



A wholly owned subsidiary of JSW Steel Ltd.

Amba River Coke Limited

Dolvi Works: Geetapuram, Taluka Pen,
Dist Raigad (Maharashtra),
Dolvi - 402 107

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BY COURIER

November 28, 2022

ARCL/COP 1/ENV/MoEF&CC/2022

To

Regional Officer
Ministry of Environment, Forest and Climate Change
Regional Office (WCZ), Ground Floor
East Wing, New Secretariat Building,
Civil Line, Nagpur-440001

Sub: Submission of 6 monthly EC Compliance report for 1.0 MTPA Coke Oven Plant of M/s. Amba River Coke Ltd. at Geetapuram, Village Dolvi, Tehsil Pen, District Raigad in Maharashtra.

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

Dear Sir,

With reference to above, please find enclosed herewith the 6 monthly EC Compliance report of 1.0 MTPA Coke Oven Plant of M/s. Amba River Coke Ltd. at Geetapuram, Village Dolvi, Tehsil Pen, District Raigad in Maharashtra.

This is for your kind information & record please.

Thanking you,

Yours faithfully,
For Amba River Coke Limited

Dr. Anand Rai
Vice President (HOD- Environment)

CC:

- 1) The Director, MoEF&CC, Indira Paryavaran Bhawan, Jor Bagh, Lodi Road, New Delhi-110003.
- 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

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AMBA RIVER COKE LTD
Geetapuram, Dolvi, Taluka – Pen, District – Raigad, Maharashtra

Compliance status of Specific and General Conditions of Environmental Clearance for Coke Oven Plant (1.0 MTPA) at Geetapuram, Village Dolvi, District Raigad, Maharashtra MoEF Letter - F No J-11011/286/2007-IA-II(I) dated 12/01/2009.

A. Specific Conditions:

Sr. No.	Specific Conditions	Status as on October 2022
i	Proper and full utilization of coke oven gases in power plant using heat recovery steam generator (WHRB) shall be ensure and no flue gas shall be discharged into the air. Tar, NH ₃ shall be cleaned in the process and H ₂ S recovery from the coke oven shall be ensured. Coal Tar, elemental sulphur and crude Benzol shall be recovered from coke oven gas. Scrubbers shall be provided to scrub ammonia Benzol and H ₂ S. Wet quenching will be adopted to minimize escape of particulate matter.	<p>The Coke Oven Gas is presently fully utilized as a fuel in Coke Oven, Sponge Iron Plant, Pellet Plant, CSP - Tunnel Furnace, Sinter Plants, Lime Calcination Plant (LCP) & 55 MW Power Plant.</p> <p>Following recovery & control systems are installed;</p> <ul style="list-style-type: none"> • Wet Quenching of coke has been adopted. Presently Coke Dry Quenching system has been installed. • Boiler for steam generation (Waste Heat Recovery Boiler (WHRB) • Waste gas recovery & Gas Holding Tank • Coal Tar & Tar Recovery system • Scrubbing System for Ammonia & H₂S • Desulphurization system for sulphur recovery • Crude Benzol is not recovered.
ii	As proposed, ammonia in coke oven gas shall be scrubbed and destructed in the process, crude tar; crude Benzol and element sulphur shall be recovered. Crude tar shall not be processed. Sulphur recovery unit shall be install to recover Sulphur.	<p>Following systems are provided;</p> <ul style="list-style-type: none"> • Scrubbing System for Ammonia & H₂S & destructed in Process • Crude Tar Recovery system • Desulphurization system for sulphur recovery. • Crude Benzol is not recovered.
iii	The prescribed emission standards for coke oven plants e.g. 10ng/m ³ as notified vide notification no. GSR 46 (E) dated 3 rd February, 2006 and subsequently amended shall be complied with.	<p>As notified vide notification no. GSR 46 (E) dated 3rd February, 2006, this norm is for Benzo-Alpha pyrene (BaP) under work zone air quality.</p> <p>The work zone ambient air emission is well within the norms.</p>
iv	Continuous stack monitoring facilities for all the major stack and adequate air pollution	<ul style="list-style-type: none"> • The Coke Oven has one Main Stack of 145 mtr. height connected to 2 nos. of

	Guidelines / Code of practice issued by the CPCB in this regards shall be followed.	<p>and coal and coke handling area.</p> <ul style="list-style-type: none"> • The work zone air quality parameters are within the prescribed norms. Records are being maintained and the report has been submitted. • Guidelines / Code of practice issued by the CPCB in this regard are being followed time to time.
vii	Total requirement of the water from the reservoir shall not exceed 6000 m ³ /day. Wet quenching system shall be adopted for cooling of hot coke coming out of the coke oven. Phenolic wastewater shall be treated in phenolic effluent treatment plant. Tar/Oils shall be separated followed by biological treatment of phenolic wastewater in BOD plant shall be ensured and use of quenching of hot coke to control emissions, dust suppression and green belt development. No wastewater shall be discharged outside the premises. ;Zero' discharge shall be adopted. Domestic wastewater shall be treated in septic tank followed by soak pit and uses for green belt development.	<ul style="list-style-type: none"> • The total water requirement for the Coke Oven Plant is within the limits prescribed, present water consumption is 5400 M³/day • Wet Quenching System Provided and presently Coke Dry Quenching system installed. • Biological Oxidization and de-phenoloization (BOD) plant has been provided to treat the waste water from the By product & coke oven plant. • BOD plant consists of (i) Pre-treatment: including oil separation pool and air floatation pool, (ii) The second step is biologic treatment stage: including anaerobic pool, anoxic pool, aerobic pool and contact oxidization pool (iii)The third stage is of tertiary treatment- final sedimentation and filter • Zero liquid discharge is being maintained in the plant. • Septic tanks followed by soak pits have been provided for treatment of domestic waste water, overflow of soak pits are connected to sewage treatment of BOD plant. • Treated water from the BOD plant is utilized for Coke Quenching process.
viii	Prior permission for the drawl of 6000 m ³ /day water shall be obtained from the concerned department.	Permission obtained from irrigation department withdrawal of Raw water dated 21/06/2013.
ix	Cyanide as CN shall be controlled within 0.2 mg/liter and Ammonical Nitrogen within 50 mg/liter as per the standard notified under the E(P) Act.	BOD plant treated water is entirely used for coke quenching and there is no discharge to outside. Free Cyanide as CN and Ammonical Nitrogen are within the prescribed standards.
x	Coal and coke fines shall be recycled and	<ul style="list-style-type: none"> • Coal & Coke fines is recycled & reused in

	Forest Department shall be prepared and implemented.	
xiii	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the coke oven plants shall be implemented.	<ul style="list-style-type: none"> • As per CREP guidelines for Coke Oven plant, implementations done. • The Coal tar generated from the coke oven plant is reused for coke processing. • Sludge generated from the Waste water treatment plant (BOD) plant is reused for coke processing. • Coke Oven Gas generated from the plant is collected in the Gas Holder and used as fuel for other plants. • Installed ground de-dusting systems with bag filters in charging side and pushing side of the Coke oven battery to control the secondary emissions
xiv	The company shall provided 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.	Project proponent has complied for housing for construction labours during construction work of the Coke oven plant. Plant construction work is already completed and the temporary structures have been already removed
xv	All the environment management measures given in the EIA/EMP shall be implemented and complied with.	Environment Management measures given in the EIA/EMP has been already implemented and complied by the project proponent

B. General Conditions:

Sr. No.	General Conditions	Status
i	The project authorities must strictly adhere to the stipulation made by the Maharashtra Pollution Control Board (MPCB) and the State Government.	As per MPCB guidelines under Air, Water and HW (M & H) Rules will be followed time to time and complied the Consent to operate conditions.
ii	No further expansion or modification in the plant should be carried out without prier approval of the Ministry of Environment and Forests.	Noted and shall be complied. No Modifications done in Coke oven plant
iii	At least four ambient air monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of	<ul style="list-style-type: none"> • Coke oven plant is located in existing Integrated Steel Plant complex. • Hence, already 5 Nos. Online AAQM locations installed in consultation with

viii	Occupational Health Surveillances of the workers shall be done on a regular basis and records maintained as per the Factories Act.	As per the Factories Act, regular health checkups done for workers and employees & records are maintained.
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, educational programmes, drinking water supply and health care etc.	<ul style="list-style-type: none"> • Environmental protection measures and safeguards recommended in the EIA/EMP report is being implemented and complied. <p>Amount spent on CSR Activities: For 2022-23 (April to October 2022): Rs 9.72 Crores</p> <p>The above amount has been spent on Social Development- (Education & Training), Skill Development, Water and Sanitization, Agriculture, Rural Development, Health, Solid Wastes and Community Development.</p> <p>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.</p> <ul style="list-style-type: none"> • Drinking water supply for surrounding villagers. • Various community development programs, Educational programmes and Skill Development, • Health care – Regular Medical Camps for villagers for health check up.
x	As proposed Rs. 90.00 Crores shall be earmarked towards Environmental Pollution control measures shall be judiciously utilized to implement the conditions stipulated by the ministry of Environment and Forest as well as the State Government. The funds so provided shall not be submitted to them regularly.	<ul style="list-style-type: none"> • As mentioned separate fund has been earmarked for pollution control measures • Rs. 66.81 crores have been utilized for pollution control measures. • Revenue Expenditure on Environment for the year 2021-22 regarding Operation and Maintenance of APCs for Coke Oven Plant 1 is approximately Rs 4.97 Crores
Xi	The regional Office of this Ministry at Bhopal / CPCB / MPCB shall monitor the stipulated conditions. A six monthly compliances report and the monitored	The project proponent has submitted Six monthly Environmental Clearance compliance reports to the Regional office, MoEFCC, MPCB and CPCB on regular basis.