

## **COMPLIANCE OF ENVIRONMENTAL CLEARANCE- ARCL**

The status report on stipulated Environmental condition vide letter No J-11011/166/2011-IA-II (I) dated 21<sup>st</sup> November 2012 & MoEFCC Letter - F No J-11011/166/2011-IA-II(I) dated 21st October 2013 for Pellet plant 1, point-wise explanations are as follows.

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1	Waste gases from Blast furnace and coke ovens will be utilised for power generation. Fugitive emissions from raw material handling section will be suppresses by dry fogging system / water sprinkling.	<p><b>Complying with</b></p> <ul style="list-style-type: none"> <li>Waste Gas from Blast Furnace (BF) and Coke Oven Gas (COG) is used in 55 MW Captive Power Plant and other plants as fuel.</li> <li>Gas Holders provided for storing the Coke Oven Gas, LD and BF Gases. Gas Holder will help the steady network flow for distribution of gas in constant pressure (Operating pressure 996 mmWC. Also it helps to proper utilization of waste gases. Total CO2 Savings will be approximately 660000 Ton of CO2 per year. Energy saving approximate 1 Million Gcal/Year. Total cost for both gas holders is Rs 86.97 (Rs 33.2 Crores + Rs 53.77 Crores)</li> <li><b>De-dusting System with Bag filters</b> at Junction houses of raw material handling section in Blast Furnace and Coke Oven Plants. De-dusting System with Bag filters at Stock House - 2 Nos Cast house fume extraction system with Bag Filters</li> <li><b>Dust suppression by dry fog systems /</b></li> </ul>

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		<p><b>water spraying systems</b> provided at Raw Material Handling Section (RMHS) and other applicable areas.</p> <ul style="list-style-type: none"> <li>• All conveyors and Junction houses of Raw Material Handling systems are closed system.</li> <li>• Total Investment on Yard sprinklers, De-dusting system and Dry fogging system Rs 77.29 Crores</li> </ul> <p>Details of covered shed for storage of Raw Material;</p> <ul style="list-style-type: none"> <li>• Covered shed for Jetty yard-A with a capacity of 110,000MT for Coal Storage</li> <li>• Covered shed for Jetty yard-B with a total capacity of 305,000 MT for Iron Ore and Flux.</li> <li>• Covered Sheds (2 Nos) for Pellet and Coke Storage of Capacity-1,20,000 MT each.</li> <li>• Covered shed for storing Iron Ore Bearing Material and Flux of Capacity 4,27,000 MT</li> </ul> <p>Total expenditure on cover shed is approximately 320 Crores.</p> <p><u>Environmental Benefits of Covered Shed:</u></p> <ul style="list-style-type: none"> <li>• No fugitive emission during handling of material</li> <li>• No water contamination during rains</li> <li>• No spillage of material on roads</li> <li>• Covered storage shed will prevent dust emission in the environment during operation of the yard.</li> </ul> <p>To control the fugitive emissions in Coke Oven Plant, following Control Measures are</p>

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		<p>provided;</p> <ul style="list-style-type: none"> <li>• Bag Filters for coal crushing &amp; mixing station &amp; route</li> <li>• Ground De-dusting system with Bag Filters – connected to charging and pushing, primary crusher, coke cutter, secondary coke crusher area</li> <li>• Bag Filters for coke screen house &amp; Silo.</li> <li>• Dust suppression system at all the transfer points, coal handling and coke handling route.</li> </ul> <p><b>Hence the condition has been complied</b></p>
2	<p>The makeup water requirement for the proposed expansion will be 2,590 m<sup>3</sup>/day and the existing consumption is 833.3 m<sup>3</sup>/day, which shall be sourced from the State Water Resources Dept. from Nagothane dam at K.T. Bandhara. Maximum recycling of wastewater will be done after treatment to achieve zero discharge. Treated wastewater will be used for dust suppression and green belt development. Effluent streams such as cooling tower blow down, floor washings etc. will be used for fugitive dust suppression, water sprinkling etc. Sewage will be treated in septic tanks. Bag filter dust will be recycled in the process. Blow down water from power plant will be reused in steel melting shop slag yards for spraying on hot slag. Blow down water from Blast furnace recirculation system will be reused in the slag granulation plant as make up water to SGP recirculation water system. Treated waste water from coke oven by products plant will be used in the system itself.</p>	<p><b>Complying with</b></p> <ul style="list-style-type: none"> <li>• The makeup water requirement for the proposed expansion is limited to 2590 m<sup>3</sup>/hr (inadvertently mentioned as m<sup>3</sup>/day) besides the existing consumption for 3 MTPA plant</li> <li>• The water is sourced from the Nagothane dam at K.T. Bandhara as per the allocation from the Water Resources Department of Maharashtra.</li> <li>• Treated waste water &amp; cooling tower blow down (CTBD) are used for dust suppression, slag cooling &amp; plantation. There is no waste water discharge from the plant.</li> <li>• Sewage is treated in septic tanks &amp; STPs &amp; reused for gardening.</li> <li>• Bag Filter dust is recycled &amp; reused in the process of Sinter &amp; Pellet Making.</li> <li>• Blow down of power plant is used in SMS slag recovery plant for dust suppression.</li> <li>• Blow down water from Blast furnace 1 recirculation system is reused in the</li> </ul>

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		<p>slag granulation plant (SGP) as make up water to SGP recirculation water system.</p> <ul style="list-style-type: none"> <li>• Treated water from Coke oven by-product is used in coke quenching</li> </ul> <p><b>Hence the condition has been complied</b></p>
3	<p>BF slag will be granulated and used for cement manufacturing. Slag from SMS production will be used in the sinter plant, in land / road / area development or for manufacturing of insulated bricks etc. Mill scale, flue dust from the blast furnace, dust from the bag filters will be used in Sinter plant.</p> <p>All pumps and motors will be selected from less noise generating types. Ear plugs will be provided to employees working in high noise prone areas. DG set will be provided with silencer.</p>	<ul style="list-style-type: none"> <li>• 100% granulated slag of Blast furnace - 1 is used in Cement Plant for making of Cement in JSW Group Company.</li> <li>• SMS- EAF slag is used in the sinter plant, in internal roads / land reclamation, area and construction of concrete structures and road construction in National Highways.</li> <li>• Mill scale, flue dust from Blast Furnace 1, dust from Bag Filters used in Sinter plant.</li> <li>• GCP dust from SMS 1 is used in Sinter Plant and Pellet plant</li> <li>• Low noise level pumps and motors are used.</li> <li>• Ear plugs / Ear muffs provided to all employees working in high noise prone areas.</li> <li>• DG sets having provided with silencer.</li> </ul> <p><b>Hence the condition has been complied</b></p>
4	<p>All the integrated steel plant are listed as S. No 3 (a) as Primary Metallurgy Industries under category A of the Schedule of EIA Notification 2006 and appraised by the Expert Appraisal Committee (Industry-I) of MoEF.</p>	<p><b>Complying with</b></p> <p>As per the EIA Notification 2006 and as per the EC conditions stipulated by MoEFCC for integrated steel plant listed as S.No 3 (a) as Primary Metallurgy Industries under category A</p>

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5	The proposal was considered by the expert Appraisal Committee -1 (industry) in its 37 <sup>th</sup> Meeting held during 14 <sup>th</sup> and 15 <sup>th</sup> June 2012. The Committee recommended the proposal for Environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public hearing was conducted on 28.02.2012.	<b>Industry is complying with</b>  all the general conditions and specific conditions stipulated in the Environment Clearance.  Complied the points raised during Public Hearing.
6	Based on the information submitted by you, presentation made by you and consultant, M/s. MECON Limited., Ranchi, the Ministry of Environment and Forests hereby accords Environmental clearance to the above project under the provision of EIA Notification dated 14 <sup>th</sup> September 2006 subject to strict compliance of the following specific and general conditions.	<b>Industry is complying</b> the general conditions and specific conditions stipulated in the Environment Clearance under the provision of EIA Notification 2006.
<b>Specific Conditions;</b>		
i	Measures shall be undertaken to mitigate particulate levels in the ambient air and a time bound action plans shall be submitted. On-line ambient air quality monitoring with proper O&M and continuous stack monitoring facilities for all the process stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), gas cleaning plant, scrubber, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm <sup>3</sup> by installing energy efficient technology.	<b>Complied</b>  <ul style="list-style-type: none"> <li>• Adequate dust control measures (Bag filters, ESPs, Venturi Scrubbers, Cyclones) have been provided to all the units to mitigate particulate levels in the ambient air quality. Environmental monitoring parameters are well within the prescribed standards as per the Consent granted by MPCB.</li> <li>• Five Continuous Ambient Air Quality Monitoring stations have been installed in consultation with MPCB. All these stations are connected to URL of MPCB &amp; CPCB &amp; data is being transmitted online on real time basis for PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> &amp; CO with proper O&amp;M</li> <li>• Continuous Stack Emission Monitoring systems are installed at all major stacks</li> </ul>

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		<p>(Process stacks) &amp; connected to URL of MPCB &amp; CPCB &amp; data is being transmitted online on real time basis.</p> <ul style="list-style-type: none"> <li>Electrostatic precipitator (ESPs), gas cleaning plants, scrubbers, bag filters etc. are provided to all units &amp; PM levels are well within the prescribed norms as per MPCB Consent conditions.</li> </ul>
ii	<p>As proposed, Electrostatic precipitator (ESP) shall be provided to sinter / Pellet plant, WHRB, DE Plants and dust catcher followed by venturi scrubbers to blast furnace to control SPM levels within 50 mg/Nm<sup>3</sup>. Fume extraction system shall be provided to induction furnaces to control the emissions within the prescribed standards.</p>	<ul style="list-style-type: none"> <li>Electrostatic precipitator provided in Blast Furnace 1, Sinter Plants &amp; Pellet plant,</li> <li>Cast House Fume Extraction System, Waste Heat Recovery Boiler (WHRB), Dust Extraction System and dust catcher followed by venturi scrubbers, de-dusting system with bag filters in stock houses in Blast Furnace are provided.</li> <li>The emission level from the stacks are well within the prescribed standards. The Copy of the Six Monthly Environment Monitoring Report for plants under Amba River Coke Ltd is attached herewith in <b>Annexure 1</b></li> <li>JSW Steel Ltd., Dolvi, there is no Induction Furnace installed, however in Steel Melting Shop 1, Electric Arc Furnace (EAF) connected with - Gas Cleaning Plants (4 Nos) with bag filters provided with primary and secondary fume extraction systems. The emission level is well within the prescribed standards. The existing Gas Cleaning plants (GCPs 1, 2 &amp; 3) were modified and the guaranteed parameters of PM level in stacks are &lt; 50 Mg/Nm<sup>3</sup>.</li> </ul>

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		<b>Hence the point is being complied</b>
iii	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16th November, 2009 shall be followed.	<b>Complied</b>  On line Ambient air quality monitoring system (5 Nos) installed in the plant for the parameters PM10, PM2.5, SO2, NOx, CO and the data is uploaded in the CPCB and MPCB servers.
iv	Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of Practice issued by the CPCB shall be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R. 414 (E) dated 30th May, 2008 should be followed.	<b>Complying with</b> Adequate measures have been taken to control the gaseous emission levels. <ul style="list-style-type: none"> <li>• Secondary fugitive emissions at Blast Furnace 1 - Cast House de-dusting system with Bag filters, Stock House de-dusting system with Bag filters.</li> <li>• Gas Cleaning Plants (4 Nos) for Electric Arc Furnace (EAF) of Steel Melting Shop (SMS – 1) from all the sources and are well within the permissible limits issued by the Ministry and regularly monitored.</li> <li>• A new standard for the sponge iron plant issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 is being followed. As per the new guidelines of Sponge Iron Plant, the monitoring for stack emissions, work place monitoring etc. are carried out and the reports are within the CPCB norms.</li> </ul>
v	Total makeup water requirement for expansion shall not exceed 2,590 KLD. Efforts shall further be made to use maximum water from the rain water harvesting sources. Use of air cooled condensers shall be explored and closed circuit	<b>Complying with</b> <ul style="list-style-type: none"> <li>• The makeup water requirement for the proposed expansion is within the water allocated and less than 2590 m3/hr.</li> </ul>

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	cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent should be treated and used for ash handling, dust suppression and green belt development. No effluent shall be discharged and 'zero' discharge shall be adopted. Sanitary sewage should be treated in septic tank followed by soak pit.	<ul style="list-style-type: none"> <li>• Roof Top Rain water harvesting system have been implemented.</li> <li>• Closed circuit cooling towers are provided to optimize water consumption.</li> <li>• All effluent is treated &amp; recycled in the process and reused in slag cooling, dust suppression &amp; plantation purpose.</li> <li>• No waste water is discharged to outside the plant premises except run off during monsoon.</li> <li>• Sewage Treatment Plants (STP) 3 Nos provided for treatment of sewage. The treated sewage water is used for gardening.</li> </ul>
vi	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	<b>Complying with</b> <ul style="list-style-type: none"> <li>• Roof top Rain water harvesting system has been established (at 12 various buildings of Oxygen Plant, Coke Oven, Power Plant, MRSS and Admin.)</li> <li>• The harvested rain water is being used in the cooling towers as make up water.</li> <li>• Since the water table is very high, therefore recharging ground water table is not feasible.</li> </ul>
vii	Regular monitoring of influent and effluent surface, sub-surface and ground water (including chromite) should be ensured and treated wastewater should meet the norms prescribed by the State Pollution Control Board or described under the E (P) Act whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bhopal, SPCB and CPCB.	<b>Complying with</b> <ul style="list-style-type: none"> <li>• Regular monitoring of surface water samples is being done by MoEFCC approved and NABL accredited labs &amp; the results of all parameters are well within the prescribed standards. The plant is not using any ground water.</li> <li>• Analysis reports are submitted to the Regional Office, MoEF&amp;CC, MPCB &amp;</li> </ul>



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		<p>CPCB on regular basis.</p> <p>All monitoring reports are submitted as per guidelines to;</p> <ul style="list-style-type: none"> <li>• MPCB - Once in three months, also as &amp; when required,</li> <li>• MOEF&amp;CC, Nagpur &amp; Delhi – Once in Six month,</li> <li>• CPCB, New Delhi – Monthly basis</li> </ul>
viii	The water consumption shall not exceed as per the standard prescribed for the steel plants.	<p>Water consumption is well within the prescribed norms &amp; CREP guidelines for the steel plants (less than 5 m<sup>3</sup>/ton of crude steel)</p> <p>Specific water consumption for the steel plant for 2023-24 (up to March 2024) is 2.35 M<sup>3</sup>/TCS</p> <p><b>Hence the point is being complied</b></p>
ix	Vehicle pollution due to transportation of raw material and finished products shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.	<p><b>Complying with</b></p> <ul style="list-style-type: none"> <li>• Transportation of raw material is mainly through sea route to captive jetty and further to the steel plant via closed conveyors.</li> <li>• Rs 320 Crores have been spent for covered shed for storage of raw material like coal, Iron Ore and Flux at Jetty &amp; Raw Material storage yard to control the dust emission.</li> <li>• Transportation of finished products is mainly by rail.</li> <li>• Adequate dust suppression systems have been provided to control dust emissions during loading and unloading of the raw material and finished product.</li> </ul> <p>Dust Suppression such as;</p> <ul style="list-style-type: none"> <li>- Dry Fog System / Water spraying in</li> </ul>

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		junction houses / Transfer Towers at Raw Material Handling System (RMHS) & other units. - All the Junction houses and Conveyors are covered to avoid fugitive emissions while transfer of material through conveyor.
x	All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3 tier avenue plantation using native species shall be developed along the roads.	<b>Complying with</b> <ul style="list-style-type: none"> <li>• All internal roads are concreted &amp; Vacuum based road sweeping machines (6 Nos) and mist type mobile water tankers (2 Nos) are provided for control of road emissions.</li> <li>• Avenue plantation using native species have been planted along the roads.</li> </ul>
xi	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 should be submitted to the Ministry's Regional Office at Bhopal, SPCB and CPCB.	<b>Complying with</b>  Proper handling, storage, utilization and disposal of all the solid wastes like Iron ore fines, coke fines, fluxes and scales generated from the plant is used in Sinter Plants & Pellet Plant. Material have been shifted through conveyor, closed bulkers and loaded by pneumatic conveying system.  The report of Solid wastes and Hazardous wastes generation and disposal are regularly submitted as mentioned below. <ul style="list-style-type: none"> <li>• MPCB - Once in three months, also as &amp; when required,</li> <li>• MOEF&amp;CC, Nagpur &amp; Delhi – Once in Six month,</li> <li>• CPCB, New Delhi – on Monthly Basis.</li> </ul>
xii	Proper embankment shall be provided for the sludge disposal area.	<b>Complying with</b>

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		<ul style="list-style-type: none"> <li>• Proper embankment provided to contain sludge at all generating points- Sponge Iron Plant, Blast Furnace 1 and Hot Strip Mill 1.</li> <li>• Sludge generated from the Effluent treatment plants (Sponge Iron Plant, Blast Furnace, are used in sinter making &amp; Pelletization process.</li> <li>• In sludge handling areas filter press and vacuum drum filters installed at Sponge Iron Plant, Hot Strip Mill and Blast Furnace.</li> </ul>
xiii	Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Bhopal, SPCB and CPCB within 3 months of issue of environment clearance letter.	Risk and Disaster Management plan is prepared and has been already submitted to MoEF&CC along with EIA Report
xiv	As proposed, green belt shall be developed in 33 % of plant area as per the CPCB guidelines in consultation with the DFO.	<p>As per the EC FJ-11011/76/2013-IA.II(I) dated 16/06/2020, Green belt is developed in and around the plant.</p> <p>In addition to the Green belt development "EK PED MAA KE NAAM" campaign was undertaken by JSW Steel, wherein plantation was done at 4 no of schools.</p> <p><b>Green Belt within Plant:</b></p> <ul style="list-style-type: none"> <li>• Presently, 13% green belt is developed over 18.00 ha land within the plant premises with 2,17,457 nos of trees.</li> <li>• Balance 18.42 Ha (3%) green belt area is to being developed with 46,200 nos of trees. Green belt developed with tree density 2500 trees/hectare and local species.</li> <li>• <b>Green Belt Outside Plant in 10 Km area:</b></li> </ul>

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		<ul style="list-style-type: none"> <li>• Green belt outside the plant premises has been developed over 203.00 Ha i.e. 33 % as per EC.</li> <li>• Green belt outside the plant premises is developed in forest land in proximity of the plant area in consultation with local forest department over 51 Ha land and Mangrove Plantation over 152.00 Ha.</li> <li>• Programs for making people aware of importance of plantation are being done through Gram-Panchayat.</li> </ul> <p><b>Hence the condition is being complied</b></p>
xv	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants should be implemented.	<p><b>Complying with</b></p> <p>The recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the steel plants are implemented.</p> <ul style="list-style-type: none"> <li>• Coke oven plant – Tar sludge / ETP sludge are reused in the Coking process.</li> <li>• Blast Furnace – Energy recovery of top blast furnace gas is being done with power generation through TRT by using top pressure of BF gas.</li> <li>• Coke Oven Plant - Coke Dry Quenching systems (3 Nos) (CDQ) installed and recover the sensible heat of red hot coke, reduce energy consumption and pollution and improve the quality of coke. Each CDQ will reduce water consumption by 1920 m<sup>3</sup>/day and energy of 70 MW will be recovered along which will reduce the CO<sub>2</sub></li> </ul>

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		<p>emissions by approx. 10.9 Lac.t CO<sub>2</sub>eq</p> <ul style="list-style-type: none"> <li>• Steel Melting Shop (SMS), secondary de-dusting system (Gas Cleaning Plants 4 Nos) has been installed to control fugitive emissions</li> <li>• Coal Injection Plant for direct injection of pulverized coal in furnace has been implemented. Present rate of CDI in our Blast Furnace 1 is 155 Kg/THM &amp; Blast Furnace 2 is 197 Kg/THM (average for the year 2023-24).</li> <li>• Blast Furnace Slag (BF) Slag- 100% utilized in Cement plant.</li> <li>• Electric Arc Furnace Slag (EAF) slag- 100 % for construction activities, land filling in the low lying areas of expansion projects and is also being used for internal road making and Concrete and asphalt roads.</li> <li>• Presently Steel slag is used as aggregates for construction roads in National Highways with coordination with Central Road Research institute (CRRI), New Delhi.</li> <li>• Cast House Fume extraction system inclusive of tap holes, runners, skimmers, ladle and charging points have been provided to control Fugitive emissions from Blast Furnace.</li> <li>• The specific water consumption for the year 2023 – 24 (April to March 2024) was 2.35 m<sup>3</sup>/t of crude steel which is well below the targets for flat products and as well as for long products.</li> <li>• Online Stack Monitoring System</li> </ul>

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		have been installed on major stacks and 5 Nos Online Ambient Air Quality Monitoring System. The real time data is interlinked with MPCB and CPCB server.
xvi	The company shall adopt well laid down corporate environment policy and identified and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with environmental clearance, environmental laws and regulations.	<b>Complied</b> Environment Policy is in place and being complied in adherence to Environmental Clearance, Environmental Laws and Rules and Regulations.
xvii	All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 28th February, 2012 should be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhopal.	Environmental protection measures and safeguards recommended in the EIA/EMP report is being implemented and complied.  Amount spent on CSR Activities: For 2022-23 (April to March 2023): Rs 3.865 Crores For 2023-24 (April 2023 to March 2024): Rs 7.90 Crores.  The above amount has been spent on Social Development- (Education & Training), Skill Development, Water and Sanitization, Agriculture, Mangrove Plantation, Rural Development, Health Check-up, Solid Wastes Management and Community Development.  The Industry has taken up many socio-economic development activities in the surrounding villages as part of our CSR activities and they are going on. Drinking water supply for surrounding villagers. Various community development programs, Educational programmes and

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		Skill Development, Health care – Regular Medical Camps for villagers for health check-up.
xviii	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 should be submitted to the Ministry's Regional Office at Bhopal, SPCB and CPCB.	<p><b>Complying with</b></p> <p>Proper handling, storage, utilization and disposal of all the solid wastes like Iron ore fines, coke fines, fluxes and scales generated from the plant is used in Sinter Plants &amp; Pellet Plant. Material have been shifted through conveyor, closed bulkers and loaded by pneumatic conveying system.</p> <p>The report of Solid wastes and Hazardous wastes generation and disposal are regularly submitted as mentioned below.</p> <ul style="list-style-type: none"> <li>• MPCB - Once in three months, also as &amp; when required,</li> <li>• MOEF&amp;CC, Nagpur &amp; Delhi – Once in Six month,</li> <li>• CPCB, New Delhi – on Monthly Basis.</li> </ul>
xix	The company shall provide housing for 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 the project.	<p><b>Industry has Complied the conditions</b> during installation and commissioning of the plant.</p> <p>Provided housing for labour within the site with all necessary Infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STPs, safe drinking water, medical health care, crèche etc.</p> <p>After completion of the project activities the temporary structures have been dismantled and removed.</p>
<b>General Conditions:</b>		
i	The project authorities must strictly adhere to the stipulations made by the Maharashtra State	<p><b>Complied</b></p> <p>All the terms &amp; conditions stipulated by</p>

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	Pollution Control Board and the state government.	Maharashtra Pollution Control Board (MPCB) and State Government are being followed.
ii	No further expansion or modification in the plant shall be carried out without prior approval of the ministry of Environment and Forests.	<b>Complied</b> As per the EC conditions, expansion or modifications of the plant was done. Industry has done in all expansion activities after obtaining prior Environmental Clearance from MoEF&CC.
iii	The gaseous emission from various process units shall conform to the load/mass based standards notified by this ministry on 19 <sup>th</sup> may, 1993 and standards prescribed from time to time. The State Boards may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	Adequate Air Pollution Control measures have been provided to each unit of the plant and the Gaseous emissions from the process units are well within the prescribed standards as notified by the Ministry.  Complied the Consent conditions as per the Maharashtra Pollution Control Board under The Air Act, The Water Act and Hazardous Waste Management & handling and Transboundary Rules. <b>Hence the point is being Complied</b>
iv	At least four ambient monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO2 and NOx are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this ministry including its regional office at Bhopal and the SPCB/CPCB ones six months.	<b>Complying with</b> <ul style="list-style-type: none"> <li>• Five Continuous Ambient Air Quality Monitoring stations have been installed in consultation with MPCB. All these stations are connected to URL of MPCB &amp; CPCB &amp; data is being transmitted online on real time basis for PM2.5, PM10, SO2, NOx &amp; CO.</li> <li>• 46 Nos. Continuous Stack Emission Monitoring systems for plants up to 10 MTPA (Phase I &amp; 2) are installed at all major stacks &amp; connected to URL of MPCB &amp; CPCB &amp; data is being transmitted online on real time basis.</li> </ul>



Sr. No.	ENVIRONMENTAL CLEARANCE CONDITIONS	COMPLIANCE STATUS
		<ul style="list-style-type: none"> <li>• Data on Stack Emission, Ambient Air Quality and Work Environment Air Quality are being submitted to;               <ul style="list-style-type: none"> <li>• MPCB - Once in three months,</li> <li>• MOEF&amp;CC, Nagpur &amp; Delhi – Once in Six month,</li> <li>• CPCB, New Delhi – Monthly basis</li> </ul> </li> </ul> <p><b>Hence the point is being Complied.</b></p>
v	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> may, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilised for plantation purpose.	<p>Industrial Waste water generated from the plant is treated in the plants and reused in the process/ slag cooling purpose.</p> <p>There is no discharge of industrial waste water to outside the plant premises.</p> <p><b>Hence the point is being Complied</b></p>
vi	The overall noise level 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 level should conform to the standards prescribed under EPA rules, 1989 viz. 75dBA (daytime) and 70 dBA (night time).	<p>Noise control measures installed in the plants like acoustic hoods, silencers, enclosures etc. on all sources of noise generation &amp; measured noise level are well with in prescribed standards.</p> <p>The ambient noise level is monitored in the boundary of the plant and the values are well within the standards prescribed under EPA rules, 1989 viz. 75dBA (daytime) &amp; 70 dBA (night time).</p> <p><b>Hence the point is being Complied</b></p>
vii	Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the factory Act.	<p>As per the Factories Act, regular health surveillance done for all the workers and employees &amp; records are maintained on regular basis.</p> <p><b>Hence the point is being Complied</b></p>
viii	The company shall develop surface water harvesting structure to harvest the rain water for utilization in the lean season besides recharging the ground water table.	<p>Roof top Rain water harvesting system is being implemented 12 buildings and the harvested rain water is being used in the cooling towers.</p>

Sr. No.	ENVIRONMENTAL CLEARANCE CONDITIONS	COMPLIANCE STATUS
		Since the water table is very high, therefore recharging ground water table is not being done.
ix	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 activities in the surrounding villages like community development programmes, drinking water supply and health care etc.	<ul style="list-style-type: none"> <li>• Environmental protection measures &amp; safeguards recommended in EIA/EMP report are being complied.</li> <li>• Socio – economic development activities / programmes like supply of drinking water, health care camps &amp; community development programmes, Self Help Groups, Training and education, Rural Development, Sanitary etc. are being carried out on regular basis and will be continued as per plan.</li> </ul> <p><b>Hence the point is being Complied.</b></p>
x	Requisite amount shall be earmarked towards capital cost and recurring cost/annum for environment pollution controls measures to implement the conditions stipulated by the ministry of environment and forest 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 of the Bhopal. The funds so provided shall not be diverted for any other purpose.	<p>Requisite amount is earmarked towards capital cost and recurring cost/annum for environment pollution controls measures to implement the conditions stipulated by the MoEF&amp;CC as well as the State Government.</p> <p>The funds earmarked for Environmental pollution control measures are properly utilized. The funds earmarked is not diverted any other purpose.</p>
xi	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila parishad /municipal corporation, Urban local body and the local NGO, if any, from whom suggestions / 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.	<p><b>Complied</b></p> <p>A copy of clearance letter is already submitted to concerned Panchayat, Zillah Parishad/Municipal Corporation, Urban Local Body and the local NGO.</p> <p>The Environment Clearance letter also put on the JSW Web site.</p>

Sr. No.	ENVIRONMENTAL CLEARANCE CONDITIONS	COMPLIANCE STATUS
xii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the regional office of the MOEF at Bhopal. The respective zonal office of the CPCB and the CECB. The criteria pollutant levels namely; PM10, SO2, NOx (ambient levels as well as stack emission) or critical sectoral parameters, indicated project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	<p><b>Complied.</b></p> <p>The status of compliance of the stipulated environment clearance conditions, including results of monitoring data on their website and shall update the same on six monthly basis.</p> <p>The EC compliance and Environmental monitoring reports are submitted to MoEFCC, CPCB.</p> <p>The CEMS data and CAAQMS data are displayed at the main gate.</p>
xiii	The project proponent shall also submit six monthly reports on the status of 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 MoEF, the respective Zonal office of CPCB and the SPCB. The Regional office of this Ministry at Bhopal / CPCB / SPCB shall monitor the stipulated conditions.	<p><b>Being Complied.</b></p> <p>The six monthly Environmental Clearance compliance report and Environmental monitoring reports are submitted to Regional Office of MoEFCC, MPCB and CPCB.</p>
xiv	The Environmental Statement for each financial year ending 31 <sup>st</sup> 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 company along with the status of compliance conditions and shall also be sent to the respective Regional Office of the MoEF at Bhopal by e-mail.	<p><b>Being submitted regularly</b></p> <p>Plant wise Environment Statement for 2023-24 prepared and submitted to MPCB portal and uploaded on the web site of the company.</p> <p>Also the same are submitted to regional office of MoEFCC along with six monthly EC compliance report.</p> <p>Copy of Environment Statement attached in <b>Annexure 2</b></p>

Sr. No.	ENVIRONMENTAL CLEARANCE CONDITIONS	COMPLIANCE STATUS
xv	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 SPCB and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://moef.nic.in">http://moef.nic.in</a> . This shall be advertised within seven days from the date of 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 locally concerned and a copy of the same should be forwarded to the Regional Office, Bhopal.	Published in newspaper as per guidelines namely in Local newspaper Dainik Krushiwal, Raigad Times, Ramprahar dated 24/11/2012 and English newspaper Indian Express dated 26/11/2012. <b>Hence this point is complied.</b>
xvi	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 concerned authorities and the date of commencing the land development work.	Complied
11	The ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
12	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted
13	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 2008 and the Public (Insurance) Liability Act 1991 along with their amendments and Rules.	<b>The plant is regularly complying for</b> <ul style="list-style-type: none"> <li>• The water (Prevention &amp; Control of Pollution) Act 1974,</li> <li>• The Air (Prevention and Control of Pollution) Act, 1981</li> <li>• The Environment (Protection) Act 1986</li> <li>• The Public Liability Insurance Act, 1991 along with their amendments and rules.</li> </ul>

# **ENVIRONMENTAL CLEARANCE COMPLIANCE STATUS REPORT**

**APRIL TO SEPT 2024**

**AMBA RIVER COKE LTD, DOLVI WORKS**

**Six Monthly Compliance, Status report**

**Compliance status of Specific and General Conditions of Environmental Clearance for Pellet Plant I (4.0 MTPA) at Geetapuram, Village Dolvi, District Raigad, Maharashtra.**

**EC No - F No J-11011/166/2011-IA-II(I) dated 21st October 2013.**

**ENVIRONMENTAL MANAGEMENT DEPARTMENT**

**JSW STEEL LTD, DOLVI WORKS, TALUKA PEN, RAIGAD-DISTRICT, MAHARASHTRA 402107**

## **Annexure 1**

# **Six Monthly Environmental Monitoring Report for Plants under Amba River Coke Ltd (April to September 2024)**

November 25, 2024

ARCL/ENV/MoEF &amp; CC/2024

To

Regional Officer  
Ministry of Environment, Forests & Climate Change  
Regional Office, (West Central Zone)  
Ground Floor, East Wing,  
New Secretarial Building, Civil Line,  
Nagpur – 440001

Sub: Submission of Six Monthly Environmental Monitoring Reports for Coke Oven Plant & Pellet Plant of M/s. Amba River Coke Ltd. at Geetapuram, Village Dolvi, Tehsil Pen, District Raigad in Maharashtra for the Period of April, 2024 to September 2024.

Ref: i) MoEF Letter - F No J-11011/286/2007-IA-II(I) dated 12/01/2009.

Dear Sir,

Please find enclosed the six monthly Environmental Monitoring Reports for the period of April, 2024 to September 2024 for 1.0 MTPA Coke Oven Plant & 4.0 MTPA Pellet Plant of M/s. Amba River Coke Ltd. at Geetapuram, Village Dolvi, Tehsil Pen, District Raigad in Maharashtra.  
This is for your information & record please.

Thanking you,

Yours faithfully,  
For Amba River Coke Limited


  
Satish Kumar Choudhary  
General Manager(Environment)


- CC: 1) The Director, MoEF&CC, Indira Paryavaran Bhawan, Jor Bagh, Lodi Road, New Delhi-110003 for kind information.  
2) The Zonal officer, CPCB, Parivesh Bhawan, Opp. VMC Ward Office No. 10, Subhanpura, Vadodara-390 023, Gujarat.  
3) The Regional Officer, MPCB, Raigad, Raigad Bhavan, CBD Belapur, Navi Mumbai

Regd. Office: JSW Centre,  
Bandra Kurla Complex,  
Bandra(E), Mumbai - 400 051.

# AMBIENT AIR QUALITY(AAQ):

Location	Near Kasumata Temple					Near Coke Oven Plant					Near Gas Gate					Near MSEB Substation					Near Dolvi Village				
Date	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO
01-04-2024	14	38	6.04	10.08	0.83	31	88	6.54	34.25	0.87	18	17	5.47	28.74	0.52	31	73	5.53	9.63	0.21	46	93	5.65	18.5	0.66
02-04-2024	11	21	6.13	8.12	0.71	28	85	6.24	22.64	0.7	17	18	5.59	30.72	0.57	19	56	4.65	9.79	0.36	54	79	5.05	19.02	0.6
03-04-2024	11	15	6.2	6.93	0.73	26	62	6	17.1	0.71	45	90	5.73	21.99	0.68	16	58	5.22	9.47	0.48	59	85	5.11	14.32	0.6
04-04-2024	19	29	6.22	8.95	0.77	23	91	6.06	24.16	0.59	48	88	5.53	30.25	0.62	19	57	4.83	9.9	1.21	42	92	5.37	15.07	0.59
05-04-2024	11	25	6.15	9.26	0.76	35	86	6.02	33.75	0.95	41	82	5.88	24.5	0.46	21	73	4.66	9.84	0.57	39	91	5.31	14.26	0.59
06-04-2024	46	95	6.13	9.27	0.85	42	87	5.98	29.99	0.82	56	83	6.00	25.47	0.49	29	93	5.38	9.91	0.89	29	87	5.32	16.18	0.58
07-04-2024	58	93	6.13	9.35	0.87	47	81	5.99	29.2	0.73	34	74	5.92	23.17	0.39	26	78	4.82	9.7	1.02	24	60	5.25	15.98	0.62
08-04-2024	33	90	6.21	8.45	0.82	29	81	5.96	21.96	0.83	31	86	6.29	24.36	0.45	20	64	4.94	9.57	0.86	34	88	5.26	15.81	0.58
09-04-2024	26	58	6.22	7.69	0.77	25	76	6.05	21.42	0.82	35	81	5.72	16.37	0.52	18	47	5.19	9.63	0.74	41	73	5.15	12.37	0.54
10-04-2024	21	44	6.05	7.63	0.7	17	62	6.1	13.71	0.6	26	67	5.34	13.3	0.46	18	53	5.54	10.66	1.68	35	58	5.59	19.15	0.46
11-04-2024	18	35	5.98	8.12	0.95	19	57	6.06	18.36	0.81	26	67	5.84	17.96	0.7	18	46	5.24	9.71	1.23	35	73	7.37	63.42	0.6
12-04-2024	17	34	6.04	7.01	0.72	14	45	5.76	19.62	0.57	30	72	5.18	19.96	0.71	42	61	5.9	10.28	0.97	37	60	7.71	70.06	0.71
13-04-2024	19	41	6.03	7.73	0.74	21	72	5.53	21.93	0.53	31	75	5.62	30.08	0.66	11	47	4.67	10.14	1.14	35	59	7.33	67.71	0.62
14-04-2024	25	63	6.11	7.95	0.77	54	95	6.28	23.45	0.49	23	54	5.14	15.68	0.5	20	48	4.91	10.61	1.21	23	52	7.68	61.52	0.55
15-04-2024	43	87	6.16	14.12	0.92	59	99	6.44	26.32	0.76	34	77	5.59	15.91	0.83	28	70	5.69	9.93	0.82	39	66	7.78	54.57	0.73
16-04-2024	44	96	6.14	7.51	0.96	55	96	3.13	20.97	0.75	51	93	5.73	25.39	1.59	18	46	5.68	9.18	1.53	58	94	8.01	23.66	0.84
17-04-2024	28	53	6.04	5.32	0.8	42	87	3	10.91	0.53	37	89	5.79	15.81	1.48	19	42	5.65	9.26	1.37	50	84	7.51	18.16	0.85
18-04-2024	26	49	6.23	6.17	0.84	32	50	6.39	12.15	0.62	36	81	6.59	10.48	1.02	16	50	5.37	10.06	1.05	45	85	7.25	17.27	0.59
19-04-2024	33	73	6.43	6.31	1.03	52	85	8.24	14.19	0.68	34	78	6.44	10.11	0.89	15	47	5.28	9.61	1.31	34	78	7.27	17.24	0.61
20-04-2024	33	79	6.24	7.1	0.84	32	81	7.39	13.79	0.64	30	90	6.78	11.23	0.94	15	60	4.98	9.77	1.73	43	98	7.74	20.19	0.58
21-04-2024	31	82	6.2	6.31	0.86	41	93	5.59	29.27	0.94	26	65	6.35	7.29	0.72	17	65	5.09	9.98	1.06	37	89	7.34	18.69	0.68
22-04-2024	30	82	6.29	7.14	0.87	21	99	5.66	31.12	0.87	24	56	5.96	11.22	0.71	40	76	5.54	10.24	0.57	25	66	7.77	21.68	0.6
23-04-2024	36	94	6.3	7.79	0.87	10	76	6.07	26.82	0.78	25	69	6.09	13.12	0.72	33	60	4.87	10.05	0.92	22	83	7.72	18.97	0.57
24-04-2024	34	84	6.32	7.12	0.88	11	83	6.26	20.87	0.77	33	86	6.76	17.31	0.76	21	57	4.75	10.39	1.29	39	98	7.2	21.97	0.66
25-04-2024	29	67	6.35	5.9	0.86	31	72	5.95	17.82	0.79	31	92	6.94	13.08	0.76	18	55	4.62	10.53	1.24	41	95	7.57	18.04	0.57
26-04-2024	40	68	7.81	10.49	0.97	39	97	9.51	30.39	0.86	28	74	6.01	19.22	0.8	23	62	4.46	13.91	1.79	29	77	7.64	22.37	0.6
27-04-2024	31	70	7.21	8.69	1.11	39	90	5.91	19.1	0.86	35	90	5.61	11.02	0.79	29	83	4.5	9.78	1.24	45	90	7.93	19.36	0.55
28-04-2024	50	85	7.12	9.01	1.19	51	87	6.17	26.85	0.8	46	95	5.88	15.44	0.87	37	86	4.65	9.94	1.03	55	94	7.98	21.4	0.66
29-04-2024	41	99	7.11	9.27	1.26	54	91	6.22	39.55	0.79	44	93	5.83	33.15	0.84	35	90	4.52	11.42	0.57	43	96	7.91	24.17	0.62
30-04-2024	45	83	7.17	9.36	1.19	39	96	6.7	34.11	0.88	42	98	5.81	31.93	0.85	34	94	4.63	11.15	1.05	42	95	7.57	22.37	0.6
Standards																									
PM2.5 µg/m3		60																							
PM10 µg/m3		100																							
(SO2), µg/m3		80																							
(NOX), µg/m3		80																							
CO( mg/m3)		2																							


  
 Prepared By  
 Dr.P.P.Nandusekar  
 Manager (Environment)

  
 Checked By  
 Satish Kumar Choudhary  
 General Manager (Environment)



# AMBIENT AIR QUALITY(AAQ):

Location	Near Kasumata Temple					Near Coke Oven Plant					Near Goa Gate					Near MSEB Substation					Near Dolvi Village				
Date	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO
DD-MM-YYYY	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3
01-05-2024	29	70	7.18	6.65	1	29	71	5.73	20.91	0.59	19	69	5.18	16.48	0.78	22	68	4.58	12.27	1.97	36	77	7.51	20.67	0.52
02-05-2024	40	91	8.27	7.27	1.98	31	95	7.38	22.69	0.82	31	90	4.98	18.35	0.96	15	48	4.67	11.11	1.16	38	91	7.23	17.18	0.64
03-05-2024	31	74	7.58	8.4	1.05	35	72	4.24	25.34	0.77	29	92	4.83	18.1	0.97	19	58	4.85	11.11	1.42	41	97	7.31	18.53	0.65
04-05-2024	27	63	7.39	6.83	0.98	45	88	6.49	19.34	0.69	24	61	6.03	10.07	0.82	19	62	4.85	11.74	1.18	33	64	7.66	17.87	0.56
05-05-2024	33	85	7.46	6.88	1.05	19	48	5.77	11.35	0.77	23	54	5.73	9.28	0.87	15	50	5.28	12.16	2.05	32	57	7	17.59	0.56
06-05-2024	16	37	7.33	6.1	0.96	14	73	7.08	13.27	0.74	18	50	5.82	8.89	0.72	13	38	4.92	13.24	1.39	26	52	7.58	18.49	0.5
07-05-2024	42	90	7.55	6.94	1.28	19	87	6.16	17.55	0.76	22	72	5.79	15.52	1.09	11	26	4.78	11.41	1.17	16	57	7.44	16.27	0.46
08-05-2024	26	67	7.49	6	0.98	13	59	6.08	13.31	0.71	18	57	5.2	10.98	0.89	13	36	4.81	13.19	1.42	23	58	7.29	14.74	0.44
09-05-2024	16	37	7.26	5.53	0.94	13	33	6.09	11.8	0.67	17	44	5.05	15.64	0.74	20	36	4.88	9.94	1.14	27	45	7.78	15.99	0.51
10-05-2024	17	42	7.16	5.29	0.97	11	33	6.36	11.76	0.61	17	44	5.48	16.21	0.69	22	71	5.18	11.43	1.3	26	47	8.06	15.13	0.46
11-05-2024	28	69	7.22	9.65	1.05	19	80	5.76	16.66	0.62	21	59	5.72	10.7	0.75	23	72	5.29	15.34	2.13	32	81	7.5	17.64	0.52
12-05-2024	19	44	7.25	7.82	1	17	52	6.05	13.56	0.64	21	54	5.73	6.21	0.74	26	66	5.14	10.87	2.09	22	72	7.35	14.86	0.46
13-05-2024	45	88	7.22	9.35	1.36	28	81	6.16	17.53	0.82	27	82	5.32	7.75	0.86	30	79	5.73	9.88	1.46	25	72	7.5	16.84	0.56
14-05-2024	38	96	7.25	9.39	1.4	33	71	5.99	40.62	0.98	43	95	5.52	11.75	1.07	32	85	5.93	10.87	1.67	42	87	8.37	20.28	0.74
15-05-2024	44	69	7.5	9.94	1.55	31	89	6.16	29.16	0.83	39	87	5.64	12.87	1.2	21	47	5.47	9.96	0.97	48	88	8.74	21.43	0.8
16-05-2024	43	88	7.53	16.79	1.31	30	70	6.01	16.08	0.9	29	67	5.55	8.17	0.77	NA	NA	5.06	9.82	1.11	56	77	6.79	17.59	0.61
17-05-2024	21	37	7.75	14.71	1.64	27	88	6.4	23.41	1.09	32	76	6.08	10.56	1.02	39	82	5.13	9.63	1.06	29	65	7.57	20.31	0.74
18-05-2024	34	74	7.41	11.55	1.05	20	62	5.96	12.34	0.68	26	62	6.07	10.01	0.89	36	58	5.29	9.79	0.93	36	61	7.71	15.22	0.5
19-05-2024	56	89	7.31	9.49	1.01	16	49	6.06	7.38	0.62	25	72	6.05	15.35	0.93	47	64	5.65	9.27	0.68	38	68	7.85	14.25	0.51
20-05-2024	54	90	7.62	8.83	1.17	17	92	6.22	9.72	0.66	29	62	6.15	19.71	1.38	21	58	5.34	10.03	0.83	40	74	7.26	15.91	0.64
21-05-2024	20	52	7.26	8.16	0.96	17	66	6.13	11.74	0.63	37	93	6.59	25.69	0.91	28	64	5.2	11.32	0.88	37	68	7.62	14.62	0.45
22-05-2024	33	81	7.64	9.12	0.78	20	86	6.01	12.09	0.57	34	80	6.2	16.15	1.13	46	66	5.47	10.1	0.8	38	72	7.29	14.36	0.48
23-05-2024	22	53	8.41	8.77	0.43	13	84	5.93	10.29	0.46	30	74	6.28	13.84	0.99	21	66	5.31	10.36	0.86	42	89	6.77	14.85	0.45
24-05-2024	37	90	8.59	7.74	0.47	14	81	6.04	10.05	0.59	27	71	6.47	12.94	0.82	20	70	5.42	10.63	0.91	38	77	5.96	14.75	0.43
25-05-2024	50	70	8.48	7.18	0.34	15	88	6.15	8.49	0.67	30	68	6.2	16.1	0.88	19	67	7.14	12.06	1.22	35	88	6.95	14.18	0.42
26-05-2024	16	29	8.46	6.66	0.33	10	27	5.83	7.71	0.48	31	77	6.49	14.13	0.98	20	86	8.78	10.59	1.17	20	86	7.48	12.43	0.41
27-05-2024	20	50	8.43	6.39	0.34	15	34	6.09	6.94	0.57	41	85	7.44	24.06	1.43	12	46	8.19	19.85	0.78	51	83	6.8	13.58	0.45
28-05-2024	15	34	8.53	6.3	0.31	20	40	5.93	7.29	0.52	42	91	7.42	17.69	1.17	15	66	5.79	11.45	1.27	54	89	7.12	13.82	0.46
29-05-2024	31	89	8.77	6.65	0.49	48	90	5.98	7.15	0.54	41	94	7.08	17.65	1.53	13	50	5.86	10.12	0.84	49	95	7.27	14.59	0.46
30-05-2024	56	75	7.63	8.98	0.8	56	79	6.09	8.35	0.62	30	75	6.65	16.75	0.88	21	94	5.8	10.35	1.07	47	97	6.5	13.91	0.45
31-05-2024	23	63	5.91	9.75	0.64	56	64	6.05	9.15	0.66	25	64	6.34	11.84	0.73	19	78	6.41	11.33	1.68	15	62	7.77	14.7	0.41
Max (µg/m3)	56	96	9	17	2	56	95	7	41	1	43	95	7	26	1.53	47	94	9	20	2	56	97	9	21	1
Min (µg/m3)	15	29	6	5	0	10	27	4	7	0	17	44	5	6	0.69	11	26	5	9	1	15	45	6	12	0
98%tile(µg/m3)	56	93	9	16	2	56	93	7	34	1	42	94	7	25	1.47	46	89	8	17	2	55	97	9	21	1
Standards	60	100	80	80	2	60	100	80	80	2	60	100	80	80	2	60	100	80	80	2	60	100	80	80	2

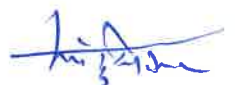
  
 Prepared By  
 Dr.P.P.Nandusekar  
 Manager (Environment)


  
 Checked By  
 Satish Kumar Choudhary  
 General Manager (Environment)

# AMBIENT AIR QUALITY(AAQ):

Location	Near Kasumata Temple					Near Coke Oven Plant					Near Goa Gate					Near MSEB Substation					Near Dolvi Village <sup>1</sup>				
Date	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO
DD-MM-YYYY	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3
01-06-2024	12	29	5.72	8.75	0.46	27	45	6.19	20.62	0.68	19	53	6.52	12.07	0.82	17	59	6.52	10.44	1.58	20	86	6.55	13.87	0.44
02-06-2024	28	35	5.83	8.66	0.54	44	99	6.11	19.14	0.67	21	53	7.04	11.04	0.71	18	70	6.21	50.38	1.43	19	59	6.93	12.78	0.41
03-06-2024	39	38	6.23	12.87	1.24	59	65	6.13	16.33	0.76	26	57	7.48	12.07	0.77	13	40	6.38	24.53	1.52	28	58	8.04	16.55	0.52
04-06-2024	46	53	6.28	27.08	0.73	44	41	6	24.65	0.73	26	67	7.23	22.08	0.8	28	81	6.54	31.41	1.37	36	80	6.99	20.96	0.47
05-06-2024	27	40	6.39	16.91	1.05	39	89	6	16.81	0.61	25	68	6.88	17.75	2.69	18	65	5.9	32.15	1.04	29	60	7.64	16.28	0.47
06-06-2024	57	50	6.85	18.57	1.61	56	79	5.96	13.23	0.48	25	57	6.89	9.7	0.67	17	66	5.55	16.74	1.05	27	49	7.59	15.4	0.4
07-06-2024	20	51	6.13	13.05	0.5	38	68	6.08	13.15	0.75	30	74	7	13.97	0.67	21	97	5.07	11.93	0.7	37	79	7.64	16.7	0.42
08-06-2024	55	54	6.33	14.37	1.35	44	96	5.98	16.95	1	25	54	7.22	11.36	0.67	19	62	5.41	11.32	1.11	24	51	7.79	16.19	0.44
09-06-2024	57	53	6.54	11.29	1.89	55	64	5.87	12.26	0.82	22	46	7.25	11.75	1.05	15	20	5.51	13.92	0.58	26	40	9.02	14.97	0.6
10-06-2024	20	60	6.33	1.26	0.78	26	43	5.96	9.36	0.83	21	43	6.9	15.14	0.89	11	21	5.9	12.11	0.55	18	34	7.85	14.62	0.46
11-06-2024	42	54	6.51	5.98	1.1	39	89	5.91	9.58	0.81	23	49	6.78	14.73	1.62	11	15	6.29	18.31	0.51	13	43	6.14	15.16	0.52
12-06-2024	48	54	7.03	17.69	1.46	51	74	6.24	14.81	0.58	30	72	7.11	20.91	2.02	13	35	6.6	12.36	0.48	18	44	7.99	15.59	0.54
13-06-2024	NA	44	7.59	19.07	1.75	60	60	6.34	15.9	0.7	12	35	7.06	7.93	0.66	12	19	6.94	12.67	0.58	9	26	7.95	14.6	0.55
14-06-2024	NA	39	7.5	21.08	1.95	49	96	5.11	13.61	0.54	14	30	7.17	9	0.92	12	16	7.25	11.52	0.58	4	22	7.78	13.81	0.44
15-06-2024	58	59	7.1	20.15	2.01	50	59	5.52	14.85	0.53	32	80	8.17	9.35	0.82	14	28	7.5	11.8	0.58	6	26	7.57	13.12	0.46
16-06-2024	49	44	7	16.67	1.69	52	59	6.22	10.48	0.63	38	85	7.69	15.96	1.51	13	20	7.89	10.72	0.62	19	51	8.24	12.9	0.51
17-06-2024	25	88	7.73	18.83	1.59	42	69	6	12.02	0.69	23	61	7.6	13.24	1.07	14	34	8.42	10.6	0.7	39	67	6.28	14.5	0.49
18-06-2024	36	75	7.04	17.16	1.61	34	88	6.09	9.03	0.66	33	94	7.36	15.45	1.24	17	50	8.79	10.36	0.87	43	72	6.88	16.9	0.84
19-06-2024	51	68	6.91	19.67	2.03	42	75	6.13	9.48	0.57	45	75	7.41	15.05	1.36	13	28	9.06	10.41	0.77	46	68	7.38	16.22	0.77
20-06-2024	39	88	8.69	22	1.88	32	81	6.21	7.58	0.58	19	54	7.73	12.57	1.14	15	17	9.81	12.91	0.72	40	57	8.25	15.65	0.74
21-06-2024	40	63	7.84	21.21	1.54	20	92	6.23	6.92	0.74	22	53	7.92	21.25	1.78	6	35	10.45	12.83	0.96	58	96	7.61	17.62	0.88
22-06-2024	56	90	12.6	49.92	0.93	29	79	6.14	8.6	0.85	22	41	7.65	11.42	0.75	NA	30	10.74	12.7	0.96	24	51	8.34	15.17	0.53
23-06-2024	NA	NA	NA	NA	NA	31	57	6.38	8.8	0.5	32	83	7.77	14.49	1.43	NA	54	11.24	12.63	0.86	25	77	7.06	14.44	0.49
24-06-2024	NA	NA	NA	NA	NA	52	95	6.09	9.3	0.6	27	67	7.62	13.13	1.16	NA	64	11.3	13.65	0.86	19	34	7.79	13.15	0.39
25-06-2024	NA	NA	NA	NA	NA	54	75	6.06	11.51	0.63	24	71	7.49	6.75	0.5	NA	83	11.59	11.64	0.88	29	38	6.88	12.62	0.39
26-06-2024	NA	NA	NA	NA	NA	28	68	5.96	11.84	0.61	28	64	7.96	11.35	0.77	NA	21	11.49	12.16	0.89	38	54	6.81	15.7	0.88
27-06-2024	NA	NA	NA	NA	NA	45	43	6.12	10.78	0.51	23	42	7.49	10.02	0.67	NA	NA	NA	NA	NA	25	35	8.29	14.48	1.03
28-06-2024	NA	NA	NA	NA	NA	28	83	6.22	9.76	0.54	22	38	7.24	11.41	0.6	NA	NA	NA	NA	NA	27	50	6.96	15.02	1.07
29-06-2024	NA	NA	NA	NA	NA	47	90	6.12	11.75	0.66	27	59	7.16	14.44	0.73	NA	NA	NA	NA	NA	53	88	8.43	17.4	1.29
30-06-2024	NA	NA	NA	NA	NA	46	55	5.97	9.89	0.6	26	76	7.29	17.94	1.54	NA	NA	NA	NA	NA	43	55	8.04	21.43	1.95
Max (µg/m3)	58	90	13	50	2	60	99	6	25	1	45	94	8	22	2.69	28	97	12	50	2	58	96	9	21	2
Min (µg/m3)	12	29	6	1	0	20	41	5	7	0	12	30	7	7	0.50	6	15	5	10	0	4	22	6	13	0
98%tile(µg/m3)	57	89	11	40	2	59	97	6	22	1	41	88	8	22	2.30	25	90	12	41	2	55	91	9	21	2
Standards	60	100	80	80	2	60	100	80	80	2	60	100	80	80	2	60	100	80	80	2	60	100	80	80	2

Showing NA due to the Aqms station is off because rain water is passing in aqms station

  
 Prepared By  
 Dr. P. P. Nandusekar  
 Manager (Environment)


Checked By   
 Satish Kumar Choudhary  
 General Manager (Environment)




# AMBIENT AIR QUALITY(AAQ):

Location	Near Kasumata Temple					Near Coke Oven Plant					Near Goa Gate					Near MSEB Substation					Near Dolvi Village				
Date	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO
DD-MM-YYYY	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3
01-07-2024	NA	NA	6.78	5.00	1.73	17	24	6.48	8.01	0.49	27	79	6.94	14.89	1.2	NA	NA	NA	NA	NA	41	83	8.42	42.69	3.35
02-07-2024	23	90	6.6	16.41	1.27	9	78	6.21	8.84	0.52	41	96	7.66	39.79	2.64	NA	NA	NA	NA	NA	59	80	8.97	56.75	1.36
03-07-2024	22	84	6.8	15.45	1.09	10	32	6.35	10.03	0.48	37	95	7.73	26.99	2.44	NA	NA	NA	NA	NA	53	87	7.51	68.3	2.54
04-07-2024	28	46	6.73	11.57	0.93	12	22	5.79	9.25	0.6	41	84	7.8	34	4.3	NA	NA	NA	NA	NA	41	72	7.78	49.6	1.4
05-07-2024	45	87	7.01	5.69	0.87	11	19	6.29	10.33	0.6	41	76	8.31	30.38	3.15	14	42	10.32	15.06	2.15	50	86	9.36	57.77	2.04
06-07-2024	18	50	7.43	11.89	0.8	7	17	6.11	8.09	0.58	51	78	8.13	43.77	5.31	86	77	11.36	21.79	1.48	32	95	7.75	42.3	1
07-07-2024	40	83	7.85	15.33	0.99	10	19	4.08	9.63	0.62	44	78	8.18	33.58	6.13	13	39	10.54	11.27	2.15	39	70	7.06	32.67	1.13
08-07-2024	32	83	8.53	32.37	2.75	13	80	6.26	11.35	0.85	13	15	7.81	7.93	4.12	20	9	12.43	17.42	2.07	9	10	5.66	16.16	0.41
09-07-2024	NA	NA	NA	NA	NA	17	90	8.14	11.3	0.72	19	24	7.59	8.44	0.67	11	16	11.33	13.03	1.52	14	24	7.06	20.37	0.7
10-07-2024	NA	NA	NA	NA	NA	31	80	6.44	13.54	0.63	24	37	8.05	10.92	0.68	14	39	10.26	11.34	0.95	20	33	10.02	22.11	0.97
11-07-2024	NA	NA	NA	NA	NA	51	87	6.95	10.37	0.73	25	29	8.29	11.84	0.87	12	16	8.41	13.28	0.66	14	22	8.17	21.42	0.64
12-07-2024	NA	NA	NA	NA	NA	27	85	6.45	10.94	0.71	20	25	8.21	22.59	1.29	17	21	9.2	13.65	1.02	17	29	7.11	24.41	0.71
13-07-2024	NA	NA	NA	NA	NA	23	82	7.3	11.55	0.62	26	39	8.65	23.87	1.82	9	25	9.03	13.06	0.78	19	46	7.96	25.15	0.88
14-07-2024	NA	NA	NA	NA	NA	17	67	5.91	12.33	1.03	25	36	8.38	19.22	1.84	33	75	9.34	13.36	1.3	15	36	7.59	22.02	0.74
15-07-2024	NA	NA	NA	NA	NA	14	69	6.62	11.76	0.62	18	21	7.75	16.12	0.87	13	18	9.3	14.98	0.81	15	25	6.64	19.14	0.47
16-07-2024	NA	NA	NA	NA	NA	20	82	8.06	9.64	0.61	17	25	8.27	10.79	0.75	12	22	9.47	13.65	0.69	24	64	13	27.47	1
17-07-2024	NA	NA	NA	NA	NA	18	79	12.7	11.47	0.63	17	29	7.79	11.54	1.16	15	42	9.71	18.97	0.7	16	48	9.33	24.6	0.82
18-07-2024	NA	NA	NA	NA	NA	14	81	7.38	10.11	0.78	17	26	7.82	15.45	1.84	17	47	10.03	19.7	0.92	31	62	7.42	27.77	0.88
19-07-2024	NA	NA	NA	NA	NA	14	50	7.71	8.16	0.81	25	40	8.06	13.03	1.96	22	59	10.14	25.2	1.01	26	86	7.82	31.55	1.19
20-07-2024	NA	NA	NA	NA	NA	13	43	8.05	8.93	0.66	30	49	7.95	18.58	2.85	13	27	10.66	18.22	0.75	55	85	7.91	39.77	1.48
21-07-2024	NA	NA	NA	NA	NA	7	55	8.46	9.77	0.57	33	58	8.34	25.44	3.8	22	61	10.25	16.06	0.79	33	84	7.47	34.65	1.08
22-07-2024	NA	NA	NA	NA	NA	8	31	8.81	7.96	0.57	41	74	8.22	33.03	3.67	27	78	10.48	16.16	0.86	30	84	7.81	43.24	1.1
23-07-2024	NA	NA	NA	NA	NA	16	34	9.09	6.2	0.57	46	76	8.52	43.74	3.3	37	83	10.81	24.47	1.01	21	35	7.89	24.13	0.49
24-07-2024	NA	NA	NA	NA	NA	14	27	9.26	7.07	0.57	44	78	8.77	40.91	4.4	51	88	11.3	22.73	1.75	20	30	6.51	17.63	0.4
25-07-2024	NA	NA	NA	NA	NA	7	84	9.42	8.51	0.55	43	79	8.63	41	3.23	66	85	11.9	24.31	1.77	22	19	7.49	16.4	0.43
26-07-2024	NA	NA	NA	NA	NA	10	20	9.63	8.89	0.46	50	89	8.91	41.73	4.94	56	81	11.87	21.83	0.19	33	69	8.55	19.42	0.38
27-07-2024	NA	NA	NA	NA	NA	11	20	9.87	8.06	0.42	48	92	10.06	49.08	3.96	NA	62	10.02	9.55	2.67	29	64	4.98	21.57	0.41
28-07-2024	NA	NA	NA	NA	NA	9	33	10.2	7.82	0.5	54	90	9.42	45.86	3.63	NA	63	9.84	9.12	2	35	50	6.13	17.48	0.38
29-07-2024	NA	NA	NA	NA	NA	14	41	11	8.61	0.69	45	89	8.94	41.94	4.79	NA	51	10.22	11.52	2.16	39	78	6.89	19.75	0.42
30-07-2024	NA	NA	NA	NA	NA	10	30	11.8	8.43	0.68	44	79	9.31	40.5	4.07	NA	27	10.07	9.54	2.03	27	58	7.7	21.66	0.65
31-07-2024	NA	NA	NA	NA	NA	10	20	12.3	7.57	0.6	42	89	9.57	42.83	1.41	NA	67	9.94	8.74	2.26	29	40	8.4	19.65	0.36
Max (µg/m3)	45	90	9	32	3	51	90	13	14	1	54	96	10	49	6	86	88	12	25	3	59	95	13	68	3
Min (µg/m3)	18	46	7	5	1	7	17	4	6	0	13	15	7	8	1	9	9	8	9	0	9	10	5	16	0
(µg/m3)	30	75	7	14	1	15	51	8	10	1	34	60	8	28	3	26	49	10	16	1	29	57	8	30	1
Standards	60	100	80	80	4	60	100	80	80	4	60	100	80	80	4	60	100	80	80	4	60	100	80	80	4

Showing NA due to the Aqms station is off because rain water is passing in aqms station

  
 Prepared By  
 Dr.P.P.Nandusekar  
 Manager (Environment)

  
 Checked By  
 Satish Kumar Choudhary  
 General Manager (Environment)


# AMBIENT AIR QUALITY(AAQ):

Location	Near Kasumata Temple					Near Coke Oven Plant					Near Goa Gate					Near MSEB Substation					Near Dolvi Village <sup>1</sup>				
Date	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO
DD-MM-YYYY	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3
01-08-2024	NA	NA	NA	NA	NA	14	17	12.7	8.17	0.48	41	92	9.61	42.46	2.99	NA	45	10.2	10.74	2.09	23	34	5.77	16.35	0.36
02-08-2024	NA	NA	NA	NA	NA	10	12	12.7	8.8	0.44	37	74	9.25	41.28	2.73	NA	48	10.7	20.41	2.09	36	73	5.4	35.65	0.78
03-08-2024	NA	NA	NA	NA	NA	7	15	12.9	7.84	0.47	44	79	9.6	43.63	2.41	NA	23	10.93	13.67	2.04	23	78	4.9	37.88	0.77
04-08-2024	NA	NA	NA	NA	NA	7	20	12.9	8.2	0.56	34	69	9.02	31.6	2.86	NA	25	11.29	16.29	2.08	3	90	7.81	45.34	1.7
05-08-2024	NA	NA	NA	NA	NA	12	16	13.8	9.6	0.49	29	63	8.25	27.7	1.99	NA	24	11.44	13.81	1.09	2	82	6.71	42.93	1.74
06-08-2024	NA	NA	NA	NA	NA	11	39	13.1	10.85	0.46	30	67	8.27	31.29	2.78	NA	31	12.33	14.91	2.16	4	37	8.77	23.73	0.42
07-08-2024	NA	NA	NA	NA	NA	10	74	12.2	11.34	0.52	34	87	9	34.19	0.49	NA	75	11.6	14.78	2.36	30	39	5.68	23.07	0.45
08-08-2024	NA	NA	NA	NA	NA	13	73	12	11.19	0.59	21	49	8.8	16.97	0.27	NA	65	11.77	13.28	2.23	37	55	7.32	26.05	0.44
09-08-2024	NA	NA	NA	NA	NA	7	84	12.4	11.27	0.57	23	60	8.64	14.7	0.35	NA	93	12.04	14.14	1.86	33	73	7.52	26.3	0.58
10-08-2024	NA	NA	NA	NA	NA	8	95	11.9	12.18	0.51	26	65	9.26	21.44	0.94	NA	40	12.24	13.53	0.16	21	43	6.64	24.04	0.47
11-08-2024	NA	NA	NA	NA	NA	26	92	11.4	9.57	0.61	23	63	9.32	24.14	1.07	NA	29	12.1	16.03	0.03	22	49	5.84	24.84	0.51
12-08-2024	NA	NA	NA	NA	NA	23	89	11.1	12.66	0.53	17	44	8.88	17.79	1.04	NA	61	11.88	12.55	0.45	21	46	5.72	20.91	0.55
13-08-2024	NA	NA	NA	NA	NA	9	94	11.4	13.08	0.48	22	60	8.71	11.57	0.57	NA	83	12.35	14.44	0.93	27	70	6.54	21	0.43
14-08-2024	NA	NA	NA	NA	NA	17	58	13	10.26	0.55	18	45	9.1	7.28	0.4	40	84	12.48	12.12	2.55	30	78	6.76	23	0.41
15-08-2024	NA	NA	NA	NA	NA	18	94	11.9	10	0.64	17	47	8.68	7.87	0.39	29	87	11.34	11.22	2.73	31	90	8.19	25.87	0.45
16-08-2024	NA	NA	NA	NA	NA	14	93	11.4	11.8	0.55	20	58	9.72	8.73	0.52	20	56	12.37	14.65	2.03	37	95	8.9	24.1	0.42
17-08-2024	NA	NA	NA	NA	NA	20	86	11.5	11.67	0.59	19	56	9.35	7.95	0.46	31	86	12.99	13.93	1.51	32	79	7.72	24.13	0.45
18-08-2024	NA	NA	NA	NA	NA	17	81	12.7	12.84	0.82	16	37	8.82	7.53	0.71	29	83	13.27	12.83	2.84	24	58	6.09	20.98	0.49
19-08-2024	NA	NA	NA	NA	NA	12	82	11.8	18.26	1.13	19	41	9.9	5.94	0.85	26	76	13.07	12.89	2.22	13	52	6.31	20.75	0.58
20-08-2024	NA	NA	NA	NA	NA	9	68	12.4	17.73	0.87	19	32	8.89	10.45	0.77	13	28	13.23	13.56	1.27	8	39	7.25	20.09	0.54
21-08-2024	NA	NA	NA	NA	NA	15	63	12.8	14.1	0.76	18	37	5.06	7.64	0.59	20	56	11.72	11.55	1.29	19	52	8.09	22.2	0.55
22-08-2024	NA	NA	NA	NA	NA	24	70	11.4	15.67	0.49	19	46	7.43	13.44	0.72	14	36	10.14	10.94	0.96	25	58	6.55	25.75	0.5
23-08-2024	NA	NA	NA	NA	NA	18	78	6.73	16.84	0.52	11	38	6.39	6.53	0.93	8	11	10.71	9.52	0.94	13	38	7.81	20.88	0.58
24-08-2024	NA	NA	NA	NA	NA	5	68	6.77	14.02	0.7	25	58	6.7	15.63	1.09	24	55	10.74	10.62	1.12	2	21	6.54	24.8	0.64
25-08-2024	NA	NA	NA	NA	NA	8	8	7.67	9.29	0.55	43	79	7.07	26.88	1.79	29	68	10.9	22.67	1.21	14	61	6.59	25.61	0.68
26-08-2024	NA	NA	NA	NA	NA	8	9	6.75	9.07	0.51	46	93	7.12	31.98	2.86	13	25	11.22	14.26	0.94	11	40	6.16	19.75	0.44
27-08-2024	NA	NA	NA	NA	NA	8	10	5.25	8.3	0.44	32	70	6.68	19.96	2.24	9	13	10.9	9.94	0.93	45	79	7.49	62.96	1.64
28-08-2024	NA	NA	NA	NA	NA	8	21	6.95	9.33	0.44	27	65	6.71	15.79	1.54	9	17	10.99	10.94	0.94	40	81	7.28	52.57	2.03
29-08-2024	NA	NA	NA	NA	NA	9	76	8.18	11.53	0.49	27	75	6.67	12.98	0.76	32	24	11.12	11.21	0.96	50	82	7.37	59.24	2.26
30-08-2024	NA	NA	NA	NA	NA	11	91	9	12.52	0.56	19	54	6.63	15.91	1.52	14	32	11.21	8.72	1.94	11	36	6.61	28.45	0.91
31-08-2024	NA	NA	NA	NA	NA	22	79	8.92	13.99	0.56	21	54	6.86	18.32	0.68	27	61	11.69	9.35	2.11	21	30	7.02	22.11	0.45
Max (µg/m3)	0	0	0	0	0	26	95	14	18	1	46	93	10	44	3	40	93	13	23	3	50	95	9	63	2
Min (µg/m3)	0	0	0	0	0	5	8	5	8	0	11	32	5	6	0	8	11	10	9	0	2	21	5	16	0
(µg/m3)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	13	60	11	12	1	26	60	8	19	1	21	50	12	13	2	23	59	7	29	1
Standards	60	100	80	80	4	60	100	80	80	4	60	100	80	80	4	60	100	80	80	4	60	100	80	80	4

Showing NA due to the Aqms station is off because rain water is passing in aqms station



Prepared By  
Dr.P.P.Nandusekar  
Manager (Environment)


Checked By   
Satish Kumar Choudhary  
General Manager (Environment)




# AMBIENT AIR QUALITY(AAQ):

Location	Near Kasumata Temple					Near Coke Oven Plant					Near Goa Gate					Near MSEB Substation					Near Dolvi Village				
Date	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO	PM2.5	PM10	SO2	NOX	CO
DD-MM-YYYY	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3
01-09-2024	NA	NA	NA	NA	NA	19.32	45.49	7.32	12.27	0.61	20.02	51.24	6.87	12.38	0.48	36.44	68.98	11.56	9.91	2.6	18.22	55.11	8.11	20	0.43
02-09-2024	NA	NA	NA	NA	NA	23.9	87.84	6.8	14.18	0.67	22.05	45.65	6.72	9.99	0.53	32.67	57.16	11.34	9.54	2.3	11.22	33.31	7.55	19.2	0.44
03-09-2024	NA	NA	NA	NA	NA	12.73	77.26	7.15	15.4	0.59	31.16	67.06	7.64	30.81	1.55	37.31	64.44	11.24	9.23	1.83	33.4	40.48	7.78	22.63	0.4
04-09-2024	NA	NA	NA	NA	NA	18.49	92.2	7.25	10.6	0.47	28.72	76.62	7.77	26.81	1.26	34.93	53.3	11.62	11.77	1.78	29.63	47.61	6.4	23.3	0.45
05-09-2024	NA	NA	NA	NA	NA	11.86	27.79	7.41	12.59	0.51	29.86	70.08	7.8	30.23	1.51	59.15	90.05	11.65	11	2.0	15.21	40.83	5.7	19.74	0.37
06-09-2024	NA	NA	NA	NA	NA	5.87	69.33	6.9	12.47	0.68	31.91	79.84	7.95	28.37	1.61	37.93	63.37	10.27	9.92	1.67	20.7	42.52	6.9	21.46	0.41
07-09-2024	NA	NA	NA	NA	NA	0.92	94.87	7.57	15.42	0.64	21.85	54.74	8.02	21.17	1.09	23.31	34.88	9.04	9.19	1.57	34.04	46.55	6.68	19.41	0.56
08-09-2024	NA	NA	NA	NA	NA	2.94	90.03	7.65	14.5	0.51	18.62	46.41	7.97	19.94	1.05	16.23	35.16	8.79	7.6	1.28	21.72	26.77	7.58	17.77	0.45
09-09-2024	NA	NA	NA	NA	NA	13.13	93.81	7.68	14.95	0.59	17.54	38.93	7.4	15.77	0.63	26.43	65.7	9.34	7.93	1.33	14.62	29.43	7.62	18.52	0.43
10-09-2024	NA	NA	NA	NA	NA	14.35	93.4	7.77	13.73	0.51	24.95	52.88	7.05	18.25	1.23	17.82	17.44	9.36	8.04	1.3	9.42	41.26	7.21	22.25	0.5
11-09-2024	NA	NA	NA	NA	NA	17.43	91.26	7.95	12.72	0.43	21.53	47.86	6.88	16.93	1.14	16.78	19.95	11.78	8.11	1.31	25.24	43.38	6.44	20.26	0.53
12-09-2024	NA	NA	NA	NA	NA	35.58	91.59	8.09	14.04	0.43	21.59	59.02	7.15	14.23	1.1	25.26	35.37	11.71	8.54	1.33	40.68	71.62	6.03	20.56	0.64
13-09-2024	NA	NA	NA	NA	NA	18.5	91.31	8.13	13.73	0.48	24.91	60.4	6.54	19.19	1.52	59.73	44.37	12.24	9.03	1.34	37.3	72.37	5.99	21.05	0.49
14-09-2024	NA	NA	NA	NA	NA	22.49	94.87	8.16	16.96	0.53	23.32	61.69	6.74	19.63	1.71	19.67	33.64	13.03	9.24	1.42	48.56	86.83	7.46	28.05	0.55
15-09-2024	NA	NA	NA	NA	NA	17.93	95.09	8.18	16.58	0.82	16.23	32.57	6.65	10.96	0.66	12.14	18.36	11.41	8.45	1.62	28.79	34.99	7.04	22.15	0.66
16-09-2024	NA	NA	NA	NA	NA	16.65	91.64	8.24	15.58	0.62	15.94	28.8	6.75	10.21	0.74	14.65	31.37	9.9	8	1.48	19.22	31.55	7.43	22.39	0.58
17-09-2024	NA	NA	NA	NA	NA	23.54	90.98	8.24	12.35	0.72	18.78	37.87	6.9	10.34	0.52	34.55	75.17	9.64	8.69	2.14	12.02	52.42	8.18	25.46	0.5
18-09-2024	NA	NA	NA	NA	NA	21.54	91.59	10.7	24.63	0.61	24.5	62.15	6.41	14.68	0.75	23.84	50.97	9.75	7.9	1.59	23.24	58.04	7.02	21.78	0.5
19-09-2024	NA	NA	NA	NA	NA	39.99	96.09	12.71	19.74	0.51	23.55	52.82	6.13	9.83	0.67	21.97	51.7	9.81	7.86	1.57	29.89	62.99	6.47	22.71	0.45
20-09-2024	NA	NA	NA	NA	NA	44.84	90.96	11.02	17.58	0.59	21.3	48.68	5.76	9.47	0.57	35.33	82.66	10.14	7.95	1.86	41.47	66.81	7.8	25.1	0.48
21-09-2024	NA	NA	NA	NA	NA	26.83	96.29	13.06	15.3	0.58	20.63	46.23	6.49	11.81	0.56	39.28	92.45	10.04	9.36	2.34	14.85	69.75	7.47	28.99	0.49
22-09-2024	NA	NA	NA	NA	NA	28.38	94.51	13.28	17.28	0.62	21.54	51.09	6.46	10.92	0.57	48.66	95.18	10.27	8.98	2.99	21.62	78.38	7.17	26.59	0.47
23-09-2024	NA	NA	NA	NA	NA	18.51	47.3	13.49	20.55	0.47	28.57	55.2	6.3	8.49	0.57	51.5	92.09	10.43	9.32	3.05	43.86	93.4	6.8	22.37	0.46
24-09-2024	NA	NA	NA	NA	NA	23.81	88.13	13.33	17.18	0.95	18.84	26.01	6.73	7.7	0.64	40.25	85.78	10.56	8.64	3.02	24.64	32.52	7.65	18.14	0.5
25-09-2024	NA	NA	NA	NA	NA	18.82	94.04	13.85	16.36	0.66	22.08	34.93	7.16	15.63	1.24	14.49	21.79	10.39	9.75	1.73	27.7	37.67	6.18	24.88	0.66
26-09-2024	NA	NA	NA	NA	NA	15.21	39.33	13.41	10.97	0.61	18.73	36.8	7.54	16.33	0.96	20.09	28.52	10.59	13.23	1.75	20.34	17.59	6.81	22.91	0.5
27-09-2024	NA	NA	NA	NA	NA	33.92	95.06	13.09	12.31	0.57	31.51	66.64	8.83	25.61	2.25	28.85	48.37	10.23	8.4	1.73	13.71	51.03	6.75	26.24	0.65
28-09-2024	NA	NA	NA	NA	NA	43.79	92.86	12.04	12	0.57	18.18	39.7	7.99	15.2	1.4	27.85	45.03	10.32	8.02	1.7	18.79	36.04	7.29	23.94	0.67
29-09-2024	NA	NA	NA	NA	NA	42.19	94.04	10.36	15.04	0.52	23.89	56.88	7.58	13.43	1.19	20.15	36.96	10.4	7.51	1.57	15.29	24.02	6.85	19.71	0.43
30-09-2024	NA	NA	NA	NA	NA	47.29	91.08	9.88	13.68	0.75	16.8	34.02	7.46	8.88	0.67	53.34	91.13	10.63	11.34	2.47	24.03	37.03	7.45	22.31	0.5
Max (µg/m3)	0	0	0	0	0	47	96	14	25	1	32	80	9	31	2	60	95	13	13	3	49	93	8	29	1
Min (µg/m3)	0	0	0	0	0	1	28	7	11	0	16	26	6	8	0	12	17	9	8	1	9	18	6	18	0
(µg/m3)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	23	84	10	15	1	23	51	7	16	1	31	54	11	9	2	25	49	7	22	1
Standards	60	100	80	80	4	60	100	80	80	4	60	100	80	80	4	60	100	80	80	4	60	100	80	80	4

Showing NA due to the Aqms station is off because rain water is passing in aqms station

  
Prepared By  
Dr.P.P.Nandusekar  
Manager (Environment)

  
Checked By  
Satish Kumar Choudhary  
General Manager (Environment)

**AMBA RIVER COKE LIMITED**  
**Integrated Steel Mill Complex**  
Geetapuram, Dolvi, Tal - Pen, Dist - Raigad

**A) STACK EMISSION :**

A) STACK EMISSION :												
Sr. No.	Name of the Plant and Stack	Stack connected to (Name of the Unit )	Height of the Stack (m)	Diameter of the Stack (m)	Pollution Control unit provided	Date & time of Monitoring	Production fig. of the unit, during the monitoring period (TPD)	Velocity m/sec	Parameters mg/Nm <sup>3</sup>			
									Particulate Matter (PM)	SO <sub>2</sub>	NOx	CO
I	Coke Oven Plant <span style="float:right">Plant Capacity: 1.0 MTPA</span>											
1	Coke Oven Battery A & B(Under firing)	Coke Oven Battery A & B	145	4.50	Natrual Draft	09/04/24 15:00 Hrs	1412	8.4	42	140.7	142.3	165.0
						09/05/24 15:00 Hrs	1302	10.5	46	110.0	121.5	128.3
						01/06/24 11:45 Hrs	1358	12.6	39	114.0	192.0	141.0
						05/07/24 16:45 Hrs	1669	12.0	40	91.8	59.6	143.1
						05/08/24 10:30 Hrs	1763	7.8	42	123.0	77.1	195.0
						05/09/24 16:00 Hrs	1915	8.8	43	96.0	122.2	128.9
2	Ground De-dusting system (Charging Side)	Coke Oven Battery A & B	31	2.50	Bag Filters	09/04/24 16:30 Hrs	1412	5.3	2	NA	NA	NA
						09/05/24 14:15 Hrs	1302	6.2	6	NA	NA	NA
						01/06/24 14:05 Hrs	1358	5.8	10	NA	NA	NA
						18/07/24 10:25 Hrs	1594	4.8	8	NA	NA	NA
						05/08/24 14:10 Hrs	1763	5.2	10	NA	NA	NA
						05/09/24 10:00 Hrs	1915	6.2	14	NA	NA	NA
3	Ground De-dusting system (pushing Side)	Coke Oven Battery A & B	31	2.50	Bag Filters	08/04/24 10:40 Hrs	1395	4.6	2	NA	NA	NA
						09/05/24 15:35 Hrs	1302	5.2	4	NA	NA	NA
						01/06/24 15:25 Hrs	1358	5.0	9	NA	NA	NA
						18/07/24 12:35 Hrs	1594	4.9	5	NA	NA	NA
						05/08/24 16:25 Hrs	1763	5.9	9	NA	NA	NA
						05/09/24 12:10 Hrs	1915	6.8	15	NA	NA	NA
4	Boiler	WHRB Boiler	40	2.00		25/04/24 10:00 Hrs	472.0	5.9	16	13.0	16.0	18.0
						10/05/24 10:00 Hrs	227.0	5.9	15	17.0	123.2	100.3
						05/06/24 15:25 Hrs	352.0	6.0	16	14.0	16.0	18.0
						03/07/24 10:15 Hrs	259.0	7.5	4	12.0	14.0	17.0
						03/08/24 10:45 Hrs	401.0	9.5	6	26.0	25.0	19.0
						18/09/24 10:00 Hrs	333.0	7.5	17	26.0	25.0	19.0

Sr. No.	Name of the Plant and Stack	Stack connected to (Name of the Unit)	Height of the Stack (m)	Diameter of the Stack (m)	Pollution Control unit provided	Date & time of Monitoring	Production fig. of the unit, during the monitoring period (TPD)	Velocity m/sec	Parameters mg/Nm <sup>3</sup>			
									Particulate Matter (PM)	SO <sub>2</sub>	NOx	CO
5	Dry Quenching Stack	Primary & Secondary Dust Catcher	30	2.50	Bag Filters	08/04/24 12:10 Hrs	1395.0	7.9	18	NA	NA	NA
						23/05/24 10:00 Hrs	1333.0	6.5	15	NA	NA	NA
						05/06/24 16:25 Hrs	1310.0	7.8	14	NA	NA	NA
						18/07/24 15:35 Hrs	1594.0	5.3	4	NA	NA	NA
						09/08/24 16:05 Hrs	1746.0	5.2	7	NA	NA	NA
						07/09/24 10:20 Hrs	1986.0	6.2	15	NA	NA	NA
6	DG Set Stack	NA	30	0.35	NA	08/04/24 14:25 Hrs	1395.0	5.6	15	NA	NA	NA
						27/05/24 14:25 Hrs	1354.0	6.8	13	NA	NA	NA
						05/06/24 10:25 Hrs	1310.0	7.0	15	NA	NA	NA
						21/07/24 16:25 Hrs	1643.0	6.4	15	NA	NA	NA
						11/08/24 10:25 Hrs	1700.0	7.2	10	NA	NA	NA
						07/09/24 12:25 Hrs	1986.0	4.2	16	NA	NA	NA
							CPCB Norms		< 50	<800	< 500	NA
II	Pellet Plant Plant Capacity: 4.0 MTPA											
1	Dedusting 1 & 2	Mixer Unit	30.5	1.15	Bag Filters	15/04/24 14:35 Hrs	11685.0	5.3	12	NA	NA	NA
						27/05/24 10:05 Hrs	10489.0	6.3	14	NA	NA	NA
						27/06/24 15:15 Hrs	12327.0	3.5	16	NA	NA	NA
						20/07/24 14:15 Hrs	10734.0	4.1	14	NA	NA	NA
						23/08/24 10:15 Hrs	12091.0	5.2	17	NA	NA	NA
						10/09/24 12:10 Hrs	12014.0	5.8	18	NA	NA	NA
2	Dedusting 3	Betonite Unit	30.5	0.89	Bag Filters	15/04/24 16:44 Hrs	11685.0	7.1	15	NA	NA	NA
						27/05/24 12:15 Hrs	10489.0	7.5	16	NA	NA	NA
						27/06/24 16:55 Hrs	12327.0	5.3	22	NA	NA	NA
						20/07/24 16:05 Hrs	10734.0	6.0	17	NA	NA	NA
						23/08/24 12:05 Hrs	12091.0	7.5	19	NA	NA	NA
						10/09/24 15:20 Hrs	12014.0	6.9	17	NA	NA	NA
3	Main ESP	Induration Furnace	100	6.25	ESP	15/04/24 11:30 Hrs	11685.0	15.6	25	18.0	21.0	33.0
						22/05/24 11:05 Hrs	12098.0	15.6	20	18.0	21.0	33.0
						27/06/24 12:05 Hrs	12327.0	14.2	17	21.0	28.0	42.0
						20/07/24 10:35 Hrs	10734.0	14.5	16	17.0	24.0	19.0
						23/08/24 14:15 Hrs	12091.0	14.5	24	17.0	24.0	19.0
						10/09/24 10:00 Hrs	12014.0	8.0	20	18.0	16.0	28.4

Sr. No.	Name of the Plant and Stack	Stack connected to (Name of the Unit)	Height of the Stack (m)	Diameter of the Stack (m)	Pollution Control unit provided	Date & time of Monitoring	Production fig. of the unit, during the monitoring period (TPD)	Velocity m/sec	Parameters mg/Nm <sup>3</sup>			
									Particulate Matter (PM)	SO <sub>2</sub>	NOx	CO
4	Dedusting 7	Hearth Layer	30.5	1.35	Bag Filters	12/04/24 16:20 Hrs	12232.0	5.7	17	NA	NA	NA
						15/05/24 15:35 Hrs	12169.0	4.8	18	NA	NA	NA
						24/06/24 10:00 Hrs	12260.0	3.2	18	NA	NA	NA
						12/07/24 10:20 Hrs	2503.0	4.5	14	NA	NA	NA
						21/08/24 10:15 Hrs	12051.0	5.0	12	NA	NA	NA
						16/09/24 10:20 Hrs	12103.0	4.6	15	NA	NA	NA
5	Dedusting 8	Final Product Silo	30.5	2	Bag Filters	12/04/24 14:40 Hrs	12232.0	6.4	18	NA	NA	NA
						15/05/24 15:35 Hrs	12169.0	5.5	17	NA	NA	NA
						24/06/24 12:20 Hrs	12260.0	3.8	22	NA	NA	NA
						12/07/24 12:10 Hrs	2503.0	4.8	16	NA	NA	NA
						21/08/24 12:22 Hrs	12051.0	6.2	15	NA	NA	NA
						16/09/24 12:20 Hrs	12103.0	7.0	13	NA	NA	NA
6	Dedusting 9	Final Product Silo	30.5	0.69	Bag Filters	30/04/24 10:00 Hrs	10529.0	4.1	15	NA	NA	NA
						15/05/24 15:35 Hrs	12169.0	3.8	14	NA	NA	NA
						24/06/24 14:20 Hrs	12260.0	4.0	16	NA	NA	NA
						12/07/24 14:30 Hrs	2503.0	3.8	13	NA	NA	NA
						21/08/24 15:18 Hrs	12051.0	5.1	16	NA	NA	NA
						16/09/24 14:00 Hrs	12103.0	5.8	17	NA	NA	NA
7	Discharge ESP	Furnace Discharge	40	1.80	ESP	30/04/24 12:15 Hrs	10529.0	6.1	23	NA	NA	NA
						27/05/24 11:05 Hrs	10489.0	7.2	21	NA	NA	NA
						24/06/24 16:23 Hrs	12260.0	7.2	12	NA	NA	NA
						12/07/24 16:25 Hrs	2503.0	6.5	10	NA	NA	NA
						21/08/24 16:45 Hrs	12051.0	7.8	14	NA	NA	NA
						16/09/24 16:35 Hrs	12103.0	7.2	20	NA	NA	NA
							CPCB Norms		< 150	<100	< 500	< 1



**b) FUGITIVE EMISSION STATUS:**

Sr. No.	Location of the Station	Date of Monitoring	Parameter
			PM10 (µg/m <sup>3</sup> )
A Coke Oven Plant			
	CPCB Norms (µg/m3)		3000
1	Near Coal Blending Area	18-04-2024	1679
		03-05-2024	1535
		13-06-2024	633
		17-07-2024	1871
		13-08-2024	960
		16-09-2024	1738
2	Near Secondary Coal Crusher Area	18-04-2024	1566
		02-05-2024	1657
		13-06-2024	430
		17-07-2024	1263
		13-08-2024	527
		16-09-2024	1839
3	Near Coke Oven Battery A Warf Area	18-04-2024	1754
		03-05-2024	1665
		14-06-2024	1531
		18-07-2024	1219
		14-08-2024	619
		16-09-2024	1758
4	Near Coke Oven Battery B Warf Area	18-04-2024	1752
		02-05-2024	1405
		14-06-2024	1479
		17-07-2024	1784
		14-08-2024	1670
		16-09-2024	1834
5	Near Coke Cutter Area	19-04-2024	1701
		03-05-2024	1714
		13-06-2024	1436
		18-07-2024	1713
		13-08-2024	1316
		17-09-2024	1720
6	Near Coke Screening Area	19-04-2024	1647
		02-05-2024	1231
		13-06-2024	1111
		17-07-2024	1578
		13-08-2024	1569
		17-09-2024	1661
7	Near Sulphur Recovery Area	19-04-2024	1631
		03-05-2024	1702
		14-06-2024	1330
		18-07-2024	1008
		14-08-2024	1090
		17-09-2024	1537
B Pellet Plant			
	CPCB Norms (µg/m3)		3000
1	Near Mixer Building Area	20-04-2024	1833
		15-05-2024	1883
		03-06-2024	1578
		15-07-2024	1659
		21-08-2024	1473
		19-09-2024	1666
2	Near Bentonite Storage Area	20-04-2024	1708
		16-05-2024	1730
		04-06-2024	1650
		16-07-2024	1527
		22-08-2024	1485
		19-09-2024	1761

**b) FUGITIVE EMISSION STATUS:**

Sr. No.	Location of the Station	Date of Monitoring	Parameter
			PM10 ( $\mu\text{g}/\text{m}^3$ )
3	Near Additive Ball Mill Area	20-04-2024	1677
		15-05-2024	1687
		04-06-2024	1719
		15-07-2024	1866
		21-08-2024	1705
		19-09-2024	1849
4	Near Ball Mill Area	20-04-2024	1667
		16-05-2024	1574
		03-06-2024	1786
		15-07-2024	1760
		21-08-2024	1088
		18-09-2024	1663
5	Near Indurating Machine	22-04-2024	1756
		15-05-2024	1796
		03-06-2024	1619
		15-07-2024	1166
		22-08-2024	1682
		18-09-2024	1682
6	Near Hearth Layer Area	22-04-2024	1634
		15-05-2024	1606
		03-06-2024	1682
		16-07-2024	1759
		22-08-2024	1235
		18-09-2024	1876
7	Near Product Storage Area	22-04-2024	1691
		16-05-2024	1425
		03-06-2024	1728
		16-07-2024	1722
		22-08-2024	1452
		18-09-2024	1722



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**C. WATER POLLUTION STATUS:****Water Consumption/tonne of product produced :**Water Consumption / MT of Coke Produced : 2.047 M<sup>3</sup>/MT, from April, 2024 to September, 2024 (For COP only).Water Consumption / MT of Pellet Produced : 0.125 M<sup>3</sup>/MT, April, 2024 to September, 2024 (For Pellet only).**Effluent discharged to : No Discharge**

Date & Time of the sample	Location of the Sampling Point	Type of the Treatment provided	Flow Rate Average (m <sup>3</sup> /day)	Parameters Monitored (mg/l, except pH)								Quantity of the treatment effluent reused / recirculated & what purpose
				pH	TSS	Phenol	Cyanide	BOD	COD	Amm. Nitrogen	O & G	
From April, 2024 to September, 2024	COBP Effluent	BOD Plant - oil separation pool and air floatation pool, anaerobic pool, anoxia pool, aerobic pool and contact oxidization pool, Activated Carbon, Pressure Sand Filter	107.31 m <sup>3</sup> /h	7.3	788.3	BLQ	BLQ	4.1	42.1	BLQ	BLQ	After treatment 100 % quantity of treated water reused for coke-quenching. No discharge of waste water.
	Pellet Plant	No Discharge										

**QUALITY OF VARIOUS EFFLUENT STREAMS AT THE BOUNDARY LINE OF THE PLANT:**

Sr. No.	Name of the Stream	Name of the Production Unit contributing to the Stream	Date & Time of Monitoring	Parameters (mg/l, except pH & Temp.)							
				Temp. ( ° C )	pH	TSS	D.O.	C.O.D.	B.O.D.	O & G	IRON
Not applicable, as we are not discharging any wastewater from the Plant.											

**STATUS OF SEWAGE TREATMENT PLANT (STP):**

Date & Time of Monitoring	Name of the STP	Quantity of the Effluent	Parameters (mg/l, except pH & Temp.)					Remark
			Temp. (° C)	pH	TSS	BOD	COD	
From April, 2024 to September, 2024	BOD Plant	After treatment 100 % quantity used for coke-quenching or gardening.						All septic tank water Connected to BOD Plant

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## D. HAZARDOUS WASTE & SOLID WASTE MANAGEMENT:

### a. Status of Solid Waste Management:

Sr. No.	Name of the Plant	Type of Waste	Quantity of Solid Waste generated per month in MT from April, 2024 to September, 2022	Method of reuse / disposal
1	Coke Oven Plant	Coke Breeze, Coke & Coal Dust	11778.5	100 % Reused Coke & Coal Dust in Coke Oven process and Coke Breeze in Pellet, Sinter Plant.
2	Pellet Plant	ESP & Bag filter dust from dedusting system	25225	100 % Reused in Pellet Process

### b. Status of Hazardous Waste Management:

Sr. No.	Name of the Plant	Quantity of Hazardous Waste generated per month	Type of Hazardous Waste / Category	Method of handling, transportation & disposal
1	Coke Oven Plant	Nil	Used oil (Category No. 5.1)	NA
		Nil	Impure Sulphur Paste (Category No. 13.6)	M/s. Mumbai Waste Management Ltd. (MWML), Taloja, Raigad
		25.6	Decanter Sludge (Category No. 13.4)	100 % Reused in Coke Oven process
		155 kg	Waste /residu containig Oil (oil Soack Cotton ) (Category No. 5.2)	disposed in HSM furnace.
		Nil	Used oil (Category No. 5.1)	NA
2	Pellet Plant	1060KG	Waste /residu containig Oil (oil Soack Cotton ) (Category No. 5.2)	Disposed in HSM furnace.

  
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## E. NOISE POLLUTION CONTROL STATUS:

Sr. No	Location	Distance from the Source (m)	Date of Monitoring	Noise Level Leq. dB(A)	
				Day	Night
				dB(A)	dB(A)
A	Coke Oven Plant				
1	Near Coke Oven -Battary Pushing side	5	08-04-2024	83	71
			14-04-2024	78	72
			04-05-2024	70	68
			24-05-2024	68	66
			05-06-2024	83	71
			20-06-2024	78	72
			06-07-2024	70	68
			20-07-2024	68	66
			08-08-2024	70	68
			20-08-2024	68	66
			06-09-2024	83	71
			20-09-2024	78	72
2	Near Coke Oven -Battary Coke side	5	08-04-2024	82	79
			14-04-2024	81	77
			04-05-2024	64	63
			24-05-2024	66	64
			05-06-2024	82	79
			20-06-2024	81	77
			06-07-2024	64	63
			20-07-2024	66	64
			08-08-2024	65	63
			20-08-2024	66	64
			06-09-2024	82	79
			20-09-2024	81	77
3	Near Coke cutter/coke screening area	5	08-04-2024	77	72
			14-04-2024	74	72
			04-05-2024	72	70
			24-05-2024	74	71
			05-06-2024	77	72
			20-06-2024	74	72
			06-07-2024	72	70
			20-07-2024	74	71
			08-08-2024	73	70
			20-08-2024	75	71
			06-09-2024	77	72
			20-09-2024	74	72
4	Near BOD Plant area	5	08-04-2024	72	70
			14-04-2024	80	73
			04-05-2024	76	74
			24-05-2024	77	72
			05-06-2024	72	70
			20-06-2024	80	73
			06-07-2024	76	74
			20-07-2024	77	73
			08-08-2024	76	74
			20-08-2024	78	75
			06-09-2024	72	70
			20-09-2024	80	73

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## E. NOISE POLLUTION CONTROL STATUS:

Sr. No	Location	Distance from the Source (m)	Date of Monitoring	Noise Level Leq. dB(A)	
				Day	Night
				dB(A)	dB(A)
5	Near Coke Oven Main office Area	5	08-04-2024	77	75
			14-04-2024	80	73
			04-05-2024	68	66
			24-05-2024	67	64
			05-06-2024	77	75
			20-06-2024	80	73
			06-07-2024	68	66
			20-07-2024	67	64
			08-08-2024	69	66
			20-08-2024	67	65
			06-09-2024	77	75
			20-09-2024	80	73
6	Near Coal blending Area	5	08-04-2024	82	75
			14-04-2024	79	76
			04-05-2024	70	68
			24-05-2024	72	70
			05-06-2024	82	75
			20-06-2024	79	76
			06-07-2024	70	68
			20-07-2024	72	70
			08-08-2024	70	68
			20-08-2024	72	70
			06-09-2024	82	75
			20-09-2024	79	76
7	Near Ammonia scrubber Area	5	08-04-2024	80	72
			14-04-2024	82	80
			04-05-2024	76	73
			24-05-2024	74	72
			05-06-2024	80	78
			20-06-2024	82	80
			06-07-2024	76	73
			20-07-2024	74	72
			08-08-2024	78	75
			20-08-2024	75	72
			06-09-2024	80	78
			20-09-2024	82	80
8	Near Secondary Crusher Area	5	08-04-2024	83	80
			14-04-2024	80	76
			04-05-2024	66	64
			24-05-2024	65	63
			05-06-2024	83	81
			20-06-2024	80	78
			06-07-2024	66	64
			20-07-2024	65	63
			08-08-2024	68	65
			20-08-2024	65	63
			06-09-2024	83	81
			20-09-2024	80	78

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## E. NOISE POLLUTION CONTROL STATUS:

Sr. No	Location	Distance from the Source (m)	Date of Monitoring	Noise Level Leq. dB(A)	
				Day	Night
				dB(A)	dB(A)
<b>B</b>	<b>Pellet Plant</b>				
1	Near Ball Mill Area	5	08-04-2024	79	76
			14-04-2024	80	74
			04-05-2024	77	75
			23-05-2024	79	77
			05-06-2024	79	76
			20-06-2024	80	77
			06-07-2024	80	75
			20-07-2024	79	77
			05-08-2024	78	76
			17-08-2024	80	78
			06-09-2024	79	76
			20-09-2024	80	77
2	Near Additive Ball Mill Area	5	08-04-2024	77	74
			14-04-2024	82	78
			04-05-2024	76	75
			23-05-2024	75	73
			05-06-2024	77	74
			20-06-2024	82	78
			06-07-2024	77	75
			20-07-2024	76	73
			05-08-2024	76	75
			17-08-2024	75	73
			06-09-2024	77	74
			20-09-2024	82	78
3	Near Main ESP	5	08-04-2024	80	77
			14-04-2024	82	81
			04-05-2024	84	82
			23-05-2024	82	80
			05-06-2024	80	77
			20-06-2024	82	81
			06-07-2024	84	82
			20-07-2024	82	80
			05-08-2024	84	82
			17-08-2024	82	80
			06-09-2024	80	77
			20-09-2024	82	81

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## E. NOISE POLLUTION CONTROL STATUS:

Sr. No	Location	Distance from the Source (m)	Date of Monitoring	Noise Level Leq. dB(A)	
				Day	Night
				dB(A)	dB(A)
4	Near Product Storage Area	5	08-04-2024	82	81
			14-04-2024	77	74
			04-05-2024	74	72
			23-05-2024	72	70
			05-06-2024	83	80
			20-06-2024	77	74
			06-07-2024	74	72
			20-07-2024	72	70
			05-08-2024	75	72
			17-08-2024	73	70
			06-09-2024	83	80
			20-09-2024	77	74
5	Near Indurating area	5	08-04-2024	81	75
			14-04-2024	76	71
			04-05-2024	82	80
			23-05-2024	80	78
			05-06-2024	81	79
			20-06-2024	76	74
			06-07-2024	82	80
			20-07-2024	80	78
			05-08-2024	83	80
			17-08-2024	80	78
			06-09-2024	81	79
			20-09-2024	76	74
6	Near Hearth Layer Area	5	08-04-2024	78	73
			14-04-2024	74	71
			04-05-2024	78	76
			23-05-2024	76	74
			05-06-2024	78	75
			20-06-2024	74	72
			06-07-2024	78	76
			20-07-2024	76	74
			05-08-2024	80	76
			17-08-2024	78	74
			06-09-2024	78	75
			20-09-2024	74	72


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**F. STATUS OF CONSENTs:**

S. No.	Acts	Consent Number	Valid w. e. f.	Validity upto
1	Under Section 26 of the Water (Prevention and Control of Pollution) Act, 1974	<b>Coke Oven Plant (1 MTPA)</b> <b>Fomat 1.0/CAC/ UAN No. 0000137969/</b> <b>CR/2302000588 dated 13/02/2023</b>	31/05/2022	31-05-2024 applied for renewal
2	Under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 and authorisation under rule 5 of the Hazardous Wastes (Management, Handling & Transboundry Movement) Rules, 2008	<b>Pellet Plant (4 MTPA)</b> <b>Fomat 1.0/CAC/ UAN No. 0000147985/</b> <b>CR/2301001229 dated 12/01/2023</b>	09-30-2022	30-09-2027

  
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TC-8057



BUREAU  
VERITAS

Test Report No. INCHE24043120509044402

ULR No.: TC805724000019023F

Report Issue Date: 09 May 2024

### TEST REPORT

Report Issued To: Amba River Coke Limited

Dolvi Works - Pellet Plant, Jui Bapuji, Tal: Alibaug, Village: Juibapuji, Pen-Alibaug Road, Raigad - Maharashtra, 402107, India

Discipline :	Chemical	Sample receipt date :	29 Apr 2024
Group :	Pollution and Environment	Date of registration :	29 Apr 2024
BV Sample ID :	1534452	Date of commencing of testing :	29 Apr 2024
Sample Name** :	Coke Oven Plant-1 Waste Water	Date of completion of testing :	07 May 2024
Physical Description :	Slightly turbid liquid		
Sample quantity / Package :	1Ltr		

Sample Information: Sampling Done by Laboratory

Sampling procedure :	BVILCH/QMS/SOP-012	Date of sampling / collection :	26 Apr 2024
Sampling location :	Amba River Coke Limited Dolvi Works - Pellet Plant, Jui Bapuji, Tal: Alibaug, Village: Juibapuji, Pen-Alibaug Road, Raigad - Maharashtra, 402107.	Sampling / Collection done by :	Mr. S. Anitharaj

No.	Test Parameters	Unit	Test Results	Test Method	LOQ
1	Ammonical Nitrogen as N	mg/L	BLQ	APHA 23rd Edn-4500 NH3 B,C	1
2	Phenolic compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/L	BLQ	APHA 23rd Edition 2017 5530 B,C	0.01
3	Cyanide as CN	mg/L	BLQ	APHA 23rd Ed. 4500 CN C,E	0.01
4	pH Value	-	6.45	APHA 23rd Ed. 4500H+B	1
5	Total Dissolved Solids	mg/L	436	APHA 23rd Ed. 2540 C	1
6	Total Suspended Solids	mg/L	6	APHA 23rd Ed. 2540 D	1
7	Oil and Grease	mg/L	BLQ	APHA 23rd Edition 2017 - 5520 O&G B	2
8	Chemical Oxygen Demand	mg/L	52	APHA 23rd Ed. 5220 B	5
9	Bio-Chemical Oxygen Demand - 27°C/3 days	mg/L	3.4	IS 3025 Part 44 : 1993	1

Abbreviations: LOQ: Limit of Quantification, BLQ: Below limit of quantification

\*\* Indicates information supplied by the customer for which the laboratory has no control

Note: SAMPLE TESTED AS RECEIVED

Authorized Signatory

M. Ramesh

Manager

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— End of Report —





Test Report No. INCHE24051400608062512

ULR No. : TC805724000021554F

Report Issue Date: 08 Jun 2024

### TEST REPORT

Report Issued To: Amba River Coke Limited			
Dolvi Works - Pellet Plant, Jui Bapuji, Tal: Alibaug, Village: Juibapuji, Pen-Alibaug Road, Raigad - Maharashtra, 402107, India			
Discipline :	Chemical	Sample receipt date :	23 May 2024
Group :	Pollution and Environment	Date of registration :	23 May 2024
BV Sample ID :	1551516	Date of commencing of testing :	24 May 2024
Sample Name** :	CUP-1 Outlet Water	Date of completion of testing :	28 May 2024
Physical Description :	Slightly turbid liquid		
Sample condition on receipt :	Good		
Sample quantity / Package :	1Ltr X 1No		
Sample Information: Sampling Done by Laboratory			
Sampling procedure :	BVILCH/QMS/SOP-012	Date of sampling / collection :	20 May 2024
Sampling location :	Amba River Coke Limited Dolvi Works - Pellet Plant, Jui Bapuji, Tal: Alibaug, Village: Juibapuji, Pen-Alibaug Road, Raigad - Maharashtra, 402107.	Sampling / Collection done by :	Mr. S. Anitharaj

No.	Test Parameters	Unit	Test Results	Test Method	LOQ
1	pH Value	-	6.33	APHA 23rd Ed. 4500H+B	1
2	Oil and Grease	mg/L	BLQ	APHA 23rd Edition 2017 - 5520 O&G B	2
3	Bio-Chemical Oxygen Demand - 27°C/3 days	mg/L	3.8	IS 3025 Part 44 : 1993	1
4	Total Dissolved Solids	mg/L	398	APHA 23rd Ed. 2540 C	1
5	Ammonical Nitrogen as N	mg/L	1.1	APHA 23rd Edn-4500 NH3 B,C	1
6	Total Suspended Solids	mg/L	8	APHA 23rd Ed. 2540 D	1
7	Chemical Oxygen Demand	mg/L	40	APHA 23rd Edition 2017 - 5220 C	5
8	Cyanide as CN	mg/L	BLQ	APHA 23rd Ed. 4500 CN C,E	0.01
9	Phenolic compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/L	BLQ	APHA 23rd Edition 2017 5530 B,C	0.01

Abbreviations: LOQ: Limit of Quantification, BLQ: Below limit of quantification

\*\* Indicates information supplied by the customer for which the laboratory has no control

Note: SAMPLE TESTED AS RECEIVED

Authorized Signatory

M. Ramesh

Manager

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— End of Report —







Test Report No. INCHE24067400704064835

ULR No. : TC805724000028251F

Report Issue Date: 04 Jul 2024

### TEST REPORT

<b>Report Issued To:</b> Amba River Coke Limited			
Dolvi Works - Pellet Plant, Jui Bapuji, Tal: Alibaug, Village: Juibapuji, Pen-Alibaug Road, Raigad - Maharashtra, 402107, India			
<b>Discipline :</b>	Chemical	<b>Sample receipt date :</b>	28 Jun 2024
<b>Group :</b>	Pollution and Environment	<b>Date of registration :</b>	28 Jun 2024
<b>BV Sample ID :</b>	1611831	<b>Date of commencing of testing :</b>	29 Jun 2024
<b>Sample Name** :</b>	COP-1 Outlet Water	<b>Date of completion of testing :</b>	03 Jun 2024
<b>Physical Description :</b>	Slightly turbid liquid		
<b>Sample quantity / Package :</b>	1Ltr		
<b>Sample Information:</b> Sampling Done by Laboratory			
<b>Sampling procedure :</b>	BVILCH/QMS/SOP-012	<b>Date of sampling / collection :</b>	25 Jun 2024
<b>Sampling location :</b>	Amba River Coke Limited Dolvi Works - Pellet Plant, Jui Bapuji, Tal: Alibaug, Village: Juibapuji, Pen-Alibaug Road, Raigad - Maharashtra, 402107.	<b>Sampling / Collection done by :</b>	S. Anitharaj

No.	Test Parameters	Unit	Test Results	Test Method	LOQ
1	pH Value	-	8.59	APHA 23rd Ed. 4500H+B	1
2	Oil and Grease	mg/L	BLQ	APHA 23rd Edition 2017 - 5520 O&G B	2
3	Bio-Chemical Oxygen Demand - 27°C/3 days	mg/L	3.0	IS 3025 Part 44 : 1993	1
4	Ammonical Nitrogen as N	mg/L	BLQ	APHA 23rd Edn-4500 NH3 B,C	1
5	Total Suspended Solids	mg/L	6	APHA 23rd Ed. 2540 D	1
6	Chemical Oxygen Demand	mg/L	27	APHA 23rd Ed. 5220 B	5
7	Total Dissolved Solids	mg/L	1084	APHA 23rd Ed. 2540 C	1
8	Cyanide as CN	mg/L	BLQ	APHA 23rd Ed. 4500 CN C,E	0.01
9	Phenolic compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/L	BLQ	APHA 23rd Edition 2017 5530 B,C	0.01

Abbreviations: LOQ: Limit of Quantification, BLQ: Below limit of quantification

\*\* Indicates information supplied by the customer for which the laboratory has no control

Note: SAMPLE TESTED AS RECEIVED

Authorized Signatory

M. Ramesh

Manager

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— End of Report —





Test Report No. INCHE24079370802095339

ULR No. : TC805724000033802F

Report Issue Date: 02 Aug 2024

## TEST REPORT

Report Issued To: Amba River Coke Limited

Dolvi Works - Pellet Plant, Jui Bapuji, Tal: Alibaug, Village: Juibapuji, Pen-Alibaug Road, Raigad - Maharashtra, 402107, India

Discipline :	Chemical	Sample receipt date :	29 Jul 2024
Group :	Pollution and Environment	Date of registration :	29 Jul 2024
BV Sample ID :	1636688	Date of commencing of testing :	30 Jul 2024
Sample Name** :	Coke Oven - 1 Outlet Water	Date of completion of testing :	02 Aug 2024
Physical Description :	Clear liquid		
Sample condition on receipt :	Good		
Sample quantity / Package :	1Ltr X 1No		

Sample Information: Sampling Done by Laboratory

Sampling procedure :	BVILCH/QMS/SOP-012	Date of sampling / collection :	26 Jul 2024
Sampling location :	Amba River Coke Limited Dolvi Works - Pellet Plant, Jui Bapuji, Tal: Alibaug, Village: Juibapuji, Pen-Alibaug Road, Raigad - Maharashtra, 402107.	Sampling / Collection done by :	Mr. S.Anithraj

No.	Test Parameters	Unit	Test Results	Test Method	LOQ
1	Ammonical Nitrogen as N	mg/L	BLQ	APHA 23rd Edn-4500 NH3 B,C	1
2	Phenolic compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/L	BLQ	APHA 23rd Edition 2017 5530 B,C	0.01
3	Cyanide as CN	mg/L	BLQ	APHA 23rd Ed. 4500 CN C,E	0.01
4	pH Value	-	7.39	APHA 23rd Ed. 4500H+B	1
5	Total Dissolved Solids	mg/L	690	APHA 23rd Ed. 2540 C	1
6	Total Suspended Solids	mg/L	4	APHA 23rd Ed. 2540 D	1
7	Oil and Grease	mg/L	BLQ	APHA 23rd Edition 2017 - 5520 O&G B	2
8	Bio-Chemical Oxygen Demand - 27°C/3 days	mg/L	3.6	IS 3025 Part 44 : 1993	1
9	Chemical Oxygen Demand	mg/L	42	APHA 23rd Edition 2017 - 5220 C	5

Abbreviations: LOQ: Limit of Quantification, BLQ: Below limit of quantification

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— End of Report —



SI. No.: 133771

Food\_Report\_INCHE2407937\_(INCHE2407937-001)\_v1.PDF



Test Report No. INCHE24090190903091302

ULR No. : TC805724000037988F

Report Issue Date: 03 Sep 2024

### TEST REPORT

Report Issued To: Amba River Coke Limited

Dolvi Works - Pellet Plant, Jui Bapuji, Tal: Alibaug, Village: Juibapuji, Pen-Alibaug Road, Raigad - Maharashtra, 402107, India

Discipline :	Chemical	Sample receipt date :	28 Aug 2024
Group :	Pollution and Environment	Date of registration :	28 Aug 2024
BV Sample ID :	1683417	Date of commencing of testing :	28 Aug 2024
Sample Name** :	Coke Oven - 1 Outlet Water	Date of completion of testing :	03 Sep 2024
Physical Description :	Clear liquid		
Sample condition on receipt :	Good		
Sample quantity / Package :	1Ltr X 1No		

Sample Information: Sampling Done by Laboratory

Sampling procedure :	BV/SAR/F/SOP/001	Date of sampling / collection :	24 Aug 2024
Sampling location :	Amba River Coke Limited Dolvi Works - Pellet Plant, Jui Bapuji, Tal: Alibaug, Village: Juibapuji, Pen-Alibaug Road, Raigad - Maharashtra, 402107.	Sampling / Collection done by :	Mr. S.Anitharaj

No.	Test Parameters	Unit	Test Results	Test Method	LOQ
1	Ammonical Nitrogen as N	mg/L	BLQ	APHA 23rd Edn-4500 NH3 B,C	1
2	Phenolic compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/L	BLQ	APHA 23rd Edition 2017 5530 B,C	0.01
3	Cyanide as CN	mg/L	BLQ	APHA 23rd Ed. 4500 CN C,E	0.01
4	pH Value	-	7.45	APHA 23rd Ed. 4500H+B	1
5	Total Dissolved Solids	mg/L	698	APHA 23rd Ed. 2540 C	1
6	Total Suspended Solids	mg/L	4	APHA 23rd Ed. 2540 D	1
7	Oil and Grease	mg/L	BLQ	APHA 23rd Edition 2017 - 5520 O&G B	2
8	Bio-Chemical Oxygen Demand - 27°C/3 days	mg/L	4.0	IS 3025 Part 44 : 1993	1
9	Chemical Oxygen Demand	mg/L	38	APHA 23rd Edition 2017 - 5220 C	5

Abbreviations: LOQ: Limit of Quantification, BLQ: Below limit of quantification

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Authorized Signatory

M.Ramesh

Manager

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— End of Report —







Test Report No. INCHE24102051003091745

ULR No. : TC805724000044843F

Report Issue Date: 03 Oct 2024

### TEST REPORT

Report Issued To: Amba River Coke Limited

Dolvi Works - Pellet Plant, Jui Bapuji, Tal: Alibaug, Village: Juibapuji, Pen-Alibaug Road, Raigad - Maharashtra, 402107, India

Discipline :	Chemical	Sample receipt date :	25 Sep 2024
Group :	Pollution and Environment	Date of registration :	25 Sep 2024
BV Sample ID :	1714154	Date of commencing of testing :	26 Sep 2024
Sample Name** :	Coke Oven - 1 Outlet Water	Date of completion of testing :	30 Sep 2024
Physical Description :	Slightly turbid liquid		
Sample quantity / Package :	1Ltr X 1No		

Sample Information: Sampling Done by Laboratory

Sampling procedure :	BV/SAR/F/SOP/001	Date of sampling / collection :	21 Sep 2024
Sampling location :	Amba River Coke Limited Dolvi Works - Pellet Plant, Jui Bapuji, Tal: Alibaug, Village: Juibapuji, Pen-Alibaug Road, Raigad - Maharashtra, 402107.	Sampling / Collection done by :	Mr. Anithraj

No.	Test Parameters	Unit	Test Results	Test Method	LOQ
1	Ammonical Nitrogen as N	mg/L	BLQ	APHA 23rd Edn-4500 NH3 B,C	1
2	Phenolic compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/L	BLQ	APHA 23rd Edition 2017 5530 B,C	0.01
3	Cyanide as CN	mg/L	BLQ	APHA 23rd Ed. 4500 CN C,E	0.01
4	pH Value	-	7.74	APHA 23rd Ed. 4500H+B	1
5	Total Dissolved Solids	mg/L	1424	APHA 23rd Ed. 2540 C	1
6	Total Suspended Solids	mg/L	6	APHA 23rd Ed. 2540 D	1
7	Oil and Grease	mg/L	BLQ	APHA 23rd Edition 2017 - 5520 O&G B	2
8	Bio-Chemical Oxygen Demand - 27°C/3 days	mg/L	6.8	IS 3025 Part 44 : 1993	1
9	Chemical Oxygen Demand	mg/L	54	APHA 23rd Edition 2017 - 5220 C	5

Abbreviations: LOQ: Limit of Quantification, BLQ: Below limit of quantification

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Note: SAMPLE TESTED AS RECEIVED

Authorized Signatory

M. Ramesh

Manager

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— End of Report —



## **Annexure 2**

### **Environment Statement (Form 5) - Pellet Plant 1 at Amba River Coke Ltd (2023-24)**





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2024

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000069992

### Submitted Date

16-09-2024

## PART A

### Company Information

#### Company Name

AMBA RIVER COKE LIMITED(PRLLET PLANT-1))

#### Application UAN number

0000147985

#### Address

GEETA PURAM DOLVI

#### Plot no

1,8,9,10,11,12,13,46,47,49

#### Taluka

ALIBAG

#### Village

JUI BAPAJI DOLVI

#### Capital Investment (In lakhs)

119012

#### Scale

LARGE

#### City

PEN

#### Pincode

402107

#### Person Name

DR.ANAND RAI

#### Designation

VICE PRESIDENT (HOD-  
ENVIRONMENT)

#### Telephone Number

9607971413

#### Fax Number

0000000

#### Email

anand.raai@jsw.in

#### Region

SRO-Raigad II

#### Industry Category

Red

#### Industry Type

R19 Coke making , liquefaction, coal  
tar distillation or fuel gas making

#### Last Environmental statement submitted online

yes

#### Consent Number

Format 1.0 /CAC/UAN  
NO.0000147985/CR/2301001229

#### Consent Issue Date

2023-01-12

#### Consent Valid Upto

2027-09-30

#### Establishment Year

2014

#### Date of last environment statement submitted

Sep 8 2023 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

PELLET

#### Consent Quantity

4000000

#### Actual Quantity

3655792.116

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

Ton/Y

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
	0.00	0.00
Cooling	3360.00	1405.00
Domestic	36.00	34.00
All others	0.00	0.00
Total	3396.00	1439.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
TRADE EFFLUENT	0	0	CMD
DOMESTIC EFFLUENT	15	14	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
PELLET (M3/UNIT OF PRODUCT)	0148	0.120	Ton/Y

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Iron ore fines -bacheli	0.55	0.52	Ton/Ton
Iron ore fines -MEL FINES	0.033	0	Ton/Ton
Iron ore fines -Odissa fines high grade	0.042	0.067	Ton/Ton
Iron ore fines -Jabalpur fines	0.014	0.040	Ton/Ton
Iron ore fines -oxide fines	0.0620	0.041	Ton/Ton
Pellet feeds	0.128	0.217	Ton/Ton
Bentonite	0.0062	0.0096	Ton/Ton
limestone fines+ Dolomite fines	0.017	0.013	Ton/Ton

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Coke Oven Gas(KM3)	0	564350000000000000	M3/Anum
BF Gas(NM3)	0	212064134	NM3/Annum
Coke Oven Breeze	0	43780.01	Ton/Y

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
ZLD	0	0	0	0	0

#### [B] Air (Stack)

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day)</b>	<b>Concentration of Pollutants discharged(Mg/NM3)</b>	<b>Percentage of variation from prescribed standards with reasons</b>		
	<b>Quantity</b>	<b>Concentration</b>	<b>%variation</b>	<b>Standard</b>	<b>Reason</b>
Dedusting 1 & 2	8.4	18.1	No deviation	50	NA
Dedusting 3	10.8	20.4	No deviation	50	NA
Main ESP	447.0	20.6	No deviation	50	NA
Dedusting 7	14.0	22.4	No deviation	50	NA
Dedusting 8	24.4	21.3	No deviation	50	NA
Dedusting 9	6.3	16.5	No deviation	50	NA
Discharge ESP	50.4	22.1	No deviation	50	NA

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	10200	6600	Ltr/A
5.2 Wastes or residues containing oil	2100	2095	Kg/Annum

#### 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NA	0	0	Ton/Y

#### 2) From Pollution Control Facilities

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
DUST (ESP & Bag Filter)	35573	37524	Ton/Y

#### 3) Quantity Recycled or Re-utilized within the unit

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Other Hazardous Waste	35573	37524	Ton/Y

## Part-F

Please specify the characteristics(in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

#### 1) Hazardous Waste

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	6600	Ltr/A	NA
5.2 Wastes or residues containing oil	2095	Kg/Annum	NA

#### 2) Solid Waste

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
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Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
NA	0	0	0	0	119012	0

Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.  
[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
NA	NA	0

[B] Investment Proposed for next Year		
Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
NA	NA	0

Part-I

Any other particulars for improving the quality of the environment.

Particulars

The company is aware of surrounding Environment. JSW Steel Limited has planted a large number of trees on the plant premises as per the guidelines given by MPCB. We are maintaining the full-fledged Nursery managed by a qualified Horticulture Officers to develop plants for our in-house requirement. Till date about 215925 Nos. big trees and 8565972 Nos. small trees including innumerable flower bushes, ornamental trees etc. have been planted.

Name & Designation

DR.ANAND RAI (Vice President) -HOD ENVIRONMENT DEPT.

UAN No:

MPCB-ENVIRONMENT\_STATEMENT-0000069992

Submitted On:

16-09-2024