



Ardent steel limited
CIN- U27310CT2007PLC007671

Ref. No. 479/ASL /MoEF & CC / 2022-23

Date: 1st January, 2023

To

The Director,
Ministry of Environment & Forest, Govt. of India
Eastern Regional Office,
A/3, ChandrasekharPur,
Bhubaneswar-751023

Sub: Submission of Half Yearly Environmental Clearance Compliance Report for Enhancement in Production capacity of Existing Iron Ore Pellet Plant from 6,90,000 TPA to 8,50,000 TPA through Process Optimization of M/s. Ardent Steel Limited in village - Phuljhar, Block -Bansapal, Dist. - Keonjhar, Odisha

Ref: EC Letter No. J-11011/112/2013-IA. II(I), date 13th February, 2020

CTO Reference No. 16141/IND-CON-6363, dtd-22nd October, 2021 of OSPCB

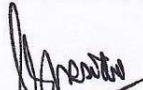
Dear Sir,

As per the conditions given in the Environmental Clearance accorded to our Existing Iron Ore Pellet Plant for Enhancement in Production capacity through Process Optimization in Phuljhar village of Keonjhar district on 13th February, 2020, we are herewith submitting the Half Yearly Environmental Clearance Compliance Report for the period of March' 2022-September'2022.

Thanking you.

Yours Faithfully

For Ardent Steel Limited


Dr. Subhasish Das
(Director)

Encl: As above.



COMPLIANCE REPORT FOR

THE PERIOD APRIL'2022 – SEPTEMBER'2022

ENVIRONMENTAL CLEARANCE

EC Letter No. J-11011/112/2013-IA. II(I), date 13th February, 2020



ARDENT STEEL LIMITED

Vill: Phuljhar, Block: Banspal, Dist: Keonjhar, Odisha.

COMPLIANCE FOR ENVIRONMENTAL CLEARANCE OF THE IRON ORE PELLETISATION PLANT OF
M/S ARDENT STEEL LIMITED

Vill: Phuljhar, Block: Banspal, Dist: Keonjhar, Odisha – 758085

A. SPECIFIC CONDITION

| SL NO | CONDITION | COMPLIANCE |
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| i. | Ground water extraction shall be limited to 500 KLD at present. No additional ground water extraction is permitted. | Ground water extraction is within 500 KLD and will not exceeded the stipulated condition. |
| ii. | No slime pond is permitted. | Agreed. There will be no slim pond within the plant premises. |
| iii. | Green belt shall be developed covering 33% of the area in a time frame of two years. | Out of total plant area of 36.781ha, around 12.13 ha (32.98% of total area) of land has green belt cover. During October 2020 to March 2021, 3200 saplings have been distributed by PAs to villagers of Andharikhaman, Phuljhar, Chhatna, Dhaladihi, Kasia etc. to plant in their unused land. These saplings of Amla, Neem, Mahaneem, Guava, Bel, Mango, Jamun, Chhatina, Kendu, etc are procured form Forest Dept. nursery at Anjar, Belda, Telkoi & Jhumpura. Mango-50,Amla-40,Neem-30,Mahaneem-20, Satiyana-22, Siek-34, Kendi-20, Jamun-20,Sisu-22,Chakhunda-20,Guava-22, Total=300 |
| iv. | Provision for industrial vacuum cleaner to control the fugitive emissions shall be made. | Truck Mounted unit with dual vacuum cleaner is provided. The suction system comprising of one Centre brush, two side brushes and two suction heads; one operating at a time having a container volume of 6.5 cum. |
| V | Particulate emissions from the stacks shall be less than 30 mg/Nm ³ with bag house as APCD. Emission from ESP shall be less than 50 mg/Nm ³ | We are getting particulate emission less than 50 mg/Nm ³ after ESP as APCD. We are regularly monitoring the particulate emission from the stack and submitting monitoring report to OSPCB as per CTO Conditions also. –We have taken the following action to mention particulate emission norms. i) New PTFE dust collecting bags has been replaced in each bag house. |

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| | | ii) New ID Fan to increase suction volume iii) New heat-exchanger (air cooler) to increase cooling surface area. Following the previous EC, we had taken all necessary steps to keep the emission from stack to less than 50 mg/Nm ³ . |
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B. GENERAL CONDITIONS

| SL NO | CONDITION | COMPLIANCE |
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| I | STATUTORY COMPLIANCE | |
| i | The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee. | Consent to Establish and Consent to operate has been obtained from OSPCB. The photo copy of Consent to Establish is attached as Annexure - 1 & Annexure-2 . |
| ii | The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project. | We have obtained the necessary permission from the Central Ground Water Authority 0.2 cusec water from ground water source. The photo copy of this agreement is given as Annexure – 3 . |
| iii | The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time. | The HW waste authorization has been obtained from OSPCB. This photo copy of the certificate is attached as Annexure – 4 . |
| II | AIR QUALITY MONITORING AND PRESERVATION: | |

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| i | The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31 st March'2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30 th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7 th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. | Online stack monitoring system has been installed. Adequate and appropriate air pollution control devices such as ESP, Bag house, Bag filters etc. has been provided to maintain the pollution level within the stipulated norms/standards. |
| ii | The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986 | We are monitoring the fugitive emissions in monthly basis which are well within the standard norms. Monitoring report of the same has been submitted to OSPCB as per CTO Conditions. Last sixmonth monitoring report is attached as Annexure – 5 . |
| iii | The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common / criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5 in reference to PM emission, and SO2 and NOX in reference to SO2 and NOX emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions. | Two numbers of CAAQMS stations has been installed and further two numbers of CAAQMS stations shall be installed in this financial year. However, we are monitoring Ambient Air Quality from four different locations by portable ambient air quality monitoring equipment and submitting the data to OSPCB in regular basis. The last six month monitoring report is attached in Annexure – 6 . |
| iv | The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality fugitive emissions to Regional Office of MoEF & CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report. | Monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality fugitive emissions has been submitted to OSPCB and the same reports are attached in this report as annexures. |
| v | Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust | Bag filters are installed at 6 locations in the plant to control fugitive emission. Apart |

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| | from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards. | from this, ESP is connected with Travelling Grate. 60 numbers of water sprinklers have been installed within the plant premises. |
| vi | The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags. | At present we are detecting the leakage by maintaining Differential Pressure. However, we are in the process to establish automatic system for the same. |
| vii | Sufficient number of mobile or stationary vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly. | 60 nos. of Water Sprinklers have been installed along with road as well as loading and unloading points, all roads. Mobile water tanker has been engaged to sprinkle water on road. Truck mounted sweeper machine is engaged to clean dust. Truck Mounted unit with dual vacuum cleaner is provided. the suction system comprising of one center brush, two side brushes and two suction heads; one operating at a time having a container volume of 6.5 cum. |
| viii | Recycle and reuse iron ore fines, coal fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration. | All fines such as iron ore fines, coal fines, lime fines are being reused in the process after collection. |
| ix | Use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin. | Leak proof trucks/dumpers has been provided to carry coal and other raw materials and cover them with tarpaulin. |
| x | Provide covered sheds for raw materials like scarp and sponge iron, lump ore, coke, coal etc | Cover shed has been provided for raw material like Coal, Dolomite and Limestone etc. except iron ore fines. |

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| xi | Provide primary and secondary fume extraction system at all melting furnaces | Not Applicable. we don't have any melting furnaces. |
| x | Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars. | Complied. |
| III | WATER QUALITY MONITORING AND PRESERVATION: | |
| i | The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (Integrated iron & steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. | This condition is not applicable to us. we are reusing enter water in our process itself. |
| ii | The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories. | Complied. Ground water monitoring data of last six-month period is attached in Annexure -7 . |
| iii | The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF & CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report. | There is no effluent discharge to outside. It is a zero liquid discharge unit. Hence, no continuous effluent quality monitoring system required. |
| iv | Adhere to 'Zero Liquid Discharge | We are reusing enter water in our process itself after series of settling tank and treatment system. |
| v | Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards. | A full fledge Sewage Treatment Plant has been provided for treatment of domestic waste water. |

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| vi | Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off. | Garland drains and collection pits has been provided to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off. |
| vii | The project proponent shall practice rainwater harvesting to maximum possible extent. | Rain Water Harvesting in our plant is practiced |
| D | NOISE MONITORING AND PREVENTION: | |
| i | Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report. | The noise level monitoring result during this six-month period is within the standards stipulated by CPCB. Attached in Annexure – 8 . |
| ii | The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time. | Accepted. The monitoring result of noise shown that the levels are under 75 dB(A) during day time and 70 dB(A) during night time. |

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| E | ENERGY CONSERVATION MEASURES: | |
| i | Use hot charging of slabs and billets/blooms as far as possible. | Not applicable. |
| ii | Waste heat recovery systems shall be provided in all units where the flue gas or process gas exceeds 300°C. | In our case the flue gas temperature from the pellet plant does not exceed 300°C. Hence no waste heat recovery boiler has been installed. |
| F | WASTE MANAGEMENT: | |
| i | The waste oil, grease and other hazardous waste like acidic sludge from pickling, galvanizing, chrome plating mills etc. shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016. | The waste oil, grease and other hazardous waste is being disposed off as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016 |
| G | GREEN BELT: | |

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| ii | Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant. | <p>Out of total plant area of 36.781ha, around 12.13 ha (32.98% of total area) of land has green belt cover. During October 2020 to March 2021, 3200 saplings have been distributed by PAs to villagers of Andharikhaman, Phuljhar, Chhatna, Dhaladihi, Kasia etc. to plant in their unused land</p> <p>These saplings of Amla, Neem, Mahaneem, Guava, Bel, Mango, Jamun, Chhatina, Kendu, etc are procured from Forest Dept. nursery at Anjar, Belda, Telkoi & Jhumpura.</p> <p>Mango-50,Amla-40,Neem-30,Mahaneem-20, Satiyana-22, Siek-34, Kendi-20, Jamun-20,Sisu-22,Chakhunda-20,Guava-22, Total=300</p> |
| ii | The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation. | Agreed. We are preparing it. |
| H | PUBLIC HEARING AND HUMAN HEALTH ISSUES: | |
| 1 | Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented. | We have already submitted On Site Emergency Plan for the existing plant to the Factories and Boilers Department. |
| 2 | The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act. | We have carried out the heat stress analysis for the workmen. Operators those who are working in such area are provided Personal Protection Equipment (PPE) as per the norms of Factory Act |
| 3 | Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project. | Provision of Housing construction has been made within the site with all necessary infrastructure and facilities. |

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| 4 | Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act. | Agreed. Occupational Health Surveillance of the workers has been conducted in regular basis. Photo copy of health checkup reports are attached as Annexure – 9. |
| I | CORPORATE ENVIRONMENT RESPONSIBILITY (CER): | |
| 1 | The project proponent shall comply with the provisions contained in this Ministry's OM vide F. No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility. | Agreed. We have a details plan/budget for Corporate Environment Responsibility. |
| 2 | The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/ violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF & CC as a part of six-monthly report. | Yes, we have a well laid down environmental policy, which is given in detail in the EIA /EMP report. |
| 3 | A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will report directly to the head of the organization. | Separate Environment Cell has been developed with qualified personnel under the control of senior Executive, who is reporting directly to the head of the organization. |
| 4 | Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be | Agreed. An effective Environment Management Plan (EMP) is developed for the project. Details in the approved EIA /EMP report. |

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| | reported to the Ministry/Regional Office along with the Six-monthly Compliance Report. | |
| 5 | Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out. | We will abide by it. |
| 6 | All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Iron and Steel plants shall be implemented. | Agreed. |
| J | MISCELLANEOUS: | |
| 1 | The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District of State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. | Yes, it has already been intimated to public and also submitted a copy to the State Pollution Control Board, Odisha. The news of obtaining EC was published in two local newspapers. |
| 2 | The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt. | Complied. |
| 3 | The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis. | Complied. The compliance report, monitoring report, CSR Activities are being uploaded on company's website (ardentsteel.com) regularly. |
| 4 | The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company. | Agreed. |

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| 5 | The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at environmental clearance portal. | Complied. The six-monthly EC compliance report is being submitted regularly. |
| 6 | The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company. | The environmental statement for each financial year is submitted every year to SPCB, Odisha. The copy of the environmental statement for the year 2021-22 is attached as Annexure – 10 . |
| 7 | The project proponent 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, commencing the land development work and start of production operation by the project. | The project has been completed before obtaining the EC. Financial Closure: 21 .10.2008 Financial approval: 21.10.2008 Purchase of 1st land : 31.05.2008 Proof for the above already submitted earlier. |
| 8 | The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government. | Yes, we are following the stipulations of SPCB, Odisha strictly. |
| 9 | The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee. | Agreed. In a phase wise manner as per CER we will implement them. |
| 10 | No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF & CC). | Agreed, our future expansion will only be carried out after prior approval of MoEF & CC. |
| 11 | Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under provisions of Environment (Protection) Act, 1986. | Agreed. |
| 12 | The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory. | Agreed. |

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| 13 | The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions. | Agreed. |
| 14 | The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data / information / monitoring reports. | Agreed. All cooperation shall be extended to the officer(s) of the Regional Office during any visit in future. |
| 15 | The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter. | Agreed. |
| 16 | Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010. | There is no appeal against this EC near the National Green Tribunal. |
