ntal / forest / e holders. Th
PPs S	Submission: Not Complied plicable Corporate Environmental Responsibility Submission: Not Complied	The company shall have a well laid down environme duly approve by the Board of Directors. The environm should prescribe for standard operating procedures to hecks and balances and to bring into focus any Infring deviation / violation of the environmental forest wildliconditions. The company shall have defined system of infringements / deviation / violation of the environment wildlife norms / conditions and / or shareholders / stak copy of the board resolution in this regard shall be sub	Date: 20/05/2024 ental policy lental policy lental policy have proper gements / freporting lental / forest / lental forest / lental / / lent
PPs S Not ap	Submission: Not Complied plicable Corporate Environmental Responsibility Submission: Not Complied plicable Corporate Environmental	The company shall have a well laid down environme duly approve by the Board of Directors. The environm should prescribe for standard operating procedures to hecks and balances and to bring into focus any Infring deviation / violation of the environmental forest wildliconditions. The company shall have defined system of infringements / deviation / violation of the environment wildlife norms / conditions and / or shareholders / stak copy of the board resolution in this regard shall be sub MoEF&CC as a part of six-monthly report. A separate Environmental Cell both at the project and head quarter level, with qualified personnel shall be secontrol of senior Executive, who will directly to the head	Date: 20/05/2024 ental policy lental policy lental policy have proper gements / freporting lental / forest / lental forest / lental / / lent

	Responsibility	along with responsibility matrix of the company shall be shall be duly approved by competent authority. The ye earmarked for environmental protection measures shall separate account and not to be diverted for any other privile progress of implementation of action plan shall be the Ministry/Regional Office along with the Six Mont Compliance Report.	ar wise funds I be kept in urpose. Year e reported to
	Submission: Not Complied plicable		Date: 20/05/2024
50	Corporate Environmental Responsibility	Self - environmental audit shall be conducted annual years third party environmental audit shall be carried or	
	Submission: Not Complied plicable		Date: 20/05/2024
51	Statutory compliance	PP shall obtain No Objection Certificate from Centra Water Authority for extraction of ground water within submitted to IRO, Ranchi.	
Comple Ground vide S. compo extract Copy of	d Water Authority (CGWA) as per no O. No. 3289(E) dated 24th Sept.,2020 nent authority i.e. "State Water Investions of ground water vide their permi of GW Abstraction NOC from SWID	and water extraction is not being regulated by Central tification of "Ministry of Jal Shakti" Gazette notification D. The "No Objection Certificate" has been taken from tigation Department, West Bengal (SWID)" for t no. P2209008004920000001TSE dated 30-11-2021. is already submitted to competent authority in EC JAG-B/EC-Com.Rep/Dec 2022 dated 24.11.2022.	Date: 20/05/2024
52	Statutory compliance	PP to complete the estimated allocated budgetary exp EMP capital cost of Rs. 41.52 Cr & Recurring cost of I year as per its letter no PTPL/JAG-B/EC-Delhi/03/22-26.07.2022. Further capital cost for environmental mor 300 Lakhs and recurring cost is Rs. 157.00 Lakhs/year budget shall be completed within strict timeline.	Rs. 9.26 Cr pe 23 dated nitoring is Rs.
Agree Enviro	nmental Monitoring has been done by	nanner in parallel with implementation of the project. the NABL/WBPCB/MoEFCC Accredited Laboratory. Noise and Vehicular Emission are attached as Annexure-	Date: 20/05/2024
53	Statutory compliance	PP shall develop 2 nos. of rain water harvesting pone will be 10 m and the depth will be 3 m) as proposed by villages in consultation with Gram Panchayat within 1 Indicator aquatic species shall be planted in this water the environmental quality. PP shall own water bodies/p present in project area, maintain and regularly monitor its long term protection.	PP near the year. Also, bodies to see bond currently
	Submission: Agreed to Comply d and will be complied.		Date: 20/05/2024
54	Statutory compliance	PP shall to implement Water distribution system in E Sashipur, Rajhat, Jot Balrampur villages with an estim 185.7065 Lakhs as in Letter no. PTPL/JAG-B/EC-Dell dated 26.07.2022. A proper water distribution network devised to meet the demands of formers related to irrig	ate Cost of Rs ni/03/22-23 shall be

		recharging of ponds, wherever required.	Б.
Agreed	and will be complied Water distribe entation of the project	bution system will be implemented in parallel with	Date: 24/05/2024
55	Statutory compliance	PP shall explore the use of Ukhra Railway siding or I Railway siding for coal transportation in future and coatransportation through road shall be stopped according this regard to be submitted to IRO within 1 year to just adequacy.	al ly. A report i
Agreed	ubmission: Agreed to Comply Durgapur railway siding will be u ine site to railway siding will be th	sed for transportation of coal. Coal transported via road trough covered vehicles.	Date: 20/05/2024
56	Statutory compliance	PP shall install ~191 water sprinklers for dedicated romining to Deul and 100 number along the separate transcrute as per Letter no. PTPL/JAG-B/EC-Delhi/03/22-2 26.07.2022. In addition, 5 nos of fog cannons of at least throw shall be installed at coal storage yard and in near	asportation 3 dated at 40 mtrs
Agreed	Submission: Agreed to Comply Water sprinklers and fog canons vative dust emission.	vill be installed in parallel with operation of mine to reduce	Date: 20/05/2024
57	Statutory compliance	PP shall transport the coal by trucks of fleet size 35-4 village road shall be used for transportation of coal.	0 tons and n
Agreed	lubmission: Agreed to Comply Transportation of coal will be don for transportation of coal during c	the by trucks of fleet size 35-40 tons and no village road will coal production phase.	Date: 20/05/2024
58	Statutory compliance	PP shall maintain at least 10 mtrs width tree plantation leaves and wind break/green-shield of about 10 mts her boundary of coal storage yard.	
		veloped in parallel with construction/development of the 500 nos of saplings has been planted and total survival	Date: 24/05/2024
project.	e 22500 nos with 72% survival rate	e.	
project. trees are		PP to plant additional 1,00,000 plants with three tier along the transportation route, if not completed, and idwith consent to the gram panchayat within two year an remaining within 2 years for their proper growth in additional committed to plant to plantation in 8.49 ha project area	entified area d plant for litional alrea
project. trees are 59 PPs S Being c greenbe	Statutory compliance Statutory compliance Submission: Being Complied omplied with 22,500 nos. of survivolt development dedicated manpow	PP to plant additional 1,00,000 plants with three tier along the transportation route, if not completed, and idwith consent to the gram panchayat within two year an remaining within 2 years for their proper growth in add	entified areased plant for litional alrease. Date:
project. trees are 59 PPs S Being c greenbe	Statutory compliance Statutory compliance Submission: Being Complied omplied with 22,500 nos. of survivolt development dedicated manpow	PP to plant additional 1,00,000 plants with three tier along the transportation route, if not completed, and idwith consent to the gram panchayat within two year an remaining within 2 years for their proper growth in additional committed to plant to plantation in 8.49 ha project area wal saplings of native species with 72% survival rate. For yer is engaged for regular monitoring & gap filling. We are	entified areased plant for litional alrease. Date: 24/05/2024

	nce regularly and same will be inform		<u> </u>
61	Statutory compliance	PP to accomplish the recruitment of a full - fledged quantum manpower with Environmental Engineer/ Environment degree background in Environment Management Cell quantum months and same shall be reported to IRO, MOEF&CO	t Science etc. within si
Compli in Envi manage	ronment Management Cell is already	power with Environmental Engineer degree background recruited. Organizational structure for environment ent authority in EC compliance (Dec-2022) vide letter ated 24.11.2022.	Date: 20/05/2024
62	Statutory compliance	PP to fulfil all the commitment made to address the p (Total amount of Rs. 473 lakhs to be completed within in EIA) issued in time bound manner as committed in l report and a progressive report to be furnished to IRO monthly compliance report.	three years a
Being cound in	nanner. In current financial year 2023	nade to address the public hearing being adhered in time 3-24 till March amount of ₹6.0 Lac has been spent gs, and others social activities under CSR/CER.	Date: 24/05/2024
63	Statutory compliance	PP shall implement Effluent Treatment Plant for was generated from workshop and Sewage Treatment Plan technology as proposed) for its colony. No untreated w discharged from mine boundaries to ponds / nallah / riv	(of MBR vater shall be
Agreed		r generated from workshop and domestic sewage will be	Date:
P.O. of		harged from mine boundaries to ponds / nallah / river. submitted in EC compliance (Dec-2023) vide letter no-	20/05/202
P.O. of PTPL/J	Sewage Treatment Plan has already s	harged from mine boundaries to ponds / nallah / river. submitted in EC compliance (Dec-2023) vide letter no-	20/05/202 nimize the d seeking cons roads inter
P.O. of PTPL/J 64 PPs S Agreed of road:	Sewage Treatment Plan has already s AG-B/EC-Com.Rep/ December 2023 Statutory compliance Submission: Agreed to Comply Water sprinklers will be installed alo	harged from mine boundaries to ponds / nallah / river. submitted in EC compliance (Dec-2023) vide letter no- 3 dated 28.11.2023. PP to maintain the transportation road properly to mi emission. PP to also develop pucca/concrete roads by s from the panchayat with widening of roads especially I linking the villages within the study area of 10 km radi ong the road to reduce fugitive dust emission. Widening roads in consultation with gram panchayat will be	nimize the diseeking constroads inter us buffer zoo
P.O. of PTPL/J 64 PPs S Agreed of roads carried	Sewage Treatment Plan has already s AG-B/EC-Com.Rep/ December 2023 Statutory compliance Submission: Agreed to Comply Water sprinklers will be installed alors and development of pucca/concrete	harged from mine boundaries to ponds / nallah / river. submitted in EC compliance (Dec-2023) vide letter no- 3 dated 28.11.2023. PP to maintain the transportation road properly to mi emission. PP to also develop pucca/concrete roads by s from the panchayat with widening of roads especially I linking the villages within the study area of 10 km radi ong the road to reduce fugitive dust emission. Widening roads in consultation with gram panchayat will be	nimize the diseeking constroads interrus buffer zon Date: 20/05/202
P.O. of PTPL/J 64 PPs S Agreed of roads carried 65 PPs S Being C NABL	Sewage Treatment Plan has already s AG-B/EC-Com.Rep/ December 2023 Statutory compliance Submission: Agreed to Comply Water sprinklers will be installed alors and development of pucca/concrete out in a time bound manner, if requir Statutory compliance Submission: Being Complied Complied The monitoring of ground a	harged from mine boundaries to ponds / nallah / river. submitted in EC compliance (Dec-2023) vide letter no-3 dated 28.11.2023. PP to maintain the transportation road properly to mi emission. PP to also develop pucca/concrete roads by s from the panchayat with widening of roads especially reliable linking the villages within the study area of 10 km radions to reduce fugitive dust emission. Widening roads in consultation with gram panchayat will be red. PP to monitor the water quality of the ground water a water body located within the core zone and 5 km radions periphery of the mine boundary as per procedure laid of the parameters are found within the prescribed	nimize the diseeking constroads interrus buffer zon Date: 20/05/202

		lease area for public display.	
Being of at the d WBPC submitt dated 2	lesignation site after getting site appro B in favour of Powerplus Traders Privated in EC compliance (Dec-2023) vide	Air Quality Monitoring Station (CAAQMS) is installed eval from WBPCB. The confirmation letter from wate Limited regarding installation of CAAQMS is e letter no- PTPL/JAG-B/EC-Com.Rep/ December 2023 ed digitally at entry and exit gate of mine lease area for	Date: 20/05/2024
67	Statutory compliance	PP must explore innovative technology to recover me gases extracted from underground mine while venting.	
	Submission: Agreed to Comply and the condition will be explored in	future for its feasibility.	Date: 20/05/2024
68	Statutory compliance	PP to install solar lights along the road used for transminerals to avoid the accidents at night and also seek in PP is asked to also identify the rural areas for installating light with its maintenance within the study area of 10 k buffer zone within one year.	ts maintenance. on of solar
Agreed assessn		road and in rural areas identified as per Need based babpur, Shrikrishnapur, Amdahi, Sandipur,	Date: 20/05/2024
69	AIR QUALITY MONITORING AND PRESERVATION	Vehicular emissions shall be kept under control and monitored. The vehicles having 'PUC' certificate from pollution testing centres shall be deployed for washery	authorized
	Submission: Not Complied plicable		Date: 20/05/2024

General Conditions

Sr.No.	Condition Type	Condition Details	
1	MISCELLANEOUS	The project proponent shall abide by all the comm recommendations made in the EIA / EMP report, co during Public Hearing and also that during their present Expert Appraisal Committee.	mmitment mad
	bmission: Being Complied is being complied in a time boun	d manner.	Date: 21/05/2024
2	Statutory compliance	The environmental clearance shall be subject to or Supreme Court of India, Hon'ble High Courts, NGT Court of Law, from time to time, and as applicable t	and any other
	<u>'</u>	·	
PPs Sul Agreed &	bmission: Agreed to Comply Noted		Date: 20/05/2024

PPs Submission: Complied

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/Dec2022 dated 24.11.2022

Date: 20/05/2024

4

Statutory compliance

The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

PPs Submission: Complied

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.

Date: 20/05/2024

5

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. (in case of the presence of schedule-1 species in the study area).

PPs Submission: Not Complied

Not applicable

Date: 20/05/2024

6

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: Being Complied

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.

Date: 20/05/2024

7

Statutory compliance

The project proponent shall obtain the necessary permission from the Central Ground Water Authority.

PPs Submission: Complied

Reply to the subject condition is already made in point no-ii of specific condition.

Date: 20/05/2024

8

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 Management Rules, 2016.

PPs Submission: Agreed to Comply

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.

Date: 20/05/2024

9

MISCELLANEOUS

No further expansion or modifications in the plant shall be carried

		out without prior approval of the Ministry of Environ and Climate Change.	ment, Forests
PPs Su Agreed	ubmission: Agreed to Comply		Date: 21/05/2024
10	MISCELLANEOUS	The project authorities must strictly adhere to the st made by the State Pollution Control Board and the St Government.	
Noted A Governn		he West Bengal Pollution Control Board and the State tion CTE and other statutory clearance are obtained	Date: 21/05/2024
11	WATER QUALITY MONITORING AND PRESERVATION	Industrial waste water from coal handling plant and shall be properly collected and treated so as to confor standards prescribed under the Environment (Protecti and the Rules made thereunder, and as amended from Oil and grease trap shall be installed before discharge effluent. Sewage treatment plant of adequate capacity installed for treatment of domestic waste water.	rm to the fon) Act, 198 in time to time to time of workshop
Agreed \		t plant with integrated oil and grease tarp of adequate nent of generated polluted waste water.	Date: 20/05/2024
12	WATER QUALITY MONITORING AND PRESERVATION	Adequate groundwater recharge measures shall be taugmentation of ground water. The project authoritie water requirement of nearby village (s) in case the vildry due to dewatering of mine.	s shall meet
Agreed l water wi rechargin	ill be used for industrial purpose and	ainwater will reuse for industrial purpose. Treated mine provided to the nearby villagers for irrigation and will fulfil water requirement of nearby village (s) in ng of mine.	Date: 20/05/2024
13	WATER QUALITY MONITORING AND PRESERVATION	The surface drainage plan including surface water of plan for the area of influence affected by the said min shall be prepared, considering the presence of any riv pond / lake etc., with impact of mining activities on it implemented by the project proponent. The surface drand / or any diversion of natural water courses shall be provisions of the approved Mining Plan / EIA EMP sthis Ministry and the same should be done with due a concerned State / GoI Authority. The construction of to prevent any danger against inrush of surface water should be as per the approved mining plan and as per of DGMS.	rer / rivulet / t, and rainage plan be as per the ubmitted to pproval of the embankment into the mine
Agreed lands following is no pro-	g villages: Dhabani, Parulia, Jamgara	ut in consultation with concern gram panchayat, in the a, Laudoha, Banagram, Sahapur & Jaganathpur. There ater courses and in this regard no approval is required	Date: 20/05/2024
14	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall take all precautionary nensure reverian / riparian ecosystem in and around the upto a distance of 5 km. A revarian / riparian ecosystem	e coal mine

		conservation and management plan should be prepare implemented in consultation with the irrigation / wate department in the state government.	
Agreed km. The common angiospe plants us Microcy Salvinia aquatic lin the decompositions.	ough all types of sensitive species can ly used plants include sensitive species, other ferns, conifers oaks and seful as pollution monitors are Sphaystis, Scendesmus, Chlorella, Hydro a. Some of the parameters which will bodies found in the study area are density of tolerant species, absence o ition of vegetation and distribution p	be planted all along project area up to a distance of 5 an be used in monitoring pollution, most useful and excies of lichens, mosses, plankton algae, aquatic ferns and many crop plants. Examples of some common types of agnum acutifolia, Fontinalis antipyretica, F. squamosa, edictyon, Cladophora, Stigoclonium, Diatoms Azolla, all be studied in post EC monitoring of the ponds and excrease in the densities of sensitive species and increase of highly sensitive species, changes in the species pattern of populations in the area. Such studies indicate is well as the spread of the pollution problem in the area.	Date: 20/05/2024
15	Noise Monitoring & Prevention	Adequate measures shall be taken for control of noi 85 dB (A) in the work environment. Workers engaged underground mining operations, operation of HEMM provided with personal protective equipments (PPE) I muffs in conformity with the prescribed norms / guide regard. Progress in usage of such accessories to be meaded awareness programme for users to be conducted.	I in , etc. shall be ike ear plugs elines in this onitored.
Agreed of coal. Appropri	Usage of PPE's kit will be made co	ing of machineries will be carried out during production ompulsory inside the mine and will be monitored. s in conformity with the prescribed norms / guidelines	Date: 20/05/2024
16	Noise Monitoring & Prevention	The noise level survey shall be carried out as per the guidelines to assess noise exposure of the workmen at points in the mine premises, and report in this regard submitted to the Ministry / RO on six - monthly basis	t vulnerable shall be
Being co		being carried out by NABL accredited laboratory and limit. The monitoring reports are attached as Annexure-1.	Date: 20/05/2024
17	MINING PLAN	Mining shall be carried out under strict adherence to the Mines Act 1952 and subordinate legislations made as applicable.	
	ubmission: Agreed to Comply and Noted		Date: 20/05/2024
Agreed		No change in mining method i.e. UG to OC, calendard scope of work shall be made without obtaining profile the Ministry of Environment, Forests and Climate Ch (MoEFCC).	20/05/2024 ar programmerior approval
Agreed 18 PPs S	and Noted	No change in mining method i.e. UG to OC, calendard and scope of work shall be made without obtaining processing the Ministry of Environment, Forests and Climate Ch	20/05/2024 ar programme

Agreed 1	ubmission: Agreed to Comply Mining will be done as per approved n aws and circulars of DGMS will be fo	mining plan, and during operation an relevant cour	Date: 20/05/2024
20	MINING PLAN	Underground work place environmental conditions rendered ergonomic and air breathable with adequate conformance with DGMS standards.	
Agreed 'evacuee.		ical Ventilator of high capacity on surface through on of variable pitch of blades to improve the quantity	Date: 20/05/2024
21	MINING PLAN	No mining activity shall be carried out in forest lar obtaining Forestry Clearance as per Forest (Conservand also adhering to The Scheduled Tribes and Othe Forest Dwellers (Recognition of Forest Rights) Act, provisions of Indian Forest Act, 1927.	ation) Act, 198 r Traditional
	ubmission: Complied st land is involved.		Date: 20/05/2024
22	MINING PLAN	Efforts should be made to reduce energy and fuel conservation, efficiency improvements and use of re	
Agreed a consumpty vehicles	ption. b. Solar panels will be installed	inveyance will be deployed to reduce energy and fuel for surface infrastructure and workshop, and electric sel for conveyance of staff/mine workers. c. If possible red for transportation of coal.	Date: 20/05/2024
23	LAND RECLAMATION	Digital Survey of entire lease hold area / core zone Remote Sensing survey shall be carried out at least of years for monitoring land use pattern and report in 1 or as notified by Ministry of Environment, Forest an Change (MOEFCC) from time to time shall be subm MOEFCC/ Regional Office (RO).	nce in three : 50,000 scale d Climate
Agreed laftom rec		ast once in three years for monitoring land use pattern 0,000 scale or as notified by Ministry of Environment, e submitted to MOEF&CC/RO.	Date: 20/05/2024
		Post mining land he rendered usable for agricultur	
24	LAND RECLAMATION	Post-mining land be rendered usable for agricultural purposes and shall be handed over to the respective of Government, as specified in the Guidelines for Preparagraph Closure Plan, issued by the Ministry of Coal dated 22 2009 and subsequent amendments.	State aration of Min
PPs Su	ubmission: Agreed to Comply	purposes and shall be handed over to the respective solutions Government, as specified in the Guidelines for Preparation Closure Plan, issued by the Ministry of Coal dated 2	State aration of Mine

			T.
Agreed. l observati mitigatio	ion of any high rate of subsidence bey	dence movement will be carried out. In case of yond the limit prescribed, appropriate effective as of life and materials. Cracks should be effectively material.	Date: 20/05/2024
26	LAND RECLAMATION	Fly ash shall be used for external dump of overburd or stowing of mine as per provisions contained in clar of subparagraph (8) of fly ash notification issued vide dated 3rd November, 2009 as amended from time to shall be made to utilize gypsum generated from Flue Desulfurization (FGD), if any, along with fly ash for of overburden, backfilling or stowing of mines. Compshall be submitted to Regional Office of MoEF&CC, SPCB.	use (i) and (ii) E SO 2804 (E) time. Efforts Gas external dump
	abmission: Agreed to Comply d mine closure plan will be followed.		Date: 20/05/2024
27	LAND RECLAMATION	A separate team for subsidence monitoring and surf measures shall be constituted and continuous monitor implementation of mitigation measures be carried out	ring &
Agreed.		osidence monitoring and implementation of mitigation	
surface s within th to err on Maximum Suitable The cum mm/m ar mm at th soil/mitti Embanki	tructures and mining operation: 1) The coal block. Hence, AoD of 220 was the side of the safety. The influence of anticipated subsidence of 4098 mm drainage should be made to avoid anyulative predicted maximum compressed 9.1 mm/m respectively would lead a surface. The surface cracks formed to prevent breathing of air and inflowment with an elevation above HFL is	and remedial measures are proposed for the safety of the are number of villages and surface structures at taken into account for design of all proposed panels of subsidence would not affect any surface structure. 2) In would affect the surface topography after mining. It water logging in the centre of subsidence troughs. 3) It is sive strain and tensile strain at the surface of 10.0 It development of cracks with crevices of 60 to 100 during extraction should immediately be filled in with the work of water to the underground workings. 4) advisable be erected on the west side of the Ajay river recise will be conducted within a span of 10 years.	Date: 20/05/2024
surface s within th to err on Maximus Suitable The cum mm/m ar mm at th soil/mitti Embanki subject to	tructures and mining operation: 1) The coal block. Hence, AoD of 220 was the side of the safety. The influence of anticipated subsidence of 4098 mm drainage should be made to avoid anyulative predicted maximum compressed 9.1 mm/m respectively would lead a surface. The surface cracks formed to prevent breathing of air and inflowment with an elevation above HFL is	nere are number of villages and surface structures is taken into account for design of all proposed panels of subsidence would not affect any surface structure. 2) in would affect the surface topography after mining. It is water logging in the centre of subsidence troughs. 3) sive strain and tensile strain at the surface of 10.0 it to development of cracks with crevices of 60 to 100 during extraction should immediately be filled in with the work water to the underground workings. 4) advisable be erected on the west side of the Ajay river	20/05/2024 cracks
surface s within th to err on Maximum Suitable The cum mm/m ar mm at th soil/mitti Embanki subject to 28 PPs Su Agreed I	tructures and mining operation: 1) The coal block. Hence, AoD of 22o was the side of the safety. The influence of anticipated subsidence of 4098 mm drainage should be made to avoid any ulative predicted maximum compressed 9.1 mm/m respectively would lead to prevent breathing of air and inflowment with an elevation above HFL is a actual ground topography. This exe	nere are number of villages and surface structures is taken into account for design of all proposed panels of subsidence would not affect any surface structure. 2) in would affect the surface topography after mining. It water logging in the centre of subsidence troughs. 3) sive strain and tensile strain at the surface of 10.0 it to development of cracks with crevices of 60 to 100 during extraction should immediately be filled in with wo f water to the underground workings. 4) advisable be erected on the west side of the Ajay river recise will be conducted within a span of 10 years. Thorough inspection of the mine lease area for any developed at the surface due to mining activities belo be carried out to prevent inrush of water in the mine.	20/05/2024 cracks
surface s within th to err on Maximum Suitable The cum mm/m ar mm at th soil/mitti Embanki subject to 28 PPs Su Agreed I out by a	tructures and mining operation: 1) The coal block. Hence, AoD of 22o was the side of the safety. The influence of anticipated subsidence of 4098 mm drainage should be made to avoid anyulative predicted maximum compressed 9.1 mm/m respectively would lead a surface. The surface cracks formed to prevent breathing of air and inflowment with an elevation above HFL is a actual ground topography. This exe LAND RECLAMATION	nere are number of villages and surface structures is taken into account for design of all proposed panels of subsidence would not affect any surface structure. 2) in would affect the surface topography after mining. It water logging in the centre of subsidence troughs. 3) sive strain and tensile strain at the surface of 10.0 it to development of cracks with crevices of 60 to 100 during extraction should immediately be filled in with wo f water to the underground workings. 4) advisable be erected on the west side of the Ajay river recise will be conducted within a span of 10 years. Thorough inspection of the mine lease area for any developed at the surface due to mining activities belo be carried out to prevent inrush of water in the mine.	20/05/2024 cracks ow ground sha Date: 20/05/2024
surface s within th to err on Maximum Suitable The cum mm/m ar mm at th soil/mitti Embanki subject to 28 PPs Su Agreed I out by a support 29 PPs Su Agreed N	tructures and mining operation: 1) The coal block. Hence, AoD of 220 was the side of the safety. The influence of an anticipated subsidence of 4098 mm drainage should be made to avoid anyulative predicted maximum compressed 9.1 mm/m respectively would lead to prevent breathing of air and inflowment with an elevation above HFL is a actual ground topography. This exe LAND RECLAMATION The burning operation in underground topography. The mining operation in underground topography. The burning the mining operation in underground topography. The burning the mining operation in underground topography. The burning the mining operation in underground topography. Agreed to Comply During the Mining operation in underground topography. Agreed to Comply above the mining operation in underground topography. Agreed to Comply above to Comply above the complex topography. Agreed to Comply above the complex topography. Agreed to Comply above the complex topography. Agreed to Comply above the complex topography.	nere are number of villages and surface structures is taken into account for design of all proposed panels of subsidence would not affect any surface structure. 2) In would affect the surface topography after mining. It water logging in the centre of subsidence troughs. 3) sive strain and tensile strain at the surface of 10.0 It to development of cracks with crevices of 60 to 100 during extraction should immediately be filled in with wo f water to the underground workings. 4) advisable be erected on the west side of the Ajay river recise will be conducted within a span of 10 years. Thorough inspection of the mine lease area for any developed at the surface due to mining activities below be carried out to prevent inrush of water in the mine. Pround, regular monitoring of surface will be carried water in the mine. Native tree species shall be selected and planted over affected by subsidence.	20/05/2024 cracks ow ground sha Date: 20/05/2024
surface s within th to err on Maximum Suitable The cum mm/m ar mm at th soil/mitti Embanki subject to 28 PPs Su Agreed I out by a service 29 PPs Su Agreed N	tructures and mining operation: 1) The coal block. Hence, AoD of 220 was the side of the safety. The influence of an anticipated subsidence of 4098 mm drainage should be made to avoid anyulative predicted maximum compressed 9.1 mm/m respectively would lead to prevent breathing of air and inflorment with an elevation above HFL is a actual ground topography. This exe LAND RECLAMATION The burning the mining operation in undergonitoring team to prevent inrush of LAND RECLAMATION LAND RECLAMATION	nere are number of villages and surface structures is taken into account for design of all proposed panels of subsidence would not affect any surface structure. 2) In would affect the surface topography after mining. It water logging in the centre of subsidence troughs. 3) sive strain and tensile strain at the surface of 10.0 It to development of cracks with crevices of 60 to 100 during extraction should immediately be filled in with wo f water to the underground workings. 4) advisable be erected on the west side of the Ajay river recise will be conducted within a span of 10 years. Thorough inspection of the mine lease area for any developed at the surface due to mining activities below be carried out to prevent inrush of water in the mine. Pround, regular monitoring of surface will be carried water in the mine. Native tree species shall be selected and planted over affected by subsidence.	cracks ow ground sha Date: 20/05/2024 er areas Date: 20/05/2024

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.

21/05/2024

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, SO2, 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 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.

PPs Submission: Being Complied

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 submitted in EC compliance (Dec-2023) vide letter no- PTPL/JAG-B/EC-Com.Rep/ December 2023 dated 28.11.2023. 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

Date: 20/05/2024

32

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 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.

PPs Submission: Being Complied

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.

Date: 20/05/2024

33

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 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.

PPs Submission: Agreed to Comply

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 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.

Date: 20/05/2024

34

AIR QUALITY

Major approach roads shall be black topped and properly

	MONITORING AND PRESERVATION	maintained.	
Agreed. more to cares. A	mine infrastructure area of a distar	etalled approachable road will be constructed from deul acc of 6.5 km length. Proper maintenance will be taken al will be installed to supress dust emission during	Date: 20/05/2024
35	AIR QUALITY MONITORING AND PRESERVATION	The transportation of coal shall be carried out as pe and route proposed in the approved mining plan. Transithe coal through the existing road passing through an be avoided. In case, it is proposed to construct a 'bypa should be so constructed that the impact of sound, du accidents could be appropriately mitigated.	nsportation of y village shal ass' road, it
	ubmission: Agreed to Comply Coal will be transported only by th	e route as mentioned and proposed in approved mining	Date: 20/05/2024
36	AIR QUALITY MONITORING AND PRESERVATION	Vehicular emissions shall be kept under control and monitored. All the vehicles engaged in mining and al shall operate only after obtaining 'PUC' certificate fr authorized pollution testing centres.	lied activities
Being c	ubmission: Being Complied omplied with Only PUC certified vormaintenance of engaged vehicles in	ehicles is being engaged in mining and allied activities.	Date: 20/05/2024
37	AIR QUALITY MONITORING AND PRESERVATION	Coal stock pile / crusher / feeder and breaker mater points shall invariably be provided with dust suppress Belt-conveyors shall be fully covered to avoid air bor cladding all along the conveyor gantry should be mad borne dust. Drills shall be wet operated or fitted with	sion system. ne dust. Side le to avoid air
	ubmission: Agreed to Comply Adequate dust suppression system	will be installed in critical areas prone to air pollution.	Date: 20/05/2024
38	AIR QUALITY MONITORING AND PRESERVATION	Coal handling plant shall be operated with effective measures w.r.t. various environmental parameters. Er friendly sustainable technology should be implement mitigating such parameters.	vironmental
Agreed vacuum		ater sprinkling / rain gun, use of movable water tanker, canon system etc. will be adopted to control fugitive dust endly.	Date: 20/05/2024
39	WATER QUALITY MONITORING AND PRESERVATION	The effluent discharge (mine waste water, workshowshall be monitored in terms of the parameters notified Water Act, 1974 Coal Industry Standards vide GSR 725.9.2000 and as amended from time to time by the Coal Pollution Control Board.	under the 42(E) dated
Agreed. untreate	ed water will be discharged from m	capacity will be installed to treat mine water. No ine boundaries to pond / nallah / river. In order to ensure g of inlet & outlet water from NABL/ WBPCB/ MoEF	Date: 20/05/2024

competent authority. The monitoring data shall be uploaded on the company's website WATER QUALITY and displayed at the project site at a suitable location. The circular 40 MONITORING AND No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry **PRESERVATION** of Environment, Forest and Climate Change shall also be referred in this regard for its compliance. **PPs Submission:** Being Complied Date: Being complied with. Data is being displayed at entry and exit gate of mine lease area for public 20/05/2024 display. Also Six monthly EC compliance is being uploaded on company's website http://www.powerplustraders.com/EHS.php 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 WATER QUALITY the mining operations. The monitoring of ground water levels shall MONITORING AND 41 be carried out four times year i.e. pre - monsoon, monsoon, post -**PRESERVATION** 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 Being complied with The monitoring of ground water levels will be carried out by NABL/WBPCB/ Date: MoEF accredited laboratory four times a year i.e. pre – monsoon, monsoon, post – monsoon and 20/05/2024 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. Monitoring of water quality upstream and downstream of water WATER QUALITY bodies shall be carried out once in six months and record of 42 MONITORING AND monitoring data shall be maintained and submitted to the Ministry **PRESERVATION** of Environment, Forest and Climate Change / Regional Office. PPs Submission: Being Complied Date: Being complied with The monitoring of water quality upstream and downstream of water bodies has 20/05/2024 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. WATER QUALITY Ground water, excluding mine water, shall not be used for mining 43 MONITORING AND operations. Rainwater harvesting shall be implemented for **PRESERVATION** conservation and augmentation of ground water resources. Date: **PPs Submission:** Agreed to Comply 20/05/2024 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. 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 WATER QUALITY embankment constructed along the river / nallah boundary shall be 44 MONITORING AND of suitable dimensions and critical patches shall be strengthened by **PRESERVATION** stone pitching on the river front side, stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation. Date: **PPs Submission:** Agreed to Comply 20/05/2024 Agreed. No alteration will be carried out.

in nate areas fo ponent shall	The project proponent shall make necessary alternat arrangements, if grazing land is involved in core zone consultation with the State government to provide alte livestock grazing, if any. In this context, the project primplement the directions of Hon'ble Supreme Court visions.	tunized for various industrial purposes evelopment, dust suppression, irrigation purposes. LAND RECLAMATION
Date: 20/05/2024		PPs Submission: Agreed to Comply Noted.
	MISCELLANEOUS Concealing factual data or submission of false / fabricated data may result in revocation of this environmental clearance and attraction under the provisions of Environment (Protection) Act, 198	
e and attract	may result in revocation of this environmental clearar	8 MISCELLANEOUS
e and attract	may result in revocation of this environmental clearar	8 MISCELLANEOUS PPs Submission: Complied Noted
e and attract) Act, 1986. Date: 21/05/2024	may result in revocation of this environmental clearar	PPs Submission: Complied
e and attract) Act, 1986. Date: 21/05/2024	may result in revocation of this environmental clearar action under the provisions of Environment (Protection	PPs Submission: Complied
e and attract) Act, 1986. Date:	may result in revocation of this environmental clearar	PPs Submission: Complied
e and attract) Act, 1986. Date:	may result in revocation of this environmental clearar	
e and attract) Act, 1986.	may result in revocation of this environmental clearar	8 MISCELLANEOUS
e and attract	may result in revocation of this environmental clearar	8 MISCELLANEOUS
in nate areas fo ponent shall	arrangements, if grazing land is involved in core zone consultation with the State government to provide alter livestock grazing, if any. In this context, the project product of the context of the project product of the context of the project product of the context of the con	7 LAND RECLAMATION
Date: 20/05/2024	or pump out mine water. After treatment the water i.e. construction and maintenance of roads, green belt ose for villagers, etc.	vill be utilized for various industrial purposes
ea, roads,	The water pumped out from the mine, after siltation utilized for industrial purpose viz, watering the mine a green belt development etc. The drains shall be regular particularly after monsoon and maintained properly.	WATER QUALITY 6 MONITORING AND PRESERVATION
Date: 20/05/2024	in the low lying area at mine site keeping 50% safety I and maximum discharge in the area adjoining the	Agreed A garland drains has been constructed
Date:	in the low lying area at mine site keeping 50% safety	
1		Agreed A garland drains has been constructed nargin over and above the peak sudden rainfal

	abmission: Agreed to Comply & Noted.		Date: 21/05/2024
52	MISCELLANEOUS	The above conditions shall be enforced, inter - a provisions of the Water (Prevention & Control of 1974, the Air (Prevention & Control of Pollution Environment (Protection) Act, 1986, Hazardous a (Management and Trans-boundary Movement) Ru Public Liability Insurance Act, 1991 along with the and Rules and any other orders passed by the Hon Court of India / High Courts and any other Court of the subject matter.	Pollution) Act, Act, 1981, the and Other Wastes ales, 2016 and the aeir amendments 'ble Supreme
	ubmission: Complied & Noted.		Date: 21/05/2024
53	MISCELLANEOUS	The proponent shall abide by all the commitmer recommendations made in the EIA / EMP report a during presentation to the EAC. All the commitme issues raised during public hearing shall also be in letter and spirit.	and also that ents made on the
Agreed, commitr		nd recommendations made in the EIA/EMP report, and also that during their presentation to the Expert	Date: 21/05/2024
54	MISCELLANEOUS	The proponent shall obtain all necessary clearan that may be required before the start of the project any other competent authority may stipulate any f for environmental protection. The Ministry or any authority may stipulate any further condition for e protection.	t. The Ministry of urther condition other competent
	ubmission: Being Complied & Noted.		Date: 21/05/2024
55	MISCELLANEOUS	Any appeal against this environmental clearance National Green Tribunal, if preferred, within a per prescribed under Section 16 of the National Green 2010.	riod of 30 days as
PPs Submission: Agreed to Comply Noted.			Date: 21/05/2024
56	MISCELLANEOUS	The coal company/project proponent shall be 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 India & others.	
	ubmission: Agreed to Comply & Noted.		Date: 21/05/2024
57	MISCELLANEOUS	The concerned State Government shall ensure no operations to commence till the entire compensations	

PPs Subi		the judgement of Hon'ble Supreme Court.	
Agreed & l	mission: Agreed to Comply Noted.		Date: 21/05/2024
58	This Environmental Clearance shall not be operational till time the project proponent complies with the above said jud of Hon'ble Supreme Court, as applicable, and other statutor requirements.		
PPs Subi Agreed & l	mission: Being Complied Noted.		Date: 21/05/2024
59	GREENBELT	The project proponent shall take all precautionary n mining operation for conservation and protection of e flora / fauna, if any, spotted / reported in the study are in this regard, if any, shall be prepared and implemen consultation with the State Forest and Wildlife Depar	endangered ea. Action pla ted in
Agreed No then we'll		ule -I is found during collection of baseline data. Even luring mining operation for conservation and protection	Date: 20/05/2024
60	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 / transportation roads.		se area in a of native
Being Com about 10 m species alredevelopme growth. • 3 CSR/CER	the height along the boundary of ceady planted in project area till Mont dedicated manpower is engage 500 nos of saplings are distributed activity. • On the occasion of "Engage activity in the occasion of "Engage activity in the occasion of the occasion occasion.	lantation of broad leaves and wind break/green-shield of coal storage yard. • Total 22500 nos. of saplings of native larch, 2024 with 72% survival rate. For greenbelt ed for regular monitoring, gap filling and their proper ed among the nearby villages in the project area under nvironment Day" on 5th June, 2023 a total 1500 nos of the school children and nearby villagers	Date: 24/05/2024
61	PUBLIC HEARING	Adequate illumination shall be ensured in all mine leading per DGMS standards) and monitored.	ocations (as
	mission: Being Complied plied with. Lighting facilities in 1	night is being setup at all places of mine site wherever is	Date: 20/05/2024
62	PUBLIC HEARING	The Project Proponent shall undertake Occupationa for initial and Periodical medical examination of the engaged in the Project and maintain records according provisions of the Mines Rules, 1955 and DGMS Circ carrying out regular periodic health check - up of their % of the workers engaged in active mining operations subjected to health check - up for occupational disease impairment, if any.	workers gly as per the ulars. Besides ir workers, 20 s shall be
PPs Subi	mission: Being Complied	ff and workers carried out at pre-entry level and later on	Date:

diseases cards in required guideline urgent ar	and for prompt remedial medical in this respect is maintained for effect in the matter. All occupational hea es. Safety matters will be reviewed	ended on an annual basis to detect early incidence of interventions in this respect. Necessary personal data ive monitoring and application of medical services lth and safety activities is being done as per DGMS once in 15 days by safety officer regularly so as to take safe operations and practices with a view to prevent	20/05/2024
63	PUBLIC HEARING	Personnel (including outsourcing employees) work areas shall wear protective respiratory devices and s provided with adequate training and information on health aspects.	hall also be
Being co working	in the dusty areas and will be regul	we Equipment (PPE's) will be provided to the workers arly monitored. Training and information will be ograph of Personals wear PPE's is given below:	Date: 20/05/2024
64	PUBLIC HEARING	Skill training as per safety norms specified by DG provided to all workmen including the outsourcing ensure high safety standards in mines.	
Being Co specified		d for providing skill training as per safety norms g the outsourcing employees to ensure high safety	Date: 20/05/2024
65	PUBLIC HEARING	Effective arrangement shall be made to provide and maintain a suitable points conveniently situated, a sufficient supply of dring water for all the persons employed.	
Complie	abmission: Complied d. Adequate drinking water facility tion phase, also provided during op	is provided to all the persons employed during eration phase.	Date: 20/05/2024
66	PUBLIC HEARING	Implementation of Action Plan on the issues raised Public Hearing shall be ensured. The Project Propor undertake all the tasks as per the Action Plan submit budgetary provisions during the Public Hearing. Lar be compensated as per the norms laid out R & R Pol Company / or the National R&R Policy / R&R Polic Government, as applicable.	nent shall tted with and oustees shal licy of the
Agreed A	abmission: Agreed to Comply A time bound action plan has been planing and will be implemented wi	prepared for addressing all the issues raised during the thin the time frame.	Date: 20/05/2024
67	PUBLIC HEARING	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.	
Agreed V	Ibmission: Agreed to Comply We'll follow the mitigation measure) dated 29th October, 2014.	es stated in this Ministry's OM No. Z-11013/5712014-	Date: 21/05/2024
68	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 / 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: Complied Complied Company has well laid down environmental policy duly approve by the Board of Date: Directors. Copy of Environmental Policy is already submitted to competent authority in EC 21/05/2024 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. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the 69 **PUBLIC HEARING** control of senior Executive, who will directly to the head of the organization. Date: PPs Submission: Complied 21/05/2024 Complied. A separate Environmental cell both at 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 70 **PUBLIC HEARING** 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: Being Complied 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. The amount spent for implementation of EMP till March, 2024 on the following heads: 1. Installation of Date: Continuous Ambient Air Quality Monitoring Station (CAAQMS): ₹35,80,044/- 2. Greenbelt 24/05/2024 Development: ₹16,72,500/- 3. CSR/CER: 6,00,000/- 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 ₹79.48 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 annually. Every three 71 PUBLIC HEARING years third party environmental audit shall be carried out. Date: **PPs Submission:** Agreed to Comply 21/05/2024 Agreed & Noted. 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 72 **MISCELLANEOUS** 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

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.

Date: 21/05/2024

73

MISCELLANEOUS

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.

PPs Submission: Complied

The copies of the environmental clearance have been submitted to the Heads of local bodies, Panchayat and Municipal Bodies (DM, Paschim Bardhaman, ADM, Paschim Bardhaman, Sub-Divisional Officer, Durgapur Sub-Division, BDO, Durgapur-Faridpur Block, BDO, Kanksa Block, GM, D.I.C., Paschim Bardhaman, Sabhadhipati, Paschim Bardhaman Zila Parishad, Sabhapati, Durgapur-Faridpur Panchayat Samity, Kanksa Panchayat Samity, Gour Bazar Gram Panchayat, Bidbehar Bazar Gram Panchayat AND Pratappur Bazar Gram Panchayat). 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.

Date: 24/05/2024

74

MISCELLANEOUS

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.

PPs Submission: Being Complied

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 http://www.powerplustraders.com/EHS.php

Date: 21/05/2024

75

MISCELLANEOUS

The project proponent shall monitor the criteria pollutants level namely; PM10, SO₂, 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.

PPs Submission: Being Complied

Being complied with. The criteria pollutants level namely; PM10, PM2.5, SO2, 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 http://www.powerplustraders.com/EHS.php

Date: 21/05/2024

76

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

Being Complied In compliance to this point, this report is being submitted. The last compliance report for the period April, 2023 to Sept, 2023 has been submitted to MoEF&CC vide our letter no. PTPL/JAG-B/EC-Com.Rep/December 2023 Date: 28/11/2023 and also uploaded on the website of the MoEF&CC at environment clearance portal.

Date: 21/05/2024

77

MISCELLANEOUS

The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II(M)

-	PPs Submission: Being Complied 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. Visit Remarks Last Site Visit Report Date: N/A	Being com	omission: Being Complied applied with. We'll follow the mitigati 2014-IA.II (M) dated 29th October, 2014-IA.II (M) dated 29th October, 2014-IA.II (M)	habitatio and villa villages a son measure 2014 The profor each Control I	th October, 2014, titled "Impact of mining acons-issues related to the mining projects where ges are the part of mine lease areas or habitatare surrounded by the mine lease area". The estated in this Ministry's OM No. Zeroject proponent shall submit the environment financial year in Form-V to the concerned Standard as prescribed under the Environment (Date: 21/05/2024 tal statement tate Pollution Protection)
Last Site Visit Report Date: N/A	Last Site Visit Report Date: N/A	Agreed W	e'll submit the environmental stateme	company	n financial year in Form-V to the WBPCB	Date:
*	*			Visit R	emarks	
Additional Remarks: NA	Additional Remarks: NA	Last Site Vi	sit Report Date:		N/A	

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

r. No.	Condition: 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 date 18.10.2022 issued vide memo no. 525-2N 11/2022(E). We will obtain Consent to Operat 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 in
		enclosed.







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 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 GW Abstraction 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 of Rs. 41.52 Cr & Recurring cost of	manner in parallel with implementation of the project.
	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.	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 <i>Annexure-1</i> .
iv.	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	Agreed and will be complied.
v.	quality for its long term protection. 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 ponds, wherever required.	Agreed and will be complied Water distribution system will be implemented in parallel with implementation of the project
vi.	PP shall explore the use of Ukhra Railway	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.
vii.	PP shall install ~191 water sprinklers for dedicated road from mining to Deul and 100 number along the separate transportation route 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.	Agreed Water sprinklers and fog canons will be installed in parallel with operation of mine to reduce the fugitive dust emission.
viii.	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 total 16500 nos of saplings has been planted and total survival trees are 22500 nos with 72% 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 22,500 nos. of survival saplings of native species with 72% 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.

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.

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

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.

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 bound manner. In current financial year 2023-24 till March amount of ₹6.0 Lac has been spent on distribution of dustbins, school bags, and others social activities under CSR/CER.



		Cricket Match Competition Cricket Match Competition has been conducted by Powerplus Traders Private Limited, and prize for first three winner teams has given. Therefore there were private in the priv
		RASHMI Distribution of School Bags, Stationery and Dustbins at
		GROUP Basudevpur F.P. School
	DD 1 11 1 1 ECCI / F	
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.
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 already 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. Also data is being displayed digitally at entry and exit gate of mine lease area for public display.
xviii.	PP must explore innovative technology to	Noted and the condition will be explored in
	recover methane from gases extracted	future for its feasibility.
	from underground mine while venting.	
xix.	PP to install solar lights along the road	Agreed
	used for transportation of minerals to	We will install color lights along the rest and
	avoid the accidents at night and also seek its maintenance. PP is asked to also	We will install solar lights along the road and in rural areas identified as per Need based
	identify the rural areas for installation of	assessment & SIA in various villages i.e.
	solar light with its maintenance within the	Nababpur, Shrikrishnapur, Amdahi, Sandipur,
	study area of 10 km radius buffer zone	Baidyanathpur.
	within one year.	
XX.	Proponent shall appoint an Occupational	Being complied.
	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	PART

	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. 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	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 already attached as Annexure-1. Agreed
	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.	
	ORY COMPLIANCE-STANDARD EC CONDI utory Compliance:	ITION APPLICABLE FOR COAL WASHERY
Sr.	Conditions	Reply
No	Conditions	керіу
	ne project proponent shall obtain forest	Not applicable, as coal washery project is not
	1 J r . r . r	Tr , as some a manage project to more

	clearance under the provisions of Forest	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
	from the National Board for Wildlife, if	proposed.
	applicable.	
iii.	The project proponent shall prepare a Site -	Not applicable, as coal washery project is not
	Specific Conservation Plan / Wildlife	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. (in case 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 not
	Establish / Operate under the provisions of Air	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 not
	necessary permission from the Central Ground	proposed.
	Water Authority.	
vi.	Solid waste / hazardous waste generated in the	Not applicable, as coal washery project is not
	washery needs to addressed in accordance to	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 not
	out under strict adherence to provisions of the	proposed.
	Factories Act, 1957 and subordinate	
	legislations made there under.	
-	ir quality monitoring and preservation:	
i.	Adequate ambient air quality monitoring	Not applicable
	stations shall be established in the core zone as	
	well as in the buffer zone for monitoring of	
	pollutants, namely particulates, SO ₂ and NO _x .	
	Location of the stations shall be decided based	
	on the meteorological data, topographical	
	features and environmentally and ecologically	

	sancitive manufaction with the	
	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 ₁₀ , PM _{2.5} , SO ₂ and NO _x . 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.	
iii.	Transportation of coal by road shall be carried	Not applicable
	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,	
	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
1 .	internal roads shall be concreted. The roads	τνοι αργιτεάσιο
	shall be regularly cleaned. Coal transportation	
	shall be carried out by covered trucks.	
V.	Covered trucks shall be engaged for mineral	Not applicable
٧.	transportation outside the washery up to the	ινοι αρμιταυίο
	1 -	
	railway siding, shall be optimally loaded to	
	avoid spillage en-route. Trucks shall be	
	adequately maintained and emissions shall be below notified limits.	
	below nonneu mints.	

vi.	Facilities for parking of trucks carrying raw	Not applicable
	material from linked mine shall be created	
	within the unit.	
vii.	Vehicular emissions shall be kept under	Not applicable
	control and regularly monitored. The vehicles	
	having 'PUC' certificate from authorized	
	pollution testing centres shall be deployed for	
	washery operations.	
viii.	Hoppers of the coal crushing unit and other	Not applicable
	washery units shall be fitted with high	11
	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.	
ix.	The raw coal, washed coal and coal wastes	Not applicable
IX.	· ·	Not applicable
	(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.	N
х.	The temporary reject sites should appropriate	Not applicable
	planned and designed to avoid air and water pollution from such sites.	
(c) V	Vater quality monitoring and preservation	
i.	The effluent discharge (mine waste water,	Not applicable
1.	workshop effluent) shall be monitored in terms	Two applicable
	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.	NT / 1' 11
ii.	The monitoring data shall be uploaded on the	Not applicable
	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	
	regard for compliance.	
iii.	Industrial waste water shall be properly	Not applicable
	collected and treated so as to conform to the	
	standards prescribed under the Environment	
	(Protection) Act, 1986 and the Rules made	
117	there under, and as amended from time to time. The project proponent shall not alter major	Not applicable
iv.	The project proponent shan not after major	140t applicable

	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.	
v.	Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.	Not applicable
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.	Not applicable
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.	Not applicable
viii.	Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.	Not applicable
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.	Not applicable
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.	Not applicable
xi.	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	Not applicable

	T	7
	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
	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.	
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,	1 τοι αρρποιοίο
	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.	NT / 1' 11
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) (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
1.	native species, of minimum 30 m width shall	ap pnousio
	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	
	to developed along vacant aleas, storage	7,50

		<u> </u>
	yards, loading / transfer points and also along	
	internal roads/ main approach roads.	AY . 19 11
ii.	The project proponent shall make necessary	Not applicable
	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.	
(g) P	Public 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,	
	if any as amended time to time.	
iii.	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.	
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	110ι αρρποασίο
	OM No.Z- 11013/57/2014-IA.II(M) dated 29 th	
	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	
	maditations and vinages are suffounded by the	OSCEN.

	mine lease area'.	
(h) C	Corporate Environment Responsibility	<u>I</u>
-		Not applicable
a)	Fund allocation for Corporate Environment	Not applicable
	Responsibility (CER) shall be made as per	
	Ministry's O.M. No. 22-65 /2017-IA.III dated 30 th September 2020 and based on	
	1	
	commitment made during public consultation	
	process for incorporating in EIA-EMP for	
1-)	deliberation of EAC.	Not and lookle
b)	The company shall have a well laid down	Not applicable
	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.	NT . 1' 11
c)	A separate Environmental Cell both at the	Not applicable
	project and company head quarter level, with	
	qualified personnel shall be set up under the	
	control of senior Executive, who will directly	
1\	to the head of the organization.	NT . 1' 11
d)	Action plan for implementing EMP and	Not applicable
	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.	NT-411
e)	Self - environmental audit shall be conducted	Not applicable
	annually. Every three years third party	
C	environmental audit shall be carried out.	
	t of EC Is Further Subject To Compliance of T	The Standard EC Conditions As Under:
<u>a)</u>	Statutory Compliance	A 1 0 NT-/ 1
i.	The environmental clearance shall be subject	Agreed & Noted
	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.	OJDER

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 (Decayor) vide letter no PTPL/LAG R/EC
iii.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	2022) vide letter no- PTPL/JAG-B/EC-Com.Rep/Dec2022 dated 24.11.2022 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 Pollution Control Board / Committee.	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.
vi.	The project proponent shall obtain the necessary permission from the Central Ground	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. Reply to the subject condition is already made
	necessary permission from the Central Ground	in point no-ii of specific condition.

	Water Authority.	
vii.	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)	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 ₂ , and NO _x . 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.	Being complied with Continuous Ambient Air Quality Monitoring Station (CAAQMS) is installed at the designation site after getting site approval from WBPCB. 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
	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.	mitigation method adopted third party monitoring from NABL accredited laboratory has been done. The monitoring reports are already attached as <i>Annexure-1</i> .
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 the Ministry / Regional Office and to the CPCB / SPCB.	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 already 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	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

	Dill di Contabilità	
iv.	Pollution Control Board. Major approach roads shall be black topped and properly maintained.	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 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.	Agreed Coal will be transported only by the route as mentioned and proposed in approved mining plan.
vi.	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 'PUC' certificate from the authorized pollution testing centres.	Being complied with Only PUC certified vehicles is being engaged in mining and allied activities. Regular maintenance of engaged vehicles is 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	Agreed. Adequate dust suppression system will be installed in critical areas prone to air pollution.

	1 1 1 1 1 1 1 1 1 1 1 1	
	borne dust. Drills shall be wet operated or fitted with dust extractors.	
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. Water Quality Monitoring and Preservation	Agreed Adequate measures like regular water sprinkling / rain gun, use of movable water tanker, vacuum sweeper machine, fog mist water canon system etc. will be adopted to control fugitive dust emission, which will be environmental friendly.
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 Climate Change shall also be referred in this regard for its compliance.	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
iv.	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. 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.	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 <i>Annexure-1</i> . 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
W		attached as Annexure-1.
V.	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.	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.
vi.	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	Agreed. No alteration will be carried out.
	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 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 sump capacity shall also provide adequate retention period to allow proper settling of silt material of the surface runoff.	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. Photographs of garland drain is given below:
viii.	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.	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.
ix.	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.	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.
X.	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 case the	Agreed RWH structure will be constructed, rainwater will reuse for industrial purpose. Treated mine water will be used for industrial purpose and

village wells go dry due to dewatering of mine. 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 хi. water conservation plan for the area of influence affected by the said mining Renovation of pond will be carried out in operations shall be prepared, considering the consultation with concern gram panchayat, in presence of any river / rivulet / pond / lake etc., the following villages: Dhabani, Parulia, with impact of mining activities on it, and Jamgara, Laudoha, Banagram, Sahapur & implemented by the project proponent. The Jaganathpur. surface drainage plan and / or any diversion of natural water courses shall be as per the There is no proposal for any diversion of natural water courses and in this regard no provisions of the approved Mining Plan / EIA EMP submitted to this Ministry and the same approval is required from concerned State / should be done with due approval of the GoI Authority. 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. The project proponent xii. shall take all Agreed & Noted. precautionary measures to ensure reverian / Bio indicator species will be planted all along riparian ecosystem in and around the coal mine project area up to a distance of 5 km. 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 and should be prepared and implemented in commonly used plants include sensitive species consultation with the irrigation / water of lichens, mosses, plankton algae, aquatic resource department in the state government. 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, Hydrodictyon, Scendesmus, Chlorella, 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 pollutant(s) as well as the spread of the pollution problem in the area.

Noise and Vibration Monitoring and Prevention

i.	Adaquata maggurag shall be taken for central	Agreed
1.	Adequate measures shall be taken for control of noise levels below 85 dB (A) in the work	Agreed
	` ′	Pagular maintanance oil and greecing of
	environment. Workers engaged in underground mining operations, operation of HEMM, etc.	Regular maintenance, oil and greasing of machineries will be carried out during
	shall be provided with personal protective	machineries will be carried out during production of coal. Usage of PPE's kit will be
	equipments (PPE) like ear plugs / muffs in	made compulsory inside the mine and will be
	conformity with the prescribed norms /	monitored. Appropriate PPE's kit like ear plugs
	guidelines in this regard. Progress in usage of	/ muffs in conformity with the prescribed
	such accessories to be monitored. Adequate	norms / guidelines will be provided during
	awareness programme for users to be	mining operation.
	conducted.	mining operation.
ii.	The noise level survey shall be carried out as	Being complied with
111.	per the prescribed guidelines to assess noise	Being complica with
	exposure of the workmen at vulnerable points	Noise level survey is being carried out by
	in the mine premises, and report in this regard	NABL accredited laboratory and found the
	shall be submitted to the Ministry / RO on six -	noise level within the prescribed limit
	monthly basis.	noise level within the presented inne.
e)	Mining Plan	
i.	Mining shall be carried out under strict	Agreed and Noted
	adherence to provisions of the Mines Act 1952	
	and subordinate legislations made there - under	
	as applicable.	
ii.	No change in mining method i.e. UG to OC,	Noted and agreed
	calendar programme and scope of work shall	
	be made without obtaining prior approval of	
	the Ministry of Environment, Forests and	
	Climate Change (MoEFCC).	
iii.	Mining shall be carried out as per the approved	Agreed
	mining plan (including mine closure plan)	Mining will be done as per approved mining
	abiding by mining laws related to coal mining	plan, and during operation all relevant coal
	and the relevant circulars issued by Directorate	mining laws and circulars of DGMS will be
	General Mines Safety (DGMS).	followed.
iv.	Underground work place environmental	Agreed
	conditions shall be rendered ergonomic and air	We've proposed to install one mechanical
	breathable with adequate illumination in	Ventilator of high capacity on surface through
	conformance with DGMS standards.	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	No forest land is involved.
	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.	
vi.	Efforts should be made to reduce energy and	Agreed
		a. Solar panels, electric vehicles for
	fuel consumption by conservation, efficiency	
	improvements and use of renewable energy.	conveyance will be deployed to reduce
		conveyance will be deployed to reduce

		 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.
f)	Land Reclamation	will be preferred for transportation of coar.
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 th 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 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.	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.
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 rd 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	Approved mine closure plan will be followed.

	SPCB.	
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	Noted.

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.

g) Green Belt

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.

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.

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 22500 nos. of saplings of native species already planted in project area till March, 2024 with 72% survival rate. For greenbelt development dedicated manpower is engaged for regular monitoring, gap filling and their proper growth.



3500 nos of saplings are 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



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.

ii.	The Project Proponent shall undertake	Being Complied.
	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.	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.
iv.	Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.	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.
V.	Effective arrangement shall be made to provide and maintain at suitable points conveniently situated, a sufficient supply of drinking water for all the persons employed.	Complied. Adequate drinking water facility is provided to all the persons employed during construction phase, also provided during operation phase.
vi.	Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project 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	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.

	Company / or the National R&R Policy / R&R Policy of the State Government, as applicable.	
vii.	The project proponent shall follow the mitigation measures provided in this Ministry's OM No. Z-11013/5712014-IA.II(M) dated 29 th 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.	Agreed We'll follow the mitigation measures stated in this Ministry's OM No. Z-11013/5712014-IA.II (M) dated 29 th October, 2014.
i)	Corporate Environment Responsibility	,
i.	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.	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.
ii.	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.	Complied. A separate Environmental cell both at project and company head quarter is in place.
iii.	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. The amount spent for implementation of EMP till March, 2024 on the following heads: 1. Installation of Continuous Ambient Air Quality Monitoring Station (CAAQMS): ₹35,80,044/- 2. Greenbelt Development: ₹16,72,500/- 3. CSR/CER: 6,00,000/- 4. Environmental Monitoring: ₹1,06,200/- 5. Sewage Treatment Plant (STP): ₹14,00,000/- 6. Fog Mist Water Canon System: ₹6,50,000/-

iv.	Self-Environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	A total amount of ₹79.48 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. Agreed & Noted.
j) i.	Miscellaneous The project proponent shall make public the	Complied
1.	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.	Complied Public notice for grant of Environmental Clearance has been given in to local newspaper that are widely circulated in the region are: • "AAJKAL" 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 (DM, Paschim Bardhaman, ADM, Paschim Bardhaman, Sub-Divisional Officer, Durgapur Sub-Division, BDO, Durgapur-Faridpur Block, BDO, Kanksa Block, GM, D.I.C., Paschim Bardhaman, Sabhadhipati, Paschim Bardhaman Zila Parishad, Sabhapati, Durgapur-Faridpur Panchayat Samity, Kanksa Panchayat Samity, Gour Bazar Gram Panchayat, Bidbehar Bazar Gram Panchayat AND Pratappur Bazar Gram Panchayat). 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 http://www.powerplustraders.com/EHS.php
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	Being complied with. The criteria pollutants level namely; PM10, PM2.5, SO ₂ , NOx (ambient levels) is being monitored by CAAQMS. Value of pollutants is being displayed on board as per CPCB format.

	disclosure to the public and put on the website of the company.	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
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 April, 2023 to Sept, 2023 has been submitted to MoEF&CC vide our letter no. PTPL/JAG-B/EC-Com.Rep/December 2023 Date: 28/11/2023 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 th 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. We'll follow the mitigation measures stated in this Ministry's OM No. Z-11013/5712014-IA.II (M) dated 29 th October, 2014
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.
x.	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	Noted and is being complied in a time bound manner.

	Committee.	
xi.	No further expansion or modifications in the	Agreed
1111	plant shall be carried out without prior	1-8-0-0
	approval of the Ministry of Environment,	
	Forests and Climate Change.	
xii.	Concealing factual data or submission of false	Noted
7111.	/ fabricated data may result in revocation of	110000
	this environmental clearance and attract action	
	under the provisions of Environment	
	(Protection) Act, 1986.	
xiii.	The Ministry may revoke or suspend the	Noted & Agreed
11111	clearance, if implementation of any of the	Thousand Tighteen
	above conditions is not satisfactory.	
xiv.	The Ministry reserves the right to stipulate	Agreed & Noted.
211 / 1	additional conditions if found necessary. The	rigioda & riotod.
	Company in a time bound manner shall	
	implement these conditions.	
XV.	The Regional Office of this Ministry shall	Agreed & Noted.
' •	monitor compliance of the stipulated	1.51000 00 110000
	conditions. The project authorities should	
	extend full cooperation to the officer (s) of the	
	Regional Office by furnishing the requisite	
	data / information / monitoring reports.	
xvi.	The above conditions shall be enforced, inter -	Agreed & Noted.
12,12	alia under the provisions of the Water	1181000 00 1100001
	(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	
	subject matter.	
5	The proponent shall abide by all the	Agreed, we'll abide all the commitments and
	commitments and recommendations made in	recommendations made in the EIA/EMP
	the EIA / EMP report and also that during	report, commitment made during Public
	presentation to the EAC. All the commitments	Hearing and also that during their presentation
	made on the issues raised during public	to the Expert Appraisal Committee.
	hearing shall also be implemented in letter and	The state of the s
	spirit.	
6	The proponent shall obtain all necessary	Agreed & Noted.
	clearances / approvals that may be required	<i>C</i>
	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.	
	P. 000000000000000000000000000000000000	(SOE)

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	S
	illegal mining, if any, and as raised by the	
	respective State Governments at any point of	
	time, in terms of the orders dated 2 nd 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	<u> </u>
	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.
	operational till such time the project proponent	_
	complies with the above said judgement of	
	Hon'ble Supreme Court, as applicable, and	
	other statutory requirements.	







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-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 ³	70.1	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (<2.5μm) in μg/m ³	31.2	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO ₂) in μg/m ³	8.2	80	IS: 5182 (Part-2)-2001, (RA-2017)
.4	Nitrogen dioxide (NO ₂) in μg/m ³	12.6	80	IS: 5182 (Part- 6)- (RA-2017)
5	Carbon Monoxide (CO) in μg/m ³	938	2000	IS: 5182 (Part- 10)- (RA-2017)
6	Ammonia (NH ₃) in μg/m ³	21.5	400	Air Sampling, 3rdEdn -Method-401
7	Ozone (O ₃) in μg/m ³	35.1	180	Air Sampling, 3 rd Edn -Method-411
8	Lead (Pb) in μg/m ³	0.13	1	EPA IO-3.2 & 5.0
9	Nickel (Ni) in ng/m ³	<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 rd Edition-2017 Part 3114B
11	Benzene (C ₆ H ₆) in μg/m ³	<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 ³	<2.0	-	USEPA IO-5.0. June:1999
14	Cadmium (Cd) in μg/m ³	<0.02	-	USEPA IO-3.2, June:1999
15	Chromium (Cr) in µg/m ³	<0.05		USEPA IO-3.2, June:1999

Report Prepared By:

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.

This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.

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-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) Sampling Done by: S.Ghosh Date of sampling: 06.02.2023-07.02.2023

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

Longitude & Latitude: 23° 42' 12.76"N, 87° 24' 41.07"E

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

Report Prepared By:

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.

This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.

[•] 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-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/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

Date of sampling: 06.02.2023-07.02.2023

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

Longitude & Latitude: 23° 41' 6.91"N, 87° 26' 55.79"E

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

Report Prepared By:

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.

This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.

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-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

Date of sampling: 07.02.2023-08.02.2023

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

Longitude & Latitude : 23° 40' 4.97"N, 87° 23' 26.86"E

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

Report Prepared By:

(O):

for Qualissure Laboratory Services
Reviewed & Authorized By

Benimadhab Gorai, Chemist (Authorized Signatory)

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

- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- 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.

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





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-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

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- 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

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

(B) Chemical Analysis

SI. No	Test Parameter	Test Method	Limit As Per (RA-2018)	,	
		rest Metriou	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 AI) in mg/I	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/I	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/l	APHA 23rd Edition 2017, 4500 F D	1.0	1.5	0.18
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/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/I	IS 3025 (Part 59): 2006 RA 2014	0.1	0.3	<0.02
17.	Nitrate (as NO ₃) in mg/I	IS 3025 (Part 34)-1986 RA: 2014	45	No Relaxation	<0.5
18.	Phenolic Compounds(as C ₆ H ₅ 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	<0.001
20.	Sulphate (as SO ₄) in mg/l	IS 3025 (Part 24)-1986, RA: 2014	200	400	25.7
21.	Sulphide (as H ₂ 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 CaCO ₃) 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	<0.002
26.	Lead(as Pb) in mg/l	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/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

Report Prepared By: (...

for Qualissure Laboratory Services
Reviewed & Authorized By

Bishnupriya Banerjee, Chemist (Authorized Signatory)

Page 2 of 2

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

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

[•] This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.

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-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

: TC627123000000284F : QLS/P-107/22-23/C/07

: 15.02.2023

: QLS/ P-107/22-23/07 : Ground Water (GW1)

: Sashipur Bore well (in MLA) : 23°39'36.59"N, 87°23'36.48"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

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

Chabraliorty Soumy Chakraborty, Microbiologist (Authorized Signatory)

Page 1 of 2

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- 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

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

(B) Chemical Analysis

	Test Parameter			S 10500 :2012 Amd. 1 & 2	Result
SI. No		Test 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	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 ₃) in mg/l	IS 3025 (Part 34)-1986 RA: 2014	45	No Relaxation	0.76
18.	Phenolic Compounds(as C ₆ H ₅ 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 ₄) in mg/l	IS 3025 (Part 24)-1986, RA: 2014	200	400	31.2
21.	Sulphide (as H ₂ S) in mg/l	IS 3025 (Part 29): 1991; RA 2014	0.05	No Relaxation	< 0.01
22.	Alkalinity(as CaCO ₃)in mg/l	IS 3025 (Part 23)- 1986, RA: 2014	200	600	167.2
23.	Total Hardness (as CaCO ₃) 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:



for Qualissure Laboratory Services
Reviewed & Authorized By

Bishnupriya Banerjee, Chemist (Authorized Signatory)

Page 2 of 2

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

[•] This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.

[•] 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-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 Sample No. 6th Floor, Kolkata-700017 : QLS/ P-107/22-23/08 Sample Description : Ground Water (GW4) Sample Location : Sahapur Bore well Name of Project: **GPS Coordinates** : 23°39'47.31"N, 87°27'13.36"E Jaganathpur-B Underground Coal Mine 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) : PTPL/QLS/001/2022-23, Dated-31.01.2023 Ref No. Date

(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

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- 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

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

(B) Chemical Analysis

SI. No	Test Parameter	Test Method		S 10500 :2012 Amd. 1 & 2	
31. 140	restratameter	rest ivietnou	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/I	IS 3025 (Part 40)-1991, RA: 2014	75	200	37.5
10.	Chloride(as CI) in mg/I	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 ₃) in mg/l	IS 3025 (Part 34)-1986 RA: 2014	45	No Relaxation	0.58
18.	Phenolic Compounds(as C ₆ H ₅ 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 ₄) in mg/l	IS 3025 (Part 24)-1986, RA: 2014	200	400	37.4
21.	Sulphide (as H ₂ S) in mg/l	IS 3025 (Part 29): 1991; RA 2014	0.05	No Relaxation	<0.01
22.	Alkalinity(as CaCO ₃)in mg/l	IS 3025 (Part 23)- 1986, RA: 2014	200	600	171.6
23.	Total Hardness (as CaCO₃) 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

Habanefee
Bishnupriya Banefjee, Chemist
Kor (Authorized Signatory)

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

Page 2 of 2

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

[•] This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.

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-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
6 th Floor, Kolkata- 700017	Sample No.	: QLS/ P-107/22-23/09
1950 Independent Control and Security Control and Security Control Con	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
raganatipal p onderground cod mine	Date of Performance	: 08.02.2023 - 14.02.2023
3	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)

Page 1 of 2

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- 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

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

(B) Chemical Analysis

SI. No	Test Parameter	Test Method		IS 10500 :2012 Amd. 1 & 2	
	×	Test medica	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	7.39
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/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	0.47
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 ₃) in mg/l	IS 3025 (Part 34)-1986 RA: 2014	45	No Relaxation	0.98
18.	Phenolic Compounds(as C ₆ H ₅ 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 ₄) in mg/l	IS 3025 (Part 24)-1986, RA: 2014	200	400	38.6
21.	Sulphide (as H ₂ S) in mg/I	IS 3025 (Part 29): 1991; RA 2014	0.05	No Relaxation	<0.01
22.	Alkalinity(as CaCO ₃)in mg/l	IS 3025 (Part 23)- 1986, RA: 2014	200	600	189.2
23.	Total Hardness (as CaCO ₃) in mg/I	IS 3025 (Part 21)-1983, RA: 2014	200	600	106.1
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	<0.02
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/l	IS 3025 (Part 37)-1988, RA- 2014	0.01	No Relaxation	
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

Report Prepared By: (,

for Qualissure Laboratory Services Reviewed & Authorized By

Bishnupriya Banerjee, Chemist Ohra (Authorized Signatory)

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

Page 2 of 2

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- 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-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/10

Date : 17.02.2023

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

: Surface Water

: 07.02.2023

Sample Location

: Ajay River Down Stream (WQ3)

GPS Coordinates

: 23°41'55.79"N, 87°23'4.18"E

Date of Performance Sample Drawn On

: 08.02.2023 - 14.02.2023

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 23 rd 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 23rd Edition-2017, 4500-O-C	5.0 (Min)	6.1
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 Cl		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 ₃) in mg/I	IS 3025 (Part 34): 1988(RA 2014)		<0.5
14	Sulphate (as SO ₄) in mg/l	APHA 23rd Edition 2017, 4500 SO ₄ 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 ₆ H ₅ 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**

. Chakrulionty Soumy Chakraborty, Microbiologist (Authorized Signatory)

----End of the Report---

for Qualissure Laboratory Services Reviewed & Authorized By

MoBane free Bishnupriya Banerjee, Chemist (Authorized Signatory)

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- 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-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. : QLS/ P-107/22-23/11

Sample Description : Surface Water

Sample Location : Ajay River Up Stream (WQ2) **GPS Coordinates** : 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

Sl.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 23rd Edition-2017, 4500 H+	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 23rd Edition 2017, 2540 B	It	170
5	Oil & Grease in mg/l	APHA 23rd Edition-2017, 5520A	1922	<1.4
6	Dissolved Oxygen in mg/I	APHA 23 rd 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 Cl		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 ₄) in mg/l	APHA 23rd Edition 2017, 4500 SO ₄ E		21.1
15	Cadmium(as Cd) in mg/l	IS 3025 (Part 41): 1992(RA 2014)	5000	<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 ₆ H ₅ 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. Chalaradeouty Soumy Chakraborty, Microbiologist (Authorized Signatory)

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

for Qualissure Laboratory Services Reviewed & Authorized By

Casane fee Bishnupriya Banerjee, Chemist (Authorized Signatory)

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- 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-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/12

: 17.02.2023

Sample No. Sample Description : QLS/ P-107/22-23/12

Sample Location

: Surface Water

GPS Coordinates

: Tumni Nala (WQ1)

Date of Performance

: 23°39'1.32"N, 87°22'49.23"E

Sample Drawn On

: 08.02.2023 - 14.02.2023

: 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 23 rd 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	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	PA		
6	Dissolved Oxygen in mg/I	APHA 23 rd 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/I	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/l	IS 3025 (Part 34): 1988(RA 2014)	***	<0.5	
14	Sulphate (as SO ₄) in mg/l	APHA 23rd Edition 2017, 4500 SO ₄ 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	
i 7	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 ₆ H ₅ 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. Chakraborty Soumy Chakraborty, Microbiologist (Authorized Signatory)

for Qualissure Laboratory Services Reviewed & Authorized By

> CoBanefice Bishnupriya Banerjee, Chemist (Authorized Signatory)

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

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- 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-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/14

: 17.02.2023

Sample No.

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

Sample 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

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-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 23 rd Edition: 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+	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 rd Edition 2017, 2540 B		224
5	Oil & Grease in mg/l	APHA 23rd Edition-2017, 5520A	1202	3.4
6	Dissolved Oxygen in mg/l	APHA 23 rd 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	44-2	50.1
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	0.51
12	Iron (as Fe) in mg/l	IS 3025 (Part 53): 1988(RA 2014)	15.55	0.31
13	Nitrate (as NO ₃) in mg/l	IS 3025 (Part 34): 1988(RA 2014)		0.82
14	Sulphate (as SO ₄) in mg/l	APHA 23rd Edition 2017, 4500 SO ₄ E		17.9
15	Cadmium(as Cd) in mg/l	IS 3025 (Part 41): 1992(RA 2014)	515	< 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)	777	<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 ₆ H ₅ 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)

CoBano fee

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

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- 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-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.
Sample Description

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

Sample Location

: Surface Water

sample Location

: Pond Near Shibpur (SW4)

GPS Coordinates

Date of Performance

: 23°37'46.85"N, 87°25'31.8"E

Sample Drawn On

: 08.02.2023 - 14.02.2023 : 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: 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 rd Edition-2017, 4500 H ⁺	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			119
5	Oil & Grease in mg/l			<1.4
6	Dissolved Oxygen in mg/l	APHA 23 rd Edition-2017, 4500-O-C	5.0 (Min)	5.2
7	Biochemical Oxygen Demand (as BOD) mg/I	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)	N	<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 ₃) in mg/l	IS 3025 (Part 34): 1988(RA 2014)		<0.5
14	Sulphate (as SO ₄) in mg/l	APHA 23rd Edition 2017, 4500 SO ₄ E		24.7
15	Cadmium(as Cd) in mg/l	IS 3025 (Part 41): 1992(RA 2014)	1	<0.002
16	Lead(as Pb) in mg/l	IS 3025 (Part 47): 1994 (RA 2014)	7.000	<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	An Andrew Grant Control of the Contr		<0.05
20	Phenolic Compounds(as C ₆ H ₅ 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
(Authorized Signatory)

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

- The results relate only to the item(s) tested:
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- 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-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.

rt No. : QLS/P-107/22-23/C/16

Date : 17.02.2023

Sample No.
Sample Description

: QLS/ P-107/22-23/16 : 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 rd Edition 2017, 2540 B		262
5	Oil & Grease in mg/l	APHA 23rd Edition-2017, 5520A		1.9
6	Dissolved Oxygen in mg/l	APHA 23 rd Edition-2017, 4500-O-C	5.0 (Min)	5.8
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		38.6
10	Copper(as Cu) in mg/I	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)	(0.44
13	Nitrate (as NO ₃) in mg/I	IS 3025 (Part 34): 1988(RA 2014)		0.71
14	Sulphate (as SO ₄) in mg/l	APHA 23rd Edition 2017, 4500 SO ₄ 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)		<0.002
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 ₆ H ₅ 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)

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

for Qualissure Laboratory Services
Reviewed & Authorized By

Bishnupriya Banerjee, Chemist (Authorized Signatory)

- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- 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.

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





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-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

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

Date : 17.02.2023

Sample No. Sample Description

: Surface Water

Sample Location

GPS Coordinates

: Pond Near Infrastructure Area in MLA (SW1) : 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

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-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 rd Edition-2017, 4500 H ⁺	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 23rd Edition 2017, 2540 B		276
5	Oil & Grease in mg/I	APHA 23rd Edition-2017, 5520A		2.1
6	Dissolved Oxygen in mg/I	APHA 23 rd 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 23 rd Edition 2017, 4500 CI		42.4
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	0.61
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 ₄) in mg/l	APHA 23rd Edition 2017, 4500 SO ₄ E	122	19.3
15	Cadmium(as Cd) in mg/l	IS 3025 (Part 41): 1992(RA 2014)	MODE:	<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 ₆ H ₅ 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

S. Chakralwerty Soumy Chakraborty, Microbiologist (Authorized Signatory)

for Qualissure Laboratory Services Reviewed & Authorized By

CoBanefice Bishnupriya Banerjee, Chemist (Authorized Signatory)

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

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- 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. : QLS/P-107/22-23/C/17

Date

: 17.02.2023

Sample No.

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

Sample Description

: Soil

Sample Location : I

: Benodpur (in MLA)

Period Of Analysis

: 08.02.2023-17.02.2023 : 23° 40' 5.99" N, 87° 23' 6.64" E

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 Loam
4.	a) Sand, %	SOP No. TPM/QLS/E/S/MA Soil & Plant Analysis, C.S.Piper	37
1673	b) Silt, %	351 116. 11 m/ qus/c/s/m/ 3611 & Flatte Allalysis, C.S. Pipel	29
	c) Clay, %	i i	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:

av!

For Qualissure Laboratory Services Reviewed & Authorized by

> Bishnupriya Banerjee, Chemist (Authorized Signatory)

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

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

[·] This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.

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-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:

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.

This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.

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 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 : Vehicular Emission
Date of Performance : 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 ₂ % (v/v)	CO % (v/v)	O ₂ (%)
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 : 🖒

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

for Qualissure Laboratory Services

(Benimadhab Gorai, Chemist)
Authorized Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services
- . 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