

BRAHMANI RIVER PELLETS LIMITED



Registered Office :

4th Floor, IPICOL House, Janpath
BHUBANESWAR, ODISHA - 751022

Tel. No.: 0674-2543390

Fax No.: 0674-2543398

E-mail : admin@brplind.com

(CIN)-U27106OR2006PLC008914

Ref. No.: BRPL/MoEFCC/PP/22/ 212

Dated November 25, 2022

To

The Research Officer,
Ministry of Environment & Forest,
Government of India,
Eastern Regional Office,
A/3, Chandrasekharpur,
Bhubaneswar-751023.

Sub: Submission of Half Yearly progress report of pellet plant at-Kalinga Nagar, Dist-Jajpur regarding the status of implementation of the conditions of environmental clearance accorded by the Ministry of Environment, Forests & Climate Change.

Dear Sir,

We are enclosing herewith the Half yearly progress report on the status of the compliance to the conditions of Environment Clearance as per EIA Notification 2006 of our Pellet Plant located at Kalinga Nagar Industrial Complex, Jajpur for your kind information. The soft copy of the report is also being sent through e-mail.

Thanking You,

Yours faithfully,
For Brahmani River Pellets Limited.

Shilp Sharma
(Plant Head)

Encl: As stated above

Copy to:- OSPCB, BBSR/ CPCB, Kolkata/ Regional office, KNIC, Jajpur.

COMPLIANCE TO SIX MONTHLY ENVIRONMENT CLEARANCE CONDITIONS

Name of the Project:- Brahmani River Pellets Ltd, (Pellet Plant)

Clearance letters No. and date:- F.NO.J-11011/295/2014-IA II (I) dated:

06.04.2016

Period of Compliance Report:- April 2022 – September 2022

Sl.No.	SPECIFIC CONDITIONS by MOEFCC	Status
i.	The project proponent shall install 24 X 7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional office.	<p>Complied. Online ambient air quality monitoring device is installed inside the plant premises to monitor the ambient air quality on 24x7.</p> <p>Besides this, Ambient air quality monitoring is also being regularly carried out twice in a week at 3 locations inside the plant premises and found to be within limits prescribed as per CPCB. The copies of the monitoring report are being submitted to the Ministry and its Regional Office.</p> <p>The monitoring work is conducted by authorized Third party and the monitoring reports are enclosed herewith as Annexure-I. The monitoring report is regularly being submitted to Odisha State Pollution Control Board.</p>
ii.	Continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic Precipitator (ESP), bag house, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm ³ and installing energy efficient technology.	<p>Continuous online monitoring has been installed in our main stack which is connected to Electrostatic Precipitator (ESP).</p> <p>Stack monitoring is also being regularly carried out for all stacks and found to be within limits prescribed as per Odisha State Pollution Control Board. The monitoring report is regularly</p>

		<p>being submitted to Odisha State Pollution Control Board.</p> <p>Air pollution control devices such as Electrostatic precipitators (ESP), Bag filters, dry fog system and wet scrubbers have been installed in our process to keep the emission levels below 50 mg/Nm³. The stack Monitoring reports are enclosed herewith as Annexure-I.</p>
iii.	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. 826 (E) dated 16 th November, 2009 shall be followed.	<p>Complied.</p> <p>The said Standards issued by the Ministry vide G.S.R. 826 (E) dated 16th November, 2009 is being followed.</p>
iv.	Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414 (E) dated 30 th May, 2008 and regularly monitored. Guidelines/Code of practice issued by the CPCB shall be followed.	<p>Gaseous emission levels including secondary fugitive emissions from all the sources are within limit.</p> <p>To reduce the particulate matter emissions from the stacks, we have installed ESPs, scrubbers and Bag filter system and for dispersion (dilution) of the pollutants, our main stack is of 85 meters high which is connected to ESP.</p> <p>We monitor and carry out preventive maintenance on a regular basis. The monitoring work is conducted by an Authorized Third party agency.</p>
v.	The PP shall install scrubber and upgrade the existing scrubbers within one year to reduce Sox emission which will be verified by the regional office.	SOx reduction measures are already in Force. From last one year SOx percentage are in reducing trend.
vi.	Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.	The main raw material for the pellet plant is beneficiated iron ore and it comes as slurry form from our Beneficiation plant through pipe line. So there are no fugitive emissions in raw materials

		<p>handling area.</p> <p>Trucks carrying other raw materials like coke, Bentonite & lime stone & product pellets are covered with tarpaulins. To minimize fugitive emission and spillage, Speed limit of the vehicles is restricted to 20 Km/hour inside the plant premises and overloading is prohibited.</p> <p>Fixed water sprinklers have been installed along the road to control fugitive emissions during vehicular movement.</p> <p>Multiple fixed water sprinklers covering 30m radius each have been installed in our product yard to control dust emission.</p> <p>Water tanker is engaged for regular water sprinkling on internal roads for dust suppression.</p> <p>Sprinkling system is installed in our product conveyor & transfer chute to control fugitive emission.</p> <p>The internal roads are black topped, concrete and laid with paver block to minimize the fugitive emission. These roads are cleaned regularly by a dedicated team.</p>
vii.	<p>“Zero” effluent discharge shall be strictly followed and no waste water shall be discharged outside the premises.</p>	<p>Complied.</p> <p>The water from iron ore slurry is separated through filtration system and sent to the thickener and treatment plant. The de-dusting / scrubbed return water of plant is also sent to the thickener</p>

		and treatment plant. The treated water is used as make up water and for other usage in pellet plant.
viii.	Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent.	Complied. The water from iron ore slurry is separated through filtration system and treated in the thickener and WTP. The treated water is used as make up water and other uses in pellet plant.
ix.	Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional office, SPCB and CPCB.	Pellet plant does not generate any solid waste.
x.	A time bound action plan shall be submitted for reduction in solid waste, its proper utilization and disposal.	Pellet plant does not generate any solid waste.
xi.	Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2009. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of understanding shall be submitted to the Ministry's Regional office at Chennai.	Not Applicable as we don't generate any fly ash.
xii.	A risk and disaster management plan shall be prepared and a copy submitted to the Ministry's Regional office, SPCB and CPCB within 3 months of issue of environment clearance letter.	Risk and Disaster Management Plan had submitted to the Ministry's Regional office on dtd 02.06.2016. And this plan also submitted to SPCB,Odisha on dtd 01.06.2016 & CPCB.
xiii.	Green belt shall be developed in at least 33% of the project area by planting native and broad leaved species in consultation with local DFO and local communities as per the CPCB guidelines.	33% of the plant area is being covered with Green belt of native species inside plant premises. Saplings of various native species like Sissoo, Amla, Krishnachuda, Neem, Maha neem, Chakunda,

		Palm etc. have been planted in various locations coming under green belt area in Pellet Plant. In this financial year (2022-23), 1000 no of fruit bearing plant has been distributed to nearby villagers.
xiv.	At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional office. Implementation of such program shall be ensured by constituting a committee comprising of the proponent, representatives of village panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional office.	As it is an operative plant and the E.C was sought to regularize on the instruction of MoEFCC. Hence this clause is not now applicable for us. However we are doing CSR work in the periphery of Kalinga Nagar Area as well as in the other area in Odisha in consultation with Local Communities, District Administration / State Government.
xv.	The proponent shall prepare a detailed CSR Plan for every year for the next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise(Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in clause 135 of the companies act, 2013 which provides for 2 % of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the plan shall be submitted as part of the Compliance Report to R.O. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual report of the company.	A detailed CSR plan for every year for the next 5 years shall be prepared which includes village-wise, sector-wise activities in consultation with the local communities and administration, and shall be submitted as part of the Compliance Report to the R.O.
xvi.	The company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard Operating process/procedure to being into focus any infringement/deviation/violation of	We have submitted the policy towards Corporate Environment Responsibility which have inter-alia address (i) Standard Operating process/procedure to being into

	<p>environmental or forest norms/ conditions, (ii) Hierarchical system or administrative order of the company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance /violation environmental norms to the Board of Directors of the company and/ or stakeholders or shareholders.</p>	<p>focus any infringement/deviation/violation of environmental or forest norms/ conditions, (ii) Hierarchical system or administrative order of the company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance /violation environmental norms to the Board of Directors of the company and/ or stakeholders or shareholders to Ministry of Environment, Forest & Climate change, Bhubaneswar on dtd. 21.09.2016.</p>
xvii.	<p>The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.</p>	<p>Agreed. Solar light system for common areas, street lights, villages, parking around plant area has been provided.</p>
xviii.	<p>The project proponent shall provide for LED Lights in their offices and residential areas.</p>	<p>Agreed. LED lights have been installed in office premises and residential areas.</p>
xix.	<p>Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of project.</p>	<p>Not Applicable, as it is an operating plant.</p>

B. General Conditions

Sl.No.	General conditions by MOEF	Status
i.	The project authorities must strictly adhere to the stipulations made by the Odisha Pollution Control Board and the State Government.	Stipulated conditions as per OSPCB are being adhered to during Implementation. Latest Consent to operate has been obtained from SPCB, Odisha vide letter No.3335/IND-I-CON-6109 , Dated 04.03.2021, Consent order no. 2755 which is valid till 31.03.2026.
ii.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	We will abide by the condition.
iii.	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM ₁₀ , PM _{2.5} , SO ₂ and Nox are anticipated in consultation with the State Pollution Control Board (SPCB). Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office located at Bhubaneswar and State Pollution Control Board/Central Pollution Control Board Once in six months.	<p>Online ambient air quality monitoring device is installed inside the plant premises to monitor the ambient air quality on 24x7.</p> <p>Besides this, Ambient air quality monitoring is also being regularly carried out twice in a week at 3 locations inside the plant premises and found to be within limits prescribed as per CPCB. The copy of the monitoring report is being submitted to Ministry and the Regional Office.</p> <p>The monitoring work is conducted by authorized Third party and the monitoring reports are enclosed herewith as Annexure-I. The monitoring report is regularly being submitted to Odisha State Pollution Control Board.</p>

iv.	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.	Complied. The water from iron ore slurry is separated through filtration system and treated in the thickener and WTP. The treated water is used as make up water and other uses in pellet plant including plantation.
v.	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 75 dBA ((nighttime).	The overall noise level in and around the plant area is kept below 85dB by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. However workers involved in operations at vulnerable area are always provided with appropriates PPEs like ear plugs/muffs and are rotated from time to time. Noise level is being monitored regularly. Monitoring reports are enclosed as Annexure-I .
vi.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per Factories Act.	The occupational health surveillance program of the workers is being carried out regularly. Health records are being maintained as per Factories Act.
vii.	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	We have already made rain water harvesting system inside our plant premises. The rain water including the rooftop water of the administrative building is channelized to this rain water harvesting pit.
viii.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development	Agreed.

	activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	
ix.	Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate change (MoEFCC) as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose.	Separate budget is being made for environment protection in every year and accordingly expenditure is being done.
x.	A copy of clearance letter shall be sent by the proponent to concerned Panchayat / Zila Parisada / Municipal Corporation, Urban local body and the local NGO, if any, from whom suggestion/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	Complied.
xi.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional office of the MoEFCC at Bhubaneswar. The respective Zonal office of CPCB and the SPCB. The criteria pollutant levels namely; PM ₁₀ , PM _{2.5} , SO ₂ , NO _x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Agreed. We have displayed Environmental information with respect to Air, Water, and hazardous waste and hazardous chemical at the main gate for public view.
xii.	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional office of MoEFCC, the respective Zonal office of Central Pollution Control Board and State Pollution Control Board. The Regional Office of this Ministry at Bhubaneswar/CPCB/SPCB shall monitor the stipulated conditions.	We are submitting six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Regional Office of MoEFCC, Bhubaneswar. We are also submitting the same report to Central Pollution Control Board and State Pollution Control Board.
xiii.	The environmental statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution control board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the	We are submitting environmental statement for each financial year ending 31 st March in Form-V to the State Pollution control board, Odisha.

	company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional office of the MoEFCC at Bhubaneswar by e-mail.	We are sending the same report to Regional office of the MoEFCC at Bhubaneswar by e-mail.
xiv.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board and may also be seen at web site of the Ministry of Environment, Forests and Climate change (MoEFCC) at http://envfor.nic.in . This shall be advertised within 7 days from the date of the issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bhubaneswar.	Circulated in local newspapers. The copies of the same have been deposited in the Regional office of MoEFCC at Bhubaneswar on 9th May 2016.
xv.	Project authorities shall inform the Regional office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Not applicable as this is an operating plant.
10.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agreed.
11.0	The Ministry reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner shall implement these conditions.	Agreed.
12.0	The above conditions shall be enforced, inter-alia under the provisions of the Water(Prevention & control of Pollution) Act, 1974, the Air (Prevention & control of Pollution) Act, 1981, the Environment (Protection) 1986, Hazardous Wastes (Management, Handling and Trans boundary Movement) Rules, 2008 and the public (Insurance) liability act,1991 along with their amendments and rules.	Complied.


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- Infrastructure Engineering
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- Environmental & Social Study

- Surface & Sub-Surface Investigation
- Quality Control & Project Management
- Renewable Energy

- Agricultural Development
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- Public Health Engineering

- Mine Planning & Design
- Mineral/Sub-Soil Exploration
- Waste Management Services

Ref: VCSPL/22/R-9131

Date: 17.11.2022

SIX MONTHLY AVERAGES CORE ZONE AAQ QUALITY RERPORT (APRIL 2022 TO SEPTEMBER 2022)

Name of Industry : M/s. Brahmani River Pellets Limited; Kalinga Nagar, Jajpur.

Name of the Location	PARAMETERS											
	PM10 (µg/m ³)	PM2.5 (µg/m ³)	SO2 (µg/m ³)	NOx (µg/m ³)	O3 (µg/m ³)	CO (mg/m ³)	NH3 (µg/m ³)	C6H6 (µg/m ³)	BaP (ng/m ³)	Ni (ng/m ³)	Pb (µg/m ³)	As (ng/m ³)
Near Manpur Gate	61.16	36.65	5.46	13.68	14.15	0.33	BDL	BDL	BDL	BDL	BDL	BDL
Near Canteen	54.74	32.99	5.50	16.84	13.31	0.29	23.49	BDL	BDL	BDL	BDL	BDL
Near Reserver	55.33	33.37	5.29	15.22	12.53	0.37	23.00	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100	60	80	80	180	4	400	5	1	20	1	6



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- Waste Management Services

Ref: VCSPL/22/R-9132

Date: 17.11.2022

SIX MONTHLY AVERAGES FUGITIVE EMISSION MONITORING REPORT (APRIL 2022 TO SEPTEMBER 2022)

Name of Industry : M/s. Brahmani River Pellets Limited; Kalinga Nagar, Jajpur.

Sl. No.	Sampling Location	Parameter
		SPM ($\mu\text{g}/\text{m}^3$)
1.	F-1:Near HLSB	485.3
2.	F-2: Near Raw Material Yard	488.8
MoEF Norms	1200 $\mu\text{g}/\text{m}^3$	



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- Mineral/Sub-Soil Exploration
- Waste Management Services

Ref: VCSPL/22/R-9133

Date: 17.11.2022

SIX MONTHLY AVERAGES NOISE MONITORING REPORT (APRIL 2022 TO SEPTEMBER 2022)

1. Name of the Industry : M/s Brahmani River Pellets Limited, Kalinga Nagar, Jajpur

Location ID	Ambient Noise Monitoring Station Location	Day time Equivalent	Night time Equivalent
		Noise Level in dB(A) leq	
N1	Near Main Gate	71.7	61
N2	Near Office Canteen	70.6	59.7
N3	OPTCL Room	69.6	62.1
N4	Manpur Gate	63.1	60.7
N5	Near CCR	64.2	61.4
N6	Near Store	66.5	60.8
N7	Electrical Work shop	68.3	61.3
N8	Near WTP	67.5	62.1
Standard as per CPCB		75	70



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- Mineral/Sub-Soil Exploration
- Waste Management Services

Ref: VCSPL/22/R-9134

Date: 17.11.2022

SIX MONTHLY AVERAGES STATIONARY EMISSION MONITORING REPORT (APRIL 2022 TO SEPTEMBER 2022)

Name of Industry : M/s. Brahmani River Pellets Limited; Kalinga Nagar, Jajpur.

Parameters	Unit	Stack attached to ESP	Stack attached to Discharge end Scrubber	Stack attached to Feed End Scrubber	Stack attached to Bag Filter	Stack attached to HLSB
Stack Temperature	°C	100	40	61	67	42
Velocity of Flue Gas	m/sec	10.22	8.06	10.19	22.74	7.82
Quantity of Gas flow	m ³ /hr	241868.05	61421.18	54515.71	286282.28	47363.25
Concentration of Particulate Matter as PM	mg/Nm ³	23.1	17.2	18.5	21.17	22.43
Sulphur dioxide as SO ₂	mg/Nm ³	21.36	16.58	19.23	<2.0	<2.0
Oxides of Nitrogen as NO _x	mg/Nm ³	19.0	18.7	18.2	<5.0	<5.0



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- Waste Management Services

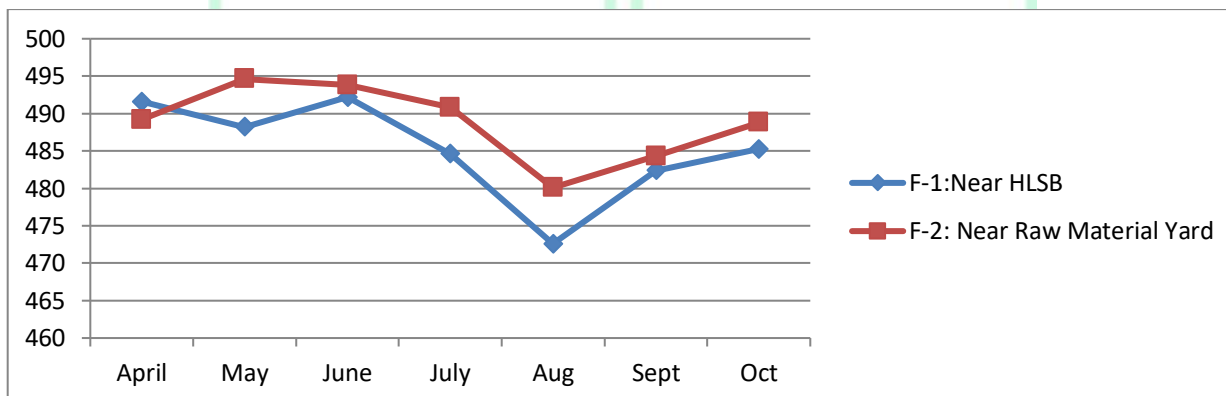
Ref: VCSPL/22/R-9135

Date: 17.11.2022

Annexure-II

Fugitive Dust Two Locations:

Month	Particulate Matter $\mu\text{g}/\text{m}^3$	
	F-1:Near HLSB	F-2: Near Raw Material Yard
APRIL-2022	491.6	489.2
MAY-2022	488.2	494.6
JUNE-2022	492.2	493.8
JULY-2022	484.6	490.8
AUGUST-2022	472.6	480.1
SEPTEMBER-2022	482.4	484.3



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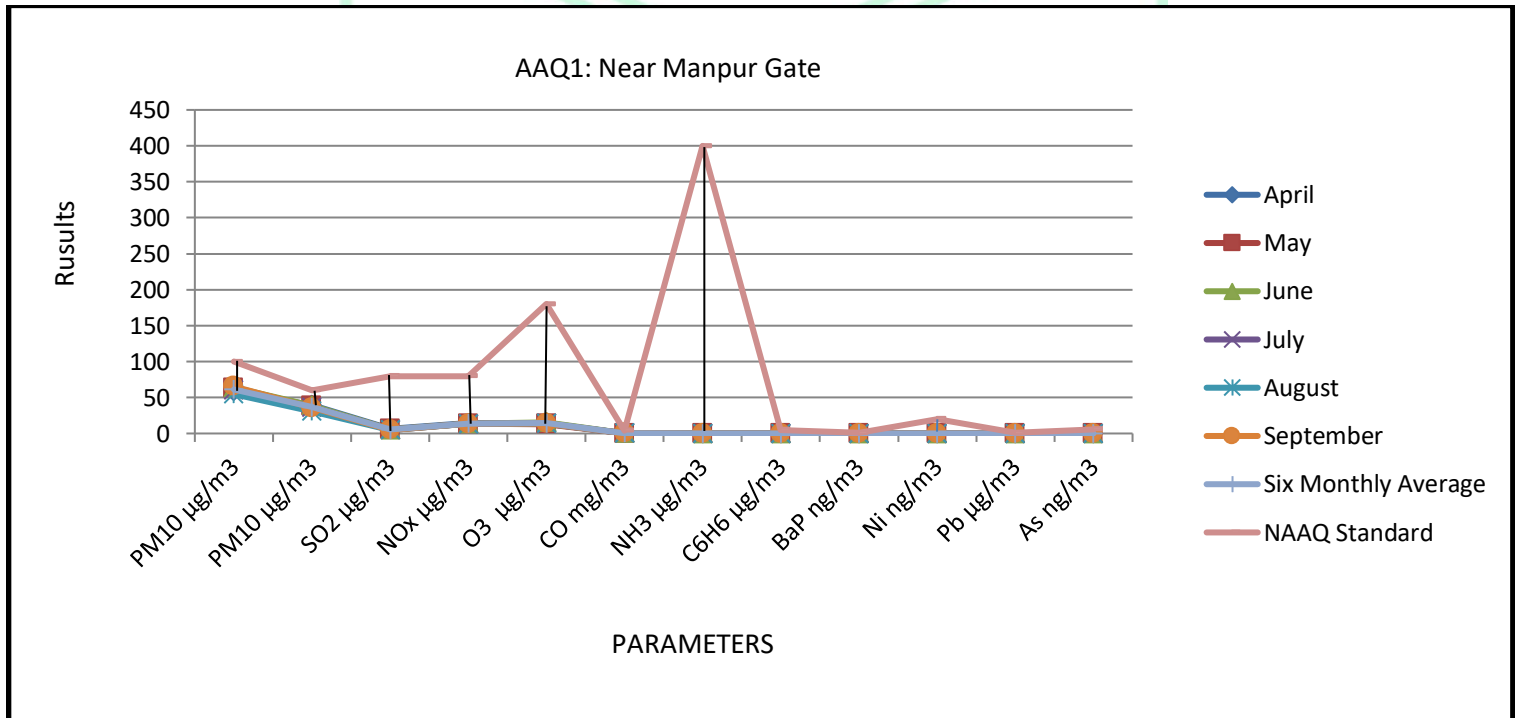
Ref: VCSPL/22/R-9136

Date: 17.11.2022

Annexure-I

(A) Near Manpur Gate

Month	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	O ₃ (µg/m ³)	CO (mg/m ³)	NH ₃ (µg/m ³)	C ₆ H ₆ (µg/m ³)	BaP (ng/m ³)	Ni (ng/m ³)	Pb (µg/m ³)	As (ng/m ³)
April	58.9	39.7	6.3	14.4	14.3	0.32	BDL	BDL	BDL	BDL	BDL	BDL
May	63.3	38.0	5.8	13.6	13.0	0.31	BDL	BDL	BDL	BDL	BDL	BDL
June	64.0	39.0	5.6	13.8	15.7	0.35	BDL	BDL	BDL	BDL	BDL	BDL
July	60.8	36.5	5.0	13.4	14.0	0.33	BDL	BDL	BDL	BDL	BDL	BDL
August	54.64	30.92	4.92	13.39	13.9	0.32	BDL	BDL	BDL	BDL	BDL	BDL
September	65.33	35.8	5.16	13.51	14.01	0.34	BDL	BDL	BDL	BDL	BDL	BDL
Six Monthly Average	61.16	36.65	5.46	13.68	14.15	0.33	BDL	BDL	BDL	BDL	BDL	BDL



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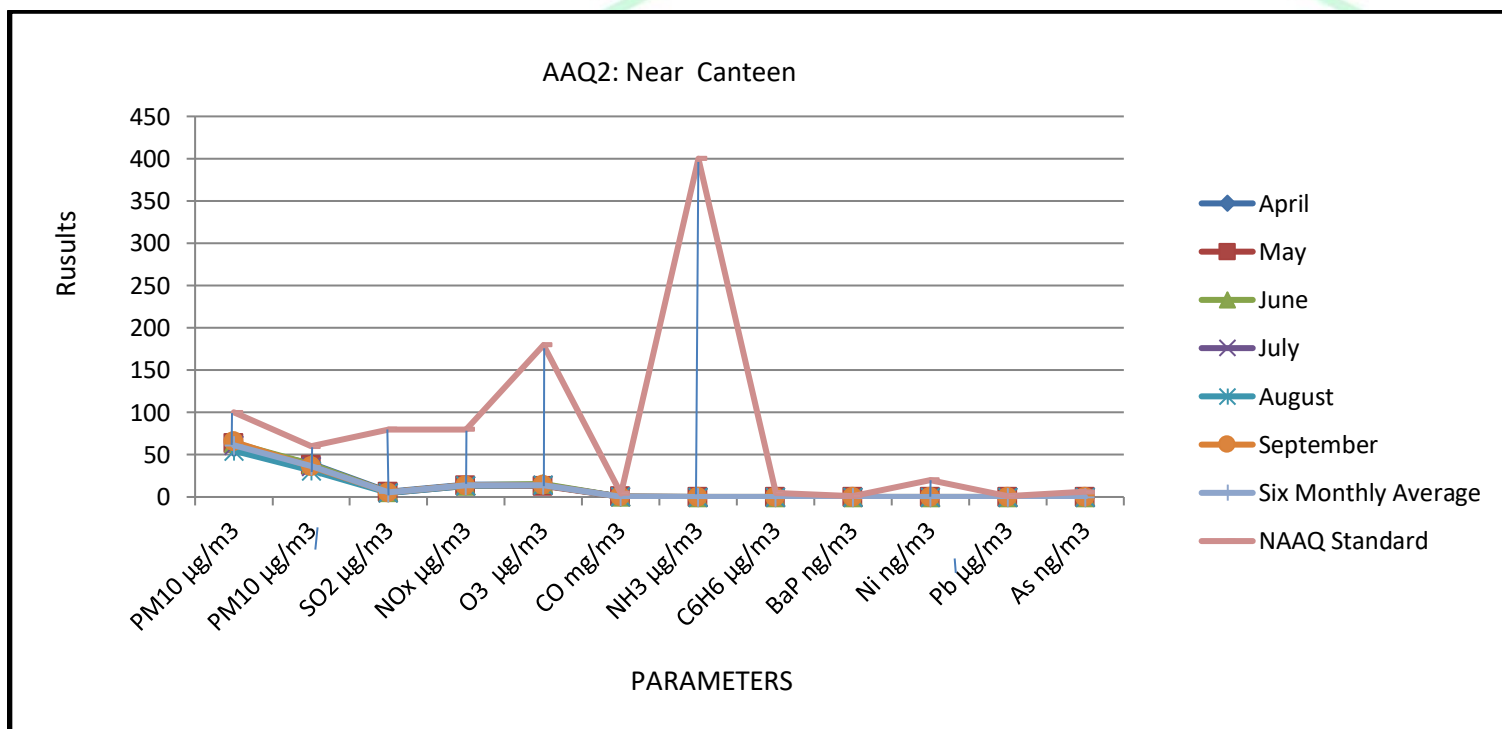
- Mine Planning & Design
- Mineral/Sub-Soil Exploration
- Waste Management Services

Ref: VCSPL/22/R-9137

Date: 17.11.2022

(B) Near Canteen

Month	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	O ₃ (µg/m ³)	CO (mg/m ³)	NH ₃ (µg/m ³)	C ₆ H ₆ (µg/m ³)	BaP (ng/m ³)	Ni (ng/m ³)	Pb (µg/m ³)	As (ng/m ³)
April	53.3	33.1	5.2	15.9	13.7	0.29	24.2	BDL	BDL	BDL	BDL	BDL
May	55.4	33.2	5.1	16.0	12.7	0.25	22.2	BDL	BDL	BDL	BDL	BDL
June	57.3	34.4	5.9	17.4	13.4	0.33	24.8	BDL	BDL	BDL	BDL	BDL
July	56.8	34.1	5.6	17.3	13.4	0.30	23.3	BDL	BDL	BDL	BDL	BDL
August	52.81	31.07	5.56	17.21	13.34	0.30	23.21	BDL	BDL	BDL	BDL	BDL
September	52.85	32.08	5.61	17.24	13.34	0.29	23.23	BDL	BDL	BDL	BDL	BDL
Six Monthly Average	54.74	32.99	5.50	16.84	13.31	0.29	23.49	BDL	BDL	BDL	BDL	BDL



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- Infrastructure Engineering
- Water Resource Management
- Environmental & Social Study

- Surface & Sub-Surface Investigation
- Quality Control & Project Management
- Renewable Energy

- Agricultural Development
- Information Technology
- Public Health Engineering

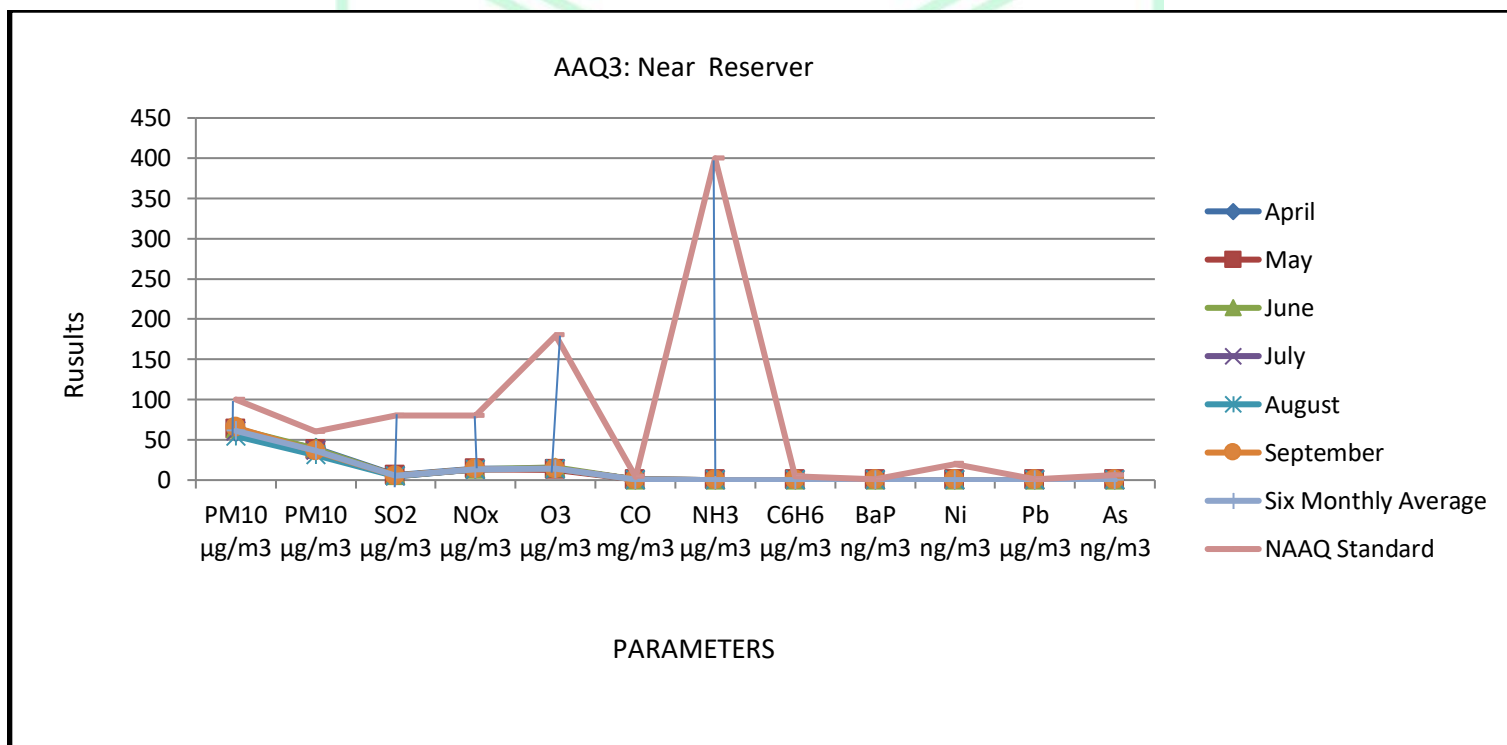
- Mine Planning & Design
- Mineral/Sub-Soil Exploration
- Waste Management Services

Ref: VCSPL/22/R-9138

Date: 17.11.2022

(C) Near Reserver

Month	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	O ₃ (µg/m ³)	CO (mg/m ³)	NH ₃ (µg/m ³)	C ₆ H ₆ (µg/m ³)	BaP (ng/m ³)	Ni (ng/m ³)	Pb (µg/m ³)	As (ng/m ³)
April	54.3	34.8	5.6	16.0	13.5	0.31	23.1	BDL	BDL	BDL	BDL	BDL
May	56.5	33.9	4.5	16.1	12.7	0.34	23.3	BDL	BDL	BDL	BDL	BDL
June	58.3	35.0	5.2	15.4	12.7	0.42	24.6	BDL	BDL	BDL	BDL	BDL
July	57.3	34.5	5.5	14.6	12.1	0.39	22.4	BDL	BDL	BDL	BDL	BDL
August	52.79	31.06	5.49	14.61	12.11	0.38	22.36	BDL	BDL	BDL	BDL	BDL
September	52.81	30.94	5.46	14.6	12.04	0.39	22.25	BDL	BDL	BDL	BDL	BDL
Six Monthly Average	55.33	33.37	5.29	15.22	12.53	0.37	23.00	BDL	BDL	BDL	BDL	BDL



Reviewed By

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Approved By