



Environment Naharpali &lt;env.naharpali@aionjsw.in&gt;

**Submission of EC Compliance report w.r.t. F.No. J-11011/196/2007 IA II (I); 2007, 2011 & 2017 reg.**

1 message

**Environment Naharpali** <env.naharpali@aionjsw.in>

Sat, May 22, 2021 at 5:27 PM

To: ecompliance-cg@gov.in

Bcc: Sanjay Shrivastava &lt;sanjay.shrivastava@aionjsw.in&gt;

Dear Sir,

This is a reference to the Environmental Clearance granted vide F.No. J 11011/196/2007 IA II (I); Dated: 26.12.2007; 31.03.2011 and 13.04.2017, we are submitting herewith EC Compliance report for the period of October, 2020 to March, 2021 with respect to JSW Ispat Special Products Limited (Formerly Known as Monnet Ispat & Energy Ltd.), Naharpali, Raigarh (C.G.)

This is for your kind perusal and necessary record.

Thanking you.

**With regards,**

Sanjay Shrivastava

JSW ISPAT SPECIAL PRODUCTS LTD.

(Formerly known as Monnet Ispat &amp; Energy Ltd.)

Naharpali, Tehsil-Kharsia,

Raigarh-496661 (Chhattisgarh)

7762-251105;9109174205

**ECR-JSWISPL (Oct,2020 to Mar,2021).pdf**

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# JSW Ispat Special Products Limited

(formerly known as Monnet Ispat & Energy Limited)

Village & P.O.: Naharpali, Tehsil : Kharsia, Raigarh-496 661 (Chhattisgarh)

CIN : LO2710CT1990PLC009826 GST : 22AAACM0501D1ZK

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E-mail : raigarh@aionjsw.in Website : www.aionjsw.in

JSWISPL/EMD/NP/403/2021

Date: 20.05.2021

To,

**The Addl. Principal Chief Conservator of Forests (C)**

Ministry of Env., Forest and Climate Change

Regional Office(WCZ),Ground Floor

East Wing, New Secretariat Building,

Civil Lines,Nagpur-440001

**Subject:** Six Monthly Environment Compliance and Monitoring Report for the period of **October, 2020 to March-2021** of 1.75 MTPA Integrated Steel Plant, located at Village & Post Naharpali, Tehsil-Kharsia, Dist. Raigarh, Chhattisgarh.

**Reference:** 1. Environmental Clearance accorded for 1.75 MTPA Integrated Steel Plant vide letter no.F. No. J-11011/196/2007-IA II(I) dated 26.12.2007;  
2. F. No. J-11011/196/2007-IA II(I) dated 31.03.2011  
3. F. No. J-11011/196/2007-IA II(I) dated 13.04.2017.

Dear Sir,

Please find enclosed herewith Six Monthly Compliance Report along with Environmental Monitoring Reports for the period of October, 2020 to March-2021 with respect to the conditions stipulated in Environmental Clearance accorded vide letter no. J-11011/196/2007-IA II (I) dated 26.12.2007, 31.03.2011 and 13.04.2017 for 1.75 MTPA Integrated Steel Plant, Naharpali, Raigarh, Chhattisgarh. Enclosures as under;

1. **Appendix-A:** Data Sheet, PART-I
2. **Appendix-B:** Compliance Status report along with monitoring Report

This is for your kind perusal and necessary records.

Thanking you.

Yours faithfully,

For, **JSW Ispat Special Products Limited**

(Formerly known as Monnet Ispat & Energy Limited)



**Authorized Signatory**

Encl: as above

Copy to:

1. **Zonal Officer**, Central Pollution Control Board, 3<sup>rd</sup> Floor, Sarkar Bhawan, North TT Nagar, Bhopal (M.P.) – 462003.
2. **Member Secretary**, Chhattisgarh Environment Conservation Board, Paryavas Bhawan, North Block Sector - 19, Atal Nagar Raipur (C.G.)

**Corporate Office :** Art Guild House, A-Wing, 2nd Floor, Unit No.13, Phoenix Mall Compound LBS Marg, Kurla West, Mumbai-400 070  
**Phone :** +91 22 6882 6700, E-mail : isc\_miel@aionjsw.in

**Regd. Office & Work :** Monnet Marg, Mandir Hasaud, Raipur - 492 101 (Chhattisgarh)  
**Phone :** +91 771 2471 334 to 339, **Fax:** +91 771 2471 250, E-mail : monnetraipur@aionjsw.in

**MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS**  
Ministry of Environment & Forests, Regional Office (WCZ), Nagpur

**Monitoring Report**

Part-I

**DATA SHEET**

1	Project type	:	1.75 MTPA Integrated Steel Plant
2	Name of the project	:	<b>JSW Ispat Special Products Limited</b> (Formerly known as Monnet Ispat & Energy Ltd.)
3	Clearance letter(s) / OM no. and date	:	J-11015/196/2007.1A.II(I), 26.12.2007; 31.03.2011 and 13.04.2017
4	Location		
	District(s)	:	Raigarh
	State(s)	:	Chhattisgarh
	Latitude	:	21°58'30.41" N to 21°59'37.87" N
	Longitude	:	83°13'28.25" E to 83°15'11.29" E
5	Address for correspondence		
	a) Address of concerned Project Chief Engineer (with pincode & telephone / telex/ fax numbers)	:	R.K. Patel Factory Manager <b>JSW Ispat Special Products Limited</b> (Formerly known as Monnet Ispat & Energy Ltd.) Village & Post-Naharpali, Tehsil-Kharsia Dist. Raigarh-496661; Ph. 07762-275502
	b) Address of Executive Project Engineer / Manager (with pin code / fax numbers.	:	Sanjay Shrivastava Head-Environment <b>JSW Ispat Special Products Limited</b> (Formerly known as Monnet Ispat & Energy Ltd.) Village & Post-Naharpali, Tehsil-Kharsia Dist. Raigarh-496661; Ph. 07762-251105 Email: env.naharpali@aionjsw.in
6	Salient features		
	a) Of the project	:	Please refer <b>Annexure- A</b>
	b) of the environmental management plans	:	Please refer <b>Annexure- B</b>
7	Break-up of the project area.		
	a) Submergence area (forest & non-forest)	:	Nil
	b) Others	:	227.84 Hectare
8	Break-up of the project Affected population with enumeration of those losing houses / dwelling units only agricultural land only, both dwelling units & agricultural land & landless laborers / artisan.		
	a) SC, ST / Adivasi's	:	Not Applicable
	b) Others (Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures if a survey is carried out give details & year of survey)	:	227.84 Hectares
9	Financial details:	:	2025 Crores (as on 2007)

	Project cost as originally planned and subsequent revised estimates and the year of price reference.		
	a) Allocation made for environmental management plans with item wise and year wise break-up.	:	
	b) Benefit cost ratio / internal rate of return and the year of assessment.	:	
	c) Whether (c) includes the cost of environmental management as shown in the above.	:	Yes
	d) Actual expenditure incurred on the project so far.	:	6917.20 Crore
	Actual expenditure incurred on the environmental management plans so far.	:	103 Crore
10	Forest land requirement.		
	a) The status of approval for diversion of forest land for non-forestry use	:	Not Applicable
	b) The status of clearing felling	:	Not Applicable
	c) The status of compensatory afforestation, if any	:	Not Applicable
	d) Comments on the viability & sustainability of compensatory afforestation program in the light of actual field experience so far.	:	Not Applicable
11	The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information.	:	Not Applicable
12	Status of construction		
	a) Date of commencement (Actual and /or planned)	:	2008
	b) Date of completion (Actual and / or planned).	:	Not Applicable as project is operational
13.	Reasons for the delay if the project is yet to start.	:	Not Applicable
14	Dates of site visits		
	a) The dates on which the project was monitored by the Regional Office on previous occasions, if any.	:	23.08.2019
	b) Date of site visit for this monitoring report	:	23.08.2019
15	Details of correspondence with project authorities for obtaining action plans / information on status of compliance to safeguards other than the routine letters for logistic support for site visits).	:	11.07.2019

## ANNEXURE- {A}

### SALIENT FEATURES THE PROJECT

**JSW Ispat Special Products Limited** (Formerly known as Monnet Ispat & Energy Ltd.) is located at village-Naharpali, 25 Km away from district headquarter Raigarh (Chhattisgarh). This was taken over by Aion capitals and JSW Steel Ltd., in September, 2020 from Monnet Ispat and Energy Limited.

#### **Salient features;**

- ISO 9001:2015 14001:2015 & 45001:2018 Certified Company
- JSW Ispat Special Products Limited was established in the year 2008 with the identity of Monnet Ispat and Energy Limited.
- It is close to National Highway NH-200, nearest Railway Station is Kharsia which is 15 KM away and Airport is Jharsugura (Odissa) about 84 KM away
- Latitudes 21°58'27" & 21°59'30" & Longitudes 83°13'31" & 83°14'55" and height from mean Sea level is 219 m.
- Max. Temp.: 47 °C and Avg. Rainfall is 1590 mm.
- Mahanadi River is the main source of water.

#### **About the JSW Group**

The JSW Group is known across the country as "Strategic first mover". It is a \$ 12 billion leading conglomerate, with a presence across all the vital sectors of the Indian economy. The company occupies a pivotal part of the O.P. Jindal Group that has emerged as an undisputable world leader in a short span of three decades. Some of the key elements that define the JSW Group are:

- JSW Group is spearheading initiatives in core sectors like Steel, Energy, Cement, Infrastructure, Ventures & Sports.
- It has a diverse workforce of over 40,000 individuals.
- The Group has proven to play a significant role in the growth of the country.

#### **JSW Group Strength**

- JSW Steel (Manufacturing Capacity) : 18 MTPA
- JSW Energy (Power Generation) : 4541 MW
- JSW Infrastructure (Operating Capacity) : 85 MTPA
- JSW Cement (Production Capacity) : 12 MTPA

#### **About JSW Ispat Special Products Limited (JSWISPL)**

JSW Ispat Special Products Limited (Formerly known as Monnet Ispat and Energy Limited), Raigarh has an integrated Steel plant with a capacity of 1.75 MT of steel production per year through various production facilities. Since inception JSW is giving its first priority to conserve Environment by producing Steel and

Iron. JSW Ispat Special Products Limited has its corporate office at Art Guild house, A-Wing 2nd Floor, Unit No. 13, Phoenix Mall Compound, LBS Marg, Kurla West, Mumbai-400 070.

JSWISPL have following production configuration:

SN.	Units	Capacity
1	Pellet Plant	2.20
2	Sponge Iron Unit (DRI)	0.50
3	Blast Furnace	0.70
4	Sinter Plant	0.75
5	Steel Melting Shop	1.74
6	Rolling Mill	0.45
7	Plate mill	0.75
8	Coal Beneficiation Plant	1.00
9	Oxygen Plant	0.13
10	Power Plant	170 MW
11	DG Set	2 x1500 KVA

All the values are in MTPA except Power Plant and DG sets

#### Board of Directors

The Board of JSW Ispat Special Products Limited (Formerly known as Monnet Ispat and Energy Limited) comprises following Directors:

1. Mr. Ravichandar Moorthy Dhakshana
2. Mr. Sheshgiri Rao
3. Mr. Jyotin Kantilal Mehta
4. Ms. Anuradha Ambar Bajpai
5. Mr. Mrs. Sutapa Banerjee
6. Mr. Sanjay Kumar
7. Mr. Nikhil Omprakash Gehrotra
8. Mr. Kaushik Subramaniam

## ANNEXURE- {B}

### ENVIRONMENT MANAGEMENT PLAN

#### Objectives of Environment Management Plan:

- To establish the present environmental scenario.
- To anticipate the impacts of proposed steel plant on the environment.
- To suggest preventive and mitigating measures to minimize adverse impacts and to maximize beneficial impacts.
- To prepare a detailed action plan for the implementation of mitigation measures.
- To prepare budgetary estimate for monitoring and implementation of environmental control measures for the project.

The environmental management plan is of great importance in controlling the adverse impact of any industrial activity. The EMP consists of mitigation measures to be adopted, environmental monitoring and institutional measures (financial estimates and organizational set-up). The present EMP addresses the components of environmental effect during construction and operation by different activities. The proposed measures of mitigation are based upon the impact assessment. While formulating the EMP for this integrated steel plant project, following have been considered:

- 1.0 Existing environmental and operational activities
- 2.0 Air and water pollution
- 3.0 Work zone environment
- 4.0 Solid waste
- 5.0 Occupational hazard and safety
- 6.0 Environmental monitoring
- 7.0 Environmental management cost & organizational set-up

Careful planning and strategy adopted for the operation of a project is the reason for both economic growth as well as environmental protection. All efforts have been made to cover different parameters of the environment to achieve the goal. The following environmental management plans have been made under EMP.

#### **1.0 EXISTING ENVIRONMENTAL AND OPERATIONAL ACTIVITIES**

An environmental monitoring and control cell is established. The Environmental Cell is functioning under the control of the plant head. The cell is responsible for monitoring ambient air quality, stack emission, ambient noise in the plant and vicinity, waste water quality and discharge, quality of water bodies receiving effluent, workplace air quality. Additional responsibilities of the cell include the following:

- Conducting annual environmental audit and submit audit report to State Pollution Control Board (SPCB);
- Submit environmental monitoring report to SPCB;

- Conduct regular training programs to educate plant personnel on safety practices to be followed in the plant;
- Conduct safety and health audits to ensure that recommended safety and health measures are being followed; and
- Inform the management regularly about conclusions/results of monitoring and recommend environmental protection measures.

## 2.0 AIR AND WATER POLLUTION

### 2.1 Air Environment Management:

The vision of JSW ISPAT SPECIAL PRODUCTS LIMITED is deeply concerned with green & clean environment. Efforts have been taken to prevent any sort of pollution, generated due to plant activities. Opacity meters are installed in all the major stacks for continuous observation of the performance of pollution control devices. We have also established online ambient air quality monitoring stations for continuous ambient air quality monitoring through highly sophisticated instruments. Following Air pollution control measures have been taken across the units are as given below-

Units	Air Pollution Control measures
SPONGE IRON DIVISION	<p>In Sponge Iron unit, raw materials like Iron ore, Dolomite and coal are fed to the kiln to produce sponge iron. Hot flue gases from DRI kilns contain high SPM level and heat. These are taken to dust chamber, which also acts as after combustion chamber for complete combustion and then to Waste Heat Recovery Boilers(WHRB).</p> <ul style="list-style-type: none"> <li>▪ Waste Heat Recovery Boilers are designed to recover sensible heat of waste gases leaving sponge iron kiln for generation of steam. Steam is fed to Steam Turbine Generator to produce power.</li> <li>▪ After heat exchange in WHRB, the flue gases are taken to Electrostatic Precipitator (ESP) and clean gases are discharged through stack.</li> </ul>
CAPTIVE POWER PLANT	<p>In Power Plant, Atmospheric Fluidized Bed Combustion (AFBC) and Circulating Fluidized Bed Combustion (CFBC) boilers are used to produce steam from coal having high ash content and other carbon bearing nonmagnetic materials like char, coal washery rejects, etc. The boilers produce 2x120 &amp; 1x336 tons/ hour steam, which is fed to turbines to produce electricity.</p> <ul style="list-style-type: none"> <li>▪ Electrostatic Precipitators are provided to control the point source emission in power plant.</li> <li>▪ Flue gases from boilers pass through ESP and thereafter discharged through the stack.</li> </ul>
ROLLING MILL	<p>In Rolling mill / Bar mill, Steel bar and structural are produced and main raw materials are steel bloom, beam and blank.</p>

<b>MILL</b>	<ul style="list-style-type: none"> <li>▪ Blast furnace gases and FO/LDO are used as fuel.</li> <li>▪ There is no major dust generation source and stack is provided for wide dispersion of gases.</li> </ul>
<b>BLAST FURNACE</b>	<p>In Blast Furnace, raw materials like iron ore, limestone, coke, dolomite, manganese ore and quartz are stored in raw material storage yard and fed to the blast furnace. Blast furnace is a vertical shaft, in which extremely high temperature is created to recover pure iron from iron ore.</p> <ul style="list-style-type: none"> <li>▪ Dust generated during process is arrested through Dry Gas Cleaning system and clean air is discharged through stack.</li> <li>▪ The BF gas emanating from blast furnace top contains dust. This gas is first passed through the dust catchers where a major portion of dust is eliminated and dust load comes down.</li> <li>▪ This gas is further cleaned in bag filter system; where the dust is fully recovered and the pure gas after cleaning passes through chimney.</li> </ul>
<b>SINTER PLANT</b>	<p>Sinter plant is a straight grate type with circular cooler where raw materials like iron ore fines, limestone, dolomite and calcined lime are used as raw material. A sinter cake is produced as a result of baking and diffusion of solids on the sinter strand. The desired product size for the blast furnace is obtained in the crushing and screening station.</p> <ul style="list-style-type: none"> <li>▪ It has Centralized de-dusting system containing Electrostatic precipitators.</li> <li>▪ Electrostatic Precipitators are installed to control the point source emission from process area as well as material transfer points.</li> </ul>
<b>STEEL MELTING SHOP</b>	<p>In Steel Melting Shop, steel slabs / billets and rounds are produced using electric arc furnace and raw materials are pig iron, sponge iron, scrap, ferroalloys, lime, burnt dolomite and fluxes.</p> <ul style="list-style-type: none"> <li>• SPM bearing gases generated from electric arc furnace are collected using fume extraction system (FES) and taken to after combustion chamber for converting CO to CO<sub>2</sub>.</li> <li>• The SPM bearing gases are passed through water cooled duct to bring down the temperature to 130 – 140 °C before entering a bag filter then discharged through stack. Similarly, the SPM bearing gases generated from the ladle refining furnace are collected using fume extraction system and taken to after combustion chamber.</li> <li>• The fugitive emission from the continuous casting machine shop is generally confined within the shed.</li> <li>• To disperse the fugitive emissions outside the shed, adequate Ventilation is provided.</li> </ul>
<b>PELLET PLANT</b>	<p>Pollution control measures have been envisaged for process gas and plant deducting</p>

	<p>to limit the dust content in outgoing gases to less than 40 mg/Nm<sup>3</sup> by using ESPs of adequate capacities.</p> <p>The plant is designed with electrostatic precipitators (ESPs) on the indurating process as discharge: Hood Exhaust &amp; Wind box Exhaust</p> <ul style="list-style-type: none"> <li>▪ SP dust will be collected in a launder and discharged into a slurry sump. The hood exhaust ESP sump pumps will discharge to a plant thickener.</li> <li>▪ The wind box exhaust ESP sump pumps will discharge to a sieve bend, which will remove coarse grit and pellet chips. The sieve bend slurry will discharge to the thickener. The oversize will be collected in a tote box.</li> <li>▪ The hearth layer bin area of indurating machine will be combined with hood exhaust gases.</li> <li>▪ To check fugitive emission during crushing, screening and charging, bag filters have been provided.</li> <li>▪ All dust collected through bag houses, ESP is being recycled in the process.</li> </ul>
<b>COAL WASHERY</b>	<ul style="list-style-type: none"> <li>▪ Fine atomizer nozzles arrangement has been provided on the coal heaps and on the screen houses and near crushers.</li> <li>▪ Water sprinkling will be done at all strategic coal transfer points such as conveyors, loading/unloading points, conveyor transfer points etc.</li> <li>▪ Apart from this, we have a provision of bag filters at the coal crushers with adequate water sprinkling arrangement subjected on good fugitive emission control. Vehicular movement in the coal washery area will be regulated effectively to avoid traffic congestion.</li> <li>▪ Area, in and around the coal washery will be made pucca either asphalted or concreted to reduce the fugitive emissions.</li> <li>▪ Green belt is being developed around the coal washery area.</li> </ul>

## 2.2 Water Environment Management:

Management is very conscious for controlling water pollution and water conservation, for which, plant has adopted Close Water Circuiting arrangement to maintain 'Zero Discharge'... Water pollution sources and control systems envisaged are as given below-

Source	Pollutants	Control systems
Raw materials handling	Suspended Solids	Catch pits and garland drains
DM water plant	pH	Neutralising pit
Cooling tower blow down	Temperature	Reused in the plant for dust suppression
Boiler blow down	Suspended Solids	Suppression and slag granulation
Canteens	BOD, Suspended Solids	Sewage Treatment Plant (STP)
Raw water treatment	Suspended Solids	Clarifier, thickener sludge
Blast furnace gas cleaning plant	Suspended Solids	Clarifier, recirculation of under flow

SMS and Wire rod mill	Suspended Solids & oil grease	Settling tanks with oil skimmers
Iron ore Palletization Plant	suspended solids/Slurry	Thickener

Various water pollution control measures have been taken, the measures taken across the units are summarized herewith-

Units	Water Pollution Control Measures
Sponge Iron Plant,	In DRI Kilns Cooling water is being taken to settling tank through drain system. Water is being recycled back through water reservoir for cooling of Sponge iron in coolers.
Power Plant	<ul style="list-style-type: none"> <li>▪ DM plant wastewater is being neutralized in neutralizing pit and reused for ash handling.</li> <li>▪ The decanted water from settling tank is being recycled back for reuse in ash handling.</li> <li>▪ The cooling tower blow-down also is being reused for ash handling.</li> <li>▪ As the boiler is AFBC/CFBC type where oil is required only at the time of starting the boiler, hence, no pollution is anticipated due to oil. From other units such as workshops, the oil water mixture will be quite low and shall be led to oil traps before its disposal.</li> <li>▪ Ash handling in AFBC/CFBC power plant and slurry handling in the coal beneficiation plant have high potential for wastewater generation.</li> <li>▪ The two systems will be closed circuit and extreme care shall be taken to maintain zero discharge from these systems.</li> </ul>
Rolling mill / Bar mill	Wastewater is skimmed for oil & scale and then recycled back to the plant through filter and cooling system. No wastewater is discharged.
Blast Furnace	It is a dry gas cleaning process there will be no effluent generation. Cooling tower blow-down & softener spent re-generated waste water will be reused for slag cooling and dust suppression.
Sinter Plant	Make-up water is added to substitute evaporation loss. Blow-down will be used in sinter nodulizing.
Steel Melting Shop EAF & Ladle furnace	<ul style="list-style-type: none"> <li>▪ The wastewater is taken to settling tank and outlet water of tank is being reused.</li> <li>▪ Make-up water added to substitute evaporation &amp; drift loss. The blow-down is used for coke quenching and slag granulation.</li> </ul>
Pellet Plant	<ul style="list-style-type: none"> <li>▪ The water requirement for the proposed pellet plant will be mostly for cooling of plant &amp; equipment and for process needs with a small part for drinking and other units.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Water used in the process is passed through thickeners where the water is separated from the iron ore fines and the clear water is recycled back into the process for utilization.</li> <li>▪ Other miscellaneous effluent generated from pellet plant to be recycled into plant through settling pit/collection pit.</li> </ul>
Coal Washery	<ul style="list-style-type: none"> <li>▪ Effluent from the washery will be treated in effluent treatment plant and the treated effluent will be recirculated.</li> <li>▪ The washery will be worked as a Zero Discharge Unit. The media water after being used for washery and all the suspended particulate matter would be squeezed and the clear water is recycled back to the process.</li> <li>▪ The underflow concentrate from the thickener is pumped to the vacuum disc type filter.</li> <li>▪ The filtrate along with any wash water is re-circulated back to the system thereby ensuring the close circuit of the system.</li> <li>▪ The treated waste water will be under the prescribed limits and will be recycled back continuously thereby maintaining Zero Effluent Discharge from Coal Washery area.</li> </ul>
Oxygen Plant	Make-up water is added to substitute evaporation and drift loss. The blow-down will be used for slag granulation.
Other Water Pollution Control Measures	<p>The following treatment and disposal measures have been planned.</p> <ul style="list-style-type: none"> <li>▪ The wastewater from water pre-treatment, containing high-suspended solids, has collected in a settling basin, where the suspended solids are settle down partly by gravity.</li> <li>▪ The supernatant water is pumped back into the raw water reservoir.</li> <li>▪ Blow down from the boilers is being collected in a sump and pumped back into the raw water reservoir.</li> <li>▪ Blow down water from the cooling water system, containing suspended solids and high TDS, will be transferred to the ETP sump for stabilization, mixing and settling of coarser solids.</li> <li>▪ Wastewater from the DM Plant is being neutralized in a neutralization tank and transferred to the ERS sump.</li> <li>▪ Floor washings is being collected in a sump, passed through oil traps, and transferred to the ETP sump for mixing, stabilization and settling.</li> <li>▪ Wastewater collected in the ERS sump will be subjected to clariflocculation and settling. The clear water is being utilized quantitatively for dust suppression and ash handling.</li> <li>▪ Domestic water is being treated in a sewage treatment plant (STP) based on activated sludge process. The treated water will be utilized quantitatively for horticulture and green belt.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ In the sintering shop, the reclaimed water is discharged through the RCC pipe by itself to the hot water pond of the circular system and after cooled is used by recycling.</li> <li>▪ In control of waste water generated from equipment cooling, blow down of soft water system, water seal, ground flushing, domestic sewage and chemical examination etc, contaminant clearing and stream splitting shall be done strictly.</li> </ul>
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### 3.0 WORK ZONE ENVIRONMENT

In operation phase noise and dust is often seen in work zone area. To Control and mitigation measures for abatement of fugitive dust emissions and noise level are as follows.

- Dust extraction systems, with bag filters have been provisioned at all transfer points and crushing/ grinding operations.
- Dust laden air is drawn through ID Fans, and passed through bag filters to bring down the dust content below 50 mg/Nm<sup>3</sup>. The clean air is discharged into the atmosphere.
- Raw materials and finished product are stored in covered sheds.
- Water sprinkling is done regularly over all open storage dumps of solid wastes and raw materials.
- Significant plantation and green belt development has been envisaged to mitigate the impact of fugitive dust on ambient air.
- Monitoring of the fugitive dust shall be carried out at various places within the project site to ensure compliance to.
- The equipment's with high noise such as crusher, air compressor and air blower has enclosed in soundproof rooms, vibration-reducing material shall be installed on the foundation, and mufflers shall be installed at entrances and exits.
- Rubber boards are lined at the corners of coal and coke carrying corridors, U-shaped sliding channels has been adopted for conveying to reduce noises from collision of materials.
- Noise isolation by landforms, high buildings and trees is also considered in the layout plan to reduce noise.
- Provision of silencer at inlet and outlet of fans.

### 4.0 SOLID WASTE MANAGEMENT

JSWISPL has implemented a very efficient solid waste management system to overcome all these problems. Type, sources and management of solid waste are summarised as follows-

UNITS	Solid Waste	Utilization/ Disposal Method
SPONGE IRON	Dolochar	Power Plant
	ESP + Bag Filter Dust	Brick manufacturing unit, Low-lying areas

	Kiln Accretion	Road making.
POWER PLANT	Fly ash	Brick manufacturers and minedout area
	Bottom Ash	Filling of minedout area
SMS	EAF Slag	Crush and segregate into mag & non-mag slag through crushing unit. Mag slag is being re-cycled and rest non-mag slag is being used for land compaction/ road making etc.
	LRF Slag	Used in land filling/road embankment.
	FES Dust	Recycled in Sinter Plant
	Skull Generation	Reused back in Steel Melting Shop
BLAST FURNACE	BF Slag	Collected and sold to Cement Plant for utilisation in cement manufacturing.
	GCP Dust	Re-used in Sinter Plant by charging along with raw materials.
Bar Mill	End cutting/Mill scale	Reused in Sinter/SMS unit

**Other control measures for solid waste:**

- In this integrated steel plant, substantial fraction of input comes out as solid waste which is generally reused in other plants. The EAF and LF generates considerable amount of solid waste, which may be used for landfill, road making, etc.
- Large quantity of solid waste is generated from power plant as ash, which is collected through ESP economizer and hopper. The fly ash will be sent to the clinker grinding unit for manufacture of cement and the remaining ash will be sent for disposal. No ash storage is proposed.
- Quantity of generated hazardous waste is being disposed-off to authorized recycler. However, even the limited quantities of generated oil/grease and resin can cause negative impact if not disposed-off appropriately.
- The other type of solid wastes generated will include the dust collected from dust collectors, empty barrels (metal and plastic), bags, sweepings and other biodegradable wastes from the canteen.

**APPENDIX-B**

**A. Compliance status of the Environment clearance granted vide dated F. No. J11011/196/2007- IA II (I) dated 26<sup>th</sup> Dec, 2007**

SN	Condition	Status as on 31.03.2021
<b>A. SPECIFIC CONDITIONS</b>		
i.	Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. Online stack monitoring facilities for all the stacks and sufficient air pollution control methods to control emissions from the kiln and WHRB shall be provided viz. Electrostatic precipitation (ESP) and bag filters etc. to keep emissions level below 100mg/Nm <sup>3</sup> . Gas cleaning plant (GCP) and Ventury Scrubbers shall be provided to blast furnace (BF). The BF gases shall be cleaned in gas cleaning system (GCS) and used in AFBC power plant. Kiln Off gases shall be used as fuel in the waste heat recovery boiler (WHRB).	<ul style="list-style-type: none"> <li>▪ Pollution control equipment like ESP, Bag filters has installed at all the process stacks, All the transfer points are equipped with adequate water sprinkling system to keep emission level within prescribed limits.</li> <li>▪ Particulate matter emission from all the stacks is being maintained well within prescribed limit.</li> <li>▪ Continuous emission monitoring system facilities has also provided to all process stacks.</li> <li>▪ Ventury scrubber and GCP Installed in Blast Furnace. Blast furnace exhaust gases are routed through Gas cleaning plant (GCP), further utilizes as a fuel in re-heating furnaces and Palletization plant.</li> <li>▪ Kiln off gases is being utilized as a fuel in the waste heat recovery boiler (WHRB).</li> </ul>
ii	Secondary fugitive emissions from blast furnace and sinter plant 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.	<p>Central de-dusting system has been provided in Blast furnace cast house and stock area to control secondary fugitive emission</p> <p>In Sinter plant, adequate and highly efficient Bag filters have been installed in material transfer points to control the secondary fugitive emission.</p>
iii	<p>Total requirement of the water from Mahanadi River shall not exceed 37,340 m<sup>3</sup>/day.</p> <p>Acidic and alkaline wastewater from demineralization unit shall be neutralized in neutralization tank.</p> <p>The wastewater from gas cleaning plant (GCP) of BF plant shall be treated in thickener to remove SS and recycled. As reflected in the EIA/EMP report, the wastewater generated from the various units shall be properly recycled and reused in the process and for cooling, palletizing, slag granulation, horticulture etc. The wastewater from coal beneficiation plant shall be reused for ash slurry preparation for the disposal of ash generated from AFBC boiler. No wastewater shall be discharged outside the premises and 'Zero' discharge shall be strictly followed as proposed. The domestic effluent shall be treated in septic tank followed by soak pits and used for green belt development.</p>	<p>Agreed and complied.</p> <p>Acidic and alkaline wastewater from demineralization is being neutralized in neutralization pit.</p> <p>The wastewater generated from Blast Furnace is being recycled and reuse in slag granulation activity.</p> <p>Waste water generated from the various units is being collected in settling tank and is being utilized in dust suppression at material storage yards, pellet granulation and horticulture purposes in localized area.</p> <p>Domestic effluent is treated in STP and treated waste water is utilized in green belt development activities maintaining, 'Zero Effluent Discharge'.</p>
iv	Prior permission for the drawl of ground as well as surface water from Mahanadi river from the state ground water Board/ Central Ground Water Authority / concerned Department shall be obtained	Permission for drawl of ground water from CGWA/CGWB have been granted vide NOC CGWA/NOC/IND/ORIG/2020/7569; dated 03.03.2020. (Annexure-I) and also permission granted from Water Resource Department (C.G.) for surface water drawl. Copy of the same is attached hereby. Annexure-II

v	All the char from DRI plant shall be utilized in AFBC Boiler of power plant and no char shall be disposed-off anywhere else. The other entire solid / hazardous waste generated shall be properly utilized or disposed off in environment friendly manner. ESP fly ash and bag filter shall be made available to the cement plants and brick making plants whereas bottom ash shall be disposed-off in a suitably designed landfill as per CPCB guideline to prevent leaching to the sub-soil and underground aquifer. Mill scale shall be reused in Ferro alloy/ pig iron furnace. The liquid slag shall be granulated in cast house granulation unit and given to cement plants/ brick manufacturers for further utilization. Non-granulated slag shall be used in making roads. DM resin shall be disposed in properly cemented pit. Waste oil and lubricant shall be sold to authorized recyclers. Kiln accretions shall be utilized for filling low lying areas. ETP sludge shall be used in brick making and filling low lying areas.	<ul style="list-style-type: none"> <li>▪ During the compliance period Captive power unites are partially running, thus char generated from DRI are being scientifically collected and stored in an identified area. All char/Dolochar will be utilized in AFBC/CFBC Boilers.</li> <li>▪ Hazardous waste disposed-off to only CPCB Authorized vendor.</li> <li>▪ Fly ash /ESP dust is being supplied to bricks/ blocks manufactures as well as self-consumed for brick/block manufacturing, excess sent to land fill area.</li> <li>▪ Mill scale is being reuse in the SMS.</li> <li>▪ Granulated slag generated from cast house granulation unit supplied to cement manufacturing unit.</li> <li>▪ Non granulated slag generated from SMS is being fully consumed for low laying area filling and road embankment.</li> <li>▪ No DM resin were generated during the period.</li> <li>▪ Used oil/ used lubricants is being sold out to authorized recycler/vendor.</li> <li>▪ Kiln accretion is utilized as land filling for low lying areas.</li> </ul>
vi	All the fly ash shall be utilized as per fly Ash Notification. 1999 and subsequently amendment in 2003.	Agreed and Complied. Fly ash generated from power generation units is being utilized in brick manufacturing and landfilling units as per the notification. Bottom ash is being utilized for Filling of low laying areas.
vii	Green belt shall be developed in at least 33% within and around the plant premises as per the CPCB guidelines in consultation with DFO.	Till now we have planted 176000 plants in and around our premises.
viii	Prior permission from the state forest department shall be taken regarding likely impact of the expansion of the proposed steel plant on the surrounding reserve forests viz. Rabo RF (0.92 Km, NE), Bansajhar RF (6.07Km, SW), Burha pahar (6.64 Km, W), Kenmura PF (2.64 Km, SW), Bendojhariya PF (5.11 Km, SW)	Noted please.
ix	All the recommendations made in the charter on Corporate Responsibility for Environment protection (CREP) for the steel sector shall be strictly implemented.	Noted please.
<b>B. GENERAL CONDITIONS</b>		
i	The project authorities must strictly adhere to the stipulations made by the Chhattisgarh Environment Conservation Board (CECB) and the state Government.	Accepted. All the stipulations made by the Chhattisgarh Environment Conservation Board (CECB) and the state Government are being followed.
ii	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and forests.	Accepted.
iii	The gaseous emissions from various process units shall conform to the load/mass based standards notified by this ministry on 19th May 1993 and standards prescribed from time to time. The state board may specify more stringent standards for the relevant parameters keeping in view the	High efficiencies ESP and Bag Filters installed at all process and transfer points to keep emission level within the prescribed norms. Apart from these, dust suppression system is installed to control fugitive dust from transfer points.

	nature of the industry and its size and location. At no time the emission level shall go beyond the prescribed standards. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	Online continuous Emission monitoring system installed at all stacks.  DRI ESP's are interlocked process.
iv	In plant control measures for checking fugitive emissions from all the vulnerable sources like spillage/raw materials/coal handling etc. shall be provided. Further specific measures like provision of dust suppression system consisting of water sprinkling, suction hoods, fans and bag filters etc., shall be installed at material transfer points, blast furnace stock, house and other enclosed raw material handling areas. Centralized De-dusting System for collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed height conforming to the standards for induction furnaces existing in the industry and proposed induction and arc furnaces. Fugitive emissions shall be regularly monitored and records maintained.	Adequate Bag filters have been provided at all material transfer points. Water sprinkling systems have been installed at conveyors, storage yards and raw material handling areas. In addition to the above water sprinklers are provided on haul areas including material storage yards. Centralized de-dusting system has been installed at stock house and raw material handling area to collect the fugitive dust. Pneumatic dust extraction system has been provided to check the fugitive dust while conveying the collected dust from pollution control equipment.
v	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM, SO <sub>2</sub> and NO <sub>x</sub> are anticipated in consultation with the CECB. Data on ambient air quality and stack emissions should be regularly submitted to this Ministry including its Regional Office at Bhopal and the CSEB / CPCB once in six months.	Four Online Ambient Air Quality Monitoring Stations are placed in four directions of the plant as suggested by the CECB which is interconnected with CECB/CPCB website. Monitoring data of the stations is being submitted regularly to CECB, Regional office at Raigarh & head office, Raipur and CPCB Delhi. Apart from the above, ambient air quality and stack emission is being monitored manually and report is being submitted to the board on monthly basis and six monthly to MoEF & CC Regional office, Nagpur and CPCB Bhopal. Copy of the same is attached herewith as <b>Annexure-III (a) &amp; III (b)</b>
vi	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1933 and 31st December 1933 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	Agreed and complied. Acidic and alkaline wastewater from demineralization is being neutralized in neutralization pit and reused in dust suppression. Waste water generated from the various units is being collected in settling tank and is being utilized in dust suppression at material storage yards, pellet granulation and horticulture purposes in localized area. Domestic effluent is treated in STP and treated waste water is utilized in green belt development activities maintaining, 'Zero Effluent Discharge'.
vii	The overall noise levels in and around the plant area shall be kept well within the standards (85dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz 75 dB A (day-time) and 70 dB A (night-time)	As a control measures, silencers and enclosures have been provided at all noise generating sources and as a secondary control measure PPE's like Earplugs/earmuff have been provided to the personals working in high noise prone areas. Regular monitoring of noise level is also in practice. Massive thick plantation is in and around the plant to control noise level. <b>Annexure-III (C)</b>
viii	Occupational Health Surveillance of the workers should be	Regular health check-up of all workers is being carried out

	done on a regular basis and records maintained as per the Factories Act.	and record is being maintained. <b>Annexure-IV</b>
ix	The Company shall develop surface water harvesting structures to harvest the rainwater for utilization in the lean season besides recharging the ground water table.	All the surface runoff drains are interconnected into the pit for water harvesting which recharge the ground water and is being utilized for dust suppression system and horticulture.
x	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 social-economic development activities in the surrounding villages community development programmes, educational programs, drinking water supply and health care etc.	We are committed to comply with all environmental protection measures and safeguards recommended in EIA/EMP report. We also undertake socioeconomic activities in nearby villages and focus areas are as education, health, infrastructure, sustainable livelihood and social issues. <b>Annexure-V</b>
xi	The project authorities shall also provide adequate funds both recurring and non-recurring to implement the conditions stipulated the Ministry of Environment and Forest as well as the state Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose.	Separate funds have been allocated for environmental protection measures and implementing the conditions stipulated by MoEF and State Boards.
xii	The Regional Office of this Ministry at Bhopal / CPCB/ CECB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Agreed. Six monthly compliance reports along with monitoring data are being submitted to the Ministries regional office in soft copies regularly. Last compliance report submitted vide letter no. <b>JISPL/EMD/NP/358/2020; Date: 27.11.2020</b>
xiii	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 CSEB and may also be seen as website of the Ministry of Environment and Forests at <a href="http://enfor.nic.in">http://enfor.nic.in</a> This shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office.	Complied
ix	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Noted please

**B. Compliance Status Report of the condition stipulated in Environmental Clearance for amendment in Environmental Clearance for inclusion of Oxygen Plant vide letter no. F. No. J-11011/196/2007 IA II (I) date: 31st March, 2011**

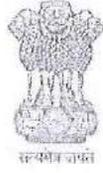
No	Condition	Status as on Status as on 31.03.2021
1.	Data on ambient air, stack and fugitive emissions shall be regularly submitted online to Ministry's Regional office at Bhopal, SPCB and Central Pollution Control Board as well as hard copy once in six months and display data on RSPM, SO <sub>2</sub> , and NO <sub>x</sub> outside the premises at the appropriate site for the general public.	Environmental monitoring data is being submitted to CECB regularly as well as six monthly compliance reports is also submitted to regional office within stipulated time. Also data is being displayed at outside of the company's main gate for public domain. <b>Annexure-VI (a)</b>
2.	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16th November, 2009 shall be followed.	Agreed. Ambient Air Quality monitoring data are within the prescribed norms. <b>Annexure-III (a)</b>
3.	The project proponent shall also submit six monthly reports on status of the compliance of stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective 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.	Six monthly compliance reports along with monitoring data are being submitted to the Ministries regional office in both soft & hard copies regularly. Last compliance report submitted vide letter no. <b>JISPL/EMD/NP/358/2020; Date: 27.11.2020</b>
4.	The environmental statement for each financial year ending on 31st 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 Environmental (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	The environmental statement and status of compliance of environmental conditions is being submitted to the State Pollution Control Board, Raipur and Regional office, MoEF, Nagpur in stipulated time frame. Last Environmental Statement has been submitted vide letter no. <b>MIEL/NP/EMD/343/2020; dated: 07.08.2020.</b> Status of compliance of environmental conditions along with monitoring report have also been published in company's website at <a href="http://www.aionjsw.in">www.aionjsw.in</a> . <b>Annexure-VI (b)</b>
5.	At least 2% of the total cost of the project (increased cost after amendment) shall be embarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program should be ensured accordingly in a time bound manner.	Not Applicable

**C. Compliance Status Report of the condition stipulated in Environmental Clearance for change of boiler configuration in Integrated Steel Plant (1.75 MTPA) and Captive Power Plant (240 MW) of MEL, Nataraj, vide letter no. F. No. J-11011/196/2007 – IA II (I) dated 13th April, 2017**

SN	Specific Condition	Status as on 31.03.2021
1.	The project proponent should install 24x7 air monitoring devices to monitor air emission and submit report to Ministry and its Regional Office.	Installed and connected with CPCB, CECB website with real time data.
2	All conditions stipulated in the earlier ECs granted to the project should be strictly adhered to.	Agreed
3	Total quantum of dust release and pollution which is being released today has to be maintained even after increase in the pellet plant capacity.	Agreed. Appropriate and adequate APCD has installed to keep emission level within norms even after increase in pellet plant capacity.
<b>General Condition</b>		
1	The project authorities must strictly adhere to the stipulations made by the Chhattisgarh Pollution Control Board and the State Government.	Agreed
2	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
3	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NO <sub>x</sub> 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 Nagpur and the SPCB/CPCB once in six months.	There are four Online Ambient Air Quality Monitoring Stations are placed in four directions of the plant as suggested by the CECB which is interconnected with CECB/CPCB website. Monitoring data of the stations is being submitted regularly to CECB, Regional office at Raigrah and CECB, head office, Raipur. Apart from the above, ambient air quality and stack emission is being monitored manually and report is being submitted to the board on monthly basis. Copy of the same is enclosed herewith as <b>annexure-III (a) &amp; III (b)</b> .
4	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31 <sup>st</sup> December 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	Agreed and complied. Acidic wastewater from demineralization is being neutralized in neutralization pit and reused in dust suppression activity. Waste water generated from the various units is being collected in settling tank and is being utilized in dust suppression at material storage yards, pellet granulation and horticulture purposes in localized area. Domestic effluent is treated in STP and treated waste water is utilized in green belt development activities maintaining, 'Zero Effluent Discharge'.
5	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 Liz.75	As a control measures, silencers and enclosures have been provided at all noise generating sources and as a secondary control measure PPE's like Earplugs/earmuff have been provided to the personals working in high noise areas. Regular monitoring of noise level is also in practice and report is being submitted to the board on

	dBA (daytime) and 70 dBA (nighttime).	monthly basis. Copy of the same is enclosed herewith as <b>annexure-III (c)</b>
6	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Regular health check-up of all workers is being carried out and record is being maintained. <b>Annexure-IV</b>
7	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	All the surface runoff drains are interconnected into the pit for water harvesting which recharge the ground water and is being utilized for dust suppression system and horticulture.
8	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/VEMP report. Further, the company must undertake socio- economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply & health care etc.	We are committed to comply with all environmental protection measures and safeguards recommended in EIA/EMP report. We also undertake socioeconomic activities in nearby villages and focus areas are as education, health, infrastructure, sustainable livelihood and social issues. <b>Annexure-V</b>
9	Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change (MoEFCC) as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Nagpur. The funds so provided shall not be diverted for any other purpose.	Separate funds have been allocated for environmental protection measures and apart from the onetime capital expenditure every year recurring fund have been provided for implementing the conditions stipulated by MoEF and State Boards.
10	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.	Agreed
11	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEFCC at Nagpur. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain	Agreed  The criteria pollutant levels namely; PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) is being monitored and displayed at main gate of the company in the public domain. <b>Annexure-VI (a)</b>  The data along with compliance report have also been published in company's website at <a href="http://www.aionjsw.in">www.aionjsw.in</a> <b>Annexure-VI (b)</b>
12	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEFOC, the respective Zonal Office of CPCB and the SPCB, The Regional Office of this Ministry at Nagpur / CPCB / SPCB shall monitor the stipulated conditions.	Six monthly compliance reports along with monitoring data are being submitted to the Ministries regional office in soft & hard copies regularly. Last compliance report submitted vide letter no. JISPL/EMD/NP/358/2020; Date: 27.11.2020

13	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 subsequent shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEFCC at Nagpur by e-mail.	The environmental statement and status of compliance of environmental conditions is being submitted to the State Pollution Control Board, Raipur. Last Environmental Statement has been submitted vide letter no. <b>MIEL/NP/EMD/343/2020</b> ; dated: <b>07.08.2020</b> ;  Status of compliance of environmental conditions also sent to the respective Regional Office of the MOEFCC at Nagpur by via email dated, Nov 30, 2020
14	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, Forests and Climate Change (MoEF&CC) at <a href="http://envfor.tic.in">http://envfor.tic.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 locality concerned and a copy of the same should be forwarded to the Regional office at Nagpur.	The Environmental Clearance had been made public via local newspapers.
15	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Agreed



भारत सरकार  
जल शक्ति मंत्रालय  
जल संवर्धन, नदी विकास  
और गंगा संरक्षण विभाग  
केन्द्रीय भूमि जल प्राधिकरण

ANNEXURE-I

Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
River Development & Ganga Rejuvenation  
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

**NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION**

Project Name:	M/s Monnet Ispat And Energy Limited		
Project Address:	Village and Post - Naharpali, Tehsil - Kharsia, Raigarh, Chhattisgarh		
Town:	Naharpali	Block:	Kharsia
District:	Raigarh	State:	Chhattisgarh
Pin Code:	496661		
Communication Address:	M/s Monnet Ispat And Energy Limited, Village and Post - Naharpali, Tehsil - Kharsia, Raigarh, Chhattisgarh - 496661		
Address of CGWB Regional Office :	Central Ground Water Board, North Central Chhattisgarh Region, 2nd Floor, LK Corporate and Logistic Park, Dhamtari Road, NH-30, Dumartarai, Raipur, Chhattisgarh - 492015		

1. NOC No.:	CGWA/NOC/IND/ORIG/2020/7569									
2. Application No.:	21-4/1777/CT/IND/2018			3. Category:	Industry					
4. Project Status:	Existing Project			5. NOC Type:	New					
6. Valid from:	03/03/2020			7. Valid up to:	02/03/2022					
8. Ground Water Abstraction Permitted:										
Fresh Water		Saline Water		Dewatering		Total				
m <sup>3</sup> /day	m <sup>3</sup> /year	m <sup>3</sup> /day	m <sup>3</sup> /year	m <sup>3</sup> /day	m <sup>3</sup> /year	m <sup>3</sup> /day	m <sup>3</sup> /year			
400.00	146000.00					400.00	146000.00			
9. Details of ground water abstraction /Dewatering structures										
Total Existing No.:10					Total Proposed No.:0					
	DW	DCB	BW	TW	MP	DW	DCB	BW	TW	MP
Abstraction Structure*	0	0	10	0	0	0	0	0	0	0
*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit										
10. Quantum of ground water recharge/harvesting(m <sup>3</sup> /year):	255312.00									
11. Number of Piezometers (Observation wells) to be constructed/ monitored & Monitoring mechanism.	No. of Piezometers		Monitoring Mechanism							
			Manual		DWLR**		DWLR With Telemetry			
**DWLR - Digital Water Level Recorder	1		0		1		0			

(Compliance Conditions given overleaf)

Digitally signed by  
NANDAKUMARAN P  
Date: 2020.03.09 17:38:36 +05'30'

सदस्य (केन्द्रीय भूमि जल प्राधिकरण)  
Member (CGWA)

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011  
Phone: (011) 23383561 Fax: 23382051, 23386743  
Website: cgwa-noc.gov.in

पानी बचावे - जीवन बचावे  
SAVE WATER - SAVE LIFE

Validity of this NOC shall be subject to compliance of the following mandatory conditions:

1. No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
2. The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
3. All new as well as existing ground water abstraction/ de-watering structures shall be fitted with digital water flow meters by the firm at its own cost immediately on completion of their construction or grant of NOC as the case may be. In case of renewal of NOCs, all existing ground water abstraction structures shall continue to be fitted with digital water flow meters. Intimation of installation of flow meters shall be sent by the proponent to the Regional Director of CGWB within 6 months of grant of NOC. Daily ground water abstraction data shall be monitored / continue to be monitored (in case of renewal) by the firm and recorded in a log book. Details of month-wise ground water abstraction shall be submitted to the Regional Director, CGWB, once every year.
4. In case the ground water abstraction is more than 10 m<sup>3</sup>/day, monthly water level monitoring data shall be maintained and submitted annually to the Regional Office of CGWB. Wherever groundwater withdrawal is more than 500 m<sup>3</sup>/day, the firm shall install telemetry system in one of the piezometers and share USER ID and password of the telemetry system with the Regional Director, CGWB.
5. In case ground water abstraction is more than 10 m<sup>3</sup>/day, ground water quality shall be monitored once in a year (during pre- monsoon period) and the report submitted to the Regional Director, CGWB.
6. Ground water augmentation/harvesting measures, as stipulated in the NOC, shall be implemented (in new cases) / continue to be maintained (in case of renewal) in consultation with the Regional Director, CGWB.
7. Proof of recharge/ water harvesting (photographs of structures constructed) shall be submitted to the Regional Director, CGWB. The firm shall also undertake periodic maintenance of recharge/water harvesting structures at its own cost.
8. The firm shall optimize water use through recycling/ reuse of waste water after proper treatment.
9. The project proponent shall take all necessary measures to prevent contamination of ground water in the premises, failing which the firm shall be responsible for any consequences arising thereupon.
10. In case of industries likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.
11. Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.
12. In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWB for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.
13. Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the Regional Director, Central Ground Water Board.
14. The firm shall report compliance of the NOC conditions online in the website ([www.cgwa-noc.gov.in](http://www.cgwa-noc.gov.in)) within one year from the date of issue of this NOC.
15. This NOC is subject to prevailing Central/ State Government rules/ laws/ norms or Court orders related to construction of tube well/ ground water abstraction structure/ recharge or conservation structure/discharge of effluents or any such matter as applicable.
16. This NOC does not absolve the proponents of their obligation/ requirement to obtain other statutory and administrative clearances from appropriate authorities.
17. The issue of this NOC does not imply that other statutory/ administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.
18. This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/ court orders in cases related to ground water or any other related matters.
19. Application for renewal can be submitted online from 90 days before the expiry of NOC. Application for renewal of expired NOCs shall not be entertained and subsequent ground water withdrawal, if any, shall be illegal & liable for legal action as per provisions of Environment Protection Act (EPA), 1986.
20. In case of any violation of NOC conditions or illegal extraction of Ground water the firm shall be liable to pay "Environmental Compensation"/ "Penalty", if any under Sec 15 of EPA 1986 as and when decided by statutory authorities.

(Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent.)

ANNEXURE-II

छत्तीसगढ़ शासन,  
जल संसाधन विभाग,  
मंत्रालय,  
दाऊ कल्याण सिंह भवन, रायपुर,

To MD  
JPL

क्रमांक...../29/31/93/म/31/अ/जप्र/डी-4, रायपुर दिनांक /06/2008  
प्रति,

मुख्य अभियंता,  
हसदेव कछार,  
जल संसाधन विभाग,  
बिलासपुर (छ.ग.)

विषय:- मोनेट इस्पात एण्ड एनर्जी लि. मंदिर हसौद द्वारा रायगढ़ जिले में प्रस्तावित इटीग्रेटेड स्टील एवं कंस्ट्रिक्ट पावर प्लांट आदि के विस्तार हेतु महानदी से अतिरिक्त 9.96 मि.घ.मी. वार्षिक जल आवंटन की स्वीकृति।

- संदर्भ:- 1. शासन का पत्र क्रमांक-2312-2313/7/जस/तरा/अ/जप्र/04/डी-4, रायपुर दिनांक 29.04.2008.  
2. कार्यपालन अभियंता, जल संसाधन विभाग, रायगढ़ का पत्र क्र.-2323-2324 /ब.ले.लि./2008 दिनांक 22.05.2008.

उपरोक्त विषयवर्तित प्रकरण में राज्य जल संसाधन उपयोग समिति, छत्तीसगढ़ की 20वीं बैठक, दिनांक 17.04.2008 में लिये गये निर्णयानुसार एवम् संस्थान द्वारा कमिटेमेंट चार्जस रु. 2.49 लाख का भुगतान जल संसाधन विभाग को किये जाने के तारतम्य में मोनेट इस्पात एण्ड एनर्जी लि. मंदिर हसौद द्वारा जिला-रायगढ़, के नहरपाली ग्राम के पास प्रस्तावित इटीग्रेटेड स्टील एवं कंस्ट्रिक्ट पावर प्लांट आदि के विस्तार हेतु महानदी से अतिरिक्त 9.96 मिलियन घन मीटर वार्षिक जल आवंटन की स्वीकृति, महानदी में संस्थान के संपूर्ण/अनुपातिक व्यय से एनीकट के निर्माण त्तरांत (आफ्टेक पाईन्ट-संस्थान द्वारा निर्मित, बालपुर के निकट स्थित इटेकवेल) निम्नलिखित शर्तों के साथ प्रदान की जाती है :-

1. संस्थान, महानदी में प्रस्तावित एनीकट के सर्वेक्षण एवं तदनुसार उसके निर्माण कार्य की संपूर्ण/अनुपातिक लागत वहन करेगा। संस्थान द्वारा एनीकट निर्माण में, वहन की गई संपूर्ण/अनुपातिक राशि को, शासकीय स्रोतों से निर्धारित जल दर के अनुसार देय जल-कर की राशि में समायोजित किया जा सकेगा। सर्वेक्षण/निर्माण कार्य जल संसाधन विभाग द्वारा किया जायेगा एवं एनीकट का स्वामित्व जल संसाधन विभाग के पास रहेगा।

2. संस्थान, महानदी में जल आहरण हेतु प्रस्तावित एनीकट के निर्धारित स्थल से अपने संयंत्र स्थल तक जल ले जाने हेतु आवश्यक व्यवस्था (इंटेकवेल/पंप हाउस का निर्माण, पाईप लाईन विछाना आदि) जल संसाधन विभाग के अनुमोदन उपरान्त स्वयं के व्यय पर करेगा। संस्थान को आर्बिट्रल जल, ग्रीष्मकाल में यदि बालपुर स्थित इंटेकवेल में उपलब्ध नहीं हो पाता है तो संस्थान की ग्रीष्मकाल की आवश्यकतानुसार जल संग्रहण हेतु बालपुर के ऊपर प्रस्तावित कासीडीह एनीकट से जल आहरण की आवश्यक व्यवस्था संस्थान को करनी होगी। इसके साथ ही संस्थान को कम से कम 15 दिनों की जल आवश्यकता के अनुरूप जल संग्रहण हेतु अपने संयंत्र परिसर में बैलेन्सिंग रिजर्वायर (तालाब) का निर्माण अनिवार्य रूप से करना होगा।
3. प्रकरण में प्रस्तावित जल की मात्रा के माप हेतु इंटेकवेल (पंप हाउस) में मानक जल मापन यंत्र की स्थापना संस्थान को स्वयं के व्यय पर करनी होगी, जिसकी समय-समय पर विभाग द्वारा जांच की जा सकेगी।
4. प्रकरण में प्रस्तावित एनीकट में दूधान तथा जल ले जाने हेतु पाईप लाईन विछाने के लिए भू-अर्जन एवं संबंधित जो भी समस्या आयेगी उसका निराकरण संस्थान स्वयं के व्यय पर स्वयं करेगा। इसके साथ ही छ.ग. राज्य की आदर्श पुनर्वास नीति-2007 (यथा सशोधित) का पालन अनिवार्य होगा।
5. संस्थान द्वारा वार्षिक जल आहरण के आधार पर स्वीकृत जल-मात्रा का आकलन एवं समीक्षा समय-समय पर शासन द्वारा की जा सकेगी।
6. महानदी में जल संग्रहण हेतु प्रस्तावित कासीडीह एनीकट एवं महानदी से जल आहरण के प्रस्तावित स्थल (बालपुर के निकट स्थित इंटेकवेल) के ऊपर एवं नीचे जल उपयोग हेतु जल संसाधन विभाग स्वतंत्र होगा एवं निर्माण किये जाने वाले एनीकट में संस्थान द्वारा वांछित जल के अतिरिक्त जल के उपलब्ध होने पर उसके उपयोग हेतु भी जल संसाधन विभाग स्वतंत्र होगा।
7. संस्थान, स्थानीय लोगों के जल उपयोग जैसे पेयजल एवं निस्तार आदि हितों पर किसी प्रकार का प्रतिकूल प्रभाव नहीं डालेगा एवं इस हेतु आवश्यक जल की मात्रा एनीकट में हमेशा सुरक्षित रखी जायेगी।
8. संस्थान, उपयोग के पश्चात अपने संयंत्र से निस्तारित जल का प्द साइकलिंग करके इसका उपयोग करेगा एवं छत्तीसगढ़ पर्यावरण संरक्षण मंडल द्वारा निर्धारित मानकों एवं नियमों के अनुसार उपचार कर निस्तारित करेगा, ताकि क्षेत्र में जल प्रदूषण की कोई समस्या उत्पन्न न हो।

**ANNEXURE-III(a)**

**JSW ISPAT SPECIAL PRODUCTS LIMITED**

(Formerly known as Monnet Ispat and Energy Ltd.)

**AMBIENT AIR QUALITY MONITORING REPORT**

**PERIOD : OCTOBER-2020 TO MARCH-2021**

Station Name/ Parameter	CAAQMS-I					CAAQMS-II					CAAQMS-III					CAAQMS-IV				
	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	SO <sub>2</sub>	NO <sub>x</sub>
MONTH	RESULTS in µg/m <sup>3</sup> ; Prescribed Standard: PM <sub>10</sub> -100 µg/m <sup>3</sup> PM <sub>2.5</sub> -60 µg/m <sup>3</sup> ; SO <sub>2</sub> & NO <sub>x</sub> -80 µg/m <sup>3</sup> and CO-2.0 mg/8Hr.																			
Oct-20	59.8	31.7	0.8	6.3	20.1	56.0	37.3	0.5	8.7	16.3	65.3	33.9	0.9	11.1	14.2	47.0	22.9	0.6	9.3	18.2
Nov-20	48.6	16.2	0.2	8.2	9.7	62.6	29.6	0.4	11.8	22.9	59.0	37.7	0.5	8.6	21.8	43.9	23.0	0.3	10.0	18.0
Dec-20	63.5	26.1	0.6	4.3	13.0	66.0	26.6	0.2	3.2	14.0	66.6	49.8	0.5	2.4	22.0	65.4	25.7	0.4	10.8	20.0
Jan-21	59.4	32.8	0.5	10.6	18.5	69.6	39.8	0.7	10.4	7.1	67.1	37.6	0.5	1.4	15.7	60.1	25.2	0.6	8.4	16.8
Feb-21	65.0	30.4	0.6	15.8	19.3	56.8	30.4	0.5	6.6	11.2	67.2	33.4	0.5	8.9	23.7	55.1	25.9	0.5	6.7	23.8
Mar-21	61.0	43.6	0.4	4.2	9.9	55.4	37.6	0.4	4.7	29.9	67.5	40.6	0.4	1.0	35.8	53.7	27.6	0.4	5.4	29.0

*Ganesh*

**Head (Environment)**

ANNEXURE-III(b)

**JSW ISPAT SPECIAL PRODUCTS LIMITED**

(Formerly known as Monnet Ispat and Energy Ltd.)

**STACK EMISSION MONITORING REPORT**

PERIOD : OCTOBER-2020 TO MARCH-2021

MONTH	STACK-1 (DRI/Klin-1 & Klin-2)		STACK-2 (DRI/Klin-3 & Klin-4)		STACK-3 (DRI/Klin-5 & Klin-6)		STACK-4 (CFBC)		STACK-5 (AFBC)		STACK-6 (Rolling Mill)	STACK-7 (Blast Furnace)	STACK-8 (Sinter Plant)	STACK-9 (SMS)	STACK-10 (Pellet Plant)	
	SO <sub>2</sub>	PM	SO <sub>2</sub>	PM	SO <sub>2</sub>	PM	SO <sub>2</sub>	NOX	PM	SO <sub>2</sub>	NOX	PM	PM	PM	PM	
Oct-20	264	27	232	25	246	32	*	*	349	186	34	*	30	31	*	26
Nov-20	214	34	227	37	240	40	385	145	40	*	*	13	21	22	14	26
Dec-20	211	35	225	39	229	42	364	174	39	*	*	15	22	26	18	31
Jan-21	224	36	213	32	233	34	334	183	38	*	*	15	26	25	26	35
Feb-21	274	35	220	29	278	34	341	214	38	366	183	39	19	20	25	29
Mar-21	258	28	249	27	289	30	354	195	37	*	*	*	16	26	28	27

RESULTS in mg/Nm<sup>3</sup>, Prescribed Standard: PM-50 mg/Nm<sup>3</sup>, SO<sub>2</sub>-600 mg/Nm<sup>3</sup> and NOX-300 mg/Nm<sup>3</sup>

\* Unit Closed

Head (Environment)

*Sewans*

## ANNEXURE-III (c)

### NOISE LEVEL MONITORING REPORT

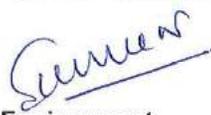
WORK ZONE & AMBIENT-DAY TIME; (PERIOD : OCT-2020 To March 2021)

SN	LOCATION	MONTH					
		Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
<b>POWER PLANT</b>							
1	TG 2	83.2	83.2	84.7	83.2	84.1	83.6
2	TG 3	82.4	84.6	84.3	82.4	82.4	81.7
3	Boiler 80 MW	81.6	81.6	84.6	81.6	83.8	83.4
4	CHP Unit	75.8	70.7	81.5	74.3	73.2	74.6
<b>SPONGE IRON DIVISION</b>							
5	Near Kiln # 1	83.5	83.3	82.7	82.4	82.3	81.7
6	Near Kiln # 3	81.2	84.7	83.4	81.2	84.9	83.7
7	Near Kiln # 6	80.2	81.7	82.9	83.6	82.8	83.9
8	RMH Unit	75.8	80.7	81.9	76.4	78.3	80.2
10	PSB Area	81.2	83.8	83.9	80.4	82.3	81.6
<b>SINTER PLANT*</b>							
11	ESP Area	83.6	84.2	84.6	83.6	82.8	83.8
12	Sinter Cooler Area	81.3	82.2	82.9	81.3	82.1	81.1
13	Control room	72.6	71.2	76.3	72.6	72	76
<b>SMS</b>							
14	Near EAF	*	84.2	82.6	83.4	83.4	84.1
15	Near LRF	*	81.9	82.6	82.3	82.3	83.6
16	Billet caster	*	82.7	83.2	84.6	84.6	82.8
<b>BLAST FURNACE</b>							
17	Blast Furnace Control room	70.8	70.5	78.3	70.8	72.5	71.3
18	BF Stove (Cast House)	83.4	83.1	83.4	83.4	82.3	83.6
19	Pump House	80.4	84.3	83.3	80.4	82.6	81.7
<b>ROLLING MILL</b>							
20	Reheating Area	*	84.2	81.6	82.4	83.2	83.2
21	CNC Room	*	76.4	80.3	81.6	80.1	74.8
22	Cooling Bed	*	83.1	82.6	81.2	80.7	80.7
<b>PELLET PLANT</b>							
23	Near Ball Mill	81.3	83.7	83.9	81.3	82.6	82.6
24	Near Indurating Furnace	83.6	84.3	84.2	82.6	83.2	83.2
25	Near Raw Material Area	81.1	83.7	81.2	80.8	82.4	79.8
26	Near Thickener	82.6	81.3	80.9	81.2	82.7	82.7

#### AMBIENT NOISE LEVEL MONITORING REPORT

1	Main Gate (Outside)	70.6	73.2	70.9	70.6	72.5	73.5
2	Gate No. 2 (Near WTP-2)	65.3	71.3	72.3	72.6	71.3	70.3
3	Gate-3 (Near Pellet Plant)	67.8	72.6	69.1	67.8	68.2	72.2

\* Unit Closed and All values are in dB(A)

  
HOD (Environment)

# ANNEXURE-IV

## Health Check-up Record

NJ-0016/A

EMPLOYEE NAME: SURESH KUMAR TIWARI AGE: 44/M.  
EMPLOYEE CODE: \_\_\_\_\_  
EMPLOYEE ID: 15.03.21 DATE: 15.03.21 DESIGNATION: SR. MANAGER DEPT: PR & Liaison,  
AADHAR No: 8972 9279 3727 EPIC No: \_\_\_\_\_

FORM 31 (Annexure)  
[Prescribed Under Rule (19)]  
Health Register

(In respect of persons employed in occupations declared to be dangerous operation under section 87)

### PRE-EMPLOYMENT & PERIODIC MEDICAL EXAMINATION

- (1) GENERAL EXAMINATION:  
HEIGHT: 180 CM. WEIGHT: 90 KG. BMI: 27.77  
CHEST: INSPIRATION 104 CM. EXPIRATION 97 CM.  
BUILT - AVERAGE / STRONG / POOR  
THROAT \_\_\_\_\_ TONGUE \_\_\_\_\_ TONSILS \_\_\_\_\_  
TEETH \_\_\_\_\_ GUMS /WNL THYROID \_\_\_\_\_  
LYMPH NODES \_\_\_\_\_  
ADDITIONAL FINDINGS \_\_\_\_\_
- (2) CARDIO-VASCULAR SYSTEM:  
PULSE: 93 / MIN. REGULAR / IRREGULAR PERIPHERAL PULSE - FELT / NOT FELT  
B.P. 136/72 mm of Hg  
HEART SOUND: \_\_\_\_\_  
MURMUR IF ANY: S/S  
ADDITIONAL FINDING (S) IF ANY: MI
- (3) RESPIRATORY SYSTEM:  
SHAPE OF CHEST: \_\_\_\_\_  
CHEST MOVEMENTS: /WNL  
TRACHEA: \_\_\_\_\_  
BREATH SOUNDS: \_\_\_\_\_
- (4) GASTRO-INTESTINAL SYSTEM:  
LIVER: \_\_\_\_\_ S/L  
ANY ABDOMINAL LUMPS: /WNL
- (5) EXAMINATION OF EYES:  
EXTERNAL EXAM: \_\_\_\_\_ SQUINT: /Nil  
NYSTAGMUS:   
COLOUR VISION - NORMAL / DEFECTIVE  
FUNDUS (L) (R) \_\_\_\_\_  
INDIVIDUAL - COLOUR IDENTIFICATION - NORMAL / DEFECTIVE  
DISTAN - VISION (WITHOUT GLASSES)  
RIGHT: 6/9 LEFT: 6/12  
(WITH GLASSES) RIGHT: 6/6 LEFT: 6/6  
NEAR VISION (WITHOUT GLASSES)  
RIGHT: N/G LEFT: N/G  
(WITH GLASSES) RIGHT: \_\_\_\_\_ LEFT: \_\_\_\_\_  
NIGHT BLINDNESS - (NYCTALOPIA): \_\_\_\_\_
- (6) EXAMINATION OF EAR, NOSE & THROAT:  
EXTERNAL EXAM: \_\_\_\_\_
- (7) GENITO URINARY SYSTEM:  
HERNIA: \_\_\_\_\_ HYDROCELE / VARICOCELE \_\_\_\_\_  
CRYPTORCHIDISM: \_\_\_\_\_ PHIMOSE \_\_\_\_\_  
VARICOSE VEINS: \_\_\_\_\_ SIGNS OF STD \_\_\_\_\_  
OTHER EXAMINATION FOR FEMALES:  
MENSTRUAL HISTORY OBSTETRIC HISTORY  
MENARCHE AT \_\_\_\_\_ Yrs. GRAVIDA \_\_\_\_\_ PARA \_\_\_\_\_  
LMP: \_\_\_\_\_  
MENSTRUAL IRREGULARITY, IF ANY \_\_\_\_\_
- (8) LAB INVESTIGATIONS:  
URINE: ALBUMIN: NIL SUGAR: NIL  
MICROSCOPY: WBC: \_\_\_\_\_ STOOL: NA

HAEMOGRAM

Blood Group: O<sup>+</sup> Rh Factor: Positive Hb: 14.0 Hct: 5.300 WBC: 4.6  
 EUC: 67 EUC: 31 EUC: 07 M: 07 S: 00 Platelets count: 2,54

LIPID PROFILE

Serum cholesterol: 174.0 145.0  
 HDL, LDL: 35.0 110.0

HEPATIC PROFILE

SGPT, SGOT: 32.5 44.2  
 Alkaline Phosphatase: 186.0

RENAL PROFILE

Blood Urea, S. Creatinine: 22.0 0.7

METABOLIC

Blood Sugar - F., Blood Sugar - PP., S. Uric acid: 80.3 110.9 7.1

(9) OTHER INVESTIGATIONS:

X-Ray Chest (In normal persons once in three years, In case of any abnormality x-ray can be done at shorter intervals) WNL  
 ECG (In case of any abnormality further tests should be carried out) WNL  
 Ultra Sound Whole abdomen (In normal persons once in three years in case of any abnormality can be done at shorter intervals) WNL

Other: \_\_\_\_\_

(10) PULMONARY FUNCTION TEST:

	FVC	FEV 1	FEV 1 / FVC
Predicted			
Measured			
% of Predicted	<u>84</u>	<u>94</u>	<u>112</u>

Remarks:

- (11) Audiometry examination - PTA of both ears at frequency of 125, 250, 500, 1000, 2000, 4000, 8000 Cycles per second L-PTA 21.25, R-PTA 18.75.
- (12) Medical examination of canteen staff  
 a - Blood examination for venereal disease and routine examination  
 b - Stool and urine examination for worm infection  
 c - Screening for skin disease (scabies and other)  
 d - X-ray and other tests for T. B.
- (13) Details of other specific medical examination carried out as mentioned in the respective schedules of rule 107 of C.G. factories 1962 --

*not for light & confined space*

*dit to join*

*7/6/3/21*

Signature (with date) of  
 Factory Medical Officer

Signature (with date) of  
 Certifying Surgeon

Emp. Sign.

Name: (SURESH KUMAR TIWARI)

**MAINA DEVI CLINIC**

JSW Ispat Special Products Ltd.

(Formerly Known As Monnet Ispat &amp; Energy Ltd.)

Village &amp; P.O.: Naharpali, Tehsil.: Kharsia, Raigarh – 496 661 (Chhattisgarh)

Sr. No.	16		Mob.	7000596645	Date	15.03.2021
Name -	Mr. Suresh Kumar Tiwari		Age / Sex	44	Male	
Department	PR & Liaison		Emp. Code -		Nj0016/A	
Blood Group Rh. -		"O"	Positive			
HAEMOGRAM :		Ref.Range		BIOCHEMISTRY :		Ref.Range
HB %	14.0	12.0 – 16.0 gm. / dl		BLOOD SUGAR (F/PP)	80.3/110.9	70 – 140 mg/dl
RBC.	4.6	3.50 – 5.50 x 10 <sup>6</sup> /ul		T. CHOLESTEROL	174.0	130 – 200 mg/dl
TLC.	5.3	4.0 – 10.0 x 10 <sup>3</sup> /ul		TRIGLYCERIDE	145.0	50 – 170 mg / dl
POLY %	61	40 – 70 %		HDL. CHOL.	35.0	35 – 80 mg / dl
LYMPH %	31	20 – 40 %		LDL.	110.0	85 – 100 mg / dl
EOSIO %	1	1 – 6 %		VLDL.	29.0	05 – 40 mg / dl
MONO %	7	3 – 12 %		BLOOD UREA	22.0	10 – 50 mg / dl
BASO %	0	0 – 1 %		S. CREATININE	0.7	0.6 – 1.3 mg / dl
PLT.	254	100 – 450 x 10 <sup>3</sup> /ul		S. URIC ACID	7.1	3.5 – 7.2 mg / dl
				SGOT. (AST)	44.2	Up to 46 IU/ L
URINE	NAD			SGPT. (ALT)	32.5	Up to 49 IU/ L
STOOL	NA			ALKALINE PHOS.	186.0	80 – 306 IU/L

Remarks :

  
Factory Medical Officer

This report is not valid for medico-legal purposes.

Page 01 of 01

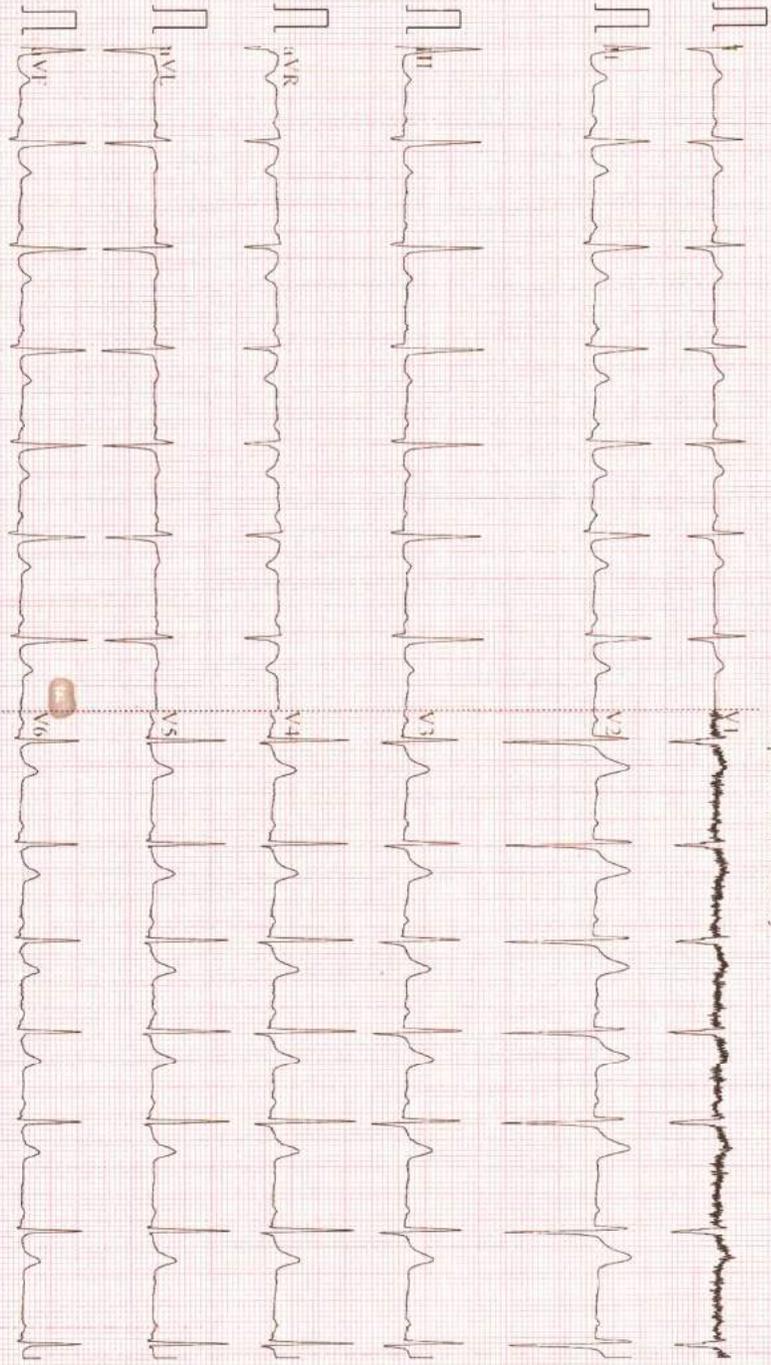
\*\*\*END OF REPORT\*\*\*

Suresh Kumar Iwari  
Male 44 Years

HR : 81 bpm  
P : 110 ms  
PR : 153 ms  
QRS : 91 ms  
QT/QTc : 341/396 ms  
P/QRS/T : 49/89/52 °  
RV/ SV1 : 1.4/0.0/7.96 mV

Diagnosis Information:  
Sinus Rhythm  
\*\*\*Normal ECG\*\*\*

Report Confirmed by:



0.67-1001Hz AC/50 25mm/s 10mm/mV 2\*5s 81 V191 SEMIP V16 Occupational Health Centre

## ANNEXURE-V

### CSR ACTIVITIES DETAILS

<b>JSW ISPAT SPECIAL PRODUCTS LIMITED</b> Naharpali, Raigarh (C.G.)					
<b>CSR EXPENSES 2020-21</b>					
S.No.	Description of CSR project or activity identified	Sector in which the project is covered	Projects or programs (1) Local area or other (2)Specify the State and district where projects or program was undertaken	Amount spent on the projects or programs Sub heads: (1) Direct expenditure on projects or programs (2) Overheads:	Cumulative expenditure up-to the reporting period (INR)
1	Computer, LCD Projectors and interactive Board provided to Jawahar Navodaya Vidyalaya	Education	10 Adopted villages.1.Naharpali, 2. Singhanpur, 3. Bilaspur 4. Bhupdeopur, 5. Tilaipali 6. Lodhajhar, 7. Salihathatha 8. Raksapali 9. Sendripali 10. Kurrubhatha, Block - Kharsia,Dist- Raigarh (CG)	Direct expenditure by procuring the good	620,000
2	Expenditure incurred in fighting Covid-19 contamination. It includes food packets, PPE Kits distribution. Providing ambulance facilities and other medical Kits to Dist Administration.	Health	Within Raigarh District	Direct expenditure by procuring the good	1,115,976
3	Expenditure incurred in developing the Dev Sthal at Salihabhata, Renovation work at Traffic Thana, proving construction materials in flood affected area, installing dustbin at market area, sponsoring kabaddi tournaments etc	Community Development	Within Raigarh District	It Includes both direct expenditure and overheads	1,336,200
4	stitching center for ladies operational at DAV School	Women empowerment	nearby villages	It Includes both direct	74,749
5	Amount deposited in the Dist Administration fund account as per the direction of Collector.	Infrastructure development	Within Raigarh District	Direct expenditure	3,059,000
<b>TOTAL</b>					<b>6205925</b>

**ANNEXURE-VI (a)**

**DATA DISPLAYED AT MAIN GATE**



## ANNEXURE-VI (b)

### DATA PUBLISHED IN WEBSITE

The screenshot displays the website for JSW Ispat Special Products Limited, formerly known as Monnet Ispat & Energy Limited. The page is titled "Clearances" and features a navigation menu with links for PROMOTERS, PRODUCTS, INVESTORS, CAREERS, CSR, and CONTACT US. The main content area lists twelve clearance reports, each with a document icon, a title, a date range, and a "Download" button. The reports are arranged in two columns. The first column includes reports for Raigarh (Apr 2020 to Sep 2020), Raipur (Oct 2019 to Mar 2020), Raipur (Apr 2019 to Mar 2020), Raipur (Jul-Dec 2019), and Naharpali Raigarh (Oct 2019 to Mar 2020). The second column includes reports for Hahaladdi Iron Ore Mine, Raipur, Raipur (Annual Environment Statement 2018-19), Raipur (Monthly Fly Ash Report Dec 2019), Raipur (Consent under Water and Air Acts), and Naharpali village, Raigarh (June 2015). A taskbar at the bottom shows the Windows Start menu, search bar, and various application icons, with the system clock indicating 4:46 PM on 5/5/2021.

Report Title	Download Link
EC Compliance Report - Raigarh Apr 2020 to Sep 2020	<a href="#">Download</a>
EC Compliance Report - Hahaladdi Iron Ore Mine	<a href="#">Download</a>
EC Compliance Report Oct 2019 to Mar 2020	<a href="#">Download</a>
Environment Clearance - Raipur	<a href="#">Download</a>
Fly Ash Utilization Report Apr 2019 to Mar 2020	<a href="#">Download</a>
Annual Environment Statement 2018-19 - Raipur	<a href="#">Download</a>
Six Monthly EC Compliance Report Jul-Dec 2019 - Raipur	<a href="#">Download</a>
Monthly Fly Ash Report Dec 2019 - Raipur	<a href="#">Download</a>
EC Compliance Report of 1.75 MTPA Integrated Steel Plant in Naharpali Raigarh Oct 2019 to Mar 2020	<a href="#">Download</a>
Consent under Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981	<a href="#">Download</a>
EC for MIEL Raigarh - MoEF Dec 2007	<a href="#">Download</a>
EC Compliance Report of 1.75 MTPA Integrated Steel Plant in Naharpali village, Raigarh, June 2015	<a href="#">Download</a>