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/BP/HR/2025-29
Dated May 22, 2025.

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 Beneficiation plant At-Tanto, Po-Bhadrasahi, Dist-Keonjhar, Odisha regarding on the status of implementation of the conditions of environmental clearance accorded by the Ministry of Environment & Forests.**

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 for our Beneficiation Plant located at Tanto under Barbil Tahasil in the district of Keonjhar 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.

Appala Swamy Barla
(Plant Head)

Encl: as above.

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

COMPLIANCE TO SIX MONTHLY ENVIRONMENT CLEARANCE CONDITIONS

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

Clearance letters No. and date-: J-11015/121/2007-IA.II (M) dated: 19.02.2009

Period of Compliance Report-: October 2024 –March 2025

SPECIFIC CONDITIONS		
Sl.No.	**Stipulated Conditions**	**Status**
i.	All the conditions stipulated by the state pollution control board, Orissa in their consent to establish shall be effectively implemented.	Stipulated conditions as per consent to establish of OSPCB are being adhered to during Implementation. Latest Consent to operate has been obtained from SPCB, Odisha vide letter **No.5890/IND-I-CON-6348**, Dated 24.03.2025, Consent order no. 2769 which is valid till 31.08.2025.
ii.	Environmental clearance is subject to grant of forestry clearance. Necessary forestry clearance under the forest (Conservation) Act, 1980 for diversion of forest land involved In the project shall be obtained before starting operation in that area. No work shall be undertaken in the forest area without obtaining requisite prior forestry clearance.	Forest clearance has been obtained for Beneficiation plant with tailing dam from MoEF vide letter no **5-ORC 137/2011-BHU dated 9th July, 2012**. Forest clearance has been obtained for slurry pipe line(running from Beneficiation plant, Barbil to Pellet Plant, Jajpur) with water pipe line from MOEF vide Ref No. **5-ORC 140/2011-BHU dated 17th August, 2012.** Forest Clearance has been obtained for laying of Slurry Pipeline inside Naibuga Reserved Forest vide ref no. **5-ORB182/2013-BHU dated 27.03.2017.**
iii.	The project proponent shall carry out conditioning of the ore with water to mitigate fugitive dust emission, without affecting flow of ore in the ore processing and handling areas.	For control of fugitive dust emission in the Raw material handling area adequate nos. of water sprinklers and dry fog systems have already been installed and Mobile water sprinkling tankers are engaged 24X7 for regular water sprinkling on internal roads for dust suppression.

<table>
<tr><td>iv.</td><td>The effluent from the ore beneficiation plant shall be treated in the tailing thickener and the tailing slurry shall be transported through a closed pipe line to the tailing dam.</td><td>The tailings generated are being first treated in tailings thickener and then transported through underground pipe line from Beneficiation plant to tailing dam which is situated at Nalda.</td></tr>
<tr><td>v.</td><td>The tailing dam shall be lined on all the sides as well as in the bottom with HDP lining.</td><td>Complied. The tailing dam has lined with HDP lining on all sides as well as in the bottom.</td></tr>
<tr><td>vi.</td><td>The garland drain shall be constructed around the tailing dam before starting operation on the project.</td><td>Garland drain has been constructed around the tailing dam.</td></tr>
<tr><td>vii.</td><td>The decant water from the tailing dam shall be re circulated and there should be zero discharge from the tailing dam. Acid mine water, if any, shall be neutralized and reused within the plant.</td><td>After the tailings settled in the dam while the supernatant water from the tailing dam is being reclaimed to the system through pipe line.</td></tr>
<tr><td>viii.</td><td>Appropriate technology shall be used for maximum recovery of ore in order to reduce slurry discharge and to increase the life of the tailing dam.</td><td>Latest technology has been adopted to reduce slurry discharge such as intermediate and tailing thickener for recovery of ore.</td></tr>
<tr><td>ix.</td><td>Plantation shall be raised in an area of 25.66 ha(15.471ha at the beneficiation plant site and 10.25ha at tailing dam site)including a green belt of adequate width around the plant and tailing disposal area by planting the native species in consultation with the local DFO/agriculture department .The exposed tailing point area shall be properly covered with vegetation.</td><td>Saplings of various native species like Sissoo, , Amla, krishnachuda, Chhatiyan ,Shegun, Chakunda , etc. have been planted in various locations coming under green belt area in Beneficiation plant, Tanto and Tailing dam, Nalda.
<table>
<tr><th>Year</th><th>Target</th><th>Achieved</th></tr>
<tr><td>2012-13</td><td>2500</td><td>2100</td></tr>
<tr><td>2013-14</td><td>3000</td><td>3500</td></tr>
<tr><td>2014-15</td><td>5000</td><td>5000</td></tr>
<tr><td>2015-16</td><td>8000</td><td>8000</td></tr>
<tr><td>2016-17</td><td>10000</td><td>10000</td></tr>
<tr><td>2017-18</td><td>6000</td><td>6000</td></tr>
<tr><td>2018-19</td><td>2500</td><td>2500</td></tr>
<tr><td>2019-20</td><td>2000</td><td>2000</td></tr>
<tr><td>2020-21</td><td>2000</td><td>2000</td></tr>
<tr><td>2021-22</td><td>2000</td><td>2000</td></tr>
<tr><td>2022-23</td><td>2000</td><td>2000</td></tr>
<tr><td>2023-24</td><td>2000</td><td>2000</td></tr>
<tr><td>2024-25</td><td>1000</td><td>1000</td></tr>
<tr><td>Total</td><td>48000</td><td>48100</td></tr>
</table>
Some fruit bearing trees have also been planted nearby school as part</td></tr>
</table>

		of Eco club plantation. In this year (2024-25), 1000 no.of fruit bearing saplings distributed to nearby villagers.
x.	Effective safeguard measure such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RSPM such as haul road, loading and unloading point and transfer points. It shall be ensured that the ambient air quality parameter confirm to the norms prescribed by central pollution control board in this regard.	Adequate dust suppression system such as dry fog system and water sprinklers have been installed at raw material handling area to control fugitive dust emissions during loading and unloading of materials. Water sprinkling is being carried out on regular basis on the haul roads and RMHS areas by engaging 2 nos. of water tankers (12KL) both at day and at night to minimize the fugitive dust emissions. Refer to **Annexure- I**. For regular monitoring of Ambient Air Quality four stations of Continuous Ambient Air Quality Monitoring have been setup at different locations in consultation with officials of Regional Office of State Pollution Control Board. Ref: **Annexure- II**.
xi.	Garland drains with appropriate size, gradient and length shall be constructed to arrest silt and sediment flows from ore dumps directly into the water bodies. The water so collected **shall be utilized for watering the mine area, roads, green belt development etc. The drain** shall be regularly de silted particularly after monsoon and maintained properly. The sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the project site .sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and de silted at regular intervals.	Garland drains have already been constructed around stock pile areas to prevent run-off to mix with any water body. Surface Run-off study has been carried out at Beneficiation Plant, Tanto and Tailing Dam, Nalda. The report of the same already submitted to SPCB,Odisha.

xii.	Regular monitoring of water quality for surface water sources as well as ground water sources shall be carried out. The ground water shall be monitored downstream of beneficiation plant as well as tailing dam up to ground water table and surface water monitoring shall be carried out in the upstream downstream of the Kundra Nallah, the Gamalei Nallah, the laskara Nallah ,the Limtur Nallah and the Betlata Nallah and record of monitoring data should be maintained and submitted on six monthly basis to the Ministry of Environment and forests, its regional office, Bhubaneswar, The Central Ground Water Authority, the regional Director Central Water Board, the Pollution Control Board and the State pollution Board.	We are monitoring water quality (both ground water and surface water) four times in a year on seasonal basis. Environmental water quality monitoring is conducted through laboratory, empaneled and recognized by SPCB, Odisha. Monitoring reports are enclosed herewith as **Annexure-II.**
xiii.	The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.	Complying.
xiv.	Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the project area shall be carried out and record maintained.	Monitoring reports are enclosed herewith as **Annexure- II.**
xv.	Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometer in and around the project area during the beneficiation process. The monitoring shall be carried out four times in a year - premonsoon (Apr-May) monsoon (Aug) post monsoon (Nov) and Winter (Jan) and the data thus collected may be sent regularly to Ministry of Environment and Forest, it regional office Bhubaneswar, Central Ground Water Authority and Regional Director, Central Ground Water Board.	We are monitoring water quality (both ground water and surface water) four times in a year on seasonal basis. The monitoring work is conducted by authorized third party. Monitoring reports are enclosed herewith as **Annexure- II.**
xvi.	The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water) required for the project.	Water resources Department of Govt. of Odisha has renewed the agreement for drawl of water from River Baitarani on 15.10.2024 and valid till 09.10.2025. For ground water, the permission is valid up to 09.10.2025.
xvii.	Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional director, Central Ground Water Board.	Suitable measure has been taken.

xviii.	Appropriate mitigation measures shall be taken to prevent pollution of the Karo River in consultation with the State pollution Control Board.	The drawl of water from River Karo has already been surrendered. We do not draw any water from Karo River.
xix.	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicle used in beneficiation operations in transportation of ore to the Beneficiation plant. The vehicles should be covered with a tarpaulin and shall not be Over loaded.	Being Complied
xx.	No transportation of ore from outside the project area shall be carried out after the sunset.	As per the statutory norms and rules being framed by district administration. The directions of State Government in this regard are being followed.
xxi.	Consent to operate shall be obtained from the State Pollution Control Board, Orissa before starting beneficiation of the ore.	Consent to operate has been obtained from SPCB, Odisha vide letter **No.5890/IND-I-CON-6348**, Dated 24.03.2025, Consent order no. 2769 which is valid till 31.08.2025.
xxii.	Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.	Adequate dust suppression system such as dry fog system and water sprinklers have been installed at raw material handling area to control fugitive dust emissions during loading and unloading of materials. Water sprinkling is done on the haul roads and RMHS areas by engaging 2 nos. of 12KL water tankers both at day and at night to minimize the fugitive dust emissions. Refer to **Annexure- I**.
xxiii.	The project proponent shall constitute on emergency management team under the control of project in charge to deal with the emergency situation pertaining to the tailing dam for the timely and effective control of emergency situation. It shall be ensured that training programme &mock drills shall be organized for the employees.	An emergency team has been constituted to combat situations effectively in Tailing Dam. Required training programme & mock drills are being organized for the employees from time to time.
xxiv.	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and the wastewater generated during the beneficiation process.	STP (Sewage treatment Plant) has been installed for treatment of domestic effluent generated from the Hostel. Wastewater generated during the beneficiation process is being

GENERAL CONDITIONS		
I.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	We will abide by the condition.
II.	Regular Ambient Air Quality and Monitoring shall be carried out. The monitoring stations will be set up in consultation with the SPCB. At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPEM, RSPM, SO2 and Nox are anticipated in consultation with the State Pollution Control Board. It will be ensured that at least one monitoring station is set up in up-wind direction along with those in other directions. The instruments used for ambient air quality monitoring shall be calibrated regularly.	Ambient air quality monitoring is being carried out twice in a week at four locations inside the plant premises and found to be within limits prescribed as per CPCB. The monitoring work is conducted by authorized third party. Monitoring reports are enclosed herewith as **Annexure- II.**
III.	Data on ambient air quality (RSPM, SPM, SO2, and Nox) shall be regularly submitted to the Ministry including its Regional Office located at Bhubaneswar and State Pollution Control Board/Central Pollution Control Board Once in six months.	Six monthly compliance reports along with monitoring reports are regularly being submitted at the Regional Office of MOEF as well at OSPCB.
IV.	Measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. shall be provided with ear plugs/muffs.	The overall noise level in and around the plant area is kept below 85dB. Near main gate noise level below 65dB is maintained. Workers involved in operations at vulnerable of HEMM, screen etc. are always provided with appropriates PPEs like ear plugs/muffs and also rotated from time to time. Noise level is being monitored regularly. Monitoring reports are enclosed as **Annexure-II**.
V.	Industrial wastewater shall be properly collected and treated so as to conform to the standards Prescribed under GSR 422(E) dated 19th May 1993 and 31st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	To minimize the consumption of fresh water, industrial water after treatment is stored in reservoir as processed water and then recycled and reused.
VI.	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillances program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, If needed.	All the environment protection measures and safety aspects are being undertaken as recommended. Personnel working in RMHS area have been provided with PPEs like nose mask and they are also rotated from time to time. They were educated on safety and health aspects by our in-

		house trainers.
VII.	Separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	We have a separate Environmental management cell which is controlled by Sr.Manager (Environment). This department undertakes monitoring of the environmental pollution levels by measuring fugitive emissions, ambient air quality, water quality, noise level either departmentally or by appointing external agencies wherever necessary.
VIII.	The project authorities should inform to the Regional office located at Bhubaneswar regarding date of financial closures and final approval of the project by the concerned authorities and the date of startup of land development work.	Financial closures made on 12.10.2007. The land has been acquired through IDCO and production activities have been started accordingly.
IX.	The funds earmarked for environmental protection measures should be kept separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional office located at Bhubaneswar.	Separate budget is being made for environment protection in every year and accordingly expenditure is being done.
X.	The Regional office of this Ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities should extend full co-operation to the officer (S) of the Regional office by furnishing the requisite data/information/monitoring reports.	Full co-operation will be extended by the company.
XI.	The project proponent shall submit six monthly report on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional office, Bhubaneswar, Central Pollution Control Board and State Pollution Control Board. The proponent shall upload the status of compliance on their website and shall update the same periodically.	We are submitting six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, Bhubaneswar. We will submit the same report to Central Pollution Control Board and State Pollution Control Board.
XII.	A copy of clearance letter will be marked concerned Panchayat /local NGO, if any, from whom suggestion/representation has been received while processing the proposal.	Complied
XIII.	The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Center and Collector's office / Tehsildar's office for 30 days.	Complied

XIV.	The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned ,within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and forests at **http://envfor.nic.in** and a copy of the same should be forwarded to the Regional office of this Ministry located at Bhubaneswar.	Circulated in local newspapers.

Signature

Annexure- I

Dry Fog Systems at Junction House 3 and 3A

Covering of Conveyor from JH-2 to JH-3 by erecting FRP conveyor hood.

Water tanker(12 KL) engaged for watering trees and Haul road sprinkling

Annexure- I






Rotary sprinklers in Raw Material Handling Site

Ref: Env.lab/24-25/TR-02134 **Date: 12.05.2025**

METEROLOGICAL DATA FROM OCTOBER-2024 TO MARCH -2025

Name of Industry : **M/s. Brahmani River Pellets Limited; Barbil, keonjhar**

Sampling Location : **OPTCL Control Room**

Date	Temperature(^{0}C)		Relative Humidity(%)		Wind Speed m/sec		Wind Direction	Rain fall (mm)
	Max	Min	Max	Min	Max	Min		
Oct-2024	29.4	22.1	70.4	54.3	2.95	0.84	-	3.69
Nov-2024	26.9	17.6	72.8	57.2	2.4	0.59	-	0.0
Dec-2024	25.8	15.8	73.5	57.8	2.3	0.67	-	0.35
Jan-2025	27.8	14.1	71.0	52.3	2.58	0.68	--	1.65
Feb-2025	29.7	17.8	70.3	51.8	2.97	0.82	--	0.50
Mar-2025	35.3	20.7	67.6	53.5	4.25	0.92	--	2.59
Six Monthly Average	29.2	18.0	70.9	54.5	2.91	0.75	-	1.46

Reviewed by: **Approved by:**

Ref: Env.lab/24-25/TR-02135 **Date: 12.05.2025**

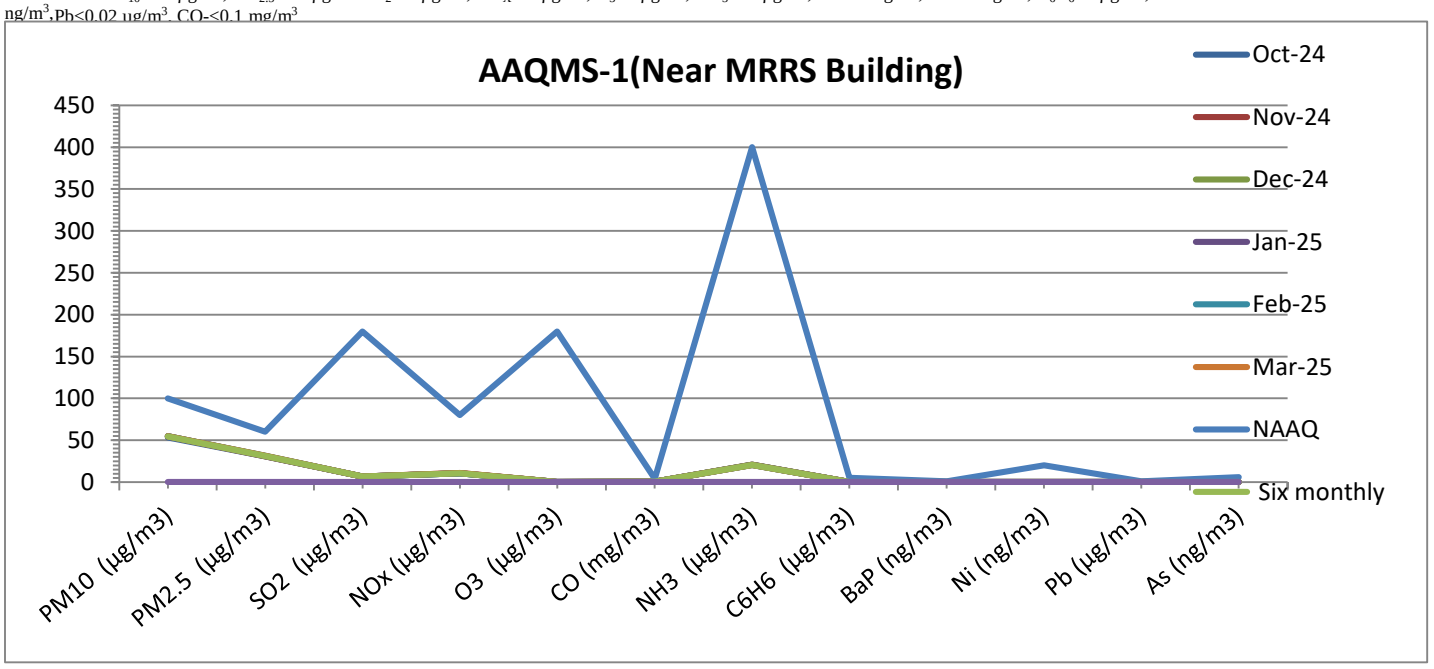
AAQ MONITORING REPORT FOR THE MONTH OF OCT-2024 TO MARCH-2025

Name of the industry:M/s. Brahmani River Pellets Limited; Barbil, keonjhar

Name of yhe location: AAQMS-1 (Near MRRS Building)

Date	PARAMETERS											
	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_x ($\mu g/m^3$)	O_3 ($\mu g/m^3$)	CO (mg/m^3)	NH_3 ($\mu g/m^3$)	C_6H_6 ($\mu g/m^3$)	BaP (ng/m^3)	Ni (ng/m^3)	Pb ($\mu g/m^3$)	As (ng/m^3)
Oct-2024	53.44	30.73	6.54	10.61	BDL	0.40	20.80	BDL	BDL	BDL	BDL	BDL
Nov-2024	54.60	30.90	6.70	10.70	BDL	0.43	20.63	BDL	BDL	BDL	BDL	BDL
Dec-2024	54.90	31.11	6.80	10.64	BDL	0.44	20.81	BDL	BDL	BDL	BDL	BDL
Jan-2025	55.00	31.20	6.71	10.64	BDL	0.44	20.50	BDL	BDL	BDL	BDL	BDL
Feb-2025	54.75	31.50	6.81	10.51	BDL	0.41	20.39	BDL	BDL	BDL	BDL	BDL
Mar-2025	54.90	31.70	6.80	10.70	BDL	0.44	20.60	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100	60	180	80	180	4	400	5	1	20	1	6
Six monthly Average	54.6	31.19	6.73	10.63	BDL	0.43	20.62	BDL	BDL	BDL	BDL	BDL
Testing method	Gravimetric	Gravimetric	Improved West and Gaeke method	Modified Jacob & Hochheiser (Na-Arsenite)	Chemical Method	NDIR Spectroscopy	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling

BDL Values: PM_{10} <20 µg/m³, $PM_{2.5}$ <10 µg/m³ SO_2< 4 µg/m³, NO_X< 6 µg/m³, O_3<4 µg/m³, NH_3<20 µg/m³, Ni<2.5 ng/m³, As < 1 ng/m³, C_6H_6<4 µg/m³, BaP<0.5 ng/m³,Pb<0.02 µg/m³, CO-<0.1 mg/m³



Reviewed by: **Approved by:**

Ref: Env.lab/24-25/R-02136 **Date: 12.05.2025**

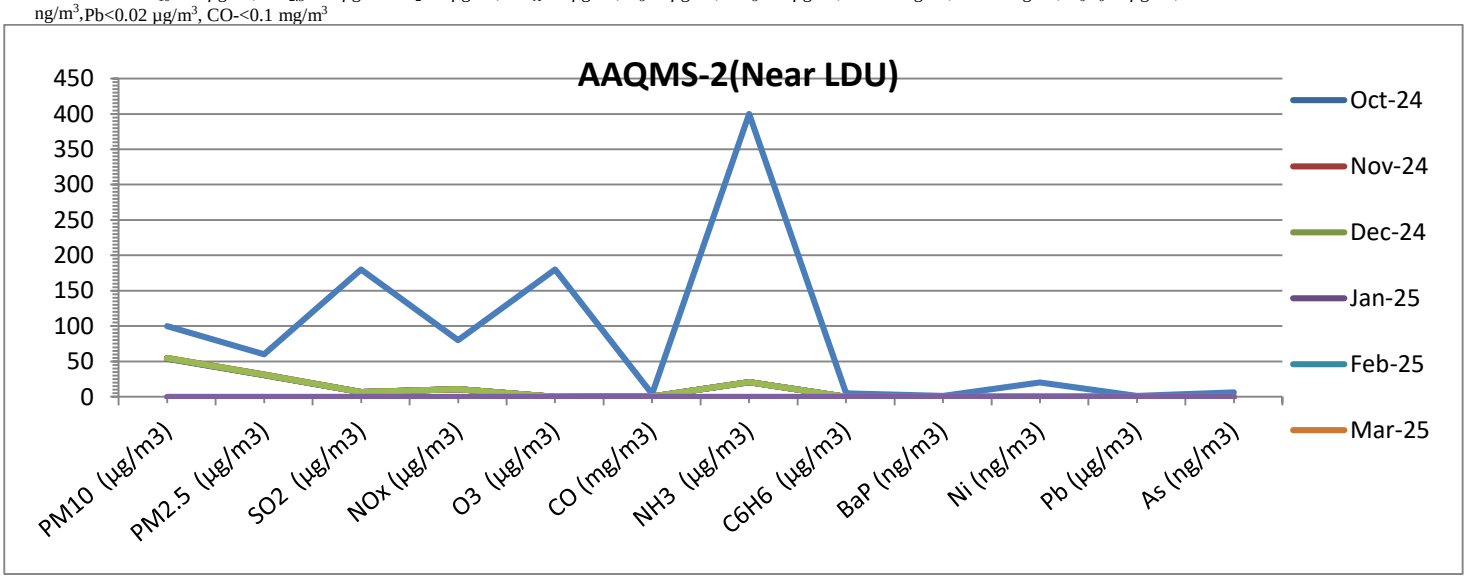
AAQ MONITORING REPORT FOR THE MONTH OF OCT-2024 TO MARCH-2025

Name of the industry:M/s. Brahmani River Pellets Limited; Barbil, keonjhar

Name of the location: AAQMS-2 (Near LDU)

Date	PARAMETERS											
	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_6H_6 (µg/m^3)	BaP (ng/m^3)	Ni (ng/m^3)	Pb (µg/m^3)	As (ng/m^3)
Oct-2024	53.66	30.64	6.50	10.49	BDL	0.39	20.61	BDL	BDL	BDL	BDL	BDL
Nov-2024	54.30	30.70	6.60	10.60	BDL	0.42	20.61	BDL	BDL	BDL	BDL	BDL
Dec-2024	54.55	30.76	6.70	10.64	BDL	0.43	20.74	BDL	BDL	BDL	BDL	BDL
Jan-2025	54.77	31.10	6.72	10.57	BDL	0.43	20.60	BDL	BDL	BDL	BDL	BDL
Feb-2025	54.62	31.41	6.75	10.61	BDL	0.45	20.66	BDL	BDL	BDL	BDL	BDL
Mar-2025	55.10	31.50	6.70	10.60	BDL	0.45	20.54	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100	60	180	80	180	4	400	5	1	20	1	6
Six monthly Average	54.50	31.02	6.66	10.59	BDL	0.42	20.63	BDL	BDL	BDL	BDL	BDL
Testing method	Gravimetric	Gravimetric	Improved West and Gaeke method	Modified Jacob & Hochheiser (Na-Arsenite)	Chemical Method	NDIR Spectroscopy	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling

BDL Values: PM_{10} <20 µg/m^3, $PM_{2.5}$ <10 µg/m^3 SO_2< 4 µg/m^3, NO_X< 6 µg/m^3, O_3<4 µg/m^3, NH_3<20 µg/m^3, Ni<2.5 ng/m^3, As < 1 ng/m^3, C_6H_6<4 µg/m^3, BaP<0.5 ng/m^3,Pb<0.02 µg/m^3, CO-<0.1 mg/m^3



Reviewed by: **Approved by:**

Ref: Env.lab/24-25/TR-02137 **Date: 12.05.2025**

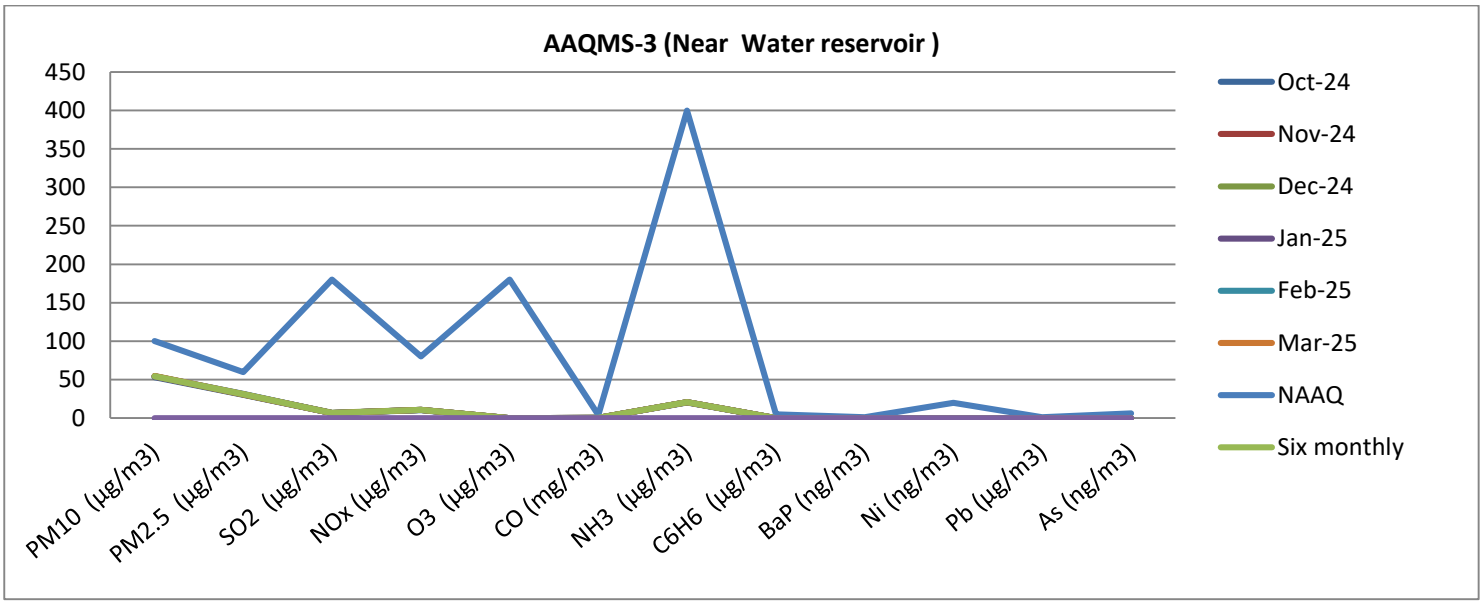
AAQ MONITORING REPORT FOR THE MONTH OF OCT-2024 TO MARCH-2025

Name of Industry : **M/s. Brahmani River Pellets Limited; Barbil, keonjhar.**

Sampling Location : **AAQMS-3 (Near Water Reservoir)**

Date	PARAMETERS											
	PM_{10} (µg/m³)	$PM_{2.5}$ (µg/m³)	SO_2 (µg/m³)	NO_x (µg/m³)	O_3 (µg/m³)	CO (mg/m³)	NH_3 (µg/m³)	C_6H_6 (µg/m³)	BaP (ng/m³)	Ni (ng/m³)	Pb (µg/m³)	As (ng/m³)
Oct-2024	53.33	30.43	6.62	10.42	BDL	0.37	20.43	BDL	BDL	BDL	BDL	BDL
Nov-2024	54.00	30.70	6.67	10.63	BDL	0.41	20.59	BDL	BDL	BDL	BDL	BDL
Dec-2024	54.33	30.76	6.75	10.68	BDL	0.43	20.58	BDL	BDL	BDL	BDL	BDL
Jan-2025	54.44	31.20	6.63	10.61	BDL	0.43	20.47	BDL	BDL	BDL	BDL	BDL
Feb-2025	54.37	31.35	6.72	10.6	BDL	0.42	20.54	BDL	BDL	BDL	BDL	BDL
Mar-2025	54.80	31.20	6.70	10.6	BDL	0.44	20.65	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100	60	180	80	180	4	400	5	1	20	1	6
Six monthly Average	54.21	30.94	6.68	10.59	BDL	0.41	20.54	BDL	BDL	BDL	BDL	BDL
Testing method	Gravimetric	Gravimetric	Improved West and Gaeke method	Modified Jacob & Hochheiser (Na-Arsenite)	Chemical Method	NDIR Spectroscopy	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling

BDL Values: PM_{10} <20 µg/m³, $PM_{2.5}$ <10 µg/m³ SO_2< 4 µg/m³, NO_X< 6 µg/m³, O_3<4 µg/m³, NH_3<20 µg/m³, Ni<2.5 ng/m³, As < 1 ng/m³, C_6H_6<4 µg/m³, BaP<0.5 ng/m³, Pb<0.02 µg/m³, CO-<0.1 mg/m³



Reviewed by: **Approved by**

Ref: Env.lab/24-25/TR-02138 **Date: 12.05.2025**

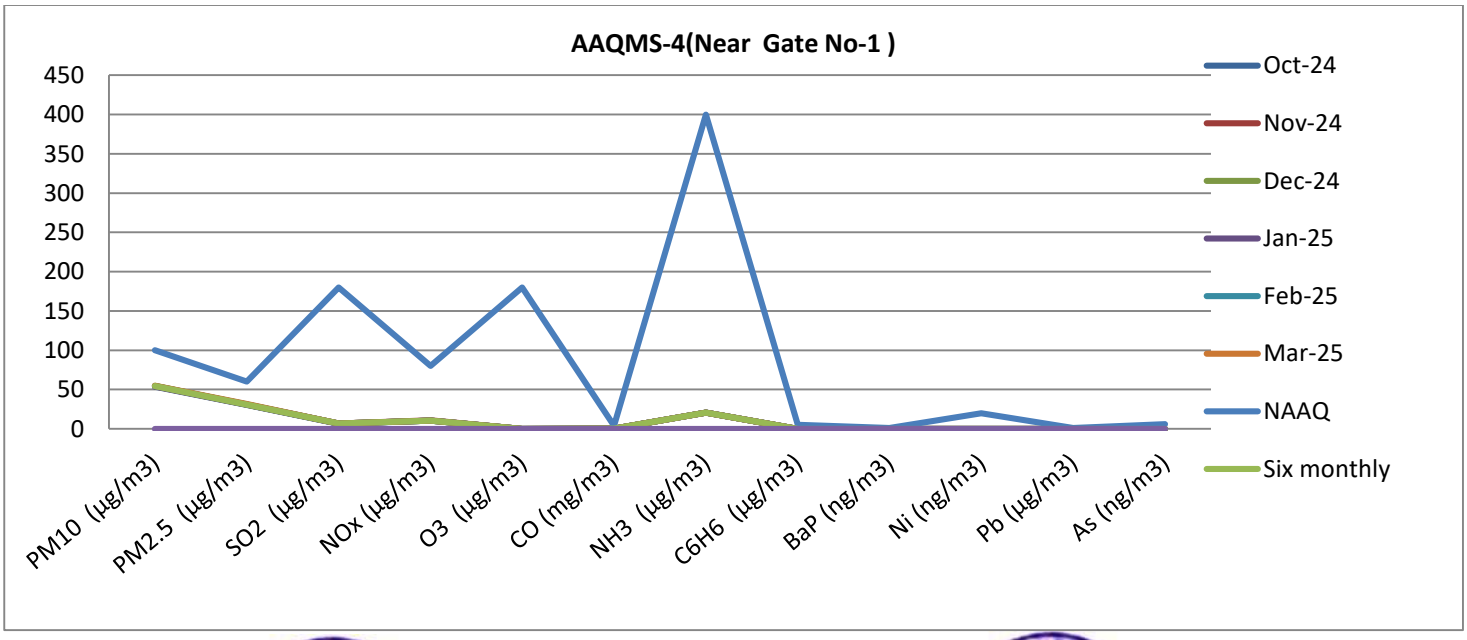
AAQ MONITORING REPORT FOR THE MONTH OF OCT-2024 TO MARCH-2025

Name of Industry : **M/s. Brahmani River Pellets Limited; Barbil, keonjhar.**

Sampling Location : **AAQMS-4 (Near Gate No-1)**

Date	PARAMETERS											
	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_x ($\mu g/m^3$)	O_3 ($\mu g/m^3$)	CO (mg/m^3)	NH_3 ($\mu g/m^3$)	C_6H_6 ($\mu g/m^3$)	BaP (ng/m^3)	Ni (ng/m^3)	Pb ($\mu g/m^3$)	As (ng/m^3)
Oct-2024	53.55	30.53	6.61	10.52	BDL	0.39	20.51	BDL	BDL	BDL	BDL	BDL
Nov-2024	54.22	30.71	6.64	10.71	BDL	0.41	20.66	BDL	BDL	BDL	BDL	BDL
Dec-2024	54.78	30.76	6.74	10.67	BDL	0.44	20.72	BDL	BDL	BDL	BDL	BDL
Jan-2025	54.55	30.95	6.74	10.58	BDL	0.43	20.49	BDL	BDL	BDL	BDL	BDL
Feb-2025	54.50	31.29	6.75	10.60	BDL	0.44	20.55	BDL	BDL	BDL	BDL	BDL
Mar-2025	55.00	31.50	6.80	10.60	BDL	0.44	20.66	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100	60	180	80	180	4	400	5	1	20	1	6
Six monthly Average	54.43	30.96	6.71	10.61	BDL	0.42	20.60	BDL	BDL	BDL	BDL	BDL
Testing method	Gravimetric	Gravimetric	Improved West and Gaeke method	Modified Jacob & Hochheiser (Na-Arsenite)	Chemical Method	NDIR Spectroscopy	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling

BDL Values: PM_{10} <20 µg/m³, $PM_{2.5}$ <10 µg/m³ SO_2< 4 µg/m³, NO_X< 6 µg/m³, O_3<4 µg/m³, NH_3<20 µg/m³, Ni<2.5 ng/m³, As < 1 ng/m³, C_6H_6<4 µg/m³, BaP<0.5 ng/m³, Pb<0.02 µg/m³, CO-<0.1 mg/m³



Reviewed by

Approved by

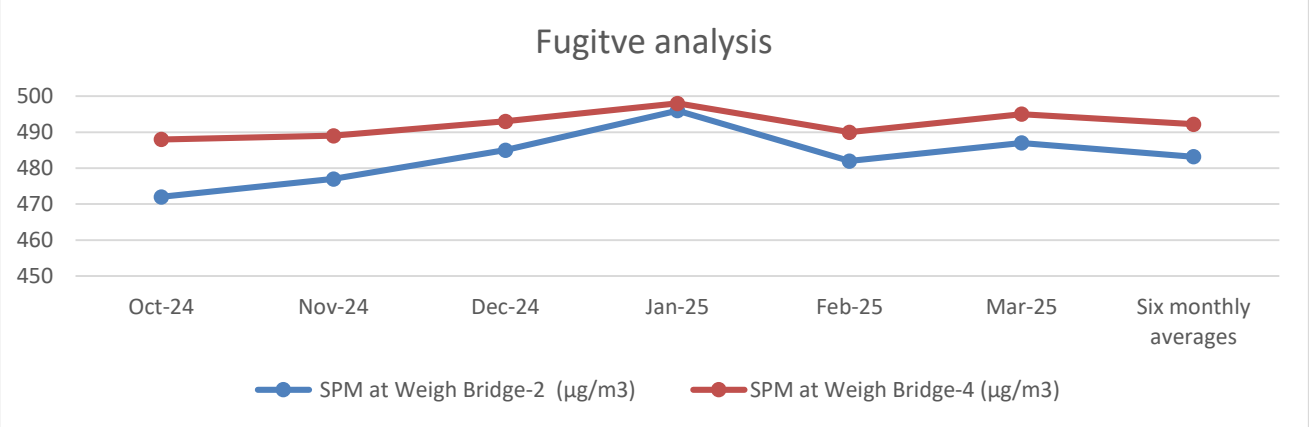
Ref: Env.lab/24-25/TR-02139 **Date: 12.05.2025**

SIX MONTH AVERAGES OF FUGITIVE MONITORING REPORT FOR THE MONTH OF

OCTOBER-2024 TO MARCH-2025

Name of Industry :**M/s. Brahmani River Pellets Limited; Barbil, keonjhar**

MONTH	F1	F2
	SPM at Weigh Bridge-2 (µg/m³)	SPM at Weigh Bridge-4 (µg/m³)
Oct-2024	472	488
Nov-2024	477	489
Dec-2024	485	493
Jan-2025	496	498
Feb-2025	482	490
Mar-2025	487	495
Six monthly averages	483.2	492.2



Reviewed by: **Approved by:**

Ref: Envlab/24-25/TR-02140 **Date: 12.05.2025**

SIX MONTH AVERAGE FOR NOISE MONITORING REPORT FROM OCTOBER-2024 TO MARCH-2025

Name of Industry : **M/s. Brahmani River Pellets Limited; Barbil,Keonjhar.**

Location ID	Ambient Noise Monitoring Station Location	Day time Equivalent Noise Level in dB(A) leq						
		Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Six Monthly Average
N-1	Near RM & PH Area	65.1	65.5	66.2	65.9	65.3	65.9	65.6
N-2	Near Main Gate	64.6	63.7	64.3	65.1	64.6	65.2	64.6
N-3	Near Administration Office	54.2	56.3	55.8	54.7	53.9	54.4	54.9
N-4	Near GT Hostel	51.8	53.1	54.2	54.9	55.1	54.3	53.9
N-5	Outside Slurry pump House	67.7	67.8	68.2	67.9	67.2	66.9	67.6
N-6	Inside Slurry pump House	67.1	67.1	67.5	68.2	67.8	68.2	67.6
N-7	Near Ball Mill	68.6	69.5	70.2	70.6	70.1	69.9	69.8
Standard as per CPCB		**75**						

Reviewed by **Approved by**

Ref: Envlab/24-25/TR-02141 **Date: 12.05.2025**

SIX MONTYH AVERAGE FOR NOISE MONITORING REPORT

FROM OCTOBER-2024 TO MARCH-2024

Name of Industry : M/s. Brahmani River Pellets Limited ; Barbil,Keonjhar.

Location ID	Ambient Noise Monitoring Station Location	Night time Equivalent Noise Level in dB(A) leq						
		Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Six Monthly Average
N-1	Near RM & PH Area	52.2	53.5	54.2	54.7	54.4	53.9	53.8
N-2	Near Main Gate	50.8	51.9	52.2	51.9	51.2	53.2	51.9
N-3	Near Administration Office	47.6	47.8	46.9	47.1	46.9	46.3	47.1
N-4	Near GT Hostel	47.1	48.7	49.2	49.5	49.8	50.0	49.0
N-5	Outside Slurry pump House	66.1	65.5	66.3	66.6	66.5	66.1	66.2
N-6	Inside Slurry pump House	65.7	64.2	64.4	65.8	66.1	66.4	65.4
N-7	Near Ball Mill	66.5	65.6	66.3	67.1	67.6	67.3	66.7
Standard as per CPCB		70						

Reviewed by: **Approved by:**

Ref: Envlab/24-25/TR-02142 **Date:12.05.2025**

SIX MONTH AVERAGES OF SURFACE WATER ANALYSIS REPORT FORM OCT-2024 TO MARCH-2025

1. **Name of the Industry : M/s Brahmani River Pellets Limited, Keonjhar**
2. Name of the Location : **SW1** Kundra Nallah Upstream

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 2296: 1992	Analysis Result		
					Nov-24	Feb-25	Average
1.	Colour	Hazen	APHA 2120 B	300.0	Colorless	Colorless	Colorless
2.	Dissolved Oxygen	mg/l	APHA 4500 O C	4.0	4.1	4.3	4.2
3.	Biochemical Oxygen Demand as BOD	mg/l	APHA 5210 B	3.0	<1.8	<1.8	<1.8
4.	Total Coli form	MPN/ 100 ML	APHA 9221 B	5000	110	94	102
5.	Chloride as Cl	mg/l	APHA 4500Cl B	600	26.8	27.2	27.0
6.	Sodium Absorption Ratio	mg/l	By Calculation	--	0.90	0.92	0.91
7.	pH at 25^0C	mg/l	APHA 4500H^+B	6.5-8.5	7.48	7.52	7.50
8.	Boron as B	mg/l	APHA 4500 B,B	--	<0.01	<0.01	<0.01
9.	Sulphate as SO_4	mg/l	**APHA 4500 SO_4^{2-} E**	400.0	5.2	4.9	5.05
10.	Nitrate as NO_3	mg/l	APHA 4500 NO_3^- E	50.0	2.6	2.4	2.50
11.	Free Ammonia as NH_3	mg/l	By Calculation	--	ND	ND	ND
12.	Copper as Cu	mg/l	APHA 3111 B,C	1.5	<0.025	<0.025	<0.025
13.	Zinc as Zn	mg/l	APHA 3111 B,C	15.0	<0.05	<0.05	<0.05
14.	Chemical Oxygen Demand as COD	mg/l	APHA 5220 C	--	4.0	4.0	4.0
15.	Suspended solids as SS	mg/l	APHA 2540 D	--	16.4	16.0	16.2
16.	Conductivity	mg/l	APHA 2510 B	--	273.2	270.1	271.65
17.	Calcium as Ca	mg/l	APHA 3500 Ca B	--	13.8	14.2	14.0
18.	Oil & Grease as O&G	mg/l	APHA 5520 B	--	ND	ND	ND
19.	Calcium Hardness	mg/l	APHA 5520 B	--	34.2	35.2	34.7
20.	Mercury as Hg	mg/l	APHA 3500 Hg B	--	< 0.001	< 0.001	< 0.001
21.	Cadmium as Cd	mg/l	APHA 3111 B,C	0.01	< 0.001	< 0.001	< 0.001
22.	Hexavalent Chromium as Cr^{6+}	mg/l	APHA 3500 Cr B	0.05	< 0.05	< 0.05	< 0.05
23.	Total Chromium as TCr	mg/l	APHA 3500 Cr B	--	< 0.05	< 0.05	< 0.05
24.	Selenium as Se	mg/l	APHA 3114 B	0.05	< 0.01	< 0.01	< 0.01
25.	Nickel as Ni	mg/l	APHA 3500 Ni B	--	< 0.01	< 0.01	< 0.01
26.	Arsenic as As	mg/l	APHA 3114 B	0.2	< 0.01	< 0.01	< 0.01
27.	Iron as Fe	mg/l	APHA 3500Fe B	0.5	0.32	0.28	0.30
28.	Flouride as F	mg/l	APHA 4500 F C	1.5	0.021	0.021	0.021
29.	Lead as Pb	mg/l	APHA 3111 B,C	0.1	< 0.01	< 0.01	< 0.01
30.	Phenolic Compounds as $C_6H_5O_6$	mg/l	APHA 5530 B,D	0.005	< 0.001	< 0.001	< 0.001
31.	Sodium as Na	mg/l	APHA 3500Na B	--	15.2	14.9	15.05
32.	Magnesium as Mg	mg/l	APHA 3500Mg B	--	5.4	5.2	5.3
33.	Ammonical Nitrogen as NH_3-N	mg/l	APHA 4500 NH_3F	--	ND	ND	ND
34.	Total Dissolved Solids as TDS	mg/l	APHA 2540 C	1500.0	174.6	172.5	173.55

BDL Value: *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

Reviewed by: **Approved by:**

Ref: Envlab/24-25/TR-02143 **Date:12.05.2025**

SIX MONTH AVERAGES OF SURFACE WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1.Name of the Industry : M/s Brahmani River Pellets Limited, Keonjhar

2.Name of the Location : SW2 Kundra Nallah downstream

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 2296: 1992	Analysis Result		
					Nov-24	Feb-25	Average
1.	Colour	Hazen	APHA 2120 B	300.0	Colorless	Colorless	Colorless
2.	Dissolved Oxygen	mg/l	APHA 4500 O C	4.0	4.2	4.4	4.3
3.	chemical Oxygen Demand as BOD	mg/l	APHA 5210 B	3.0	<1.8	<1.8	<1.8
4.	Total Coli form	MPN/ 100 ML	APHA 9221 B	5000	120	110	115
5.	Chloride as Cl	mg/l	APHA 4500Cl B	600	27.3	27.6	27.45
6.	Sodium Absorption Ratio	mg/l	By Calculation	--	0.94	0.98	0.96
7.	pH at 25^0C	mg/l	APHA 4500H^+B	6.5-8.5	7.46	7.49	7.47
8.	Boron as B	mg/l	APHA 4500 B,B	--	<0.01	<0.01	<0.01
9.	Sulphate as SO_4	mg/l	APHA 4500 SO_4^{2-} E	400.0	4.8	4.4	4.6
10.	Nitrate as NO_3	mg/l	APHA 4500 NO_3^- E	50.0	2.2	2.1	2.15
11.	Free Ammonia as NH_3	mg/l	By Calculation	--	ND	ND	ND
12.	Copper as Cu	mg/l	APHA 3111 B,C	1.5	<0.025	<0.025	<0.025
13.	Zinc as Zn	mg/l	APHA 3111 B,C	15.0	<0.05	<0.05	<0.05
14.	hemical Oxygen Demand as COD	mg/l	APHA 5220 C	--	4.0	3.8	4.0
15.	Suspended solids as SS	mg/l	APHA 2540 D	--	15.8	15.4	15.6
16.	Conductivity	mg/l	APHA 2510 B	--	276.8	272.6	274.7
17.	Calcium as Ca	mg/l	APHA 3500 Ca B	--	14.2	14.6	14.4
18.	Oil & Grease as O&G	mg/l	APHA 5520 B	--	ND	ND	ND
19.	Calcium Hardness	mg/l	APHA 5520 B	--	35.4	36.2	35.8
20.	Mercury as Hg	mg/l	APHA 3500 Hg B	--	< 0.001	< 0.001	< 0.001
21.	Cadmium as Cd	mg/l	APHA 3111 B,C	0.01	< 0.001	< 0.001	< 0.001
22.	Hexavalent Chromium as Cr^{6+}	mg/l	APHA 3500 Cr B	0.05	< 0.05	< 0.05	< 0.05
23.	Total Chromium as TCr	mg/l	APHA 3500 Cr B	--	< 0.05	< 0.05	< 0.05
24.	Selenium as Se	mg/l	APHA 3114 B	0.05	< 0.01	< 0.01	< 0.01
25.	Nickel as Ni	mg/l	APHA 3500 Ni B	--	< 0.01	< 0.01	< 0.01
26.	Arsenic as As	mg/l	APHA 3114 B	0.2	< 0.01	< 0.01	< 0.01
27.	Iron as Fe	mg/l	APHA 3500Fe B	0.5	0.34	0.30	0.32
28.	Flouride as F	mg/l	APHA 4500 F C	1.5	0.023	0.023	0.021
29.	Lead as Pb	mg/l	APHA 3111 B,C	0.1	< 0.01	< 0.01	< 0.01
30.	Phenolic Compounds as $C_6H_5O_6$	mg/l	APHA 5530 B,D	0.005	< 0.001	< 0.001	< 0.001
31.	Sodium as Na	mg/l	APHA 3500Na B	--	15.8	15.3	15.55
32.	Magnesium as Mg	mg/l	APHA 3500Mg B	--	5.6	5.4	5.5
33.	Ammonical Nitrogen as NH_3-N	mg/l	APHA 4500 NH_3F	--	ND	ND	ND
34.	Total Dissolved Solids as TDS	mg/l	APHA 2540 C	1500.0	176.9	174.2	175.55

BDL Value: *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

Reviewed by: **Approved by:**

Ref: Envlab/24-25/TR-02144 **Date:12.05.2025**

SIX MONTH AVERAGES OF SURFACE WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1.Name of the Industry : M/s Brahmani River Pellets Limited, Keonjhar

2.Name of the Location : SW3 Galemi river upstream

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 2296: 1992	Analysis Result		
					Nov-24	Feb-25	Average
1.	Colour	Hazen	APHA 2120 B	300.0	Colorless	Colorless	
2.	Dissolved Oxygen	mg/l	APHA 4500 O C	4.0	**4.2**	**4.4**	43
3.	Biochemical Oxygen Demand as BOD	mg/l	APHA 5210 B	3.0	**<1.8**	**<1.8**	<1.8
4.	Total Coli form	MPN/ 100 ML	APHA 9221 B	5000	**94**	**110**	102
5.	Chloride as Cl	mg/l	APHA 4500Cl B	600	**24.8**	**25.4**	25.6
6.	Sodium Absorption Ratio	mg/l	By Calculation	--	**0.89**	**0.92**	0.905
7.	pH at 25^0C	mg/l	APHA 4500H^+B	6.5-8.5	**7.49**	**7.47**	7.48
8.	Boron as B	mg/l	APHA 4500 B,B	--	**<0.01**	**<0.01**	<0.01
9.	Sulphate as SO_4	mg/l	APHA 4500 SO_4^{2-} E	400.0	**4.8**	**4.8**	4.8
10.	Nitrate as NO_3	mg/l	APHA 4500 NO_3^- E	50.0	**1.20**	**1.18**	1.19
11.	Free Ammonia as NH_3	mg/l	By Calculation	--	**ND**	**ND**	ND
12.	Copper as Cu	mg/l	APHA 3111 B,C	1.5	**<0.025**	**<0.025**	<0.025
13.	Zinc as Zn	mg/l	APHA 3111 B,C	15.0	**<0.05**	**<0.05**	<0.05
14.	Chemical Oxygen Demand as COD	mg/l	APHA 5220 C	--	**<3.0**	**<3.0**	<3.0
15.	Suspended solids as SS	mg/l	APHA 2540 D	--	**14.9**	**12.9**	13.9
16.	Conductivity	mg/l	APHA 2510 B	--	**189.8**	**190.2**	190.0
17.	Calcium as Ca	mg/l	APHA 3500 Ca B	--	**14.2**	**13.8**	14.0
18.	Oil & Grease as O&G	mg/l	APHA 5520 B	--	**ND**	**ND**	ND
19.	Calcium Hardness	mg/l	APHA 5520 B	--	**35.2**	**34.4**	34.8
20.	Mercury as Hg	mg/l	APHA 3500 Hg B	--	**< 0.001**	**< 0.001**	< 0.001
21.	Cadmium as Cd	mg/l	APHA 3111 B,C	0.01	**< 0.001**	**< 0.001**	< 0.001
22.	Hexavalent Chromium as Cr^{6+}	mg/l	APHA 3500 Cr B	0.05	**< 0.05**	**< 0.05**	< 0.05
23.	Total Chromium as TCr	mg/l	APHA 3500 Cr B	--	**< 0.05**	**< 0.05**	< 0.05
24.	Selenium as Se	mg/l	APHA 3114 B	0.05	**< 0.01**	**< 0.01**	< 0.01
25.	Nickel as Ni	mg/l	APHA 3500 Ni B	--	**< 0.01**	**< 0.01**	< 0.01
26.	Arsenic as As	mg/l	APHA 3114 B	0.2	**< 0.01**	**< 0.01**	< 0.01
27.	Iron as Fe	mg/l	APHA 3500Fe B	0.5	**0.30**	**0.28**	0.29
28.	Flouride as F	mg/l	APHA 4500 F C	1.5	**0.02**	**0.022**	0.021
29.	Lead as Pb	mg/l	APHA 3111 B,C	0.1	**< 0.01**	**< 0.01**	< 0.01
30.	Phenolic Compounds as $C_6H_5O_6$	mg/l	APHA 5530 B,D	0.005	**< 0.001**	**< 0.001**	< 0.001
31.	Sodium as Na	mg/l	APHA 3500Na B	--	**14.2**	**13.8**	14.0
32.	Magnesium as Mg	mg/l	APHA 3500Mg B	--	**5.2**	**4.8**	5.0
33.	Ammonical Nitrogen as NH_3-N	mg/l	APHA 4500 NH_3F	--	**ND**	**ND**	ND
34.	Total Dissolved Solids as TDS	mg/l	APHA 2540 C	1500.0	**114.3**	**121.5**	117.9

BDL Value: *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

Reviewed by: **Approved by:**

Ref: Envlab/24-25/TR-02145 **Date:12.05.2025**

SIX MONTH AVERAGES OF SURFACE WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1.Name of the Industry : M/s Brahmani River Pellets Limited, Keonjhar

2.Name of the Location : SW4 Galemi river downstream

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 2296: 1992	Analysis Result		Average
					Nov-24	Feb-25	
1.	Colour	Hazen	APHA 2120 B	300.0	Colorless	Colorless	Colorless
2.	Dissolved Oxygen	mg/l	APHA 4500 O C	4.0	**4.1**	**4.2**	4.15
3.	Biochemical Oxygen Demand as BOD	mg/l	APHA 5210 B	3.0	**<1.8**	**<1.8**	<1.8
4.	Total Coli form	MPN/ 100 ML	APHA 9221 B	5000	**110**	**130**	120
5.	Chloride as Cl	mg/l	APHA 4500Cl B	600	**25.0**	**25.8**	25.4
6.	Sodium Absorption Ratio	mg/l	By Calculation	--	**0.92**	**0.94**	0.93
7.	pH at 25^0C	mg/l	APHA 4500H^+B	6.5-8.5	**7.52**	**7.54**	7.53
8.	Boron as B	mg/l	APHA 4500 B,B	--	**<0.01**	**<0.01**	<0.01
9.	Sulphate as SO_4	mg/l	APHA 4500 SO_4^{2-} E	400.0	**5.2**	**5.2**	5.2
10.	Nitrate as NO_3	mg/l	APHA 4500 NO_3^- E	50.0	**1.27**	**1.22**	1.24
11.	Free Ammonia as NH_3	mg/l	By Calculation	--	**ND**	**ND**	ND
12.	Copper as Cu	mg/l	APHA 3111 B,C	1.5	**<0.025**	**<0.025**	<0.025
13.	Zinc as Zn	mg/l	APHA 3111 B,C	15.0	**<0.05**	**<0.05**	<0.05
14.	Chemical Oxygen Demand as COD	mg/l	APHA 5220 C	--	**<3.0**	**<3.0**	<3.0
15.	Suspended solids as SS	mg/l	APHA 2540 D	--	**15.5**	**13.8**	14.65
16.	Conductivity	mg/l	APHA 2510 B	--	**190.6**	**193.6**	192.1
17.	Calcium as Ca	mg/l	APHA 3500 Ca B	--	**14.4**	**14.0**	14.2
18.	Oil & Grease as O&G	mg/l	APHA 5520 B	--	**ND**	**ND**	ND
19.	Calcium Hardness	mg/l	APHA 5520 B	--	**35.8**	**34.6**	35.2
20.	Mercury as Hg	mg/l	APHA 3500 Hg B	--	**< 0.001**	**< 0.001**	< 0.001
21.	Cadmium as Cd	mg/l	APHA 3111 B,C	0.01	**< 0.001**	**< 0.001**	< 0.001
22.	Hexavalent Chromium as Cr^{6+}	mg/l	APHA 3500 Cr B	0.05	**< 0.05**	**< 0.05**	< 0.05
23.	Total Chromium as TCr	mg/l	APHA 3500 Cr B	--	**< 0.05**	**< 0.05**	< 0.05
24.	Selenium as Se	mg/l	APHA 3114 B	0.05	**< 0.01**	**< 0.01**	< 0.01
25.	Nickel as Ni	mg/l	APHA 3500 Ni B	--	**< 0.01**	**< 0.01**	< 0.01
26.	Arsenic as As	mg/l	APHA 3114 B	0.2	**< 0.01**	**< 0.01**	< 0.01
27.	Iron as Fe	mg/l	APHA 3500Fe B	0.5	**0.32**	**0.30**	0.31
28.	Flouride as F	mg/l	APHA 4500 F C	1.5	**0.022**	**0.024**	0.020
29.	Lead as Pb	mg/l	APHA 3111 B,C	0.1	**< 0.01**	**< 0.01**	< 0.01
30.	Phenolic Compounds as $C_6H_5O_6$	mg/l	APHA 5530 B,D	0.005	**< 0.001**	**< 0.001**	< 0.001
31.	Sodium as Na	mg/l	APHA 3500Na B	--	**14.7**	**14.2**	14.45
32.	Magnesium as Mg	mg/l	APHA 3500Mg B	--	**5.3**	**5.0**	5.15
33.	Ammonical Nitrogen as NH_3-N	mg/l	APHA 4500 NH_3F	--	**ND**	**ND**	ND
34.	Total Dissolved Solids as TDS	mg/l	APHA 2540 C	1500.0	**121.8**	**123.6**	122.7

BDL Value: *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

Reviewed by: **Approved by**

Ref: Envlab/24-25/TR-02146 **Date:12.05.2025**

SIX MONTH AVERAGES OF SURFACE WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1.Name of the Industry : M/s Brahmani River Pellets Limited, Keonjhar

2.Name of the Location : SW5 Laskara Nallah upstream

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 2296: 1992	Analysis Result		Average
					Nov-24	Feb-25	
1.	Colour	Hazen	APHA 2120 B	300.0	Colorless	Colorless	Colorless
2.	Dissolved Oxygen	mg/l	APHA 4500 O C	4.0	**4.1**	**4.4**	4.25
3.	Biochemical Oxygen Demand as BOD	mg/l	APHA 5210 B	3.0	**<1.8**	**<1.8**	<1.8
4.	Total Coli form	MPN/ 100 ML	APHA 9221 B	5000	**120**	**110**	120
5.	Chloride as Cl	mg/l	APHA 4500Cl B	600	**27.2**	**27.2**	27.2
6.	Sodium Absorption Ratio	mg/l	By Calculation	--	**0.92**	**0.94**	0.93
7.	pH at 25^0C	mg/l	APHA 4500H^+B	6.5-8.5	**7.52**	**7.47**	7.49
8.	Boron as B	mg/l	APHA 4500 B,B	--	**<0.05**	**<0.05**	<0.05
9.	Sulphate as SO_4	mg/l	APHA 4500 SO_4^{2-} E	400.0	**5.7**	**6.1**	5.9
10.	Nitrate as NO_3	mg/l	APHA 4500 NO_3^- E	50.0	**2.53**	**2.43**	2.48
11.	Free Ammonia as NH_3	mg/l	By Calculation	--	**ND**	**ND**	ND
12.	Copper as Cu	mg/l	APHA 3111 B,C	1.5	**<0.025**	**<0.025**	<0.025
13.	Zinc as Zn	mg/l	APHA 3111 B,C	15.0	**<0.05**	**<0.05**	<0.05
14.	Chemical Oxygen Demand as COD	mg/l	APHA 5220 C	--	**4.0**	**4.0**	4.0
15.	Suspended solids as SS	mg/l	APHA 2540 D	--	**16.4**	**15.2**	15.8
16.	Conductivity	mg/l	APHA 2510 B	--	**279.8**	**281.3**	280.55
17.	Calcium as Ca	mg/l	APHA 3500 Ca B	--	**15.8**	**14.9**	15.35
18.	Oil & Grease as O&G	mg/l	APHA 5520 B	--	**ND**	**ND**	ND
19.	Calcium Hardness	mg/l	APHA 5520 B	--	**39.2**	**37.0**	38.1
20.	Mercury as Hg	mg/l	APHA 3500 Hg B	--	**< 0.001**	**< 0.001**	< 0.001
21.	Cadmium as Cd	mg/l	APHA 3111 B,C	0.01	**< 0.001**	**< 0.001**	< 0.001
22.	Hexavalent Chromium as Cr^{6+}	mg/l	APHA 3500 Cr B	0.05	**< 0.05**	**< 0.05**	< 0.05
23.	Total Chromium as TCr	mg/l	APHA 3500 Cr B	--	**< 0.05**	**< 0.05**	< 0.05
24.	Selenium as Se	mg/l	APHA 3114 B	0.05	**< 0.01**	**< 0.01**	< 0.01
25.	Nickel as Ni	mg/l	APHA 3500 Ni B	--	**< 0.01**	**< 0.01**	< 0.01
26.	Arsenic as As	mg/l	APHA 3114 B	0.2	**< 0.01**	**< 0.01**	< 0.01
27.	Iron as Fe	mg/l	APHA 3500Fe B	0.5	**0.32**	**0.28**	0.30
28.	Flouride as F	mg/l	APHA 4500 F C	1.5	**0.019**	**0.020**	0.0195
29.	Lead as Pb	mg/l	APHA 3111 B,C	0.1	**< 0.01**	**< 0.01**	< 0.01
30.	Phenolic Compounds as $C_6H_5O_6$	mg/l	APHA 5530 B,D	0.005	**< 0.001**	**< 0.001**	< 0.001
31.	Sodium as Na	mg/l	APHA 3500Na B	--	**15.4**	**14.9**	15.15
32.	Magnesium as Mg	mg/l	APHA 3500Mg B	--	**5.1**	**4.8**	4.95
33.	Ammonical Nitrogen as NH_3-N	mg/l	APHA 4500 NH_3F	--	**ND**	**ND**	ND
34.	Total Dissolved Solids as TDS	mg/l	APHA 2540 C	1500.0	**179.2**	**179.8**	179.5

BDL Value: *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

Reviewed by: **Approved by:**

Ref: Envlab/24-25/TR-02147 **Date:12.05.2025**

SIX MONTH AVERAGES OF SURFACE WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1.Name of the Industry : M/s Brahmani River Pellets Limited, Keonjhar

2.Name of the Location : SW6 Laskara Nallah downtream

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per 2296: 1992	Analysis Result		Average
					NOV-24	Feb-25	
1.	Colour	Hazen	APHA 2120 B	300.0	Colorless	Colorless	Colorless
2.	Dissolved Oxygen	mg/l	APHA 4500 O C	4.0	**4.0**	**4.2**	4.10
3.	Biochemical Oxygen Demand as BOD	mg/l	APHA 5210 B	3.0	**<1.8**	**<1.8**	<1.8
4.	Total Coli form	MPN/ 100 ML	APHA 9221 B	5000	**130**	**120**	125
5.	Chloride as Cl	mg/l	APHA 4500Cl B	600	**27.6**	**27.6**	27.6
6.	Sodium Absorption Ratio	mg/l	By Calculation	--	**0.94**	**0.96**	0.95
7.	pH at 25^0C	mg/l	APHA 4500H^+B	6.5-8.5	**7.57**	**7.53**	7.55
8.	Boron as B	mg/l	APHA 4500 B,B	--	**<0.05**	**<0.05**	<0.05
9.	Sulphate as SO_4	mg/l	APHA 4500 SO_4^{2-} E	400.0	**6.2**	**5.8**	6.0
10.	Nitrate as NO_3	mg/l	APHA 4500 NO_3^- E	50.0	**2.82**	**2.62**	2.72
11.	Free Ammonia as NH_3	mg/l	By Calculation	--	**ND**	**ND**	ND
12.	Copper as Cu	mg/l	APHA 3111 B,C	1.5	**<0.025**	**<0.025**	<0.025
13.	Zinc as Zn	mg/l	APHA 3111 B,C	15.0	**<0.05**	**<0.05**	<0.05
14.	Chemical Oxygen Demand as COD	mg/l	APHA 5220 C	--	**4.4**	**4.4**	4.4
15.	Suspended solids as SS	mg/l	APHA 2540 D	--	**18.4**	**16.6**	17.5
16.	Conductivity	mg/l	APHA 2510 B	--	**281.7**	**283.2**	282.45
17.	Calcium as Ca	mg/l	APHA 3500 Ca B	--	**16.4**	**15.4**	17.5
18.	Oil & Grease as O&G	mg/l	APHA 5520 B	--	**ND**	**ND**	ND
19.	Calcium Hardness	mg/l	APHA 5520 B	--	**40.8**	**38.2**	38.0
20.	Mercury as Hg	mg/l	APHA 3500 Hg B	--	**< 0.001**	**< 0.001**	< 0.001
21.	Cadmium as Cd	mg/l	APHA 3111 B,C	0.01	**< 0.001**	**< 0.001**	< 0.001
22.	Hexavalent Chromium as Cr^{6+}	mg/l	APHA 3500 Cr B	0.05	**< 0.05**	**< 0.05**	< 0.05
23.	Total Chromium as TCr	mg/l	APHA 3500 Cr B	--	**< 0.05**	**< 0.05**	< 0.05
24.	Selenium as Se	mg/l	APHA 3114 B	0.05	**< 0.01**	**< 0.01**	< 0.01
25.	Nickel as Ni	mg/l	APHA 3500 Ni B	--	**< 0.01**	**< 0.01**	< 0.01
26.	Arsenic as As	mg/l	APHA 3114 B	0.2	**< 0.01**	**< 0.01**	< 0.01
27.	Iron as Fe	mg/l	APHA 3500Fe B	0.5	**0.34**	**0.31**	0.325
28.	Flouride as F	mg/l	APHA 4500 F C	1.5	**0.02**	**0.021**	0.0205
29.	Lead as Pb	mg/l	APHA 3111 B,C	0.1	**< 0.01**	**< 0.01**	< 0.01
30.	Phenolic Compounds as $C_6H_5O_6$	mg/l	APHA 5530 B,D	0.005	**< 0.001**	**< 0.001**	< 0.001
31.	Sodium as Na	mg/l	APHA 3500Na B	--	**15.8**	**15.2**	15.5
32.	Magnesium as Mg	mg/l	APHA 3500Mg B	--	**5.3**	**5.1**	5.2
33.	Ammonical Nitrogen as NH_3-N	mg/l	APHA 4500 NH_3F	--	**ND**	**ND**	ND
34.	Total Dissolved Solids as TDS	mg/l	APHA 2540 C	1500.0	**180.2**	**181.1**	180.65

BDL Value: *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

Reviewed by: **Approved by:**

Ref: Envlab/24-25/TR- 02148 **Date:12.05.2025**

SIX MONTH AVERAGES OF SURFACE WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1.Name of the Industry : M/s Brahmani River Pellets Limited, Keonjhar

2.Name of the Location : SW7 Limtur Nallah uptream

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 2296: 1992	Analysis Result		Average
					Nov-24	Feb-25	
1.	Colour	Hazen	APHA 2120 B	300.0	**Colorless**	**Colorless**	Colorless
2.	Dissolved Oxygen	mg/l	APHA 4500 O C	4.0	**4.1**	**4.2**	4.15
3.	Biochemical Oxygen Demand as BOD	mg/l	APHA 5210 B	3.0	**<1.8**	**<1.8**	<1.8
4.	Total Coli form	MPN/ 100 ML	APHA 9221 B	5000	**110**	**120**	115
5.	Chloride as Cl	mg/l	APHA 4500Cl B	600	**25.9**	**26.3**	26.1
6.	Sodium Absorption Ratio	mg/l	By Calculation	--	**0.94**	**0.97**	0.955
7.	pH at 25^0C	mg/l	APHA 4500H^+B	6.5-8.5	**7.50**	**7.54**	7.52
8.	Boron as B	mg/l	APHA 4500 B,B	--	**<0.05**	**<0.05**	<0.05
9.	Sulphate as SO_4	mg/l	APHA 4500 SO_4^{2-} E	400.0	**4.9**	**5.2**	5.05
10.	Nitrate as NO_3	mg/l	APHA 4500 NO_3^- E	50.0	**0.72**	**0.86**	0.79
11.	Free Ammonia as NH_3	mg/l	By Calculation	--	**ND**	**ND**	ND
12.	Copper as Cu	mg/l	APHA 3111 B,C	1.5	**<0.025**	**<0.025**	<0.025
13.	Zinc as Zn	mg/l	APHA 3111 B,C	15.0	**<0.05**	**<0.05**	<0.05
14.	Chemical Oxygen Demand as COD	mg/l	APHA 5220 C	--	**<3.0**	**<3.0**	<3.0
15.	Suspended solids as SS	mg/l	APHA 2540 D	--	**16.8**	**15.8**	16.3
16.	Conductivity	mg/l	APHA 2510 B	--	**192.2**	**195.5**	193.85
17.	Calcium as Ca	mg/l	APHA 3500 Ca B	--	**16.9**	**15.8**	16.35
18.	Oil & Grease as O&G	mg/l	APHA 5520 B	--	**ND**	**ND**	ND
19.	Calcium Hardness	mg/l	APHA 5520 B	--	**42.0**	**39.2**	40.6
20.	Mercury as Hg	mg/l	APHA 3500 Hg B	--	**< 0.001**	**< 0.001**	< 0.001
21.	Cadmium as Cd	mg/l	APHA 3111 B,C	0.01	**< 0.001**	**< 0.001**	< 0.001
22.	Hexavalent Chromium as Cr^{6+}	mg/l	APHA 3500 Cr B	0.05	**< 0.05**	**< 0.05**	< 0.05
23.	Total Chromium as TCr	mg/l	APHA 3500 Cr B	--	**< 0.05**	**< 0.05**	< 0.05
24.	Selenium as Se	mg/l	APHA 3114 B	0.05	**< 0.01**	**< 0.01**	< 0.01
25.	Nickel as Ni	mg/l	APHA 3500 Ni B	--	**< 0.01**	**< 0.01**	< 0.01
26.	Arsenic as As	mg/l	APHA 3114 B	0.2	**< 0.01**	**< 0.01**	< 0.01
27.	Iron as Fe	mg/l	APHA 3500Fe B	0.5	**0.36**	**0.32**	0.34
28.	Flouride as F	mg/l	APHA 4500 F C	1.5	**0.020**	**0.021**	0.0205
29.	Lead as Pb	mg/l	APHA 3111 B,C	0.1	**< 0.01**	**< 0.01**	< 0.01
30.	Phenolic Compounds as $C_6H_5O_6$	mg/l	APHA 5530 B,D	0.005	**< 0.001**	**< 0.001**	< 0.001
31.	Sodium as Na	mg/l	APHA 3500Na B	--	**16.9**	**15.7**	16.3
32.	Magnesium as Mg	mg/l	APHA 3500Mg B	--	**5.2**	**4.9**	5.05
33.	Ammonical Nitrogen as NH_3-N	mg/l	APHA 4500 NH_3F	--	**ND**	**ND**	ND
34.	Total Dissolved Solids as TDS	mg/l	APHA 2540 C	1500.0	**123.4**	**125.1**	124.25

BDL Value: *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

Reviewed by: **Approved by:**

Ref: Envlab/24-25/TR-02149 **Date:12.05.2025**

SIX MONTH AVERAGES OF SURFACE WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1.Name of the Industry : M/s Brahmani River Pellets Limited, Keonjhar

2.Name of the Location : SW8 Limtur Nallah downstream

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 2296: 1992	Analysis Result		
					Nov-24	Feb-25	Average
1.	Colour	Hazen	APHA 2120 B	300.0	**Colorless**	**Colorless**	Colorless
2.	Dissolved Oxygen	mg/l	APHA 4500 O C	4.0	**3.9**	**4.0**	3.95
3.	Biochemical Oxygen Demand as BOD	mg/l	APHA 5210 B	3.0	**<1.8**	**<1.8**	<1.8
4.	Total Coli form	MPN/ 100 ML	APHA 9221 B	5000	**130**	**140**	135
5.	Chloride as Cl	mg/l	APHA 4500Cl B	600	**26.6**	**27.4**	27.0
6.	Sodium Absorption Ratio	mg/l	By Calculation	--	**0.96**	**0.99**	0.975
7.	pH at 25^0C	mg/l	APHA 4500H^+B	6.5-8.5	**7.48**	**7.50**	7.49
8.	Boron as B	mg/l	APHA 4500 B,B	--	**<0.05**	**<0.05**	<0.05
9.	Sulphate as SO_4	mg/l	APHA 4500 SO_4^{2-} E	400.0	**5.2**	**5.5**	5.35
10.	Nitrate as NO_3	mg/l	APHA 4500 NO_3^- E	50.0	**0.82**	**0.98**	0.90
11.	Free Ammonia as NH_3	mg/l	By Calculation	--	**ND**	**ND**	ND
12.	Copper as Cu	mg/l	APHA 3111 B,C	1.5	**<0.025**	**<0.025**	<0.025
13.	Zinc as Zn	mg/l	APHA 3111 B,C	15.0	**<0.05**	**<0.05**	<0.05
14.	Chemical Oxygen Demand as COD	mg/l	APHA 5220 C	--	**<3.0**	**<3.0**	<3.0
15.	Suspended solids as SS	mg/l	APHA 2540 D	--	**17.3**	**16.2**	16.75
16.	Conductivity	mg/l	APHA 2510 B	--	**197.8**	**199.6**	198.7
17.	Calcium as Ca	mg/l	APHA 3500 Ca B	--	**17.2**	**16.4**	16.8
18.	Oil & Grease as O&G	mg/l	APHA 5520 B	--	**ND**	**ND**	ND
19.	Calcium Hardness	mg/l	APHA 5520 B	--	**42.8**	**40.6**	41.7
20.	Mercury as Hg	mg/l	APHA 3500 Hg B	--	**< 0.001**	**< 0.001**	< 0.001
21.	Cadmium as Cd	mg/l	APHA 3111 B,C	0.01	**< 0.001**	**< 0.001**	< 0.001
22.	Hexavalent Chromium as Cr^{6+}	mg/l	APHA 3500 Cr B	0.05	**< 0.05**	**< 0.05**	< 0.05
23.	Total Chromium as TCr	mg/l	APHA 3500 Cr B	--	**< 0.05**	**< 0.05**	< 0.05
24.	Selenium as Se	mg/l	APHA 3114 B	0.05	**< 0.01**	**< 0.01**	< 0.01
25.	Nickel as Ni	mg/l	APHA 3500 Ni B	--	**< 0.01**	**< 0.01**	< 0.01
26.	Arsenic as As	mg/l	APHA 3114 B	0.2	**< 0.01**	**< 0.01**	< 0.01
27.	Iron as Fe	mg/l	APHA 3500Fe B	0.5	**0.38**	**0.35**	0.365
28.	Flouride as F	mg/l	APHA 4500 F C	1.5	**0.021**	**0.022**	0.0215
29.	Lead as Pb	mg/l	APHA 3111 B,C	0.1	**< 0.01**	**< 0.01**	< 0.01
30.	Phenolic Compounds as $C_6H_5O_6$	mg/l	APHA 5530 B,D	0.005	**< 0.001**	**< 0.001**	< 0.001
31.	Sodium as Na	mg/l	APHA 3500Na B	--	**17.5**	**16.8**	17.15
32.	Magnesium as Mg	mg/l	APHA 3500Mg B	--	**5.5**	**5.1**	5.3
33.	Ammonical Nitrogen as NH_3-N	mg/l	APHA 4500 NH_3F	--	**ND**	**ND**	ND
34.	Total Dissolved Solids as TDS	mg/l	APHA 2540 C	1500.0	**126.4**	**127.4**	126.9

BDL Value: *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

Reviewed by: **Approved by:**

Ref: Envlab/24-25/TR-02150 **Date:12.05.2025**

SIX MONTH AVERAGES OF SURFACE WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1.Name of the Industry : M/s Brahmani River Pellets Limited, Keonjhar

2.Name of the Location : SW9 Betlata Nallah uptream

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 2296: 1992	Analysis Result		Average
					Nov-24	Feb-25	
1.	Colour	Hazen	APHA 2120 B	300.0	**<5**	**<5**	<5
2.	Dissolved Oxygen	mg/l	APHA 4500 O C	4.0	**4.2**	**4.2**	4.2
3.	Biochemical Oxygen Demand as BOD	mg/l	APHA 5210 B	3.0	**<1.8**	**<1.8**	<1.8
4.	Total Coli form	MPN/ 100 ML	APHA 9221 B	5000	**120**	**140**	130
5.	Chloride as Cl	mg/l	APHA 4500Cl B	600	**26.3**	**26.6**	26.45
6.	Sodium Absorption Ratio	mg/l	By Calculation	--	**0.94**	**0.94**	0.94
7.	pH at 25^0C	mg/l	APHA 4500H^+B	6.5-8.5	**7.52**	**7.54**	7.53
8.	Boron as B	mg/l	APHA 4500 B,B	--	**<0.05**	**<0.05**	<0.05
9.	Sulphate as SO_4	mg/l	APHA 4500 SO_4^{2-} E	400.0	**5.3**	**6.2**	5.75
10.	Nitrate as NO_3	mg/l	APHA 4500 NO_3^- E	50.0	**2.56**	**2.9**	2.73
11.	Free Ammonia as NH_3	mg/l	By Calculation	--	**ND**	**ND**	ND
12.	Copper as Cu	mg/l	APHA 3111 B,C	1.5	**<0.025**	**<0.025**	<0.025
13.	Zinc as Zn	mg/l	APHA 3111 B,C	15.0	**<0.05**	**<0.05**	<0.05
14.	Chemical Oxygen Demand as COD	mg/l	APHA 5220 C	--	**4.0**	**4.8**	4.4
15.	Suspended solids as SS	mg/l	APHA 2540 D	--	**15.3**	**17.4**	16.35
16.	Conductivity	mg/l	APHA 2510 B	--	**234.2**	**232.6**	233.4
17.	Calcium as Ca	mg/l	APHA 3500 Ca B	--	**15.8**	**17.2**	16.5
18.	Oil & Grease as O&G	mg/l	APHA 5520 B	--	**ND**	**ND**	ND
19.	Calcium Hardness	mg/l	APHA 5520 B	--	**39.2**	**43.2**	41.2
20.	Mercury as Hg	mg/l	APHA 3500 Hg B	--	**< 0.001**	**< 0.001**	< 0.001
21.	Cadmium as Cd	mg/l	APHA 3111 B,C	0.01	**< 0.001**	**< 0.001**	< 0.001
22.	Hexavalent Chromium as Cr^{6+}	mg/l	APHA 3500 Cr B	0.05	**< 0.05**	**< 0.05**	< 0.05
23.	Total Chromium as TCr	mg/l	APHA 3500 Cr B	--	**< 0.05**	**< 0.05**	< 0.05
24.	Selenium as Se	mg/l	APHA 3114 B	0.05	**< 0.01**	**< 0.01**	< 0.01
25.	Nickel as Ni	mg/l	APHA 3500 Ni B	--	**< 0.01**	**< 0.01**	< 0.01
26.	Arsenic as As	mg/l	APHA 3114 B	0.2	**< 0.01**	**< 0.01**	< 0.01
27.	Iron as Fe	mg/l	APHA 3500Fe B	0.5	**0.29**	**0.33**	0.31
28.	Flouride as F	mg/l	APHA 4500 F C	1.5	**0.021**	**0.020**	0.023
29.	Lead as Pb	mg/l	APHA 3111 B,C	0.1	**< 0.01**	**< 0.01**	< 0.01
30.	Phenolic Compounds as $C_6H_5O_6$	mg/l	APHA 5530 B,D	0.005	**< 0.001**	**< 0.001**	< 0.001
31.	Sodium as Na	mg/l	APHA 3500Na B	--	**15.1**	**16.1**	15.6
32.	Magnesium as Mg	mg/l	APHA 3500Mg B	--	**5.0**	**5.4**	5.2
33.	Ammonical Nitrogen as NH_3-N	mg/l	APHA 4500 NH_3F	--	**ND**	**ND**	ND
34.	Total Dissolved Solids as TDS	mg/l	APHA 2540 C	1500.0	**149.6**	**148.6**	149.1

BDL Value : *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

Reviewed by: **Approved by:**

Ref: Envlab/24-25/TR-02151 **Date:12.05.2025**

SIX MONTH AVERAGES OF SURFACE WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1.Name of the Industry : M/s Brahmani River Pellets Limited, Keonjhar

2.Name of the Location : SW10 Betlata Nallah downtream

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 2296: 1992	Analysis Result		
					Nov-24	Feb-25	Average
1.	Colour	Hazen	APHA 2120 B	300.0	**<5**	**<5**	<5
2.	Dissolved Oxygen	mg/l	APHA 4500 O C	4.0	**4.4**	**4.2**	4.3
3.	Biochemical Oxygen Demand as BOD	mg/l	APHA 5210 B	3.0	**<1.8**	**<1.8**	<1.8
4.	Total Coli form	MPN/ 100 ML	APHA 9221 B	5000	**130**	**140**	135
5.	Chloride as Cl	mg/l	APHA 4500Cl B	600	**27.1**	**26.6**	26.85
6.	Sodium Absorption Ratio	mg/l	By Calculation	--	**0.98**	**0.94**	0.96
7.	pH at 25^0C	mg/l	APHA 4500H^+B	6.5-8.5	**7.58**	**7.54**	7.56
8.	Boron as B	mg/l	APHA 4500 B,B	--	**<0.05**	**<0.05**	<0.05
9.	Sulphate as SO_4	mg/l	APHA 4500 SO_4^{2-} E	400.0	**5.8**	**6.2**	6.5
10.	Nitrate as NO_3	mg/l	APHA 4500 NO_3^- E	50.0	**2.72**	**2.9**	2.81
11.	Free Ammonia as NH_3	mg/l	By Calculation	--	**ND**	**ND**	ND
12.	Copper as Cu	mg/l	APHA 3111 B,C	1.5	**<0.025**	**<0.025**	<0.025
13.	Zinc as Zn	mg/l	APHA 3111 B,C	15.0	**<0.05**	**<0.05**	<0.05
14.	Chemical Oxygen Demand as COD	mg/l	APHA 5220 C	--	**4.4**	**4.8**	4.6
15.	Suspended solids as SS	mg/l	APHA 2540 D	--	**16.2**	**17.4**	16.8
16.	Conductivity	mg/l	APHA 2510 B	--	**236.8**	**232.6**	234.7
17.	Calcium as Ca	mg/l	APHA 3500 Ca B	--	**16.4**	**17.2**	16.8
18.	Oil & Grease as O&G	mg/l	APHA 5520 B	--	**ND**	**ND**	ND
19.	Calcium Hardness	mg/l	APHA 5520 B	--	**40.6**	**43.2**	41.9
20.	Mercury as Hg	mg/l	APHA 3500 Hg B	--	**< 0.001**	**< 0.001**	< 0.001
21.	Cadmium as Cd	mg/l	APHA 3111 B,C	0.01	**< 0.001**	**< 0.001**	< 0.001
22.	Hexavalent Chromium as Cr^{6+}	mg/l	APHA 3500 Cr B	0.05	**< 0.05**	**< 0.05**	< 0.05
23.	Total Chromium as TCr	mg/l	APHA 3500 Cr B	--	**< 0.05**	**< 0.05**	< 0.05
24.	Selenium as Se	mg/l	APHA 3114 B	0.05	**< 0.01**	**< 0.01**	< 0.01
25.	Nickel as Ni	mg/l	APHA 3500 Ni B	--	**< 0.01**	**< 0.01**	< 0.01
26.	Arsenic as As	mg/l	APHA 3114 B	0.2	**< 0.01**	**< 0.01**	< 0.01
27.	Iron as Fe	mg/l	APHA 3500Fe B	0.5	**0.30**	**0.33**	0.315
28.	Flouride as F	mg/l	APHA 4500 F C	1.5	**0.019**	**0.020**	0.0195
29.	Lead as Pb	mg/l	APHA 3111 B,C	0.1	**< 0.01**	**< 0.01**	< 0.01
30.	Phenolic Compounds as $C_6H_5O_6$	mg/l	APHA 5530 B,D	0.005	**< 0.001**	**< 0.001**	< 0.001
31.	Sodium as Na	mg/l	APHA 3500Na B	--	**15.6**	**16.1**	15.85
32.	Magnesium as Mg	mg/l	APHA 3500Mg B	--	**5.1**	**5.4**	5.25
33.	Ammonical Nitrogen as NH_3-N	mg/l	APHA 4500 NH_3F	--	**ND**	**ND**	ND
34.	Total Dissolved Solids as TDS	mg/l	APHA 2540 C	1500.0	**151.1**	**148.6**	149.85

BDL Value : *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

Reviewed by: **Approved by:**

Ref: Envlab/24-25/TR-02152 **Date: 12.05.2025**

SIX MONTH AVERAGES OF DRINKING WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1. **Name of the Industry:** M/s Brahmani River Pellets Limited, Keonjhar
2. **Name of the Location:** DW1 Bore Well Near Hostel

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 10500:2012	Analysis Result		
					Nov-24	Feb-25	Average
1	Colour	Hazen	APHA 2120 B,C	5.0	Colorless	Colorless	Colorless
2	Odour	---	APHA 2150 B	Agreeable	Agreeable	Agreeable	Agreeable
3	Taste	---	APHA 2160 C	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity	NTU	APHA 2130 B	1.0	<1	<1	<1
5	pH at 25^{0}C	---	APHA 4500H$^+$B	6.5-8.5	7.52	7.48	7.50
6	Total hardness	mg/l	APHA 2340 C	200	140.0	136.0	138.0
7	Iron	mg/l	APHA 3500Fe B	0.3	0.32	0.29	0.305
8	Chlorides	mg/l	APHA 4500Cl$^-$ B	250	33.7	31.5	32.6
9	Residual free chlorine	mg/l	APHA 4500Cl$^-$ B	0.2	ND	ND	ND
10	Total dissolved solids	mg/l	APHA 2540 C	500.0	328.4	326.5	327.4
11	Calcium as Ca	mg/l	APHA 3500 Ca B	75	19.4	18.6	19.0
12	Copper as Cu	mg/l	APHA 3111 B,C	0.05	<0.025	<0.025	< 0.025
13	Manganese as Mn	mg/l	APHA 3500Mn B	0.1	< 0.05	< 0.05	< 0.05
14	Sulphate as SO_4	mg/l	APHA 4500SO_4^{2-} B	200	5.2	4.9	5.05
15	Nitrate as NO_3	mg/l	APHA 4500NO_3^-E	45	2.43	2.33	2.38
16	Fluoride as F	mg/l	APHA 4500 F$^-$ C	1.0	0.025	0.024	0.245
17	Phenolic Compounds as C_6H_6OH	mg/l	APHA 5530 B,D	0.001	< 0.001	< 0.001	< 0.001
18	Mercury as Hg	mg/l	APHA 3500 Hg B	0.001	< 0.001	< 0.001	< 0.001
19	Cadmium as Cd	mg/l	APHA 3111 B,C	0.003	< 0.001	< 0.001	< 0.001
20	Selenium as Se	mg/l	APHA 3114 B	0.01	< 0.01	< 0.01	< 0.01
21	Arsenic as As	mg/l	APHA 3114 B	0.01	< 0.01	< 0.01	< 0.01
22	Cyanide as CN	mg/l	APHA 4500 CN- C D	0.05	ND	ND	ND
23	Lead as Pb	mg/l	APHA 3111 B,C	0.01	< 0.01	< 0.01	< 0.01
24	Zinc as Zn	mg/l	APHA 3111 B,C	5.0	< 0.05	< 0.05	< 0.05
25	Nickel as Ni	mg/l	APHA 3500 Ni B	0.02	< 0.01	< 0.01	< 0.01
26	Anionic detergents	mg/l	APHA 5540 C	0.2	ND	ND	ND
27	Hexavalent Chromium as Cr6+	mg/l	APHA 3111 B	0.05	< 0.05	< 0.05	< 0.05
28	Mineral Oil	mg/l	APHA 5520 B	0.5	ND	ND	ND
29	Alkalinity as $CaCO_3$	mg/l	APHA 2320 B	200	132.0	127.2	129.6
30	Aluminium as Al	mg/l	APHA 3500 Al B	0.2	< 0.001	< 0.001	< 0.001
31	Boron as B	mg/l	APHA 4500 B C	0.5	< 0.01	< 0.01	< 0.01
32	Magnesium as Mg	mg/l	APHA 3500Mg B	30	18.8	20.9	19.85
33	Total coliform	MPN/100ml	APHA 9221 B	Should not be detectable in any 100 ml	< 1.8	< 1.8	< 1.8
34	Pesticide	mg/l	APHA 6630 C	---	Absent	Absent	Absent
35	Electrical Conductivity	µS/cm	APHA 2510 B	---	513.8	510.6	512.2
36	Sodium as Na	mg/l	APHA 3500Na B	---	16.8	15.4	16.1
37	Potassium as K	mg/l	APHA 3500K B	---	2.4	2.3	2.35
38	Total Chromium as Cr	mg/l	APHA 3500 Cr B	0.05	< 0.05	< 0.05	< 0.05
39	E.Coli	MPN/ 100ml	APHA 9221 F	Should not be detectable in any 100 ml	Absent	Absent	Absent
40	Silver as Ag	mg/l	APHA 3500 Ag	0.1	< 0.001	< 0.001	< 0.001
41	Barium as Ba	mg/l	APHA 3500 Ba	0.7	< 0.05	< 0.05	< 0.05
42	Sulphide	mg/l	APHA 4500 S2- D	0.05	ND	ND	ND
43	Ammonical Nitrogen	mg/l	APHA 4500 NH_3F	0.5	ND	ND	ND
44	Feacal Coli form	MPN/100ml	APHA 9221 B	---	<1.8	<1.8	<1.8

BDL Value: *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l, Ni<0.01 mg/l, Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

Reviewed by: **Approved by**

Ref: Envlab/24-25/TR-02153 **Date:12.05.2025**

SIX MONTH AVERAGES OF DRINKING WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1. **Name of the Industry: M/s Brahmani River Pellets Limited, Keonjhar**
2. **Name of the Location: DW2: Bore well Near Store**

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 10500:2012	Analysis Result		
					Nov-24	Feb-25	Average
1	Colour	Hazen	APHA 2120 B,C	5.0	Colorless	Colorless	Colorless
2	Odour	---	APHA 2150 B	Agreeable	Agreeable	Agreeable	Agreeable
3	Taste	---	APHA 2160 C	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity	NTU	APHA 2130 B	1.0	<1	<1	<1
5	pH at 250C	---	APHA 4500H+B	6.5-8.5	7.58	7.52	7.55
6	Total hardness	mg/l	APHA 2340 C	200	144.0	140.0	142.0
7	Iron	mg/l	APHA 3500Fe B	0.3	0.34	0.30	0.32
8	Chlorides	mg/l	APHA 4500Cl- B	250	34.9	32.8	33.85
9	Residual free chlorine	mg/l	APHA 4500Cl- B	0.2	ND	ND	ND
10	Total dissolved solids	mg/l	APHA 2540 C	500.0	335.9	332.4	334.15
11	Calcium as Ca	mg/l	APHA 3500 Ca B	75	20.6	19.4	20.0
12	Copper as Cu	mg/l	APHA 3111 B,C	0.05	<0.025	<0.025	<0.025
13	Manganese as Mn	mg/l	APHA 3500Mn B	0.1	< 0.05	< 0.05	< 0.05
14	Sulphate as SO4	mg/l	APHA 4500SO42- B	200	5.5	5.2	5.35
15	Nitrate as NO3	mg/l	APHA 4500NO3-E	45	2.55	2.42	2.48
16	Fluoride as F	mg/l	APHA 4500 F - C	1.0	0.027	0.025	0.026
17	Phenolic Compounds as C6H6OH	mg/l	APHA 5530 B,D	0.001	< 0.001	< 0.001	< 0.001
18	Mercury as Hg	mg/l	APHA 3500 Hg B	0.001	< 0.001	< 0.001	< 0.001
19	Cadmium as Cd	mg/l	APHA 3111 B,C	0.003	< 0.001	< 0.001	< 0.001
20	Selenium as Se	mg/l	APHA 3114 B	0.01	< 0.01	< 0.01	< 0.01
21	Arsenic as As	mg/l	APHA 3114 B	0.01	< 0.01	< 0.01	< 0.01
22	Cyanide as CN	mg/l	APHA 4500 CN- C D	0.05	ND	ND	ND
23	Lead as Pb	mg/l	APHA 3111 B,C	0.01	< 0.01	< 0.01	< 0.01
24	Zinc as Zn	mg/l	APHA 3111 B,C	5.0	< 0.05	< 0.05	< 0.05
25	Nickel as Ni	mg/l	APHA 3500 Ni B	0.02	< 0.01	< 0.01	< 0.01
26	Anionic detergents	mg/l	APHA 5540 C	0.2	ND	ND	ND
27	Hexavalent Chromium as Cr6+	mg/l	APHA 3111 B	0.05	< 0.05	< 0.05	< 0.05
28	Mineral Oil	mg/l	APHA 5520 B	0.5	ND	ND	ND
29	Alkalinity as CaCO3	mg/l	APHA 2320 B	200	136.0	131.4	133.7
30	Aluminium as Al	mg/l	APHA 3500 Al B	0.2	< 0.001	< 0.001	< 0.001
31	Boron as B	mg/l	APHA 4500 B C	0.5	< 0.01	< 0.01	< 0.01
32	Magnesium as Mg	mg/l	APHA 3500Mg B	30	20.6	21.4	20.5
33	Total coliform	MPN/100ml	APHA 9221 B	ll not be detectable in any 100 ml	< 1.8	< 1.8	< 1.8
34	Pesticide	mg/l	APHA 6630 C	---	Absent	Absent	Absent
35	Electrical Conductivity	µS/cm	APHA 2510 B	---	525.2	519.7	522.45
36	Sodium as Na	mg/l	APHA 3500Na B	---	17.2	16.5	16.85
37	Potassium as K	mg/l	APHA 3500K B	---	2.5	2.4	2.45
38	Total Chromium as Cr	mg/l	APHA 3500 Cr B	0.05	< 0.05	< 0.05	< 0.05
39	E.Coli	MPN/100ml	APHA 9221 F	ll not be detectable in any 100 ml	Absent	Absent	Absent
40	Silver as Ag	mg/l	APHA 3500 Ag	0.1	< 0.001	< 0.001	< 0.001
41	Barium as Ba	mg/l	APHA 3500 Ba	0.7	< 0.05	< 0.05	< 0.05
42	Sulphide	mg/l	APHA 4500 S2- D	0.05	ND	ND	ND
43	Ammonical Nitrogen	mg/l	APHA 4500 NH3F	0.5	ND	ND	ND
44	Feacal Coli form	MPN/100ml	APHA 9221 B	---	<1.8	<1.8	<1.8

BDL Value: *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

Reviewed by: **Approved by:**

Ref: Envlab/24-25/TR-02154 **Date: 12.05.2025**

SIX MONTH AVERAGES OF DRINKING WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1. **Name of the Industry : M/s Brahmani River Pellets Limited, Keonjhar**
2. **Name of the Location : DW3: Bore well Near Nalda**

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 10500:2012	Analysis Result		
					Nov-24	Feb-25	Average
1	Colour	Hazen	APHA 2120 B,C	5.0	Colourless	Colourless	Colourless
2	Odour	---	APHA 2150 B	Agreeable	Agreeable	Agreeable	Agreeable
3	Taste	---	APHA 2160 C	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity	NTU	APHA 2130 B	1.0	<1.0	<1.0	<1.0
5	pH at 25^0C	---	APHA 4500H^+B	6.5-8.5	7.56	7.50	7.53
6	Total hardness	mg/l	APHA 2340 C	200	146.0	142.6	144.0
7	Iron	mg/l	APHA 3500Fe B	0.3	0.26	0.28	0.27
8	Chlorides	mg/l	APHA 4500Cl^- B	250	35.2	32.6	33.9
9	Residual free chlorine	mg/l	APHA 4500Cl^- B	0.2	ND	ND	ND
10	Total dissolved solids	mg/l	APHA 2540 C	500.0	310.2	308.6	309.3
11	Calcium as Ca	mg/l	APHA 3500 Ca B	75	28.8	26.6	27.7
12	Copper as Cu	mg/l	APHA 3111 B,C	0.05	<0.025	<0.025	<0.025
13	Manganese as Mn	mg/l	APHA 3500Mn B	0.1	< 0.05	< 0.05	< 0.05
14	Sulphate as SO_4	mg/l	APHA 4500SO_4^{2-} B	200	5.4	5.0	5.2
15	Nitrate as NO_3	mg/l	APHA 4500NO_3^-E	45	1.96	1.78	1.87
16	Fluoride as F	mg/l	APHA 4500 F^- C	1.0	0.021	0.02	0.025
17	Phenolic Compounds as C_6H_6OH	mg/l	APHA 5530 B,D	0.001	< 0.001	< 0.001	< 0.001
18	Mercury as Hg	mg/l	APHA 3500 Hg B	0.001	< 0.001	< 0.001	< 0.001
19	Cadmium as Cd	mg/l	APHA 3111 B,C	0.003	< 0.001	< 0.001	< 0.001
20	Selenium as Se	mg/l	APHA 3114 B	0.01	< 0.01	< 0.01	< 0.01
21	Arsenic as As	mg/l	APHA 3114 B	0.01	< 0.01	< 0.01	< 0.01
22	Cyanide as CN	mg/l	APHA 4500 CN- C D	0.05	ND	ND	ND
23	Lead as Pb	mg/l	APHA 3111 B,C	0.01	< 0.01	< 0.01	< 0.01
24	Zinc as Zn	mg/l	APHA 3111 B,C	5.0	< 0.05	< 0.05	< 0.05
25	Nickel as Ni	mg/l	APHA 3500 Ni B	0.02	< 0.01	< 0.01	< 0.01
26	Anionic detergents	mg/l	APHA 5540 C	0.2	ND	ND	ND
27	Hexavalent Chromium as Cr^{6+}	mg/l	APHA 3111 B	0.05	< 0.05	< 0.05	< 0.05
28	Mineral Oil	mg/l	APHA 5520 B	0.5	ND	ND	ND
29	Alkalinity as $CaCO_3$	mg/l	APHA 2320 B	200	138.0	136.0	137.0
30	Aluminium as Al	mg/l	APHA 3500 Al B	0.2	< 0.001	< 0.001	< 0.001
31	Boron as B	mg/l	APHA 4500 B C	0.5	< 0.01	< 0.01	< 0.01
32	Magnesium as Mg	mg/l	APHA 3500Mg B	30	16.6	18.4	17.5
33	Total coliform	MPN/ 100ml	APHA 9221 B	I not bedetectable in any 100 ml	< 1.8	< 1.8	< 1.8
34	Pesticide	mg/l	APHA 6630 C	---	Absent	Absent	Absent
35	Electrical Conductivity	µS/cm	APHA 2510 B	---	484.7	485.2	484.95
36	Sodium as Na	mg/l	APHA 3500Na B	---	19.3	18.2	18.75
37	Potassium as K	mg/l	APHA 3500K B	---	1.2	1.5	1.35
38	Total Chromium as Cr	mg/l	APHA 3500 Cr B	0.05	< 0.05	< 0.05	< 0.05
39	E.Coli	MPN/ 100ml	APHA 9221 F	Shall not be detectable in any 100 ml	Absent	Absent	Absent
40	Silver as Ag	mg/l	APHA 3500 Ag	0.1	< 0.001	< 0.001	< 0.001
41	Barium as Ba	mg/l	APHA 3500 Ba	0.7	< 0.05	< 0.05	< 0.05
42	Sulphide	mg/l	APHA 4500 S2- D	0.05	ND	ND	ND
43	Ammonical Nitrogen	mg/l	APHA 4500 NH_3F	0.5	ND	ND	ND
44	Feacal Coli form	MPN/ 100ml	APHA 9221 B	---	<1.8	<1.8	<1.8

BDL Value : *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+} <0.05 mg/l, Ba<0.05 mg/l*

Reviewed by: **Approved by:**

Ref: Envlab/24-25/TR-02155 **Date: 12.05.2025**

SIX MONTH AVERAGES OF DRINKING WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1. **Name of the Industry: M/s Brahmani River Pellets Limited, Keonjhar**
2. **Name of the Location: DW4: Bore well Near Tanto petrol pump**

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 10500:2012	Analysis Result		
					Nov-24	Feb-25	Average
1	Colour	Hazen	APHA 2120 B,C	5.0	**Colourless**	**Colourless**	**Colourless**
2	Odour	---	APHA 2150 B	Agreeable	Agreeable	**Agreeable**	**Agreeable**
3	Taste	---	APHA 2160 C	Agreeable	Agreeable	**Agreeable**	**Agreeable**
4	Turbidity	NTU	APHA 2130 B	1.0	**<1.0**	**<1.0**	**<1.0**
5	pH at 25^{0}C	---	APHA 4500H$^+$B	6.5-8.5	**7.48**	**7.52**	**7.50**
6	Total hardness	mg/l	APHA 2340 C	200	**158.0**	**144.8**	**151.4**
7	Iron	mg/l	APHA 3500Fe B	0.3	**0.29**	**0.29**	**0.29**
8	Chlorides	mg/l	APHA 4500Cl$^-$ B	250	**39.2**	**33.8**	**36.5**
9	Residual free chlorine	mg/l	APHA 4500Cl$^-$ B	0.2	**ND**	**ND**	**ND**
10	Total dissolved solids	mg/l	APHA 2540 C	500.0	**317.3**	**311.2**	**314.25**
11	Calcium as Ca	mg/l	APHA 3500 Ca B	75	**33.6**	**27.2**	**30.4**
12	Copper as Cu	mg/l	APHA 3111 B,C	0.05	**<0.025**	**<0.025**	**<0.025**
13	Manganese as Mn	mg/l	APHA 3500Mn B	0.1	**< 0.05**	**< 0.05**	**< 0.05**
14	Sulphate as SO_4	mg/l	APHA 4500SO_4^{2-} B	200	**5.5**	**5.1**	**5.3**
15	Nitrate as NO_3	mg/l	APHA 4500NO_3^-E	45	**2.9**	**1.85**	**2.37**
16	Fluoride as F	mg/l	APHA 4500 F $^-$ C	1.0	**0.02**	**0.02**	**0.02**
17	Phenolic Compounds as C_6H_6OH	mg/l	APHA 5530 B,D	0.001	**< 0.001**	**< 0.001**	**< 0.001**
18	Mercury as Hg	mg/l	APHA 3500 Hg B	0.001	**< 0.001**	**< 0.001**	**< 0.001**
19	Cadmium as Cd	mg/l	APHA 3111 B,C	0.003	**< 0.001**	**< 0.001**	**< 0.001**
20	Selenium as Se	mg/l	APHA 3114 B	0.01	**< 0.01**	**< 0.01**	**< 0.01**
21	Arsenic as As	mg/l	APHA 3114 B	0.01	**< 0.01**	**< 0.01**	**< 0.01**
22	Cyanide as CN	mg/l	APHA 4500 CN- C D	0.05	**ND**	**ND**	**ND**
23	Lead as Pb	mg/l	APHA 3111 B,C	0.01	**< 0.01**	**< 0.01**	**< 0.01**
24	Zinc as Zn	mg/l	APHA 3111 B,C	5.0	**< 0.05**	**< 0.05**	**< 0.05**
25	Nickel as Ni	mg/l	APHA 3500 Ni B	0.02	**< 0.01**	**< 0.01**	**< 0.01**
26	Anionic detergents	mg/l	APHA 5540 C	0.2	**ND**	**ND**	**ND**
27	Hexavalent Chromium as Cr^{6+}	mg/l	APHA 3111 B	0.05	**< 0.05**	**< 0.05**	**< 0.05**
28	Mineral Oil	mg/l	APHA 5520 B	0.5	**ND**	**ND**	**ND**
29	Alkalinity as $CaCO_3$	mg/l	APHA 2320 B	200	**143.0**	**135.4**	**139.2**
30	Aluminium as Al	mg/l	APHA 3500 Al B	0.2	**< 0.001**	**< 0.001**	**< 0.001**
31	Boron as B	mg/l	APHA 4500 B C	0.5	**< 0.01**	**< 0.01**	**< 0.01**
32	Magnesium as Mg	mg/l	APHA 3500Mg B	30	**17.8**	**18.6**	**18.2**
33	Total coliform	MPN/ 100ml	APHA 9221 B	not be detectable in any 100 ml	**< 1.8**	**< 1.8**	**< 1.8**
34	Pesticide	mg/l	APHA 6630 C	---	**Absent**	**Absent**	**Absent**
35	Electrical Conductivity	µS/cm	APHA 2510 B	---	**496.8**	**486.7**	**491.75**
36	Sodium as Na	mg/l	APHA 3500Na B	---	**23.8**	**18.6**	**21.2**
37	Potassium as K	mg/l	APHA 3500K B	---	**1.4**	**1.6**	**1.5**
38	Total Chromium as Cr	mg/l	APHA 3500 Cr B	0.05	**< 0.05**	**< 0.05**	**< 0.05**
39	E.Coli	MPN/ 100ml	APHA 9221 F	not be detectable in any 100 ml	**Absent**	**Absent**	**Absent**
40	Silver as Ag	mg/l	APHA 3500 Ag	0.1	**< 0.001**	< 0.001	**< 0.001**
41	Barium as Ba	mg/l	APHA 3500 Ba	0.7	**< 0.05**	< 0.05	**< 0.05**
42	Sulphide	mg/l	APHA 4500 S2- D	0.05	**ND**	ND	**ND**
43	Ammonical Nitrogen	mg/l	APHA 4500 NH_3F	0.5	**ND**	ND	**ND**
44	Feacal Coli form	MPN/100ml	APHA 9221 B	---	**<1.8**	<1.8	**<1.8**

BDL Value: *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

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Ref: Envlab/24-25/TR-02156 **Date: 12.05.2025**

SIX MONTH AVERAGES OF DRINKING WATER ANALYSIS REPORT FROM OCT-2024 TO MARCH-2025

1. **Name of the Industry: M/s Brahmani River Pellets Limited, Keonjhar**
2. **Name of the Location: DW5: Bore well Near Banka village**

SL. No.	Name of the Parameters	Unit	Testing Method	Standard as per IS 10500:2012	Analysis Result		
					Nov-24	Feb-25	Average
1	Colour	Hazen	APHA 2120 B,C	5.0	**Colorless**	**Colorless**	**Colorless**
2	Odour	---	APHA 2150 B	Agreeable	**Agreeable**	**Agreeable**	**Agreeable**
3	Taste	---	APHA 2160 C	Agreeable	**Agreeable**	**Agreeable**	**Agreeable**
4	Turbidity	NTU	APHA 2130 B	1.0	**<1**	**<1**	**<1**
5	pH at 25^0C	---	APHA 4500H^+B	6.5-8.5	**7.54**	**7.48**	**7.51**
6	Total hardness	mg/l	APHA 2340 C	200	**137.0**	**135.8**	**136.4**
7	Iron	mg/l	APHA 3500Fe B	0.3	**0.26**	**0.24**	**0.25**
8	Chlorides	mg/l	APHA 4500Cl^- B	250	**33.6**	**31.2**	**32.4**
9	Residual free chlorine	mg/l	APHA 4500Cl^- B	0.2	**ND**	**ND**	**ND**
10	Total dissolved solids	mg/l	APHA 2540 C	500.0	**285.8**	**283.1**	**284.4**
11	Calcium as Ca	mg/l	APHA 3500 Ca B	75	**28.8**	**25.8**	**27.3**
12	Copper as Cu	mg/l	APHA 3111 B,C	0.05	**<0.025**	**<0.025**	**<0.025**
13	Manganese as Mn	mg/l	APHA 3500Mn B	0.1	**< 0.05**	**< 0.05**	**< 0.05**
14	Sulphate as SO_4	mg/l	APHA 4500SO_4^{2-} B	200	**5.4**	**4.9**	**5.15**
15	Nitrate as NO_3	mg/l	APHA 4500NO_3^-E	45	**1.2**	**1.1**	**1.15**
16	Fluoride as F	mg/l	APHA 4500 F^- C	1.0	**0.02**	**0.022**	**0.021**
17	Phenolic Compounds as C_6H_6OH	mg/l	APHA 5530 B,D	0.001	**< 0.001**	**< 0.001**	**< 0.001**
18	Mercury as Hg	mg/l	APHA 3500 Hg B	0.001	**< 0.001**	**< 0.001**	**< 0.001**
19	Cadmium as Cd	mg/l	APHA 3111 B,C	0.003	**< 0.001**	**< 0.001**	**< 0.001**
20	Selenium as Se	mg/l	APHA 3114 B	0.01	**< 0.01**	**< 0.01**	**< 0.01**
21	Arsenic as As	mg/l	APHA 3114 B	0.01	**< 0.01**	**< 0.01**	**< 0.01**
22	Cyanide as CN	mg/l	APHA 4500 CN- C D	0.05	**ND**	**ND**	**ND**
23	Lead as Pb	mg/l	APHA 3111 B,C	0.01	**< 0.01**	**< 0.01**	**< 0.01**
24	Zinc as Zn	mg/l	APHA 3111 B,C	5.0	**< 0.05**	**< 0.05**	**< 0.05**
25	Nickel as Ni	mg/l	APHA 3500 Ni B	0.02	**< 0.01**	**< 0.01**	**< 0.01**
26	Anionic detergents	mg/l	APHA 5540 C	0.2	**ND**	**ND**	**ND**
27	Hexavalent Chromium as Cr^{6+}	mg/l	APHA 3111 B	0.05	**< 0.05**	**< 0.05**	**< 0.05**
28	Mineral Oil	mg/l	APHA 5520 B	0.5	**ND**	**ND**	**ND**
29	Alkalinity as $CaCO_3$	mg/l	APHA 2320 B	200	**124.6**	**123.2**	**123.9**
30	Aluminium as Al	mg/l	APHA 3500 Al B	0.2	**< 0.001**	**< 0.001**	**< 0.001**
31	Boron as B	mg/l	APHA 4500 B C	0.5	**< 0.01**	**< 0.01**	**< 0.01**
32	Magnesium as Mg	mg/l	APHA 3500Mg B	30	**15.5**	**17.1**	**16.3**
33	Total coliform	MPN/100ml	APHA 9221 B	l not be detectable in any 100 ml	**< 1.8**	**< 1.8**	**< 1.8**
34	Pesticide	mg/l	APHA 6630 C	---	**Absent**	**Absent**	**Absent**
35	Electrical Conductivity	µS/cm	APHA 2510 B	---	**446.9**	**444.2**	**457.05**
36	Sodium as Na	mg/l	APHA 3500Na B	---	**17.8**	**16.7**	**17.25**
37	Potassium as K	mg/l	APHA 3500K B	---	**1.4**	**1.3**	**1.35**
38	Total Chromium as Cr	mg/l	APHA 3500 Cr B	0.05	**< 0.05**	**< 0.05**	**< 0.05**
39	E.Coli	MPN/100ml	APHA 9221 F	l not be detectable in any 100 ml	**Absent**	**Absent**	**Absent**
40	Silver as Ag	mg/l	APHA 3500 Ag	0.1	**< 0.001**	**< 0.001**	**< 0.001**
41	Barium as Ba	mg/l	APHA 3500 Ba	0.7	**< 0.05**	**< 0.05**	**< 0.05**
42	Sulphide	mg/l	APHA 4500 S2- D	0.05	**ND**	**ND**	**ND**
43	Ammonical Nitrogen	mg/l	APHA 4500 NH_3F	0.5	**ND**	**ND**	**ND**
44	Feacal Coli form	MPN/100ml	APHA 9221 B	---	**<1.8**	**<1.8**	**<1.8**

BDL Value: *Cu <0.025 mg/l, Hg<0.001 mg/l, Cd <0.001 mg/l, Se <0.01 mg/l, AS<0.01 mg/l, Pb<0.01mg/l, Zn<0.05 mg/l,Ni<0.01 mg/l,Cr^{6+}<0.05 mg/l, Ba<0.05 mg/l*

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