(CIN: U27100MH2000PLC125893)

Manuf. & Supplier : Beam, Angles, Channels, Wire Rod, HB, Sponge Iron, Billets, Sillico Manganese Phase-II, Village-Siltara, (Near Industrial Growth Center), Dharsiva, Raipur Chhattisgarh-493111 District Raipur Tel. : 98936 94255-58, Email : Works@sksispat.com, www.sksispat.com

Ref.: No. SKSIPL/MOEF/ENV/2021-22/2358

Date: 04.05.2022

The Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated regional Office (IRO) Ground Floor, Aranya Bhawan, Sector-19, Atal Nagar, Nava Raipur (Chhattisgarh)

Sub.: Half Yearly compliance report of Environment Clearance condition awarded for integrated Steel Plant along with Coal Based Power Plant at Village- Siltara, Raipur, and Chhattisgarh for the period of October -2021 - March- 2022.

Ref.: Environment Clearance Letter No. J-11011/99/2006-IA.II (I), MOEF GOI New Delhi, dated 25.08.2006.

Sir,

We, SKS Ispat and Power Limited have established an Integrated Steel Plant and Coal based Thermal Power plant at village Siltara, Block: Dharsiwa, Raipur, (C.G.). The project Capacity is given as below:

| SI.No. | PRODUCT NAME | TOTAL PRODUCTION CAPACITY |
|--------|------------------------|---------------------------|
| 01 | SPONGE IRON | 2,70,000 TPA |
| 02 | STEEL DIVISION | 3,31,500 TPA |
| 03 | ROLLING MILL | 3,84,000 TPA |
| 04 | WHRB BASED POWER PLANT | 25 MW |
| 05 | COAL BASED POWER PLANT | 2 X 30 MW |
| 06 | FERRO ALLOY PLANT | 29,400 TPA |

With reference to the terms and conditions prescribed in the above referred Environment Clearance, please find attached herewith Half Yearly Environment Compliance Report along with relevant documents/details for your kind perusal. We hope you will find the same in order and oblige.

Thanking you,

For SKS Ispat and Power Limited Rajeev Sabhlok

Copy to -

| | Central Pollution Control Board Zonal | Member Secretary,CECB, |
|------------------------------------|--|------------------------------|
| Director | Office (Central) | Paryawas Bhawan, Sector-19, |
| Ministry of Environment, Forests & | 4 rd Floor, Sahkar Bhawan,North | Atal Nagar Nava Raipur (CG). |
| Climate Change Indira Paryavaran | T.T.Nagar, Bhopal – 462003 | |
| Bhavan, Jor Bagh Road, New Delhi - | | |

Encl.: As above.

ENVIRONMENT CLEARANCE F.NO.J-11011/99/2006-IA (I) COMPLIANCE STATUS REPORT

(October -2021- March-2022)

| SI. | EC Conditions | Compliance | | | |
|-------|--|--|--|--|--|
| No | | - | | | |
| Speci | Specific Conditions | | | | |
| i | The gaseous emissions from various processes units shall confirm to the load / mass based standards notified by the Ministry of Environment and Forest on 19 th 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 nature of 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. | All the emissions from various processes are confirming to the standards notified by the MOEF and CPCB which are monitored regularly and reports are submitted to the MoEF, CPCB and SPCB time to time, CECB also monitors the same in regular intervals. We have installed appropriate APCD to ensure that at no point of time the emission levels go beyond the prescribed standards. As per guidelines from CPCB we have installed Online continuous stack emission monitoring system and Gas Analyzers along with Flow meters at our stacks and are connected to the CPCB & CECB server and continuously the real time data is transferred to the SPCB & CPCB server. Interlocking facility has been provided | | | |
| | In Cool Road Thermal Dower Plant | such that process can be automatically stopped in case of tripping of ESP/emission level exceeds the limit. | | | |
| | stacks of adequate height as per CPCB norms and electrostatic precipitator (ESPs) of adequate capacity and efficiency not less than 99.5% shall be installed to control particulate emission is not exceeding 100 mg/Nm ³ . | (AFBC & CFBC) stacks of adequate height as per CPCB norms are constructed and attached with ESP's of 99.9% efficiency and are confirming the emission level of particulate matter below 50 mg/Nm ³ . | | | |

| iii | 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, steel melting shop and other enclosed raw material handling areas. All the material transfer points, discharge points and raw material storage area shall be completely covered. Fugitive emissions shall be controlled by providing closed conveyor system for transport of raw material from the stock yard to the sponge iron plant. Telescopic Chutes with Bag Filters shall also be provided for removal of fugitive dust from the product storage and loading area. Monitoring the fugitive emission in the work zone environment shall be carried out regularly as per CPCB guidelines and reports submitted to SPCB/CPCB and Ministry's Regional office Bhopal | Measures are taken for checking fugitive emissions from all the vulnerable sources like spillage /Raw materials/coal handling etc. Dust suppression system consisting dust extraction, water sprinkling, suction hoods, dry fog system, rain guns and bag filters etc, have been provided for all the material transfer points, discharge points and raw material storage area and are working efficiently. Closed Conveyer System is provided for transport of raw materials from the stock yard to the sponge iron for controlling fugitive emission. Bag Filters are provided for removal of fugitive dust from the product storage loading area. We are regularly monitoring the fugitive emission in the work zone area and submitting the reports to the authorities regularly. |
|-----|---|---|
| iv | Asphalting or concreting of the roads shall be carried out in work area to control fugitive emissions. | Complied |
| V | As indicated in the EIA/EMP report the company shall install Waste Heat Recovery Boilers (WHRB) to recover the waste heat and generate power from the steam produced by the WHRB. The particulate emissions from the WHRB shall be controlled by installation of ESPs as per CPCB specifications and particulate emission should not exceed 50mg/Nm ³ .Further the company shall install bag filter ,After burning chamber (ABC),suction hood ,dust extraction device and fume extraction system. | Waste Heat Recovery Boiler (WHRB) has been installed to recover the Waste Heat and generate the power from the steam. ESP has been installed to control particulate emission from the WHRB as per the CPCB specifications. The existing ESPs are being upgraded to achieve particulate emission less than 50mg/Nm ³ . After Burning Chamber (ABC), Suction Hoods, dust de-dusting system, dry fog system have been installed in RMP. |

| | | Also 1, 00,000 m ³ capacity bag filters are installed at product separation area and 25,000 m ³ bag filters is connected with fuel crusher house and secondary screen area. We have installed ESP's of five fields with total collecting surface area 12375 meter and efficiency of ESP is 99.9 %, resulting emission level below 50 mg/Nm ^{3.} |
|-----|--|---|
| vi | Total requirement of the waters from kharoon river shall not exceed 4,800 m3 /day permitted by the state Government as reflected in the EIA/EMP report ,The waste water generation from the various units and its proper recycling and reuse for dust suppression and green belt within the plant premises shall insured .The effluent during the monsoon shall be discharged after confirming the prescribed standards .The domestic waste water after treatment in STP shall be used for greenbelt development .No waste water shall be discharged outside the plant premises and zero discharge should be strictly followed as proposed. | The total water required is 4,800 M3/day. We do not have colony in the premises only few staff quarters and guesthouse established which generate very nominal sewage, The same is routed through septic tank and soak pit. Effluent treatment plant is already established in plant premises with capacity 500 m3/Day, After treatment & maintain the parameters it is being reuse for cooling system in sponge iron division and in continues water sprinkling for dust suppuration. No effluent is discharged outside of plant premises under any circumstances. Hence, zero discharge conditions are maintained at all the times. |
| vii | Solid waste will be generated in the form of char, kiln accretions; fly ash from ESP's and bottom ash etc. The char shall be used as fuel in the AFBC Boiler in coal based TPP. Kiln accretions shall utilize for filling the low lying area. The entire quantity of Fly ash generated during the process shall be utilized for making bricks manufacturing plant. Granulated slag shall be used for bricks making and non-granulated slag shall be used in road making.ETP sludge shall be used brick making and filling low-lying areas. Mill Scale shall be reused Ferro | ETP plant picture Enclosed as annexure – 6 Char, Dolochar and Coal fines are used as fuel in the AFBC/CFBC Boiler of coal based CPP .Kiln accretions are used for filling the low lying areas and area development. Fly ash is given to cement plants, fly ash bricks manufacturer and are used for making bricks in our own fly ash bricks manufacturing unit. Bottom ash has been used for road making, low lying area filling and surplus (if any) are disposed off in a suitable land fill as per CPCB |

| | Alloys/Pig iron furnace; ESP Fly Ash will be made available to the cement plants and bricks making plants whereas bottom ash shall be either used for construction or disposal off in a suitably designed landfill as per CPCB guidelines to prevent leaching to the sub-soil and underground aquifer. Solid waste generation in the form of cutting edge scrape shall be recycled to the billet plant. | guidelines. We get done soil leachate test & Fly ash test by third party in every six month. Report Enclosed as annexure - 7 Granulated slag and non granulated slag are used for road making. Mill scale is reused in SMS as raw material. |
|------|---|---|
| viii | The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table. | Surface and roof top rainwater harvesting has been adopted to harvest the rainwater for utilization in the lean season besides recharging the ground water table in the Administrative building area and inside plant buildings. |
| ix | Green Belt shall be developed in at least 20 Ha areas (33%) within and around the plant premises as per the CPCB guidelines in consultation with DFO. | We have covered more than 33% area of the plant as green belt and as on March -2022 the total survived saplings are around 56,000 Nos Around 15,500 saplings we have planted away from the plant site. The plantation is being done as per the CPCB guidelines. Details enclosed as Annexure – 1. |
| x | Occupational Health Surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act. | Occupational Health Surveillance of the employees is carried out on a regular interval basis and records are maintained and submitted as per Factories Act. |
| xi | All recommendations of the charter on the corporate Responsibility for Environmental protection (CREP) for steel plants shall be followed. | CREP recommendations have been implemented. The compliance report for the same is enclosed as Annexure – 2. |
| Gene | ral Conditions | |
| i | The project authorities must strictly adhere to the stipulations made by the Chhattisgarh Environment Conservation Board (CECB) and the | Company is strictly adhering to the stipulations made by the CECB and the State Government. |

| | state Government. | |
|-----|---|--|
| ii | No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment and Forests | Noted. |
| iii | At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentrations of SPM, SO2, Nox are anticipated in consultation with the CECB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional office at Bhopal, and CPCB and CECB once in six months. | One "Online Ambient Air Quality Monitoring Station" installed at plant premises. And server connected with CPCB & CECB. Picture Enclosed as (Annexure- 5) Four ambient air quality monitoring stations have been established in consultation with the CECB. Picture Enclosed as (Annexure- 5) Data on ambient air quality and stack emission is monitored on regularly basis and reports submitted to MOEF including its Regional office at Nagpur and CPCB (Once in Six months) and CECB on monthly basis. Summary of last six month average monitoring data as submitted are enclosed as Annexure- 3. |
| iv | Industrial waste water shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 (e) dated 19 th May, 1993 and 31 st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose. | Noted |
| V | The overall noise levels in and around the plant area shall be kept well within standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time). | The Noise level monitoring is being carried out regularly at work places and the noise level is maintained below to the stipulated norms. The people working at high noise area are being Provided with PPE and facilitated with job rotation. The ambient noise level also confirmed to EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time). Copy of last six month monitoring reports as submitted is |

| | | enclosed as Annexure- 4 |
|------|---|---|
| vi | The project proponent shall also comply with all the environmental protection measures and safeguards recommended in EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc. | Recommendations made in EIA/EMP report are compiled. The socio- economic and peripheral development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc are been taken care. |
| vii | As mentioned in EIA/EMP Rs.10.65 Crores and Rs.1.90 Crores kept towards the capital cost and recurring expenditure /annum for implementing environmental pollution control measures shall be judiciously used to implement the conditions stipulated by the MOEF as well as state government along with the implementation schedule for all conditions stipulated herein .The funds so provided shall not be diverted for any purpose. | Noted |
| Viii | The Regional office of this Ministry at Bhopal /CPCB/CECB shall monitor the stipulated conditions .A six monthly compliance report and the monitored data along with statically interpretation shall be submitted to them regularly. | The compliance report and monitoring data have been regularly submitted at stipulated periodic time interval to CPCB, Regional Office, MOEF Bhopal and CECB. |
| ix | 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 CECB/Committee and may also be seen at Website of the Ministry of Environment and Forests at http:/envifor.nic.in. 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 | Complied |

| | one shall be in the vernacular language of the locality concerned and the copy of same should be forwarded to the Regional office. | |
|-----|---|-------|
| X | Project authorities shall inform the Regional Office as well as Ministry the date of financial closure and final approval of the Project by the concerned authorities and the date of commencing the land development works. | Noted |
| 5.0 | The Ministry may revoke or suspend the clearance, if implementation of any of the above condition is not satisfactory. | Noted |
| 6.0 | The Ministry reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner will implement these conditions. | Noted |
| 7.0 | The above conditions will be enforced inter-alia under the Provision of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules. | Noted |

ANNEXURE-I

मेसर्स एसकेएस इस्पात एवं पॉवर लिमिटेड 18^{जी} माईल स्टोन बिलासपुर रोड फेस–2 सिलतरा रायपुर (छ .ग.)

वृक्षारोपण के संबंध मे जानकारी

| 1 | उघेग परिसीमा का कुल क्षेत्र फल | 190.755 एकड (77.19 ह.े) |
|---|--|---|
| 2 | वृक्षारोपण हेतु प्लांट मे आराक्षिति क्षेत्र फल | प्लांट के कुल क्षेत्र फल का 33 प्रतिशत लगभग 62.94 एकड (25.17 ह.े) |
| 3 | उद्योग परिसर मे कुल जिवित वृक्षो की संख्या | 56,000 (लगभग) कुल क्षेत्र फल 88.92 एकड (36.0 ह.े) (वृक्षो के वृक्षारोपण की बीच की दुरी 3 [,] 3 मीटर) |
| 4 | उद्योग परिसर मे कुल जिवित वृक्षो की संख्या प्रतिशत मे | 67-69: (लगभग) |
| 5 | प्रकार | नीम,गुलमोह्ट,छातिम,पेलटाफार्म,करंज,जामुन,अमरुद, आम,आंवला, इत्यादि |

नोटः– समस्त वृक्षारोपण ब्ब्ल के मापदंडो के अनुसार किया गया है !

2

Neriti dall'i sionivi

Green Belt Development









Plantation Done on Monsoon Season 2021 at SKS Ispat Power Itd.



THANK YOU

Annexure- 2

CREP COMPLIANCE STATUS REPORT

(STEEL PLANT)

| SI. No. | Description | Status |
|------------|--|--|
| 1 | Coke Oven Plants | |
| | To meet the parameters PLD (% leaking doors), PLL (%leaking lids), PLO (% leaking off take), of the notified standards under EPA within three years (by December 2005). Industry will submit time bound action plan and PERT Chart along with the Bank Guarantee for the implementation of the same. | Not Applicable |
| | To rebuild at least 40% of the coke oven batteries* in next 10 years (by December 2012). | Not Applicable |
| 2 | Steel Melting Shop | |
| | Fugitive emissions: To reduce 30% by March 2004 and 100% by March 2008 (including installation of secondary de-dusting facilities). | We have installed Bag filters with suction hood on each furnace, which are very effective and installed fume extraction system to reduce fugitive emission up to 100%. |
| 3 | Blast Furnace | |
| | Direct inject of reducing agents —— by June 2013. | Not Applicable |
| 4 | Solid Waste / Hazardous Waste Management | |
| | Wanagement Utilization of Steel Melting Shop (SMS) / Blast Furnace (BF) Slag as per the following schedule By 2009 - 70%, By 2010 - 80% and By 2011 - 100% | SKSIPL is generating slag from Induction Furnaces. This generated slag sent to slag crusher for crushing after crushing separation of metallic and nonmetallic parts are done. Metallic part is again utilized in furnaces, where as non-metallic part is used for road construction, area development and filling of low lying areas inside and out |
| | | the plant premises. |

| | Hazardous Wastes | |
|---|---|---|
| | Charge of tar sludge / ETP sludge to Coke Oven by June 2003. | Not Aplicable |
| | Authorization of the Hazardous Waste as per Hazardous Waste (M&H) Rules, 1989 as amended in 2000 and implementation of the Rules by Dec. 2003. | As per Hazardous Waste Rules amended till date, we have been granted authorization under the hazardous waste (management, handling and transboundary movement) rules 2016 for Used/ Spent Oil - 6.0 KL/Year, Spent ion exchange resin containing toxic metals- 1.0 MT/Year and Glasswool & cerawool (toxic) – 50kg/year, Empty barrels/containers /liners contaminated |
| | (Tar sludge, acid sludge, waste lubricating oil and type fuel falls in the category of Hazardous Waste) | with hazardous chemicals /wastes 6 T/year, Tarry residues /Coa 20-MT/Annum, Contaminated Cotton rags or other cleaning materials 20kg/year, Organic Residue (Phenolic Waste Water Containing Organic Residue) 200-KL/year, ETP Sludge 10T/Year (Chemical sludge Tar (Authorization valid till 16.07.2025) |
| | | During FY 2020-21 we have generated 1.7 KL (approx) of used/spent oil. This oil is stored in the drums at Hazardous waste storage area and is used as lubricant at our Rolling Mills and other units. |
| 5 | Water Conservation / Water Pollution To reduce specific water consumption to 5 m³/t for long products and 8 m³/t for flat products by December 2005. | We are manufacturing Ingots, Blooms and Billets through concast and send them to rolling mill for manufacturing of long products. In our plant, we are not manufacturing any long/flat products and therefore this is not applicable. |
| | • To operate the CO-BP effluent treatment plant efficiently to achieve the notified effluent discharge standards by July 2003 | Applied |
| 6 | Installation of Continuous stack monitoring system & its calibration in major stacks and setting up of the online ambient air quality monitoring | Online continuous emission monitoring system and Gas analyzers are installed at stacks to monitor dust and gas emissions continuously and is connected |

| | (AAQM) stations by June 2005 | with CECB/CPCB server. |
|---|---|---|
| 7 | To operate the existing pollution control equipment efficiently and to keep proper record of run hours, failure time and efficiency with immediate effect. Compliance report in this regard is submitted to CPCB / SPCB every three months. | Separate logbook is maintained for each pollution control equipment like ESP, Bag House, Bag Filter etc. We are submitting the record of pollution control equipment to CECB on monthly basis. As our regular practice preventive maintenance of all the APCD are carried out also the performance check by third party is done as and when required. |
| 8 | To implement the recommendations of Life Cycle Assessment (LCA) study sponsored by MoEF by December 2003. | Noted |
| 9 | The industry will initiate the steps to adopt the following clean technologies/measures to improve the performance of industry towards production, energy and environment. Energy recovery of top Blast Furnace (BF) gas. Use of Tar-free runner linings. De-dusting of Cast House at tap holes, runners, skimmers, ladle and charging points. Suppression of fugitive emissions using nitrogen gas or other inert gas. | Not Applicable Not Applicable We have provided fume extraction system and de-dusting system to control dust. Noted. |
| | To study the possibility of slag and fly ash transportation back to the abandoned mines, to fill up the cavities through empty railway wagons while they return back to the mines and its implementation. Processing of the waste containing flux & ferrous wastes through waste recycling plant. | 100% utilization of slag and fly ash being implemented. Not Applicable Surface and roof top rainwater harvesting |
| | To implement rainwater harvesting. | building, store room building, quality control lab building area as well as inside |

| | plant premises. | | |
|--|--|--|--|
| Reduction of Green House Gases by: | We are a designated consumer under | | |
| Reduction in power consumption | PAT scheme as introduced by BEE (Bureau of Energy Efficiency) Govt of India and in regular time interval we undergo Energy Audit and various steps are taking for promotion of reduction of power consumption. Also we are | | |
| Use of by-products gases for power generation | educate the employees for reduction of power consumption. | | |
| Promotion of Energy Optimization Technology including energy audit. | We have already installed Waste heat recovery boilers and out of which we are generating 25 MW power. | | |
| | We are a designated consumer under PAT scheme as introduced by BEE (Bureau of Energy Efficiency) Govt of India hence Time to time, we are undergone Energy Audit from external agency and various steps are taking for promotion of energy optimization. | | |
| To set targets for Resource Conservation such as Raw material, energy and water consumption to match International Standards. | We have set our own targets and manufacturing done as per targets. The company has also awarded ISO 9001 and 14001 and we are committed to conserve natural resources. | | |
| Up-gradation in the monitoring and analysis facilities for air and water pollutants. Also to impart elaborate training to the manpower so that realistic data is obtained in the environmental monitoring laboratories | We have made separate Environment, Health & Safety Cell, headed by eminent Environmentalist. We have established Environment laboratory for monitoring and analysis for air and water pollutants like BOD incubator, Oven, pH meter, Water bath, Respirable dust samplers, PM2.5, Stack monitoring kit, Noise level meter, Conductivity meter, Turbidity meter etc. | | |
| | We are providing periodic training regarding environmental awareness from top to bottom level management. Simultaneously, we also provide training to the persons of environment cell for effective monitoring and analysis. | | |
| To improve overall housekeeping. | To improve overall housekeeping some | | |

| | | af the stand and should be such as |
|----|---|--|
| | | of the steps are already taken such as: |
| | | 150 Nos. of water sprinklers are provided for dust suppression on both sides of the roads. Almost 99% roads made pucca by concrete or with the help of fly ash bricks/blocks. |
| | | Around 53,000 saplings are planted inside the plant boundary till date with survival rate of 66-70%. |
| | | Water sprinkling through water tanker in raw material storage area are done |
| | | We are having truck mounted road sweeping machine for effective house keeping. |
| | | Day to day road sweeping and trenches cleaning are also in practice. |
| | | 5 S systems have been introduced for better housekeeping. |
| 10 | <u>Sponge Iron Plants</u> Inventorization of sponge iron plants to be completed by SPCBs/CPCB by June 2003 and units will be asked to install proper air pollution control equipment by | We have set up the state-of-the art sponge iron plant with waste heat recovery boilers. |
| | December 2003 to control primary and secondary emissions. | In plant all Pollution generating points are connected with pollution control equipment like Electrostatic Precipitators (ESPs), Bag House, Dust Suppression system, Sprinklers, Dry fog system etc. |
| | | We have also constructed sock pits for domestic wastewater treatment and treated wastewater is being reused for plantation and dust suppression purpose. |

CREP COMPLIANCE STATUS REPORT

(THERMAL POWER PLANT)

| SI. | Description | Status |
|-----------------|--|--|
| No. 1 | New/expansion power projects to be | In Coal Based Thermal Power Plant |
| | accorded environmental clearance on or after 01 04 2003 shall meet the limit of 100 | (AFBC/CFBC) we have constructed |
| | mg/Nm^3 for particulate matter. | CPCB norms. ESP's of 99.9% efficiency is provided to limit the |
| | | emission particulate matter well below 50 mg/Nm ³ . |
| 2 | Development of SO ₂ & NO _x emission | We have provided appropriate stack |
| | December 2003. | and achieving the prescribed standards. |
| | - New/expansion power projects shall | |
| | 01.01.2005. $O_2 \approx NO_x \approx 0.1$ | |
| | Existing power plants shall meet the limit of SO₂ & NO_x w.e.f. 01.01.2006. | |
| 3 | Install/activate Opacity meters/continuous monitoring systems in all the units by | Online continuous emission monitoring systems along with Gas |
| | System. | installed at all the stacks to monitor |
| | | dust and gas emissions continuously and real time data is transferred |
| | | continuously at CECB/CPCB server. |
| 4 | Development of guidelines/standards for mercury and other toxic heavy metals by | Noted |
| | December 2003. | |
| 5 | Review of stack height requirement and quidelines for power plants based on micro | Stack Height H = 14 (Q) ^{0.5} Where H = Stack Height |
| | meteorological data by June 2003. | Q = Emission rate of SO2 in kg/hr. |
| | | Based on this formula stack height |
| | | power plant) and 80 Mtr. (50 MW |
| | | power plant) for our existing power |
| | | plants, where as we have provided stack height 60 mtr & 80 mtr |

_

| | | respectively. |
|----|---|---------------------------------------|
| 6 | Implementation of use of beneficiated coal | We have signed Fuel Supply |
| | as per GOI notification. | Assignment with CIL-SECL and in |
| | Power plant will sign fuel supply agreement | regular touch with the authorities. |
| | (FSA) to meet the requirement as per the | |
| | matrix prepared by CEA for compliance of | |
| | the notification as shot term measure. | |
| | Options/mechanism for setting up of coal | |
| | washeries as a long-term measure. | |
| | Coal India will set up its own washery. | |
| | State Electricity Board to set up its own washery | |
| | • Cool India to ack private entropropeurs | |
| | • Coal India to ask private entrepreneurs | |
| | washing charges. | |
| 7 | Power plants will provide dry ash to the | We have installed Silo for dry ash |
| | users outside the premises or uninterrupted | storage and providing dry ash to the |
| | access to the users within six months. | users outside the plant premises. |
| 8 | Power plants should provide dry fly ash | We are providing dry fly ash free of |
| | free of cost to the users. | cost to the users. |
| 9 | State PWDs/construction & development | We are ready to give our fly ash free |
| | agencies shall also adhere to the | of cost to state PWDs/construction & |
| | specifications/Schedules of CPWD for | development agency. But till date we |
| | ash/ash based products utilization. MOEF | have not noticed any enforcement |
| | will take up the matter with state | from the State Govt. of Central Govt. |
| | Governments. | to the Govi. agency for use of ity |
| | | ash/ash based products nowever we |
| | | manufacturing and given to Bricks |
| | | manufacturing and given to blicks |
| 10 | (i) New plants to be accorded | We have already provided dry fly ash |
| 10 | environmental clearance on or after | disposal system (Pneumatic Ash |
| | 1.04.2003 shall adopt dry fly ash | Conveying Line). |
| | extraction or dry disposal system or | |
| | medium (35-40%) ash concentration | |
| | slurry disposal system or Lean phase | |
| | with hundred percent ash where re- | |
| | circulation system depending up on site | |
| | specific environmental situation. | |
| | (ii) Existing plants shall adopt any of the | |
| | systems mentioned in (i) by December | |
| | 2004. | |
| 11 | Fly ash mission shall prepare | We are utilizing fly ash as per the |
| | guidelines/manuals for fly ash utilization | norms set by the authorities. |
| | manual. | |
| 12 | New plants shall promote adoption of | We are using clean coal and clean |
| | clean coal and clean power generation | power generation technology. |
| | technologies. | |

Annexure - V

AMBIENT AIR QUALITY MONITORING DATA (All Values in µg/m³)

(October 2021 – March 2022)

| S.No. | LOCATION | Near Main Gate | | Near Dispatch yard | | Near Canteen | | | Near Quality Control Lab | | | | | | | | |
|---------|------------------|----------------|--------|--------------------|-------|--------------|--------|-------|--------------------------|-------|--------|-------|-------|-------|--------|-------|-------|
| | MONTH | PM10 | PM 2.5 | SO2 | NOx | PM10 | PM 2.5 | SO2 | NOx | PM10 | PM 2.5 | SO2 | NOx | PM10 | PM 2.5 | SO2 | NOx |
| 1 | October 2021 | 60.5 | 31.5 | 12.2 | 11.2 | 74.2 | 32.6 | 11.9 | 8.7 | 63.3 | 33.4 | 10.1 | 10.3 | 75.8 | 34.2 | 14.1 | 8.1 |
| 2 | November 2021 | 64.1 | 33.1 | 11.9 | 13.8 | 72.3 | 33.8 | 12.1 | 9.2 | 66.2 | 35.2 | 11.2 | 11.1 | 73.9 | 33.6 | 12.9 | 9.5 |
| 3 | December 2021 | 79.40 | 37.59 | 11.14 | 23.27 | 79.28 | 32.17 | 10.96 | 21.14 | 75.40 | 33.63 | 9.26 | 19.23 | 83.40 | 41.54 | 13.18 | 27.30 |
| 4 | January 2022 | 79.64 | 38.47 | 12.57 | 21.85 | 77.38 | 31.11 | 11.44 | 20.52 | 77.22 | 33.73 | 9.92 | 20.30 | 82.19 | 40.75 | 27.71 | 14.61 |
| 5 | February 2022 | 81.40 | 39.80 | 13.52 | 23.14 | 77.25 | 32.14 | 11.31 | 21.52 | 76.6 | 34.63 | 9.92 | 20.74 | 81.92 | 43.59 | 17.09 | 29.04 |
| 6 | March 2022 | 82.42 | 40.35 | 13.52 | 23.58 | 78.03 | 32.80 | 11.78 | 22.29 | 79.20 | 35.07 | 10.05 | 21.61 | 82.71 | 44.13 | 17.41 | 29.79 |
| Average | | 74.57 | 36.80 | 12.47 | 19.47 | 76.40 | 32.43 | 11.58 | 17.22 | 72.98 | 34.27 | 10.07 | 17.21 | 79.98 | 39.63 | 17.06 | 19.72 |

Annexure-III

STACK MONITORING DATA (October 2021 – March 2022)

POWER PLANT DIVISION

> CFBC BOILER (30 MW)

| SI. No. | Month | Air Pollution Control Device | PM Concentration in (mg/Nm3) |
|---------|-----------------|------------------------------|------------------------------|
| 1. | October-2021 | ESP | 31.1 |
| 2. | November- 2021 | ESP | Under Shutdown |
| 3. | December- 2021 | ESP | Under Shutdown |
| 4. | January- 2022 | ESP | 42.90 |
| 5. | February – 2022 | ESP | 43.51 |
| 6. | March- 2022 | ESP | 45.22 |

> AFBC BOILER (30 MW)

| SI. No. | Month | Air Pollution Control Device | PM Concentration in (mg/Nm3) |
|---------|-----------------|------------------------------|------------------------------|
| 1. | October-2021 | ESP | Under Shutdown |
| 2. | November- 2021 | ESP | 32.6 |
| 3. | December- 2021 | ESP | 36 |
| 4. | January- 2022 | ESP | Under Shutdown |
| 5. | February – 2022 | ESP | Under Shutdown |
| 6. | March- 2022 | ESP | Under Shutdown |

SPONGE IRON DIVISION

> (WHRB), KILN 1 & 2 (2x 100 TPD).

| SI. No. | Month | Air Pollution Control Device | PM Concentration in (mg/Nm3) |
|---------|-----------------|------------------------------|------------------------------|
| 1. | October-2021 | ESP | 26.6 |
| 2. | November- 2021 | ESP | 30.26 |
| 3. | December- 2021 | ESP | 41.20 |
| 4. | January- 2022 | ESP | 40.80 |
| 5. | February – 2022 | ESP | 42.36 |
| 6. | March- 2022 | ESP | 43.45 |

> (WHRB) KILN 3 & 4 (2x 350 TPD)

| SI. No. | Month | Air Pollution Control Device | PM Concentration in (mg/Nm3) |
|---------|-----------------|------------------------------|------------------------------|
| 1. | October-2021 | ESP | 33.2 |
| 2. | November- 2021 | ESP | 28.74 |
| 3. | December- 2021 | ESP | 38.56 |
| 4. | January- 2022 | ESP | 36.24 |
| 5. | February – 2022 | ESP | 38.35 |
| 6. | March- 2022 | ESP | 39.25 |

FERRO ALLOYS DIVISION

| SI. No. | Month | Air Pollution Control Device | PM Concentration in (mg/Nm3) |
|---------|-----------------|------------------------------|------------------------------|
| 1. | October-2021 | Bag House | 29.7 |
| 2. | November- 2021 | Bag House | 18.3 |
| 3. | December- 2021 | Bag House | 39 |
| 4. | January- 2022 | Bag House | 23.09 |
| 5. | February – 2022 | Bag House | 24.91 |
| 6. | March- 2022 | Bag House | 25.89 |

SMS DIVISION

| Sr. No. | Month | Air Pollution Control Device | PM Concentration in (mg/Nm3) |
|---------|-----------------|------------------------------|------------------------------|
| 1. | October -2021 | Bag filters | 23.3 |
| 2. | November- 2021 | Bag filters | 22.9 |
| 3. | December- 2021 | Bag filters | 34 |
| 4. | January – 2022 | Bag filters | 26.87 |
| 5. | February – 2022 | Bag filters | 28.62 |
| 6. | March- 2022 | Bag filters | 29.96 |

AVERAGE NOISE MONITORING DATA (October 2021- March 2022)

| | At M | ain gate | At Disp | ach Yard | Near | Canteen | Near Quality | y Control lab |
|---------|-------|----------|---------|----------|-------|---------|--------------|---------------|
| Month | Day | Night | Day | Night | Day | Night | Day | Night |
| Oct-21 | 55.5 | 56.4 | 54.6 | 51.1 | 50.9 | 50.2 | 69.9 | 65 |
| Nov-21 | 62.7 | 42.05 | 71.9 | 49.9 | 51 | 48.5 | 69.5 | 66.2 |
| Dec-21 | 66.8 | 59.2 | 69.4 | 56.3 | 62.3 | 52.9 | 65.4 | 54.8 |
| Jan-22 | 67.94 | 60.4 | 70.41 | 57.4 | 63.74 | 53.38 | 64.21 | 53.1 |
| Feb-22 | 66.5 | 58.94 | 72.85 | 61.27 | 62.7 | 52.85 | 63.75 | 52.44 |
| Mar-22 | 68.72 | 60.01 | 73.1 | 62.16 | 65.21 | 55.23 | 61.98 | 51.56 |
| AVERAGE | 64.69 | 56.17 | 68.71 | 56.36 | 59.31 | 52.18 | 65.79 | 57.18 |

The environment monitoring has done on regular basis by In-house and by third party.





(Near Quality Control Lab)



(Near Bachelor Hostel)



Near Main Gate & (Material Gate)











Online Ambient Air Quality monitoring Station is established at plant premises. (Latitude- 21.387365, Longitude- 81.650339)



Effluent treatment plant is already established in plant premises with capacity 500 m3/Day,





Vardan EnviroLab

Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Haryana) ISO 9001 | ISO 14001 | ISO 45001

Test Report

Sample Number: Name & Address of Party: VEL /SL/01 SKS ISPAT AND POWER LIMITED Village: Siltara (Near Industrial Growth Centre Phase -II, RAIPUR-493111(C.G.)

Sample Description: Sampling Location: Sample Collected by Preservation: Sampling & Analysis Protocol: Sludge Leachate Test Near SMS Slag Chrusher Vardan EnviroLab Representative Refrigerated IS: 2720-1983 Report No.: Format No.: Party Reference No.: Reporting Date: Period of Analysis: Receipt Date: Sampling Date: Sampling Type: Sample Quantity: VEL/SL/2112060001 7.8 F 01 NIL 10/12/2021 06-12-2021 to 12-12-202 06/12/2021 04/12/2021 Composite 2.0 Kg.

| S. No. | Parameter | Test-Method | Result | Unit |
|--------|--------------------------|--------------------------------|---------------------------|-----------------------|
| 1.arda | pH (at 25°C)(1:2:5 Sus.) | SOP, SP-147, Issue No. 01 2018 | 7.89 | dan E n vi |
| 2. | Total Chromium | SOP, SP-147,Issue No. 01 2018 | 15.23 | mg/kg |
| 3. | Zinc (as Zn) | SOP, SP-147,Issue No. 01 2018 | 41.52 | mg/kg |
| 4. | Lead (as Pb) | SOP, SP-147,Issue No. 01 2018 | 18.86 abv | mg/kg |
| 5. | Arsenic (as As) | SOP, SP-147,Issue No. 01 2018 | 0.19 | mg/kg |
| 6. | Cadmium (as Cd) | SOP, SP-153,Issue No. 01 2018 | 0.79 | mg/kg |
| 7. | Iron (as Fe) | SOP, SP-154,Issue No. 01 2018 | 14.71 *BDL(**DL_0.005) | mg/kg mg/kg |
| 8. | Mercury (as Hg) | SOP, SP-158,Issue No. 01 2018 | | |
| 9. | Copper (as Cu) | SOP, SP-147, Issue No. 01 2018 | 27.81 | mg/kg |
| 10. | Nickel(as Ni) | SOP, SP-147,Issue No. 01 2018 | dan E 5.32 Lab V r | mg/kg |

(Checked By

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Authorized Signatory

Ph: 0124-4343750/752/753, 9810355569, 9953147268 E-mail: lab@vardanenvironet.com, bd@vardanenvironet.com



Vardan EnviroLab

Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Haryana) ISO 9001 | ISO 14001 | ISO 45001

Test Report

Sample Number: Name & Address of Party: VEL /SL/02 SKS ISPAT AND POWER LIMITED Village: Siltara (Near Industrial Growth Centre Phase -II, RAIPUR-493111(C.G.)

Sample Description: Sampling Location: Sample Collected by Preservation: Sampling & Analysis Protocol: Sludge Leachate Test Near Dispach Yard Vardan EnviroLab Representative Refrigerated IS: 2720-1983 Report No.: Format No.: Party Reference No.: Reporting Date: Period of Analysis: Receipt Date: Sampling Date: Sampling Type: Sample Quantity:

(Author

ized Signator

VEL/SL/2112060002 7.8 F 01 NIL 10/12/2021 06-12-2021 to 12-12-2021 06/12/2021 04/12/2021 Composite 2.0 Kg.

TEST RESULTS

| S. No. | Parameter | Test-Method | Result | Unit | |
|------------|--------------------------|-------------------------------|---------------------------------|----------------------------------|--|
| .ab 1.rda | pH (at 25°C)(1:2:5 Sus.) | SOP, SP-147,Issue No. 01 2018 | dan E 7.78 | dan E rr vir | |
| 2. | Total Chromium | SOP, SP-147,Issue No. 01 2018 | 11.36 38.62 16.24 0.15 | mg/kg mg/kg mg/kg mg/kg | |
| 3. | Zinc (as Zn) | SOP, SP-147,Issue No. 01 2018 | | | |
| 4. | Lead (as Pb) | SOP, SP-147,Issue No. 01 2018 | | | |
| dan Env | Arsenic (as As) | SOP, SP-147,Issue No. 01 2018 | | | |
| ab \ 6. da | Cadmium (as Cd) | SOP, SP-153,Issue No. 01 2018 | dan Er0.75 Lab Van | mg/kg | |
| ab \7. da | Iron (as Fe) | SOP, SP-154,Issue No. 01 2018 | 13.20 *BDL(**DL_0.005) | mg/kg mg/kg | |
| ola 8.Var | Mercury (as Hg) | SOP, SP-158,Issue No. 01 2018 | | | |
| ab \ 9. da | Copper (as Cu) | SOP, SP-147,Issue No. 01 2018 | 24.11 | mg/kg | |
| ab 10. | Nickel(as Ni) | SOP, SP-147,Issue No. 01 2018 | dan E 4.89 | mg/kg | |

Note:- *BDL-Below Detection Limit, *DL- Detection Limit.

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