Bhushan Power & Steel Ltd. Vill. : Thelkoloi, P.O.: Lapanga-768212 Teh. ; Rengali, Dist-Sambalpur (Odisha) INDIA

JSWBPSL/ENV/22-23/058. 28<sup>th</sup> November, 2022. T +91 (0)663 6636000 T +91 (0)663 2535203 / 216 T +91 (0)663 2562026 - 32 F +91 (0)663 2562011 / 039 orissa@bpsl.net, www.bpsl.net CIN : U27100DL1999PLC108350



To, The Additional Director General of Forest (C), Ministry of Environment, Forest & Climate Change, Eastern Regional Office, (EZ), A/3, Chandrasekharpur, Bhubaneswar - 751023, Odisha.

Subject : Six monthly compliance report (from April 2022 to September 2022) on the conditions stipulated in EC issued to Bhushan Power & Steel Limited, located at Village Thelkoloi, Post Lapanga, Tehasil Rengali, District Sambalpur, Odisha.

Reference : i) EC for 5.5 MTPA vide F No. J-11011/40/2009-IA-II(I) dated 06.12.2016. ii) EC for 3.0 MTPA vide F No. J-11011/40/2009-IA-II(I) dated 17.10.2012. iii) EC for 2.8 MTPA vide F No. J-11011/40/2009-IA-II(I) dated 02.04.2010. iv) EC for 2.2 MTPA vide F No. J-11011/372/2006-IA-II(I) dated 29.03.2007 v) EC for 1.2 MTPA vide F No. J-11011/228/2003-IA-II(I) dated 12.05.2004.

Dear Sir,

Inviting your kind attention on the subject mentioned above.

Please find enclosed herewith the half yearly compliance reports to the EC's granted to us as referred above for the period from April 2022 to September 2022. The Soft copy of the compliance reports has been mailed to your good office at ID <u>roez.bsr-mef@nic.in</u> from the E-mail ID – <u>ranjit.ghosh@jsw.in</u> on 28.11.2022.

If you require any clarification or information in this regard we shall submit you the same immediately.

Thanking you,

Yours faithfully, For Bhushan Power & Steel Limited.

Ranjit Kumar Ghosh Associate Vice-President – Environment

<u>Copy to:</u> i) The Member Secretary, OSPCB, Bhubaneswar, Odisha - 751012.

ii) The Member Secretary, CPCB, East Arjun Nagar, New Delhi - 110032

#### COMPLIANCE TO CONDITIONS OF LETTER File No-J-11011/40/2009-IA-II(I),dated 06.12.2016 for 5.5 MTPA.

#### A. Specific Condition:

No	Env. Parameter	Condition Description	Compliance Status
i	Air quality Monitoring & Preservation	The project Proponent shall install 24x7 air monitoring devices to monitor air emission as provided by the CPCB and submit report to ministry and its Regional office	<ul> <li>Four numbers of Continuous Ambient Air Quality Monitoring Stations have been installed within plant.         <ul> <li>CAAQMS-1-Near Township</li> <li>CAAQMS-2-Near Railway Gate</li> <li>CAAQMS-3-Behind CRM</li> <li>CAAQMS-4-Near ETP</li> </ul> </li> <li>Continuous stack emission monitoring system have been installed at all the major stacks (42 nos) and connected to OSPCB &amp; CPCB.</li> <li>The monitoring report is being submitted in the Regional offices of Ministry as well as OSPCB regularly.</li> </ul>
ii	Statutory Compliance	The project Proponent shall prepare R&R plan for the affected households in the core zone, including compensation to be paid and employment to be provided and submit the same to the Regional office of the Ministry of Environment, Forest and Climate Change, Bhubaneswar Odisha.	<ul> <li>R&amp;R Plan approved by RPDAC has been submitted to IRO of the Ministry of Environment Forest &amp; Climate Change.</li> </ul>
	Air Quality Monitoring & preservation	Continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz, Electrostatic precipitator (ESP), bag house, bag filters etc, shall be provided to keep the emission levels below 50 mg/Nm <sup>3</sup> and installing energy efficient technology.	<ul> <li>42 numbers of Continuous Emission Monitoring system has been installed in all the major stacks of existing units of DRI, CPP, SMS, Blast furnace, Coke Oven, Sinter plant etc. List of CEMS installed is enclosed as <b>Annexure-I</b></li> <li>To control air pollution in different units Electrostatic Precipitator, bag house, Fumes treatment plan, wet scrubber etc has been installed. List of Air Pollution Control devices is enclosed as <b>Annexure-II</b></li> <li>Also we will ensure all ESP and Bag Houses design emission level below 50 mg/Nm<sup>3</sup> in the coming projects.</li> </ul>
iv	Air Quality Monitoring & preservation	Hot Gases from DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely. The gas then shall be cleaned in ESP	<ul> <li>All DRI units have been equipped with Dust settling chamber(DSC) to remove coarse solids and After burning chamber (ABC) to burn carbon monoxide.</li> </ul>

### Half Yearly Compliance Report (Aprl'22 to Sept'22)

		before leaving out into the atmosphere through ID fan and stack.	•	independent v boilers (WHRB) The hot gas o	of DRI Kiln is being er generation through covery boilers. ESP's have been
v	Water Quality Monitoring & Preservation	Efforts shall further be made to use maximum water from the rain water harvesting sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent should be treated and used for ash handling, dust suppression and green belt development. ETP sludge should be disposed off scientifically.	capac which mons M/s recen entire harve report metho Based the co Struct All the in effl KLD.	city 200000 M help in rain wa oon. KRG Rain w tly conducted complex to sting potential t with detaile bodology etc. d on the appro onstruction of F tures will be dor e effluent of mil uent treatment Effluent genera	ter reservoirs having 13 and 134000 M3 ater harvesting during ater foundation has feasibility study in b assess rainwater and submit feasibility ed plan, expenses, wed Feasibility report Rain Water harvesting he within 2 years. I area is being treated plant of capacity 500 ate from Coke oven -2 capacity 75 M3/hr
		All the coal fines, char from DRI plant shall be utilized and no char shall be used for briquette making or disposed		follows. Waste	wastes and utilization Utilization /disposal
	Waste Management	off anywhere else. Scrap shall be used in steel melting shop (SMS) and SMS slag and kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass shall be properly disposed off in environment-	01	Description Coal fines	Reused in Captive plant
			02	DRI char	Reused in Captive plant
vi		friendly manner.	03	DRI accretion materials and refractory mass	Utilized in internal ro low-lying area filling
			04	SMS Slag	Metallic part recover residue utilized in making and land filling
			05	Blast furnace slag	Entire quantity sold Cement plant

			06 Mill scale Recvcled in SMS
			06 Mill scale Recycled in SMS and Scrap
		All internal roads shall be black topped.	In the existing complex, nearly 50 Km
		The roads shall be regularly cleaned	length of roads are there for movement of
		with mechanical sweepers. A 3-tier	vehicular traffic. The details are given
		avenue plantation using native species	below:
		shall be developed along the roads.	Total length within plant area :50 Km
		Facilities for parking of trucks carrying	Concrete roads completed : 34Km
		raw coal from the linked coal mines shall	Completion by March 2023 : Balance
		be created within the Unit.	16 Km
			To control dust emissions following
			measures have been taken:
			05 numbers of mechanized road sweepers
			has already been engaged. In addition,
			two more multi-utility vehicles engaged having facility for high pressure water jets,
			pressurized water sprinkling and water jet
			for cleaning tree leaves. Mist beam for
	Miscellanous		dust suppression & Fire fighting facility.
vii	Miscellanous		dust suppression & the righting facility.
			Tree plantation has been done in project
			completed area and avenue plantation
			using native species is being developed
			along the internal roads.
			Four mobile water tankers have been
			engaged currently for spraying water on
			non concreted roads of project areas.
			Two numbers of wheel washing systems
			have been installed and additional four
			has been procured and the same are
			under installation.
			Two numbers of parking facilities have
			been developed for parking of trucks
			carrying raw material.
		The standards issued by the Ministry	The standards issued by the Ministry vide
		vide G.S.R.No. 277(E) dated 31 <sup>st</sup> March,	G.S.R.No. 277(E) dated $31^{st}$ March, 2012
		2012 regarding integrated iron and steel	regarding integrated iron and steel plant is
vii	Statutory	plant shall be followed.	being followed in existing plant and same
	Compliance		will be implemented in the upcoming
			projects. All the monitoring report attached
1	1		
			as Annexure – III, IV, V, VI & XV.
	Statutory	The National Ambient Air Quality	The National Ambient Air Quality Emission
ix	Statutory Compliance	The National Ambient Air Quality Emission Standards issued by the	

			16the November, 2009 shall be followed.	2009 is being followed in existing plant and same will be implemented in the upcoming projects. Ambient air Quality for the period Apr'22 to Sept'22 is enclosed as <b>Annexure-III.</b>
x	Air Monitoring Preservation	Quality &	Gaseous emission levels including secondary fugitive emission from all the sources shall be controlled within the latest permission limits issued by the Ministry vide G.S.R414(E) dated 30 <sup>th</sup> May, 2008 and regularly monitored. Guidelines/ code of Practice issued by the CPCB shall be followed.	In the existing units gaseous emission levels including secondary fugitive emission from all the sources has been controlled within the latest permission limits issued by the Ministry vide G.S.R414(E) dated 30 <sup>th</sup> May, 2008 and regularly monitored. Guidelines/ code of Practice issued by the CPCB, Same will be followed. Stack emission result for the period Apr'2022 to Sept'2022 is enclosed as <b>Annexure - IV</b> and results of fugitive emission are enclosed as <b>Annexure- V</b> .
xi	Air Monitoring Preservation	Quality &	Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emission during loading and unloading of the raw material and finished product.	finished products are being covered with tarpaulin.
xii	Water Monitoring Preservation	Quality &	'Zero' effluent discharge shall be strictly followed and no waste water shall be discharged outside the premises.	For 100% reuse and utilization of treated waste water RO plant of capacity 510 m <sup>3</sup> /hr has been commissioned & the same is in Operation. All the 03 Nos. of existing STP's have been upgraded to meet the prescribed standards. All the STP's are operating

			satisfactorily. All the effluent water and storm water drains have been segregated throughout the plant. Up-gradation of ETP in CRM is under Commissioning.
xiii	Water Quality Monitoring & Preservation	Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated waste water shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent.	Regular monitoring of influent and effluent surface, sub-surface and ground water is being carried out by the third party and regularly report is submitted to the OSPCB. Monitoring result treated effluent for the period Apr22' to Sept'22 is enclosed as <b>Annexure-VI.</b> Monitoring of ground water quality is enclosed as <b>Annexure-VII</b> for Ground Water.
xiv	Waste Management	Proper handling, storage, utilization and disposal of all the solid waste shall be ensure and regular report regarding toxic metal content in the waste material and its composition, and use of solid/hazardous waste shall be submitted to the Ministry's Regional Office, SPCB and CPCB.	Presently all the waste segregated at the source and as per the guide line of the OSPCB/CPCB the wastes are disposed. Details of Solid waste generation and utilization is enclosed herewith as <b>Annexure- VIII</b> The TCLP Test result of all the waste is enclosed as <b>Annexure-IX</b> .
xv	Waste Management	A time bound action plan shall be • submitted to reduce solid waste generated due the project related activity, its proper utilization and disposal.	The solid waste generation due to project related activity are being segregated properly and disposed as per the guide line of the OSPCB/CPCB.
xvi	Waste Management	Utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 as amended. All the fly ash shall be provided to cement and brick manufacturer for further utilization and Memorandum of Understanding shall be submitted to the Regional Office of the Ministry, Bhubaneswar.	The ash generated from CPP is being utilized in different area like fly ash brick manufacturing, low lying area filling, embankment rising and quarry void filling. In the year 2022-23 till Sept'22 we have utilized 100 % of fly ash generated in our plant Fly ash is being supplied to 45 numbers of fly ash based brick manufacturing units in and around Jharsuguda, Sambalpur, Sundargarh and Deogarh District of Odisha free of cost with transportation subsidy @150/Ton for maximum utilization of ash.
xvii	Risk Mitigation & Disaster Management	A Risk and Disaster Management Plan • shall be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of	Risk and Disaster Management incorporating the units proposed in expansion project will be submitted after the amendment of EC.

		environment clearance letter.	
xviii	Greenbelt	Green belt shall be developed in at least 33% of the project area by planting native and broad leaved species in consultation with local communities as per the CPCB guidelines.	<ul> <li>Since soon after getting the EC for 5.5 MTPA the plant went into NCLT no much attention was given on greenbelt development and only 9.28% greenbelt is developed till March 2022.</li> <li>Revised action plan to completion greenbelt over 33% of total project area by December 2024 is enclosed as Annexure -X</li> </ul>
xix	Public Hearing	All the commitments made to the public during Public Hearing/public consultation meeting shall be satisfactory implemented as adequate budget provision shall be made accordingly.	EC for the project was accorded in December 2016. Soon after the company went into NCLT from June 2017 hence no much progress was made to fulfill the commitments made during PH. Now after taking over the plant by JSW Steel in March 2021 activities to fulfill the commitments made in PH has been started on priority basis. During FY 2021-22 CSR activities with a budget of 9.28 crores has been started. Details of activities initiated and carried out during FY 2021-22 is enclosed as <b>Annexure-XI</b> The CSR activities and Peripheral Development undertaken for the year 2022-23 till Sept'22 is enclosed herewith as <b>Annexure – XII</b> As per suggestion of EAC during last meeting on 18.10.2022 an action plan to undertake various activities to fulfill the commitments made in PH by December 2023 with a budget outlay of 50 crores has been made All the commitments made to the public during Public Hearing/Public Consultation meeting will be implemented and the details of physical targets is enclosed as <b>Annexure-XIII</b>
xx	Miscellaneous	An amount of Rs.458 crores shall be earmarked towards the Enterprise Social Commitment for a period of 10 years for implementing activities based on Public Hearing issues, local needs and item-wise details along with time bound action plan shall be prepared and	<ul> <li>Action Plan to undertake expenditure towards Enterprises Social Commitment has been submitted to IRO during inspection on 16.09.2022.</li> <li>As directed Rs.495.7 crores has been earmarked towards the Enterprise Social Commitment and will be spent</li> </ul>

		submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.	along with commencement of the project. List of activities considered is enclosed as <b>Annexure-XIV</b> .
xxi	Miscellaneous	The proponent shall prepare a detailed CSR plan for every year for the next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, sanitation, Health, Skill Development ad infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR plan will include the amount of 2 % retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2 % of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the plan shall be submitted as part of the Compliance Report to RO. The details the the CSR plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.	The details of CSR activities and Peripheral Development undertaken in FY 2021-22 is enclosed as <b>Annexure – XI</b> The CSR activities and Peripheral Development undertaken for the year 2022-23 till Sept'22 is enclosed herewith as <b>Annexure – XII</b>
xxii	Corporate Environmental Responsibility	<ul> <li>The company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address</li> <li>(i) Standard operating process/ procedure to being into focus any infringement/deviation/violation of environmental or forest norms/conditions,</li> <li>(ii) Hierarchical system or Administrative order of the company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and</li> </ul>	Information on expenditure towards Enterprise Social Commitment has been submitted to IRO during inspection on 16.09.2022.

		(iii) System of reporting of non- compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.	
xxiii	Energy Preservation & measures	The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.	We have already provided solar street light in Village Salad. We assure to provide solar lights in more villages and also expedite installation of solar light in common area of the plant.
xxi v	Energy Preservation & measures	The Project proponent shall provide for LED lights in their offices and residential areas.	• LED lights is provided in all the offices and residential areas.
xxv	Human Health Environment	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	<ul> <li>Labour colony with all facilities and health care facility is provided</li> <li>6 Nos. of canteens have been established within the plant at various locations for employees and workers. Construction of additional 06 canteens is in progress.</li> </ul>

#### B. General Conditions:

No	Env. Parameter	Condition Description	Compliance Status
i	Statutory Compliance	The Project authorities must strictly adhere to the stipulations made by the Odisha pollution Control Board and the State Government.	<ul> <li>All relevant stipulations made by Odisha State Pollution Control Board and State Government are being complied.</li> </ul>
ii	Statutory Compliance	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and climate Change (MOEFCC).	carried out without prior approval of
	Air Quality Monitoring & Preservation	At least four ambient air quality monitoring stations should be established in the downwind direction as well as where maximum ground level concentration of $PM_{10}$ , $PM_{2.5}$ , $SO_2$ and $NO_x$ are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its	<ul> <li>CAAQMS-3-Behind CRM</li> <li>CAAQMS-4-Near ETP</li> </ul>

### Half Yearly Compliance Report (Aprl'22 to Sept'22)

		Regional Office at Bhubaneswar and the SPCB/CPCB once in six months.	<ul> <li>OSPCB.</li> <li>The monitoring reports are being submitted to the Regional offices of Ministry as well as OSPCB regularly</li> </ul>
		Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.	Presently three numbers of waste water treatment plants are in operation for treatment of waste water generating in the existing plant. ETP and BETP have been installed for treatment of process waste water from existing plant as per the list mentioned below
			No Name of facility Capacity
			01 Waste water 750 M3/hr Treatment plant-1
			02 Waste water 750 M3/hr Treatment plant-2
			03 Waste water 750 M3/hr Treatment plant-2
	Water Quality		04 Effluent treatment 500KLD Plant-CRM
iv	Monitoring & Preservation		05 Biological Effluent 75 M3/hr Treatment Plant
			06 Sewage Treatment 500 KLD Plant-1
			07 Sewage Treatment 900 KLD Plant-2
			08 Sewage Treatment 900 KLD Plant-3
			09 Reverse Osmosis 510 M3/hr Plant
			<ul> <li>RO System of capacity 510 m3/hr has been installed to achieve zero liquid discharge.</li> </ul>
			<ul> <li>The entire treated water is being</li> </ul>
			used inside the plant in various
			applications such as ash
			conditioning, sprinkling, horticulture, firefighting, etc
		The overall noise levels in and around the plant area shall be kept well within	All the noise prone areas such as turbine houses and compressor houses have
	Noise Monitoring &	the standard 85 dB(A) by providing noise control measures including acoustic hoods, silencers, enclosures	been provided with adequate silencer and acoustics enclosure for meeting the standard prescribed under EPA Rules.
V	amp;Prevention	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)	The ambient and work zone noise level monitoring results for the period from Apr'2022 to Sept'2022 is enclosed as
		day time and 70 dB(A) night time.	Annexure-XV (A) & (B).

vi	Human I Environment	Health	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	<ul> <li>An Occupational Health Centre (OHC) has been setup within the plant for pre-joining and periodical medical check-up of all workers including contract labours.</li> <li>The OHC is having following facilities for providing health care to employees-</li> <li>Essential drug delivery through pharmacy.</li> <li>X ray services for diagnosis of musculoskeletal and internal abnormalities.</li> <li>Pathology section for conducting bedside diagnosis and disease screening.</li> <li>ECG facility to rule out cardiac abnormality.</li> <li>Physiotherapy set up to manage pain and stiffness in musculoskeletal illness and injury.</li> <li>Minor OT to repair wound and Dressing of wounds and ulcers.</li> <li>Clinic for diagnosis of common disease and injuries.</li> <li>Basic and Advanced Ambulance services.</li> <li>Facility for online training on preventable diseases.</li> <li>Audiometric Booth for diagnosis of hearing losses.</li> <li>As per the requirement of Factory Act 1948 all necessary record &amp; documents are maintained.</li> </ul>
vii	Water Monitoring Preservation	quality and	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.	BPSL has two water reservoirs having capacity 200000 M3 and 134000 M3 which help in rain water harvesting during monsoon. We have engaged M/s KRG Rain water foundation for further implementation of rain water harvesting facilities within our plant. They has recently conducted feasibility study in entire complex to assess rainwater harvesting potential. Very soon they will submit feasibility report with detailed plan, expenses, methodology etc. Based on the feasibility

			report we shall start construction of Rain Water harvesting Structures will be started and completed within 2 years.
vii	Miscellaneous	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	Environmental protection measures & safeguards recommended in EIA /EMP report are being complied. Socio-economic development activities/programmes like supply of drinking water, health care camps and community development programmes are being carried out on regular basis and will be continued as per plan
ix	Miscellaneous	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 and 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 Bhubaneswar. The funds so provided shall not be diverted for any other purpose.	The funds allocated for installation of pollution control equipments and implementing environmental protection measures is being judiciously utilized to fulfill the conditions stipulated by the Ministry of Environment and Forests as well as State pollution Control Board.
x	Statutory Compliance	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad /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 out on the web site of the company by the proponent.	Information regarding issue of environmental clearance by the ministry was given to the local Panchayat. Acknowledge copy of the letters are enclosed as <b>Annexure – XVI</b> .
xi	Statutory Compliance	The project proponent shall upload the status of compliance of the stipulated environmental 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 Bhubaneswar. 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	Six monthly compliance report to the conditions the stipulated in EC along with monitoring results are uploaded in company's website <u>http://www.jswbpsl.in</u> . The compliance reports along with monitoring data in soft copy is being submitted at the Regional office of MoEF&CC through mail and hardcopy at OSPCB & CPCB. Display board for display of online emission monitoring results have been provide at main gate.

		displayed at a convenient location near	
		the main gate of the company in the	
		public domain.	
xii	Statutory Compliance	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 MOEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhubaneswar/CPCB/SPCB shall monitor the stipulated conditions.	<ul> <li>Six monthly compliance reports along with monitoring data are regularly being submitted at the Regional Office of MoEF&amp;CC as well at OSPCB/CPCB.</li> <li>Last sixmonthly compliance with monitoring results is submitted vide letter no-JSWBPSL//MoEF&amp;CC/22-23/015 on Dated- 31.05.2022</li> </ul>
xiii	Statutory Compliance	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF&CC at Bhubaneswar by e-mail.	Environmental statement in Form – V has been submitted to OSPCB and Regional Office MoEF&CC, Bhubaneswar for the financial year ending 31 <sup>st</sup> March, 2022 vide our letter No-JSWBPSL/ENV/22- 23/047 dated 24 <sup>th</sup> September 2022 as per guidelines.
xiv	Miscellaneous	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 http:/envfor.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 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 Bhubaneswar.	Information regarding issue of EC was published in local news papers and copy of the letter has been submitted at OSPCB, Regional Office of MoEF&CC and at the offices of local Panchayat.
xv	Miscellaneous	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.	The date of financial closure for 5.5 MTPA is not applicable as it is proposed to revise the capacity and to amend the capacity of expansion from 3.0 MTPA to 4.5 MTPA in place of 5.5 MTPA. The date of closure of 4.5 MTPA shall be submitted within three months of receipt of EC for

### Half Yearly Compliance Report (Aprl'22 to Sept'22)

		4.5 MTPA
--	--	----------

### COMPLIANCE TO CONDITION LETTER File No. J-11011/40/2009-IA II(I) Dated 17.10.2012 for 3.0 MTPA

### A. Specific Conditions:

No <b>En</b>	v. Parameter	Condition Description	Compliance Status
1 1	ntutory npliance	Compliance to all the specific and general conditions stipulated for the existing plant by the Central/State Govt. shall be ensured and regular reports submitted to the Ministry and its Regional Office at Bhubaneswar.	<ul> <li>All the conditions stipulated by Central &amp; State Government Authorities are being complied.</li> <li>Half yearly compliance reports along with monitoring data are being submitted at OSPCB / CPCB &amp; MoEF&amp;CC regularly.</li> <li>Last six monthly compliance report was submitted vide letter no-JSWBPSL/MoEF &amp;CC/22-23/015 on dated 31.05.2022</li> </ul>
	Quality nitoring and eservation	Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks shall be provided along with the sufficient air pollution control devices viz. Electrostatic precipitator (ESP),gas cleaning plant cyclone, multi-cyclone, wet scrubber, bag house, bag filters etc. shall be provide to keep the emission levels below 50 mg/Nm <sup>3</sup> by installing energy efficient technology. At no time the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	<ul> <li>Adequate control measures have been adopted to control RSPM.</li> <li>Five numbers of high pressure mist beam has been installed in Raw material handling stock yard area.</li> <li>O6 numbers of Mobile water sprinkling tankers are being engaged for regular water sprinkling on haul roads and in construction areas for control of fugitive dust emissions.</li> <li>O5 nos. of Mechanized road sweepers have been engaged for continuous cleaning of concrete roads inside the plant premises to control fugitive dust.</li> <li>Fixed water sprinkling have been installed in stock yards, raw material handling areas and internal concrete roads for dust suppression.</li> <li>O4 Numbers of Continuous Ambient Air Quality Monitoring System have been installed within plant in consultation with OSPCB to monitor the Ambient Air Quality.</li> <li>42 numbers of Continuous Emission Monitoring systems have been installed in all stacks of DRI, CPP, Iron &amp; Steel making process Units.</li> <li>Bag Filters and Dry Fog systems are installed in Iron ore crushing and screening areas.</li> <li>Dry BF Gas Cleaning system and bag filters are provided in Blast furnace-1. ESP is provided for in plant de dusting of various units including DRI and Sinter plant.</li> <li>ESP's are provided in DRI-WHRB, AFBC &amp; CFBC Boilers of CPP and Sinter Plant.</li> <li>Fumes treatment plant installed at SMS-1 and SMS-2.</li> </ul>

			<ul> <li>Stack emission monitoring data for the period Apr'22 to Sept'22 is enclosed as Annexure-IV</li> <li>A list of Air Pollution Control Devices installed is enclosed as Annexure-II</li> <li>In the event of failure of any pollution control system, automatic interlocking facility has been provided with all units to hold the process and minimize the emission.</li> <li>In the event of power failure in DRI automatically the DG starts and supply power to auxiliaries, hold the</li> <li>Process and minimize the emission.</li> <li>Six monthly monitoring reports are being submitted to MoEFCC, CPCB and SPCB regularly.</li> </ul>
iii	Air Quality Monitoring and Preservation	As proposed, electrostatic precipitator (ESP) shall be provided to Sinter Plant, WHRB, CFBC, DRI and Slag Cement Plants; bag house to Blast Furnace and ESP & bag filters to by-product recovery type of coke oven to control SPM levels within 50 mg/Nm <sup>3</sup> . Fume extraction system with bag filters shall be provided to electric arc furnace and ladle furnace.	<ul> <li>As mentioned in our Environment Management Plan ESPs and other Pollution Control systems have been installed to control dust emission in different units. The details are as follows.</li> <li>DRI/WHRB</li> <li>There are 12 numbers of ESP installed at the Hot end of the DRI Kiln, 3 numbers ESP and 3 numbers of Bag filter for dedusting system at cold end of the DRI kiln.</li> <li>Captive Power Plant:</li> <li>Two numbers of ESP installed at CPP 40 MW and 60MW AFBC Boilers, and 06 nos. of ESP installed in CFBC boilers of 3x130 MW CPP to keep the emission well within the limit</li> <li>Blast Furnace</li> <li>One de dusting system have been installed in cast house of Blast furnace -1 followed by Dry Gas cleaning plant. In BF-2 two dedusting systems have been installed in Cast house and stock house to keep the emission level within the norms.</li> <li>Coke Oven</li> <li>One dedusting system installed at Coke oven -2 for control of emission.</li> <li>Steel Melting Shop</li> <li>Four nos. of fumes extraction and treatment plant along with bag filters have been installed to control the fugitive emission in the EAF and LF of SMS-I, Similarly in SMS-II one FTP have been installed .</li> <li>In the proposed cement plant adequate pollution</li> </ul>

			control system ESP/Bag filter will be installed.
			, , , , , , , , , , , , , , , , , , , ,
iv	Air Quality Monitoring and Preservation	Hot gases from DRI kiln shall be passed through Dust Setting Chamber (DCS) to remove coarse solids and after Burning Chambers (ABC) to burn CO completely and used in waste heat recovery boiler (WHRB).The gas then shall be cleaned in ESP before leaving out into the atmosphere through ID fan and stack.	<ul> <li>All the DRI Units have been equipped with DCS, ABC followed by independent waste heat recovery boilers (WHRB) for power generation.</li> <li>Independent ESP's have been installed for all the DRI kilns. There are 12 numbers .of ESPs have been installed in the DRI complex.</li> </ul>
v	Statutory compliance	All the standards prescribed for the coke oven plants shall be followed as per the latest guidelines, Naphthalene scrubbing unit shall be provided to remove residual naphthalene from coke oven gas. Ammonia released in de-sulphuriziton section of coke oven plant shall be catalytically cracked to Nitrogen and Hydrogen. BF top gas shall be cleaned in dust catcher and gas cleaning plant (GCP) comprising of bag filters and used in furnace of CSP, BF, EAF, sinter plant, lime & dolo plant. Bag filters with adequate stack height shall be provided to lime and dolo plant. Proper and full utilization of coke oven gases in power plant using heat recovery steam generators shall be ensured and no flue gases shall be discharged into the air.	<ul> <li>All efforts are being taken to comply with the prescribed standards and guidelines for the coke oven facilities.</li> <li>The Coke oven-1 is of Non Recovery type. The hot gas of coke oven is being utilized in the power generation passing through waste heat recovery boilers (WHRB) feeding to two numbers of turbo generators which generates 16 MW power.</li> <li>The Coke Oven Plant -2 (Recovery type) has been installed with adequate pollution control equipments like Pushing &amp; Charging Emission Control system and Bag filter. Stack height has been designed for better dispersion of pollutants.</li> <li>The byproduct plant is equipped with naphthalene scrubbing unit and Desulphurization unit to remove residual naphthalene from coke oven gas.</li> <li>The Coke oven gas is being utilized systematically and no flue gas discharged into atmosphere.</li> <li>BF top Gas is cleaned in dust catcher and Gas cleaning plant and is being used in Tunnel Furnace of CSP, Sinter Plant, Lime/dolo Plant, SMS,Wire and Rod Mill and Pellet plant.</li> </ul>
vi	Statutory compliance	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R No. 826(E) dated 16 <sup>th</sup> November 2009 shall be followed.	<ul> <li>The National Ambient Air quality Emission standards issued by the Ministry vide G.S.R No. 826(E) dated 16<sup>th</sup> November 2009 are being followed.</li> <li>Monitoring reports for the period Apr'22 to Depition is explaned as Amagement 100 is explaned.</li> </ul>
vii	Statutory compliance	All the standards prescribed for the coke oven plants shall be followed as per the latest guidelines. Proper and full utilization of coke oven gases in power plant using heat recovery steam generators shall be	<ul> <li>Sept'22 is enclosed as Annexure-III</li> <li>All the standards prescribed for the coke oven plants are being followed.</li> <li>In coke oven -1 hot gas is being completely utilized in Waste Heat Recovery Boilers to generate 2x8 MW power.</li> </ul>

		ensured and no flue gases shall be discharged into the air.	• In Coke Oven-2 De dusting and Pushing and Charging emission control system have been installed .
			<ul> <li>Biological effluent treatment plant (BETP) have been installed for treatment of effluent generate from byproduct plant.</li> <li>The clean color over generic being utilized in</li> </ul>
			<ul> <li>The clean coke oven gas is being utilized in coke oven battery heating, Tunnel furnace of CSP, Lime/Dolo plant and pellet plant.</li> </ul>
viii	Air Quality Monitoring and Preservation	In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Bag filters shall be provided at coal mill, intermediate bin/separation building, product storage silo, day bin, iron ore circuit, load out, cooler discharge to control fugitive dust emission. Dust suppression system with water sprinklers shall be provided at raw material stock piles and loading/unloading point. Dust extraction system with bag filters shall be provided at all raw material transfer points, crusher house, junction towers and feed points. All conveyors shall be completely covered by GI sheets. All the roads shall be asphalted to control dust emissions.	Adequate control measures have been adopted to control fugitive dust generation         • ESP's are provided in DRI-WHRB (12 nos.), AFBC.(02nos.) & CFBC(06 nos.) Boilers of CPP, Sinter Plant and pellet plant.         • Installation of 09 nos. of Bag filters at various building and junction houses of RMHS are and Dry Fog systems are installed in Iron ore and coal circuit crushing and screening areas.         • Fumes treatment plant has been installed at SMS-1(4 nos.) and SMS-2(01 no).         • Dry BF Gas Cleaning system and bag filters are provided in Blast furnace-1. ESP is provided for in plant de dusting of various units including DRI and Sinter plant.         • Fixed water sprinkler have been installed in stock yards, raw material handling areas and internal Concrete roads for dust suppression.         • Six numbers of high pressure mist beam has been installed in Raw material handling stockyard area.         • O6 numbers of Mobile water sprinkling tankers are being engaged for periodical water sprinkling on all the internal roads within the plant premises.         • 05 nos. of Mechanized road sweepers have been engaged for continuous cleaning of concrete road inside the plant premises to control fugitive dust.         • In the following units Fugitive emission is being monitored and report for the period Apr'22 to Sept'22 is enclosed as Annexure-V         No       Name of the units       Frequency         1       RMHS       2         2       DRI       3
			4Power PlantOnce in a model5Pellet plantOnce in a model6Sinter plantOnce in a model

	1		. r			
				7	Blast Furnace	
				8	Steel melting shop	
				9	Lime plant	
ix	Air Quality Monitoring and Preservation	Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/code of practice issued by it CPCB shall be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R 414(E) dated 30 <sup>th</sup> May.2008 shall be followed.	device	s ha lim	existing units adequate air po ve been installed to keep gas it. Monitoring Report is IV.	eous emission
x	Air Quality Monitoring and Preservation	Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.	•	prod Wate raw emiss mate Mob enga mate dust Two alrea whe For bee	cles carrying raw materials ucts are being covered with ta er sprinkling arrangement has material handling areas to ssion during loading and u erials. ile water sprinkling tankers aged for regular water sprin erial transporting roads to o numbers of Wheel washing ady been installed to clear el and control the fugitive dust ur more nos of Wheel washing en procured to installed in holling areas and the exit gate	arpaulin. been made at control dust unloading raw s have been nkling on raw control fugitive system have n the vehicle con road. ng system has Raw material
xi	Water Quality Monitoring and Preservation	Total water requirement from Hirakud Dam shall not exceed 5,500 m <sup>3</sup> /hr although 'Permission' for the drawl of 10,194 m <sup>3</sup> /hr.water is accorded by the Water Resource Department. Govt. of Orissa vide letter dated 17 <sup>th</sup> June, 2003. Efforts shall further be made to use maximum water from the rain water harvesting sources. As proposed, modified wet quenching system shall be provided to coke oven plant. Air cooled condensers and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent shall be treated and used for ash handing, dust suppression and green belt	•	Pres Hiral facili Was treat WW pren proc ore conc The efflu efflu capa	ently 2376 M3/hr of water kud Reservoir for our exis	drawing from ting operating n waste water /WTP-2 and ed within plant lt, fire fighting, washery, iron plant and ash t. eing treated in / 500 KLD and d in BETP of hin plant

		development. No effluent shall be discharged and 'Zero' discharge shall be adopted. Sanitary sewages shall be treated in septic tank followed by soak pit and used for green belt development.	<ul> <li>with individual septic tanks and soak pits.</li> <li>Three numbers of Sewage treatment plant has been provided of capacity STP-1-500 KLD,STP -2-900 KLD and STP-3-900 KLD for treatment of sewage in township maintain zero discharge.</li> <li>To achieve ZLD we have installed 510 M3/hr Reverse Osmosis plant for maximize the utilization of the treated water</li> </ul>
xii	Water Quality Monitoring and Preservation	Effluent treatment plant (ETP) shall be provided for the treatment of Phenolic effluent from coke oven plant and the treated water shall be used for sprinkling at coal stockyard. Clarifier, sludge pond and filter press shall be provided in raw water treatment plant. DM plant water shall be neutralized in neutralization pit and the treated water shall be used for ash handling. Process wastewater shall be recycled /reused in the plant. Cooling tower blow down shall be in the plant for dust suppression and slag granulation, pig casting machine etc. Provision of separate drains for the process and storm water shall be kept.	<ul> <li>The phenolic effluent is being treated in BETP plant and treated effluent is being reused for quenching of hot coke in Coke oven-2.</li> <li>Neutralization pits have been provided in DM Plant for neutralizing the effluent and treated water is used in ash silos for ash conditioning.</li> <li>Process effluent/waste water generated from other processes such as Cold Rolling Mill Complex is being treated in Effluent Treatment Plant and treated wastewater is used for sprinkling on haul roads to control fugitive emissions.</li> </ul>
xiii	Water Quality Monitoring and Preservation	All the wastewater from the coke oven plant containing, cyanide, phenol and COD etc. Shall be properly treated in the BOD plant. Continuous monitoring of Total Organic compounds (TOC) including cyanide, phenol and COD etc. shall be done at the outlet of ETP (BOD plant) and recovery of products like tar, ammonia, naphthalene etc shall be ensured.	<ul> <li>The Coke Oven -1 is non-recovery type. Water is only used for quenching which is collected in settling tanks and reused in the process of quenching.</li> <li>The waste water containing cyanide, phenol and COD is being treated in BETP plant and treated effluent is being reused for quenching of hot coke in Coke oven-2.</li> <li>Online monitoring system have been installed to monitor the treated water quality of the effluent generated from the BETP plant.</li> </ul>
xiv	Water Quality Monitoring and Preservation	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	<ul> <li>M/s KRG Rain water foundation has recently conducted feasibility study in entire complex to assess rainwater harvesting potential and submit feasibility report with detailed plan, expenses, methodology etc. Based on the approved Feasibility report the construction of Rain Water harvesting Structures will be started completed within about 2 years.</li> <li>BPSL has two water reservoirs having capacity 200000 M3 and 134000 M3 which help in rain water harvesting during monsoon.</li> </ul>

xv	Statutory compliance	'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.	As a measure of water conservation and also ensure Zero liquid discharge, For 100% reuse ar utilization of treated waste water RO plant of capaci 510 m <sup>3</sup> /hr has been commissioned & the same is Operation. All the 03 Nos. of existing STP's have been upgrade to meet the prescribed standards. All the STP's a operating satisfactorily. All the effluent water and storm water drains hav been segregated throughout the plant. Up-gradation of ETP in CRM is under Commissioning		
xvi	Statutory compliance	The water consumption shall not exceed 16 m <sup>3</sup> /Ton of Steel as per prescribed standard.	Consumption of water in steel making areas is maintained below the prescribed standard. In the FY 2022-23 till Sept'22 the water consumption is 3.47 M <sup>3</sup> /ton of crude steel		
xvii	Water Quality Monitoring and Preservation	Regular monitoring of influent and effluent surface, sub surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution control Board or described under the E (P) Act whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional officer at Bhubaneswar, OPCB and CPCB	<ul> <li>Monitoring of treated effluent, treated waste water and ground water is being monitor regularly.</li> <li>Analysis report of ground water quality in the surrounding villages is enclosed as Annexure-VII.</li> <li>Treated effluent quality of ETP outlet, treated waste water quality WWTP-1, WWTP-2 WWTP-3 outlets and outlet of BETP for the period April'22 to September'22 is enclosed as Annexure-VI.</li> <li>Six monthly compliance with Monitoring reports is being submitted at MoEF&amp;CC, OSCPB and CPCB.</li> <li>Last six monthly compliance status with monitoring report was submitted vide letter no-JSWBPSL/MOEF&amp;CC/22-23/015 on dated 31.05.2022</li> </ul>		
xviii	Waste Management	Iron ore fines, process dust, and mill scales shall be recycled to sinter plant to produce sinter. Sludge and slag from electric arc furnace (EAF) shall also be recycled in the sinter plant. Scrap shall be reused in the steel melting shop (SMS).	<ul> <li>Iron ore fines, process flue dust, mill scales and EAF slag generating in the plant is being recycled through sinter plant &amp; pellet plant.</li> <li>Iron ore fines are consumed for making pellets which is further used in DRI Kilns.</li> <li>All the scraps are being recycled in the Steel melting shop.</li> </ul>		
xix	Waste Management	All the coal fines, char from DRI plant and washery rejects shall be utilized in AFBC boiler of power plant and no char shall be used for briquette making or disposed off anywhere else. AFBC boiler shall be installed simultaneously along with the DRI	Details of wastes and utilization         No       Waste       Utilization /disposal         Description       01       Coal fines       Reused in Captive power pla		

	1					<u> </u>	1.
		plant to ensure full utilization of char from the beginning. All the blast furnace (BF)	02	DRI char	Reused in Captiv		
		slag shall be granulated and used in manufacturing. Portland slag cement (PSC) in the proposed cement plant. Scrap shall be used in steel molting shap (SMS) EAE 8	03	DRI accretion materials and refractory mass	Utilized in interna lying area filling	al road and	low
		be used in steel melting shop (SMS) EAF & SMS slag kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass kiln accretions shall	04	SMS Slag	Metallic part r residue utilized i and land filling		and king
		be properly disposed off in environment friendly manner. Tar sludge from coke oven decanter, waste oil and oil sludge shall be	05	Blast furnace slag	Entire quantity Cement plant	sold to	the
		(Management & Handling) Rules, 1989 as subsequently amended.	06	Mill scale and Scrap	Recycled in SMS		
xx	Waste Management	All the slag shall be used for land filling inside the plant or used as building material only after passing through Toxic chemical Leachability Potential (TCLP) test. Toxic slag shall be disposed in secured landfill as CPCB guidelines. Otherwise hazardous substances shall be recovered from the slag and output waste and be disposed in secured landfill as per CPCB guidelines.	•	Metallic part of the sinter plant and re internal road making	maining slag is b	eing used	
xxi	Waste Management	Proper utilization of fly ash shall be ensured as per Fly ash Notification, 1999 and subsequent amendment in 2003 & 2010. All the fly ash and BF slag shall be fully utilized in manufacturing of Pozollona Portland Cement (PPC) and Pozollona Slag Cement (PSC)	differ area In the of fly • Fly bas Jha Dis	te ash generated from ent area like fly ash b filling, embankment e year 2022-23 till Se ash generated in our ash is being supplie sed brick manufactu arsuguda, Sambalput trict of Odisha free psidy @150/Ton for m	prick manufacturing rising and quarry pt22 we have utiliz plant. ed to 45 numbers uring units in ar r, Sundargarh and of cost with tran	g, low lying void filling. zed 100 % of fly ash nd around d Deogarh nsportation	
xxii	Waste Management	Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic, metal content in the waste material and the composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office at Bhubaneswar, OPCB and CPCB.	•	The non-utilizable a is disposed in des site as per the guid Annual returns of regularly submitted	& non-hazardous s ignated solid wast elines of CPCB & ( hazardous waste	solid waste te disposal OSPCB.	
xxiii	Waste Management	A time bound action plan shall be submitted for solid waste, its proper utilization and disposal.	•	specified in our El The solid waste units are being red	generate from va cycled within the pl are being taken for	rious plant lant.	
	Management	<ul> <li>disposal of all the solid waste shall be ensured and regular report regarding toxic, metal content in the waste material and the composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office at Bhubaneswar, OPCB and CPCB.</li> <li>A time bound action plan shall be submitted for solid waste, its proper utilization and</li> </ul>	•	is disposed in des site as per the guid Annual returns of regularly submitted Solid waste is dis specified in our Ef The solid waste units are being rec Necessary steps a	ignated solid wast elines of CPCB & ( hazardous waste to SPCB Odisha posed as per the a MP Plan. generate from val cycled within the pl are being taken for	te dispo OSPCB e is be action p rious p lant.	osal eing olan lant

xxiv	Risk Mitigation and Disaster Management	A Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional at Bhubaneswar OPCB and CPCB with in 3 months of issue of environment clearance letter.	<ul> <li>Risk and Disaster Management Plan prepared from the very beginning of the plant operation and were submitted at your good office along with our six monthly compliance reports from time to time with addition of some new units, new hazardous chemicals Revised and up dated risk &amp; Disaster Management Plan along with mitigation measures and the same is followed as and when required. and their inventory changes in key personnel etc.</li> <li>To combat emergency situation in the plant a dedicated department with all sorts of facilities has been established.</li> </ul>
xxv	Greenbelt	As proposed, green belt shall be developed in 430 acres (33%) out of total 1300 acres in and around the plant as per the CPCB guidelines in consultation with DFO.	<ul> <li>We have constantly increases every year green coverage areas.</li> <li>We have developed greenbelt 9.28 % of the total area.</li> <li>We have planted 32188 nos. of tree in April 22 to Sept.22.</li> <li>Revised action plan to completion greenbelt over 33% of total project area by December 2024 is enclosed as Annexure -X</li> </ul>
xxvi	Corporate Environmental Responsibility	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be implemented.	BPSL has implemented all recommendations made in the Charter of Corporate Responsibility for Environment Protection (CREP).
xxvii	Statutory compliance	Rehabilitation and Resettlement Plan for the project affected population including tribal shall be implemented as per the policy of the State Govt. in consultation with the State Govt. of Orissa Compensation paid in any case shall not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy,2007.	Rehabilitation and resettlement plan for displacement of families has already been implemented as per the policy of Government of Odisha.
xxvii i	Miscellaneous	At least 5% of the total cost of the project shall be earmarked towards the corporate social responsibility and item wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program shall be ensured accordingly in a time bound manner.	Company is regularly contributing as per the demand raised by Rehabilitation & Periphery Development Advisory Committee (RPDAC) for taking up various peripheral development works by the District Administration.CSR activities for the year 2021-22 enclosed as <b>Annexure- XI</b> and for 2022-23 till Sept'22 as <b>Annexure-XII</b>

xxix	Human Health Environment	The company shall provide housing for construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc		Company has setup a separate labour colony for providing shelter to all temporary construction labors. Amenities such as toilets, wash rooms, drinking water, etc. is provided to them at the labour colony. Provision for free medical facility is provided to all workers at companies Occupational Health Center (OHC).
------	-----------------------------	---	--	--

#### **B. General Conditions:**

No	Env. Parameter	Condition	Compliance Status		
i	Statutory compliance	The project authorities must strictly adhere to the stipulations made by the Orissa pollution Control Board (OPCB) and the State Govt.	All relevant stipulations made by Odisha State Pollution Control Board and state government are being complied		
ii	Statutory compliance	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment & Forests.	No expansion or modification has been carried out without prior approval of Ministry of Environment Forest and Climate Change.		
iii	Air Quality Monitoring and Preservation	The gaseous emissions from various process unit shall conform to the load/mass based standards notified by this Ministry on 19 <sup>th</sup> May 1993 and standards prescribed from time to time. The Orissa Pollution Control Board (OPCB) may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	<ul> <li>Gaseous emission level from various process conform to the load /mass based standard as notified by the Ministry on 19<sup>th</sup> May 1993 and standard prescribed from time to time.</li> <li>Continuous Emission Monitoring systems have been installed in 42 numbers major stacks of DRI, CPP, Iron &amp; Steel making process Units. Stack emission monitoring data for the period Apr'22 to Sept'22 is enclosed as Annexure-IV.</li> <li>In all the existing units adequate pollution control measures to maintain gaseous emission within prescribed standard. The list of Air Pollution control devices installed is enclosed as Annexure-II.</li> </ul>		
iv	Air Quality Monitoring and Preservation	At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO <sub>2</sub> and NOx are anticipated in consultation with the OPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and OPCB, CPCB once in six months.	<ul> <li>Four numbers of Continuous Ambient Air Quality Monitoring Stations have been installed within plant.</li> <li>CAAQMS-1-Near Township</li> <li>CAAQMS-2 Near Railway Gate</li> <li>CAAQMS-3-Behind CRM</li> <li>CAAQMS-4-Near ETP</li> <li>All stations have been establish in consultation with the regional office OSPCB.</li> <li>The monitoring report is being submitted in the Regional offices of Ministry as well as OSPCB regularly.</li> </ul>		

v	Air Quality Monitoring and Preservation	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Further, specific measure like water sprinkling around the coal stockpiles and asphalting or concreting of the roads shall be done to control fugitive emissions.	<ul> <li>To have control on fugitive emission following measures have been adopted</li> <li>Adequate Air Pollution Control devices Equipments installed in all the existing units to maintain emission within limit. List of Pollution Control Devices installed is enclosed as Annexure-II</li> <li>Five numbers of high pressure mist beam has been installed in Raw material handling stock yard area.</li> <li>Bag Filters and Dry Fog systems are installed in Iron ore crushing and screening areas.</li> <li>Fixed water sprinkling installed in stock yards, raw material handling areas and internal concrete roads for dust suppression.</li> <li>O6 numbers of Mobile water sprinkling on haul roads and in construction areas for control of fugitive dust emissions.</li> <li>O5 Mechanized road sweepers have been engaged for continuous cleaning of concrete roads inside the plant premises to control fugitive dust.</li> <li>Construction of internal roads is in progress</li> <li>All the conveyors belts and transfer points have been covered and enclosed.</li> </ul>
vi	Water Quality Monitoring and Preservation	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 or as amended form time to time. The treated waste water shall be utilized for plantation purpose.	<ul> <li>Three numbers of waste water treatment plants are in operation for treatment of waste water generate from the plant.</li> <li>Effluent Treatment Plant has been installed for treatment of process effluent generated from CRM complex.</li> <li>Biological ETP has been installed for treatment of effluent generate from Coke Oven-2.</li> <li>The entire treated water is being used inside the plant in various applications such as ash conditioning, sprinkling, horticulture, firefighting, etc.</li> <li>The monitoring reports of industrial waste water are being submitted to SPCB/CPCB/MoEF &amp; CC at regular intervals.</li> </ul>
vii	Noise Monitoring & Prevention	The overall noise levels in and around the plant area shall be kept well within the standards (85dBA) by providing noise control measures including accosting hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules,1989 viz.75dB(A)(day time) and 70dB(A)(night time)	<ul> <li>All the noise prone area such as turbine house and compressor house have been provided with adequate acoustics enclosure and silencer</li> <li>No employee has been deployed full working hours at noise prone area. Whenever any employee goes for he/she uses earplug/earmuffs.</li> <li>Noise level monitoring report for work zone and Ambient are for the period Apr'22 to Sept'22 is enclosed as Annexure-XV (A&amp;B)</li> </ul>
viii	Human Health Environment	Occupational health surveillance of the workers shall be done on a regular basis and records	• An Occupational Health Centre (OHC) has been setup within the plant for pre-joining and periodical medical check-up of all workers including contract labours.

		maintained as per the Factories Act.	<ul> <li>The OHC is is having following facilities for providing health care to employees-</li> <li>Essential drug delivery through pharmacy.</li> <li>X ray services for diagnosis of musculoskeletal and</li> </ul>
			<ul> <li>internal abnormalities.</li> <li>Pathology section for conducting bedside diagnosis and disease screening.</li> <li>ECG facility to rule out cardiac abnormality.</li> <li>Physiotherapy set up to manage pain and stiffness in musculoskeletal illness and injury.</li> <li>Minor OT to repair wound and Dressing of wounds and ulcers.</li> <li>Clinic for diagnosis of common disease and injuries.</li> <li>Basic and Advanced Ambulance services.</li> <li>Facility for online training on preventable diseases.</li> <li>Audiometry Booth for diagnosis of hearing losses.</li> </ul>
			• As per the requirement of Factory Act 1948 all necessary record & documents is maintained.
ix	Miscellaneous	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.	M/s KRG Rain water foundation has recently conducted feasibility study in entire complex to assess rainwater harvesting potential and submit feasibility report with detailed plan, expenses, methodology etc. Based on the approved Feasibility report the construction of Rain Water harvesting Structures will be started completed within about 2 years.
x	Corporate Environmental Responsibility	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio- economic development activities in the surrounding villages like community development programmes, educational programmes drinking water supply and health care etc. Suggestions made during the public hearing shall be implemented.	<ul> <li>As described in the EIA/EMP report all the Environmental protection measures implemented in the project. BPSL continuously undertaking various community developments activities under its socio-economic development programme.</li> <li>These included construction /renovation of primary and secondary schools in nearby villages, providing financial assistances to educational institutions, construction of roads, construction of temples, providing drinking water, etc. Company is regularly conducting free health camps in association with District Administration and provide free of cost medicines to the patients.</li> </ul>
xi	Miscellaneous	As proposed. Rs.130.00 Crores and 14.00 Crores shall be earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures .All the funds allocated shall be judiciously utilized to implement the conditions stipulated by the Ministry of environment and Forests as well as per the states	<ul> <li>The funds allocated for installation of pollution control equipments and implementing environmental protection measures is being judiciously utilized to fulfill the conditions stipulated by the Ministry of Environment and Forests as well as State pollution Control Board.</li> </ul>

	7		,
		Government. The funds so	
		provided shall not be diverted for	
		any other purpose.	
		The Regional office of this MinistryatBhubaneswar/CPCB/OSPCBshallmonitorthestipulated	• Six monthly compliance reports along with monitoring data are regularly being submitted at the Regional Office of MoEF&CC as well at OSPCB/CPCB.
xii	Statutory compliance	conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Last Six monthly compliance with monitoring report submitted vide letter no-JSWBPSL/MoEF&CC/22- 23/015 on date 31.05.2022
xiii	Statutory compliance	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 OPCB and may also be seen at website of the Ministry of Environment and forests at http:/envfor.nic.in. This shall be advertised within seven days from the date if 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 copy of the same shall be forwarded to the Regional office at Bhubaneswar.	<ul> <li>Information regarding issue of environmental clearance by the ministry was published in local Odia as well as English newspapers. Copies of the publications are as follows</li> <li>Information regarding issue of environmental clearance as follows</li> </ul>
xiv	Statutory compliance	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zilla 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.	Information regarding issue of environmental clearance by the ministry was given at local panchayat.
xv	Statutory compliance	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitoring data on their web site and shall update the same periodically. It shall simultaneously be sent to the Regional office of the MOEF, the respective Zonal Office	<ul> <li>conditions has been uploaded in company's website https://www.jswbpsl.in/ and same along with monitoring data are regularly being submitted at the Regional Office of MOEF&amp;CC as well at OSPCB/CPCB.</li> <li>Last compliance report submitted vide letter no JSWBPSL/MoEF &amp; CC/22-23/015 datd. 31.05.2022</li> </ul>

		of CPCB and the OPCB. The criteria pollutant levels namely, SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as sack emissions) or critical sectoral parameters like total Organic Compounds (TOC) including cyanide, phenol and COD etc. indicated for the projects shall be monitored and displayed at convenient location near the main gate of the company in the public domain.	
xvi	Statutory compliance	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environment 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.	Six monthly compliance reports along with monitoring data is being submitted at the Regional Office of MOEF&CC, OSPCB, CPCB regularly. Last six-monthly compliance report was submitted vide letter no-JSWBPSL/MoEF&CC/22-23/015 on dated 31.05.2022
xvii	Statutory compliance	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned state pollution control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional offices of the MOEF by e-mail.	Environmental statement in Form – V is being submitted at OSPCB Last Environment Statement for the financial year 2021-22 was submitted vide letter no-JSWBPSL/ENV/22-23/047 on dated 24.09.2022.
xviii	Miscellaneous	Project authorities shall inform the Regional office as well 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.	Complied

### COMPLIANCE TO CONDITION LETTER File No.J-11011/40/2009-IA II(I) Dated 02.04.2010 for 2.8 MTPA

#### A. Specific Conditions:

No	Env. Parameter	Condition Description	Compliance Status		
i	Statutory compliance	Compliance to all the specific and general conditions stipulated for the existing plant by the Central/State Govt. shall be ensured and regular reports submitted to the Ministry and its Regional Office at Bhubaneswar.	<ul> <li>All the conditions stipulated by Central &amp; State Government Authorities are being complied.</li> <li>Half yearly compliance reports along with monitoring data are being submitted at OSPCB / CPCB &amp; MoEF&amp;CC regularly.</li> <li>Last six monthly compliance report was submitted vide letter no-JSWBPSL/MoEF &amp;CC/22-23/015 on dated 31.05.2022</li> </ul>		
ii	Air Quality Monitoring and Preservation	Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks shall be provided along with the sufficient air pollution control devices viz. Electrostatic precipitator (ESP),gas cleaning plant cyclone, multi-cyclone, wet scrubber, bag house, bag filters etc. shall be provide to keep the emission levels below 50 mg/Nm <sup>3</sup> by installing energy efficient technology. At no time the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	<ul> <li>RSPM.</li> <li>Five numbers of high pressure mist beam has been installed in Raw material handling stock yard area.</li> <li>06 numbers of Mobile water sprinkling tankers are being engaged for regular water sprinkling on haul roads and in construction areas for control of fugitive dust emissions.</li> <li>05 nos. of Mechanized road sweepers have been engaged for continuous cleaning of concrete roads inside the plant premises to control fugitive dust.</li> </ul>		

			<ul> <li>In the event of failure of any pollution control system, automatic interlocking facility has been provided with all units to hold the process and minimize the emission.</li> <li>In the event of power failure in DRI automatically the DG starts and supply power to auxiliaries, hold the Process and minimize the emission.</li> <li>Six monthly monitoring reports are being submitted to MoEFCC, CPCB and SPCB regularly.</li> </ul>
	Air Quality Monitoring and Preservation	As proposed, electrostatic precipitator (ESP) shall be provided to Sinter Plant, WHRB, CFBC, DRI and Slag Cement Plants; bag house to Blast Furnace and ESP & bag filters to by-product recovery type of coke oven to control SPM levels within 50 mg/Nm <sup>3</sup> . Fume extraction system with bag filters shall be provided to electric arc furnace and ladle furnace.	<ul> <li>As mentioned in our Environment Management Plan ESPs and other Pollution Control systems have been installed to control dust emission in different units. The details are as follows.</li> <li>DRI/WHRB</li> <li>There are 12 numbers of ESP installed at the Hot end of the DRI Kiln, 3 numbers ESP and 3 numbers of Bag filter for dedusting system at cold end of the DRI kiln.</li> <li>Captive Power Plant:</li> <li>Two numbers of ESP installed at CPP 40 MW and 60MW AFBC Boilers, and 06 nos. of ESP installed in CFBC boilers of 3x130 MW CPP to keep the emission well within the limit</li> <li>Blast Furnace</li> <li>One de dusting system have been installed in cast house of Blast furnace -1 followed by Dry Gas cleaning plant. In BF-2 two dedusting systems have been installed in Cast house and stock house to keep the emission level within the norms.</li> <li>Coke Oven</li> <li>One dedusting system installed at Coke oven -2 for control of emission.</li> <li>Steel Melting Shop</li> <li>Four nos. of fumes extraction and treatment plant along with bag filters have been installed to control the fugitive emission in the EAF and LF of SMS-I, Similarly in SMS-II one FTP have been installed .</li> <li>In the proposed cement plant adequate pollution control system ESP/Bag filter will be installed.</li> </ul>
iv	Air Quality Monitoring and Preservation	Hot gases from DRI kiln shall be passed through Dust Setting Chamber (DCS) to remove coarse solids and after Burning Chambers (ABC) to burn CO completely and used in waste heat recovery boiler (WHRB).The gas then shall be cleaned in ESP before leaving out into the atmosphere through ID fan	<ul> <li>All the DRI Units have been equipped with DCS, ABC followed by independent waste heat recovery boilers (WHRB) for power generation.</li> <li>Independent ESP's have been installed for all the DRI kilns. There are 12 numbers .of ESPs have been installed in the DRI complex.</li> </ul>

		and stack.	
		All the standards prescribed for the	All efforts are being taken to comply with the prescribed
v	Statutory compliance	coke oven plants shall be followed as per the latest guidelines, Naphthalene scrubbing unit shall be provided to remove residual naphthalene from coke oven gas. Ammonia released in de- sulphuriziton section of coke oven plant shall be catalytically cracked to Nitrogen and Hydrogen. BF top gas shall be cleaned in dust catcher and gas cleaning plant (GCP) comprising of bag filters and used in furnace of CSP, BF, EAF, sinter plant, lime & dolo plant. Bag filters with adequate stack height shall be provided to lime and dolo plant. Proper and full utilization of coke oven gases in power plant using heat recovery steam generators shall be ensured and no flue gases shall be discharged into the air.	<ul> <li>standards and guidelines for the coke oven facilities.</li> <li>The Coke oven-1 is of Non Recovery type. The hot gas of coke oven is being utilized in the power generation passing through waste heat recovery boilers (WHRB) feeding to two numbers of turbo generators which generates 16 MW power.</li> <li>The Coke Oven Plant -2 (Recovery type) has been installed with adequate pollution control equipments like Pushing &amp; Charging Emission Control system and Bag filter. Stack height has been designed for better dispersion of pollutants.</li> <li>The byproduct plant is equipped with naphthalene scrubbing unit and Desulphurization unit to remove residual naphthalene from coke oven gas.</li> <li>The Coke oven gas is being utilized systematically and no flue gas discharged into atmosphere.</li> <li>BF top Gas is cleaned in dust catcher and Gas cleaning plant and is being used in Tunnel Furnace of CSP, Sinter Plant, Lime/dolo Plant, SMS,Wire and Rod Mill and Pellet plant.</li> </ul>
vi	Statutory compliance	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R No. 826(E) dated 16 <sup>th</sup> November 2009 shall be followed.	<ul> <li>The National Ambient Air quality Emission standards issued by the Ministry vide G.S.R No. 826(E) dated 16<sup>th</sup> November 2009 are being followed.</li> <li>Monitoring reports for the period Apr'22 to Sept'22 is enclosed as Annexure-III</li> </ul>
vii	Statutory compliance	All the standards prescribed for the coke oven plants shall be followed as per the latest guidelines. Proper and full utilization of coke oven gases in power plant using heat recovery steam generators shall be ensured and no flue gases shall be discharged into the air.	<ul> <li>All the standards prescribed for the coke oven plants are being followed.</li> <li>In coke oven -1 hot gas is being completely utilized in Waste Heat Recovery Boilers to generate 2x8 MW power.</li> <li>In Coke Oven-2 De dusting and Pushing and Charging emission control system have been installed .</li> <li>Biological effluent treatment plant (BETP) have been installed for treatment of effluent generate from byproduct plant.</li> <li>The clean coke oven gas is being utilized in coke oven battery heating, Tunnel furnace of CSP, Lime/Dolo plant and pellet plant.</li> </ul>
viii	Air Quality Monitoring and Preservation	In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Bag filters shall be	<ul> <li>Adequate control measures have been adopted to control fugitive dust generation</li> <li>ESP's are provided in DRI-WHRB (12 nos.), AFBC.(02nos.) &amp; CFBC(06 nos.) Boilers of CPP, Sinter</li> </ul>

ix

	provided at coal mill, intermediate bin/separation building, product storage silo, day bin, iron ore circuit, load out, cooler discharge to control fugitive dust emission. Dust suppression system with water sprinklers shall be provided at raw material stock piles and loading/unloading point. Dust extraction system with bag filters shall be provided at all raw material transfer points, crusher house, junction towers and feed points. All conveyors shall be completely covered by GI sheets. All the roads shall be asphalted to control dust emissions.	<ul> <li>Insta and j are in scree</li> <li>Fume nos.)</li> <li>Dry provide d plant</li> <li>Fixed raw r for du</li> <li>Six r instal</li> <li>06 nu enga interr</li> <li>05 n enga the p</li> <li>In th monii enclo</li> <li>No</li> <li>1</li> <li>2</li> <li>3</li> <li>4</li> <li>5</li> <li>6</li> <li>7</li> <li>8</li> <li>9</li> </ul>	<ul> <li>a water sprinkler have been material handling areas and ust suppression.</li> <li>numbers of high pressure led in Raw material handlin umbers of Mobile water springed for periodical water hal roads within the plant pression of Mechanized road ged for continuous cleaning lant premises to control fugine following units Fugitive tored and report for the periosed as Annexure-V</li> <li>Name of the units</li> <li>RMHS</li> <li>DRI</li> <li>Coke Oven</li> <li>Power Plant</li> <li>Pellet plant</li> <li>Sinter plant</li> <li>Blast Furnace</li> <li>Steel melting shop</li> <li>Lime plant</li> </ul>	re and Dry Fog systems bal circuit crushing and en installed at SMS-1(4 in and bag filters are P is provided for in plant cluding DRI and Sinter installed in stock yards, internal Concrete roads internal Concrete roads mist beam has been g stockyard area. nkling tankers are being sprinkling on all the emises. sweepers have been g of concrete road inside itive dust. we emission is being fod Apr'22 to Sept'22 is Frequency Once in a month
Air Quality Monitoring and Preservation	Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/code of practice issued by it CPCB shall be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R	have beer	existing units adequate air p n installed to keep gaseou gReport is attached as <b>Ann</b>	is emission within limit.

		414(E) dated 30 <sup>th</sup> May.2008 shall be followed.	
x	Air Quality Monitoring and Preservation	Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.	<ul> <li>Vehicles carrying raw materials and finished products are being covered with tarpaulin.</li> <li>Water sprinkling arrangement has been made at raw material handling areas to control dust emission during loading and unloading raw materials.</li> <li>Mobile water sprinkling tankers have been engaged for regular water sprinkling on raw material transporting roads to control fugitive dust.</li> <li>Two numbers of Wheel washing system have already been installed to clean the vehicle wheel and control the fugitive dust on road.</li> <li>Four more nos of Wheel washing system has been procured to installed in Raw material handling areas and the exit gate of the plant</li> </ul>
xi	Water Quality Monitoring and Preservation	Total water requirement from Hirakud Dam shall not exceed 5,500 m <sup>3</sup> /hr although 'Permission' for the drawl of 10,194 m <sup>3</sup> /hr.water is accorded by the Water Resource Department. Govt. of Orissa vide letter dated 17 <sup>th</sup> June, 2003. Efforts shall further be made to use maximum water from the rain water harvesting sources. As proposed, modified wet quenching system shall be provided to coke oven plant. Air cooled condensers and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent shall be treated and used for ash handing, dust suppression and green belt development. No effluent shall be discharged and 'Zero' discharge shall be treated in septic tank followed by soak pit and used for green belt development.	<ul> <li>Presently 2376 M3/hr of water drawing from Hirakud Reservoir for our existing operating facilities.</li> <li>Waste water is being treated in waste water treatment plants (WWTP-1,WWTP-2 and WWTP-3) and treated water reused within plant premises for developing green belt, fire fighting, process make up water for coal washery, iron ore beneficiation plant and pellet plant and ash conditioning at captive power plant.</li> <li>The process effluent CRM is being treated in effluent treatment plant of capacity 500 KLD and effluent from coke oven treated in BETP of capacity 75 M3/hr and reused within plant</li> <li>All office buildings and plant toilets are provided with individual septic tanks and soak pits.</li> <li>Three numbers of Sewage treatment plant has been provided of capacity STP-1-500 KLD,STP -2-900 KLD and STP-3-900 KLD for treatment of sewage in township maintain zero discharge.</li> <li>To achieve ZLD we have installed 510 M3/hr Reverse Osmosis plant for maximize the utilization of the treated water</li> </ul>
xii	Water Quality Monitoring and Preservation	Effluent treatment plant (ETP) shall be provided for the treatment of Phenolic effluent from coke oven plant and the treated water shall be used for sprinkling at coal stockyard. Clarifier, sludge pond and filter press shall be provided in raw water	<ul> <li>The phenolic effluent is being treated in BETP plant and treated effluent is being reused for quenching of hot coke in Coke oven-2.</li> <li>Neutralization pits have been provided in DM Plant for neutralizing the effluent and treated water is used in ash silos for ash conditioning.</li> </ul>

		treatment plant. DM plant water shall be neutralized in neutralization pit and the treated water shall be used for ash handling. Process wastewater shall be recycled /reused in the plant. Cooling tower blow down shall be in the plant for dust suppression and slag granulation, pig casting machine etc. Provision of separate drains for the process and storm water shall be kept.	• Process effluent/waste water generated from other processes such as Cold Rolling Mill Complex is being treated in Effluent Treatment Plant and treated wastewater is used for sprinkling on haul roads to control fugitive emissions.
xiii	Water Quality Monitoring and Preservation	All the wastewater from the coke oven plant containing, cyanide, phenol and COD etc. Shall be properly treated in the BOD plant. Continuous monitoring of Total Organic compounds (TOC) including cyanide, phenol and COD etc. shall be done at the outlet of ETP (BOD plant) and recovery of products like tar, ammonia, naphthalene etc shall be ensured.	<ul> <li>The Coke Oven -1 is non-recovery type. Water is only used for quenching which is collected in settling tanks and reused in the process of quenching.</li> <li>The waste water containing cyanide, phenol and COD is being treated in BETP plant and treated effluent is being reused for quenching of hot coke in Coke oven-2.</li> <li>Online monitoring system have been installed to monitor the treated water quality of the effluent generated from the BETP plant.</li> </ul>
xiv	Water Quality Monitoring and Preservation	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	<ul> <li>M/s KRG Rain water foundation has recently conducted feasibility study in entire complex to assess rainwater harvesting potential and submit feasibility report with detailed plan, expenses, methodology etc.</li> <li>Based on the approved Feasibility report the construction of Rain Water harvesting Structures will be started completed within about 2 years.</li> <li>BPSL has two water reservoirs having capacity 200000 M3 and 134000 M3 which help in rain water harvesting during monsoon.</li> </ul>
xv	Statutory compliance	'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.	As a measure of water conservation and also to ensure Zero liquid discharge, For 100% reuse and utilization of treated waste water RO plant of capacity 510 m <sup>3</sup> /hr has been commissioned & the same is in Operation. All the 03 Nos. of existing STP's have been upgraded to meet the prescribed standards. All the STP's are operating satisfactorily. All the effluent water and storm water drains have been segregated throughout the plant. Up-gradation of ETP in CRM is under Commissioning
xvi	Statutory compliance	The water consumption shall not exceed 16 m <sup>3</sup> /Ton of Steel as per prescribed standard.	Consumption of water in steel making areas is maintained below the prescribed standard. In the FY 2022-23 till Sept'22 the water consumption is 3.47 M <sup>3</sup> /ton of crude steel
xvii	Water Quality Monitoring and	Regular monitoring of influent and effluent surface, sub surface and	• Monitoring of treated effluent, treated waste water and ground water is being monitor regularly.

	Preservation	ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution control Board or described under the E (P) Act whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional officer at Bhubaneswar, OPCB and CPCB	•	surrounding villages Treated effluent qu water quality WWT outlet of BETP for t is enclosed as <b>Ann</b> Six monthly comp being submitted at Last six monthly o report was	of ground water quality in the s is enclosed as <b>Annexure-VII</b> . Hality of ETP outlet , treated waste P-1, WWTP-2 WWTP-3 outlets and the period April'22 to September'22 <b>exure-VI</b> . Dilance with Monitoring reports is MoEF&CC, OSCPB and CPCB. compliance status with monitoring submitted vide letter no- CC/22-23/015 on dated 31.05.2022
xviii	Waste	Iron ore fines, process dust, and mill scales shall be recycled to sinter plant to produce sinter. Sludge and slag from electric arc furnace (EAF) shall also be recycled in the sinter plant. Scrap shall be reused in the	• All the	slag generating in sinter plant & pellet Iron ore fines are o is further used in D	consumed for making pellets which
xix	Management	steel melting shop (SMS). All the coal fines, char from DRI plant	Details of wastes and utilization		zation
		and washery rejects shall be utilized in AFBC boiler of power plant and no char shall be used for briquette making or disposed off anywhere else. AFBC boiler shall be installed simultaneously along with the DRI plant to ensure full utilization of char from the beginning. All the blast furnace (BF) slag shall be granulated and used in manufacturing. Portland slag cement (PSC) in the proposed cement plant. Scrap shall be used in steel melting shop (SMS) EAF & SMS slag kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass kiln accretions shall be properly	No 01 02 03 04 05 06	Waste Description Coal fines DRI char DRI accretion materials and refractory mass SMS Slag Blast furnace slag Mill scale and	Utilization /disposal Reused in Captive power plant Reused in Captive power plant Utilized in internal road and low lying area filling Metallic part recovered and residue utilized in road making and land filling Entire quantity sold to the Cement plant Recycled in SMS
	Waste Management	disposed off in environment friendly manner. Tar sludge from coke oven decanter, waste oil and oil sludge shall be properly disposed as per Hazardous waste (Management & Handling) Rules, 1989 as subsequently amended.	06	Scrap	

	1		
xx	Waste Management Waste Management	All the slag shall be used for land filling inside the plant or used as building material only after passing through Toxic chemical Leachability Potential (TCLP) test. Toxic slag shall be disposed in secured landfill as CPCB guidelines. Otherwise hazardous substances shall be recovered from the slag and output waste and be disposed in secured landfill as per CPCB guidelines. Proper utilization of fly ash shall be ensured as per Fly ash Notification,	and remaining slag is being used internal road making ,railway ballast etc.
		1999 and subsequent amendment in 2003 & 2010. All the fly ash and BF slag shall be fully utilized in manufacturing of Pozollona Portland Cement (PPC) and Pozollona Slag Cement (PSC)	<ul> <li>embankment rising and quarry void filling. In the year 2022-23 till Sept22 we have utilized 100 % of fly ash generated in our plant.</li> <li>Fly ash is being supplied to 45 numbers of fly ash based brick manufacturing units in and around Jharsuguda, Sambalpur, Sundargarh and Deogarh District of Odisha free of cost with transportation subsidy @150/Ton for maximum utilization of ash</li> </ul>
	Waste	Proper handling, storage, utilization	
XXII	Management	and disposal of all the solid waste shall be ensured and regular report	disposed in designated solid waste disposal site as per the guidelines of CPCB & OSPCB.
		regarding toxic, metal content in the	5 5 ,
		waste material and the composition, end use of solid/hazardous waste	submitted to SPCB Odisha
		shall be submitted to the Ministry's	
		Regional Office at Bhubaneswar,	
		OPCB and CPCB.	Solid waste is disposed as per the action plan specified in our
xxiii		A time bound action plan shall be submitted for solid waste, its proper	EMP Plan.
		utilization and disposal.	The solid waste generate from various plant units are being
			recycled within the plant.
	Waste Management		Necessary steps are being taken for maximum utilization of Solid waste.
	Management	A Risk and Disaster Management	
xxiv		Plan along with the mitigation measures shall be prepared and a	the very beginning of the plant operation and were submitted at your good office along with our six
		copy submitted to the Ministry's Regional at Bhubaneswar OPCB and	monthly compliance reports from time to time with addition of some new units, new hazardous chemicals
		CPCB with in 3 months of issue of	Revised and up dated risk & Disaster Management
		environment clearance letter.	Plan along with mitigation measures and the same is followed as and when required. and their inventory changes in key personnel etc.
	Risk Mitigation and Disaster		
	Management		<ul> <li>To combat emergency situation in the plant a dedicated department with all sorts of facilities has</li> </ul>
L	-	1	

			been established.
XXV	Greenbelt	As proposed, green belt shall be developed in 430 acres (33%) out of total 1300 acres in and around the plant as per the CPCB guidelines in consultation with DFO.	, , , , , , , , , , , , , , , , , , , ,
xxvi	Corporate Environmental Responsibility	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be implemented.	BPSL has implemented all recommendations made in the Charter of Corporate Responsibility for Environment Protection (CREP).
xxvii	Statutory compliance	Rehabilitation and Resettlement Plan for the project affected population including tribal shall be implemented as per the policy of the State Govt. in consultation with the State Govt. of Orissa Compensation paid in any case shall not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy,2007.	Rehabilitation and resettlement plan for displacement of families has already been implemented as per the policy of Government of Odisha.
xxvii i	Miscellaneous	At least 5% of the total cost of the project shall be earmarked towards the corporate social responsibility and item wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program shall be ensured accordingly in a time bound manner.	Company is regularly contributing as per the demand raised by Rehabilitation & Periphery Development Advisory Committee (RPDAC) for taking up various peripheral development works by the District Administration.CSR activities for the year 2021-22 enclosed as <b>Annexure- XIV</b> and for 2022-23 till Sept'22 as <b>Annexure-XV</b>
xxix	Human Health Environment	The company shall provide housing for construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc	<ul> <li>Company has setup a separate labour colony for providing shelter to all temporary construction labors.</li> <li>Amenities such as toilets, wash rooms, drinking water, etc. is provided to them at the labour colony.</li> <li>Provision for free medical facility is provided to all workers at companies Occupational Health Center (OHC).</li> </ul>

#### **B. General Conditions:**

No	Env. Parameter	Condition	Compliance Status		
i	Statutory compliance	The project authorities must strictly adhere to the stipulations made by the Orissa pollution Control Board (OPCB) and the State Govt.	All relevant stipulations made by Odisha State Pollution Control Board and state government are being complied		
ii	Statutory compliance	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment & Forests.	No expansion or modification has been carried out without prior approval of Ministry of Environment Forest and Climate Change.		
111	Air Quality Monitoring and Preservation	The gaseous emissions from various process unit shall conform to the load/mass based standards notified by this Ministry on 19 <sup>th</sup> May 1993 and standards prescribed from time to time. The Orissa Pollution Control Board (OPCB) may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	<ul> <li>Gaseous emission level from various process conform to the load /mass based standard as notified by the Ministry on 19<sup>th</sup> May 1993 and standard prescribed from time to time</li> <li>Continuous Emission Monitoring systems have been installed in 42 numbers major stacks of DRI, CPP, Iron &amp; Steel making process Units. Stack emission monitoring data for the period Apr'22 to Sept'22 is enclosed as Annexure-IV.</li> <li>In all the existing units adequate pollution control measures to maintain gaseous emission within prescribed standard. The list of Air Pollution control devices installed is enclosed as Annexure-II.</li> </ul>		
iv	Air Quality Monitoring and Preservation	At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO <sub>2</sub> and NOx are anticipated in consultation with the OPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and OPCB, CPCB once in six months.	<ul> <li>Four numbers of Continuous Ambient Air Quality Monitoring Stations have been installed within plant.</li> <li>CAAQMS-1-Near Township</li> <li>CAAQMS-2 Near Railway Gate</li> <li>CAAQMS-3-Behind CRM</li> <li>CAAQMS-4-Near ETP</li> <li>All stations have been establish in consultation with the regional office OSPCB.</li> <li>The monitoring report is being submitted in the Regional offices of Ministry as well as OSPCB regularly.</li> </ul>		
v	Air Quality Monitoring and Preservation	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Further, specific measure like water sprinkling around the coal stockpiles and asphalting or concreting of the roads shall be done to control fugitive emissions.	<ul> <li>To have control on fugitive emission following measures have been adopted</li> <li>Adequate Air Pollution Control devices Equipments installed in all the existing units to maintain emission within limit. List of Pollution Control Devices installed is enclosed as Annexure-II</li> <li>Five numbers of high pressure mist beam has been installed in Raw material handling stock yard area.</li> <li>Bag Filters and Dry Fog systems are installed in</li> </ul>		

			<ul> <li>Iron ore crushing and screening areas.</li> <li>Fixed water sprinkling installed in stock yards, raw material handling areas and internal concrete roads for dust suppression.</li> <li>06 numbers of Mobile water sprinkling tankers are being engaged for regular water sprinkling on haul roads and in construction areas for control of fugitive dust emissions.</li> <li>05 Mechanized road sweepers have been engaged for continuous cleaning of concrete roads inside the plant premises to control fugitive dust.</li> </ul>
			<ul> <li>Construction of internal roads is in progress</li> <li>All the conveyors belts and transfer points have been covered and enclosed.</li> </ul>
vi	Water Quality Monitoring and Preservation	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 or as amended form time to time. The treated waste water shall be utilized for plantation purpose.	<ul> <li>Three numbers of waste water treatment plants are in operation for treatment of waste water generate from the plant.</li> <li>Effluent Treatment Plant has been installed for treatment of process effluent generated from CRM complex.</li> <li>Biological ETP has been installed for treatment of effluent generate from Coke Oven-2.</li> <li>The entire treated water is being used inside the plant in various applications such as ash conditioning, sprinkling, horticulture, firefighting, etc.</li> <li>The monitoring reports of industrial waste water are being submitted to SPCB/CPCB/MoEF &amp; CC at regular intervals.</li> </ul>
vii	Noise Monitoring & Prevention	The overall noise levels in and around the plant area shall be kept well within the standards (85dBA) by providing noise control measures including accosting hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules,1989 viz.75dB(A)(day time) and 70dB(A)(night time)	<ul> <li>All the noise prone area such as turbine house and compressor house have been provided with adequate acoustics enclosure and silencer</li> <li>No employee has been deployed full working hours at noise prone area. Whenever any employee goes for he/she uses earplug/earmuffs.</li> <li>Noise level monitoring report for work zone and Ambient are for the period Apr'22 to Sept'22 is enclosed as Annexure-XV (A&amp;B)</li> </ul>
viii	Human Health Environment	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	<ul> <li>An Occupational Health Centre (OHC) has been setup within the plant for pre-joining and periodical medical check-up of all workers including contract labours.</li> <li>The OHC is is having following facilities for providing health care to employees-</li> <li>Essential drug delivery through pharmacy.</li> <li>X ray services for diagnosis of musculoskeletal and internal abnormalities.</li> <li>Pathology section for conducting bedside</li> </ul>

	1		diagnosis and disease screening.
			<ul> <li>ECG facility to rule out cardiac abnormality.</li> </ul>
			<ul> <li>Physiotherapy set up to manage pain and</li> </ul>
			stiffness in musculoskeletal illness and injury.
			<ul> <li>Minor OT to repair wound and Dressing of</li> </ul>
			wounds and ulcers.
			• Clinic for diagnosis of common disease and
			injuries.
			Basic and Advanced Ambulance services.
			<ul> <li>Facility for online training on preventable diseases.</li> </ul>
			<ul> <li>Audiometry Booth for diagnosis of hearing losses.</li> <li>As per the requirement of Factory Act 1948 all</li> </ul>
			<ul> <li>As per the requirement of Factory Act 1948 and necessary record &amp; documents is maintained.</li> </ul>
		The company shall develop rain water	M/s KRG Rain water foundation has recently conducted
		harvesting structures to harvest the rain	feasibility study in entire complex to assess rainwater
		water for utilization in the lean season	harvesting potential and submit feasibility report with
	Miscellaneous	besides recharging the ground water	detailed plan, expenses, methodology etc.
ix		table.	Based on the approved Feasibility report the
			construction of Rain Water harvesting Structures will be started completed within about 2 years.
		The project proponent shall also comply	• As described in the EIA/EMP report all the
		with all the environmental protection	Environmental protection measures implemented
		measures and safeguards recommended	in the project. BPSL continuously undertaking
		in the EIA/EMP report. Further, the	various community developments activities under
		company must undertake socio-economic	its socio-economic development programme.
	Corporate	development activities in the surrounding	These included construction /renovation of
x	Environmental	villages like community development	primary and secondary schools in nearby villages,
	Responsibility	programmes, educational programmes drinking water supply and health care etc.	providing financial assistances to educational
		Suggestions made during the public	institutions, construction of roads, construction of
		hearing shall be implemented.	temples, providing drinking water, etc. Company is regularly conducting free health camps in
			association with District Administration and
			provide free of cost medicines to the patients.
		As proposed. Rs.130.00 Crores and 14.00	The funds allocated for installation of pollution
		Crores shall be earmarked towards total	control equipments and implementing
		capital cost and recurring cost/annum for	environmental protection measures is being
		environmental pollution control measures	judiciously utilized to fulfill the conditions
xi	Miscellaneous	.All the funds allocated shall be judiciously	stipulated by the Ministry of Environment and
	MISOCIALIEOUS	utilized to implement the conditions	Forests as well as State pollution Control Board.
		stipulated by the Ministry of environment	
		and Forests as well as per the states	
		Government. The funds so provided shall	
		not be diverted for any other purpose.	
	Statuton	The Regional office of this Ministry at	, , , , , , , , , , , , , , , , , , , ,
vii	Statutory	Bhubaneswar/CPCB/OSPCB shall monitor the stipulated conditions. A six	monitoring data are regularly being submitted at
xii	compliance	monthly compliance report and the	the Regional Office of MoEF&CC as well at OSPCB/CPCB.
L		monuny compliance report and the	

		monitored data along with statistical interpretation shall be submitted to them regularly.	report submitted vide letter no- JSWBPSL/MoEF&CC/22-23/015 on date
xiii	Statutory compliance	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 OPCB and may also be seen at website of the Ministry of Environment and forests at http:/envfor.nic.in. This shall be advertised within seven days from the date if 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 copy of the same shall be forwarded to the Regional office at Bhubaneswar.	<ul> <li>Information regarding issue of environmental clearance by the ministry was published in local Odia as well as English newspapers. Copies of the publications are as follows</li> <li>Information regarding issue of environmental clearance by the ministry was published in local Odia as well as English newspapers. Copies of the publications are as follows</li> </ul>
xiv	Statutory compliance	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zilla 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.	Information regarding issue of environmental clearance by the ministry was given at local panchayat.
xv	Statutory compliance	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitoring data on their web site and shall update the same periodically. It shall simultaneously be sent to the Regional office of the MOEF, the respective Zonal Office of CPCB and the OPCB. The criteria pollutant levels namely, SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as sack emissions) or critical sectoral parameters like total Organic Compounds (TOC) including cyanide, phenol and COD etc. indicated for the projects shall be monitored and displayed at convenient location near the main gate of the company in the public domain.	<ul> <li>Six monthly compliance status report of the stipulated conditions has been uploaded in company's website https://www.jswbpsl.in/ and same along with monitoring data are regularly being submitted at the Regional Office of MOEF&amp;CC as well at OSPCB/CPCB.</li> <li>Last compliance report submitted vide letter no JSWBPSL/MoEF &amp; CC/22-23/015 datd. 31.05.2022</li> <li>For display of the environmental parameters an electronic board has been installed at the main gate.</li> </ul>

	-		
xvi		The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environment	Six monthly compliance reports along with monitoring data is being submitted at the Regional Office of MOEF&CC, OSPCB, CPCB regularly.
	Statutory compliance	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.	Last six-monthly compliance report was submitted vide letter no-JSWBPSL/MoEF&CC/22-23/015 on dated 31.05.2022
xvii	Statutory compliance	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form- V as is mandated to be submitted by the project proponent to the concerned state pollution control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional offices of the MOEF by e-mail.	Environmental statement in Form – V is being submitted at OSPCB Last Environment Statement for the financial year 2021- 22 was submitted vide letter no-JSWBPSL/ENV/22- 23/047 on dated 24.09.2022.
xviii	Missellereeus	Project authorities shall inform the Regional office as well the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land	Complied
	Miscellaneous	development work.	

#### COMPLIANCE TO CONDITIONS OF LETTER File No.J-11011/372/2006-IA II (I) Dated-29.03.2007 for 2.2 MTPA

Α.	Specific Condition:				
No	Env. Parameter	Condition	Compliance status		
i	Air Quality Monitoring and Preservation	The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19 <sup>th</sup> May, 1993 and standards prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters keeping in view in the nature of the industry and its size and location. At no time the emission level shall go beyond the prescribed standards. Online continuous stack emission monitoring for all the major stacks will be carried out and reports submitted to the OSPCB & CPCB. The emission levels from all the sources shall be kept below 100 mg/Nm <sup>3</sup> .Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	<ul> <li>Gaseous emission level from various process conforms to the load /mass based standard notified by the Ministry on 19<sup>th</sup> May 1993 a standard prescribed from time to time.</li> <li>Continuous Emission Monitoring systems habeen installed in 42 numbers major stacks of D CPP, Iron &amp; Steel making process Units. List Continuous emission Monitoring System encloars <b>Annexure-I</b></li> <li>Stack emission monitoring data for the per Apr22' to Sept'22 is enclosed as <b>Annexure-IV</b>.</li> <li>In all the existing units adequate pollution con measures have been installed to maintain gased emission within prescribed standard.</li> <li>The list of Air Pollution control devices installed enclosed as <b>Annexure-II</b></li> <li>In the event of power failure in DRI automatic the DG starts and supply power to auxiliaries, h the process and minimize the emission.</li> </ul>		
ii	Statutory compliance	Continuous online ambient air quality monitoring stations shall be set-up at three locations around the project site and reports submitted to the OSPCB & CPCB.	<ul> <li>Four numbers of Continuous Ambient Air Qual Monitoring Stations have been installed within plant.</li> <li>CAAQMS-1-Near Township</li> <li>CAAQMS-2 Near Railway Gate</li> <li>CAAQMS-3-Behind CRM</li> <li>CAAQMS-4 -Near ETP</li> <li>All stations have been established in consultation with the regional office OSPCB.</li> <li>Ambient Air Quality Monitoring data for the perior Apr'22 to Sept'22 is enclosed as Annexure – III</li> </ul>		
iii	Air Quality Monitoring and Preservation	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Dust suppression system shall be provided to coal/raw material stockpiles. Bag house shall be provided to BF-dry cleaning system. Bag filters shall be provided to fume extraction system, RMP Crusher etc. ESP shall be provided to Pellet Plant, DRI Kilns, BF stock house, Sinter Plant, DRI Kilns, BF stock house, Sinter Plant, DRI – WHRB Stacks, AFBC, CFBC, Lime Plant Kiln, Dolo Plant Kiln and Ferro-Alloy Plant. Dry fog dust suppression system shall be provided to BF cast house. Further, specific Page 1 of 7	<ul> <li>nos.), AFBC (02nos.) &amp; CFBC (06 nos.) Boilers of CPP, Sinter Plant and pellet plant.</li> <li>Installation of 09 nos. of Bag filters at various building and junction houses of RMHS are and Dry Fog systems are installed in Iron ore and coal circuit crushing and screening areas.</li> <li>Fumes treatment plant has been installed at SMS-1 (4 nos.) and SMS-2(01 no).</li> <li>Dry BF Gas Cleaning system and bag filters have be provided in Blast furnace-1.</li> <li>ESP has been provided for in plant de dusting of</li> </ul>		

iv

	measures like water sprinkling shall be carried out at the coal yard, wagon tippler and truck tippler etc. Fugitive emissions shall be controlled, regularly monitored and records maintained.		F F YC S b as s a c F h c ft in s	various units including DRI and Details of Air pollution Control enclosed as <b>Annexure-II</b> . Fixed water sprinkler have been vards, raw material handling Concrete roads for dust suppre- Six numbers of high pressur- been installed in Raw material area. Six numbers of Mobile water are being engaged for periodic on all the internal roads within a Five numbers of Mechanize ave been engaged for conti- concrete road inside the plant ugitive dust. In the following units fugitive monitored and report for the Sept'22 is enclosed as <b>Annexu</b>	d Sinter plant. Devices installed is en installed in stock areas and internal ession. re mist beam has handling stockyard r sprinkling tankers cal water sprinkling the plant premises. ed road sweepers inuous cleaning of premises to control emission is being period Apr'22 to ure-V.
			No	Name of the units	Frequency of monitoring
			1	RMHS	
			2	DRI	
			3	Coke Oven	
			4	Captive Power Plant	Once in Month
			5	Pellet plant	_
			6	Sinter plant	-
			7	Blast furnace	_
			8	Steel melting shop	_
			9	Lime plant	
	Total requirement of the water from	•		Presently 2376 M3/hr of w	-
	Hirakud Reservoir shall not exceed 93,252 m <sup>3</sup> /day as per the permission			Hirakud Reservoir for our facilities.	existing operating
	accorded by the Department of Water		•	Waste water is being treat	ed in waste water
	resources, Govt. of Orissa. All the		-	treatment plants (WWTF	
	treated wastewater shall be recycled &			WWTP-3) and treated water	
	reuse either in the premises or for green			premises for developing gree	
Water Quality	belt development. No effluent shall be			process make up water for	
Monitoring and	discharged outside the premises and "Zero" discharge shall be adopted.			ore beneficiation plant and p	•
Preservation	Domestic wastewater shall be treated in			conditioning at captive power The process effluent CRM	•
	septic tank followed by soak pits.			effluent treatment plant of	-
				and effluent from coke oven	
				capacity 75 M3/hr and reuse	d within plant
		•	•	All office buildings and plant	•
				with individual septic tanks ar	•
		•		Three numbers of Sewage t	
				been provided of capacity S	TP-1-500 KLD,STP

		Ground water monitoring around the	•	of sewage To achiev Reverse utilization	e in towns ve ZLD v Osmosis of the tre	TP-3-900 KLD for treatment hip maintain zero discharge. we have installed 510 M3/hr plant for maximize the ated water
v	Water Quality Monitoring and Preservation	solid waste disposal site/ secure landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at , CPCB and OSPCB.	and so	lid waste	disposal a	area is regularly done. Report is enclosed as <b>Annexure</b> –
		Slag from BF shall be granulated and	Details	s of Solid	waste ut	ilization is as follows
		sold to cement plants. SMS slag from IF,	No	Units	Solid	Utilization
		EAF and LF shall be used for internal			waste	
		road making and filling low lying areas. Scrap from SMS shall be recycled in the steel plant. Scale and debris from CSP and rolling mill shall be reused in the	01	BF	BF Slag	The entire slag generating from BF is granulated and sold to cement manufacturers.
		sinter plant itself. Dust from DRI, Pellet Plant and SMS shall be recycled to sinter plant. No char shall be disposed off and efforts shall be made to use in AFBC boiler.	02	SMS	SMS slag	Slag is being crushed and the metallic content is recovered and recycled through Sinter Plant .The residue after recovery is used for internal road making and in leveling of low lined areas in the plant.
vi	Waste Management		03	DRI	Char	Char generate from DRI unit is blended with coal and used in AFBC and CFBC boilers of Captive Power plant
			04	CSP & Rolling Mill	Scales & derbie s from CSP and Rolling mill	Scales and debris generating from rolling mill and SMS is recycled in Sinter Plant
			05	Differe nt Units	Scrap	Recycled In Steel melting shop

vii	Waste Management	Possibilities shall be explored regarding use of Fly Ash from AFBC, CFBC boilers of CPP by cement and brick- manufacturing units in the nearby areas. Ash shall be utilized as per the 10 years action plan submitted. Bottom Ash shall be disposed off in a suitable designated landfill as per CPCB guidelines to prevent leaching to the sub-soil and underground aquifer.	<ul> <li>The ash generated from CPP is being utilized in different area like fly ash brick manufacturing, low lying area filling, embankment rising and quarry void filling. In the year 2022-23 till sept'22 we have utilized 100 % of fly ash generated in our plant.</li> <li>Fly ash is being supplied to 45 numbers of fly ash based brick manufacturing units in and around Jharsuguda, Sambalpur, Sundargarh and Deogarh District of Odisha free of cost with transportation subsidy @150/Ton for maximum utilization of ash.</li> <li>Proper protection is provided at the bottom of the landfill area to prevent any leaching to the sub-soil and underground aquifer.</li> </ul>			
viii	Water Quality Monitoring and Preservation	The company shall develop rainwater harvesting structure to harvest the rain water for utilization in the lean season besides recharging the ground water table.	BPSL has two water reservoirs having capacity 200000 M3 and 134000 M3 which help in rain water harvesting during monsoon. M/s KRG Rain water foundation has recently conducted feasibility study in entire complex to assess rainwater harvesting potential and submit feasibility report with detailed plan, expenses, methodology etc. Based on the approved Feasibility report the construction of Rain Water harvesting Structures will be started & completed within about 2 years.			
ix	Greenbelt	Green belt of adequate width and density shall be provided to mitigate the effects of fugitive emission in at least 462 acres out of total 1,721 acres of land in and around the plant as per the CPCB guidelines in consultation with DFO.	<ul> <li>We have constantly increases every year green coverage areas.</li> <li>We have developed greenbelt 9.28 % of the total area.</li> <li>We have planted 32188 nos. of tree in April 22 to Sept.22.</li> <li>Revised action plan to completion greenbelt over 33% of total project area by December 2024 is enclosed as Annexure -X</li> </ul>			

×	Human Health Environment	Occupational Health Surveillance of the worker shall be done on a regular basis and records maintained as per the Factories Act. The company shall install CO detectors to detect leakage of CO from the BF. Cardiopulmonary Resuscitation facilities and mediated Oxygen cylinder facilities shall be provided.	<ul> <li>setup within the plant for pre-joining and periodical medical check-up of all workers including contract labours.</li> <li>The OHC is is having following facilities for providing health care to employees-</li> <li>Essential drug delivery through pharmacy.</li> <li>X ray services for diagnosis of musculoskeletal and internal abnormalities.</li> <li>Pathology section for conducting bedside diagnosis and disease screening.</li> <li>ECG facility to rule out cardiac abnormality.</li> <li>Physiotherapy set up to manage pain and stiffness in musculoskeletal illness and injury.</li> <li>Minor OT to repair wound and Dressing of wounds and ulcers.</li> <li>Clinic for diagnosis of common disease and injuries.</li> <li>Basic and Advanced Ambulance services.</li> <li>Facility for online training on preventable diseases.</li> <li>Audiometry Booth for diagnosis of hearing losses.</li> <li>As per the requirement of Factory Act 1948 all necessary record &amp; documents are maintained</li> </ul>
xi	Corporate Environmental Responsibility	All the recommendation of the Charter of CorporateResponsibilityforEnvironmentalProtection(CREP)issued for the integrated Iron and SteelSectors shall be implemented.	Recommendations made in the Charter of Corporate Responsibility for Environment Protection (CREP) are being implemented as per the guidelines laid for Integrated Iron & Steel Sector.
В	General Conditions:		
i	Statutory compliance	The project authorities must strictly adhere to the stipulations made by the Orissa pollution Control Board (OSPCB) and the State Govt.	Pollution Control Board and state government are
ii	Statutory compliance	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment & Forests.	No expansion or modification has been carried out without prior approval of Ministry of Environment Forest and Climate Change.
iii	Air Quality Monitoring and Preservation	At least four ambient air quality monitoring stations shall be established in the down wind direction, as well as where max. Ground level concentrations of SPM, SO2 & NOx are anticipated in consultation with OSPCB. Data on ambient air quality and stack emissions should be regularly submitted to this Ministry including its Regional Office and the OSPCB/Central Pollution Control Board once in six months.	<ul> <li>Four numbers of Continuous Ambient Air Quality Monitoring Stations have been installed within plant</li> <li>CAAQMS-1-Near Township</li> <li>CAAQMS-2 Near Railway Gate</li> <li>CAAQMS-3-Behind CRM</li> <li>CAAQMS-4-Near ETP</li> <li>All stations have been established in consultation with the regional office OSPCB.</li> <li>Ambient Air Quality Monitoring data for the period Apr'22 to Sept'22 is enclosed as Annexure – III</li> </ul>

		Industrial waste water shall be properly collected, treated so as to conform to	•	Details of Waste water/efflu facilities	ent Treatment
		the standards prescribed under GSR (E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup>	N o	Name of facility	Capacity
		December, 1993 or as amended from time to time. The treated waste water	1	Waste water Treatment plant-1	750 M3/hr
		should be utilized for plantation purpose.	2	Waste water Treatment plant-2	750 M3/hr
			3	Waste water Treatment plant-2	750 M3/hr
			4	Effluent treatment Plant-CRM	500KLD
IV	WaterQualityMonitoringandPreservation		5	Biological Effluent Treatment Plant at Coke Oven-2	75 M3/hr
			6 7 8	Sewage Treatment Plant-1 Sewage Treatment Plant-2 Sewage Treatment Plant-3	500 KLD 900 KLD 900 KLD
			9	Reverse Osmosis Plant	510 M3/hr
			The	entire treated water is being used	inside the plant
				various applications such as as	
			•	nkling, horticulture, fire fighting etc.	
				lysis report of treated Effluent of ef	
				nt (ETP) ,BETP & waste wate /TP-2 WWTP-3 for the period of A	
				nclosed as Annexure-VI	
		The overall noise levels in and around	All	the noise prone area such as tur	bine house and
		the plant area shall be kept well within		pressor house have been provide	d with adequate
		the standards 85 dB(A) by providing noise control measures including		ustics enclosure and silencer employee has been deployed full v	working hours at
	Noise Monitoring	noise control measures including acoustic hoods, silencers, enclosures		e prone area. Whenever any em	-
v	& Prevention	etc on all sources of noise generation.		he uses earplug/earmuffs.	projec geee iei
		The ambient noise levels should	Nois	e level monitoring report for	work zone and
		conform to the standards prescribed		pient are for the period Apr'22	2 to Sept'22 is
		under EPA Rules ,1989 viz 75 dBA (daytime) and 70 dBA (nighttime)	enci	osed as Annexure-XV(A&B)	
		The project proponent shall also comply	•	Environmental protection measure	es & safeguards
		with all the environmental protection		recommended in EIA /EMP re	-
		measures and safeguards		complied.	
	Corporate	recommended in the EIA / EMP report. Further, the company must undertake	•	Socio-economic	development
vi	Environmental	socio-economic development activities		activities/programmes like supp water, health care camps a	
	Responsibility	in the surrounding villages like		development programmes are be	
		community development programmes,		on regular basis and will be contin	-
		educational programmes, drinking water		-	
		supply and healthcare etc.			

vii	Statutory compliance	As mentioned in the EIA/EMP, Rs. 440.00 Crores and Rs. 55.0 crores earmarked towards the capital cost and recurring cost/annum for environmental pollution control measures shall be judiciously utilized to implement the conditions stipulated by the Ministry of Environment and Forests as well as State Government. The funds so provided shall not be diverted for any	<ul> <li>The funds allocated for installation of pollution control equipments and implementing environmental protection measures has been judiciously utilized to fulfill the conditions stipulated by the Ministry of Environment and Forests as well as the State pollution Control Board.</li> <li>We ensure that funds earmarked for the environmental protection measures has not diverted for any other purpose.</li> </ul>
viii	Statutory compliance	other purpose. The Regional Office of this Ministry at / Central Pollution Control Board /Orissa State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and monitored data along with statistical interpretation shall be submitted them regularly.	<ul> <li>Six monthly compliance reports along with monitored data are regularly being submitted at the Regional Office of MoEF&amp;CC as well as at OSPCB/CPCB.</li> <li>The last six-monthly report was submitted on dated 31.05.2022</li> </ul>
ix	Statutory compliance	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 Orissa State Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at http:envfor.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 one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional Office.	<ul> <li>Information regarding issue of environmental clearance by the ministry was published in local newspapers.</li> <li>ি ি মির্লি বিস্কি ব্যক্ত ব্রকি ব্যক্ত প্রদিশি ব্যক্ত বির্বাজ্য বিষ্ণা ব্যক্তি ব্যক্ত ব্রকি ব্যক্ত ব্রকার ব্যায়ার্য্য দি ব্যক্তি ব্যক্ত ব্রকার ব্যায়ার্য্য দির্ঘাল ব্যক্ত ব্রকার ব্যায়ার্য্য দির্ঘাল ব্যক্ত ব্রকার ব্রায়ার্য্য দির্ঘাল ব্যক্ত ব্রকার ব্রায়ার্য্য দের ব্রায়ার্য্র্য দের ব্রায়ার্য্য দের ব্রায়ার্য্র্য দের ব্রায়ার্য্র্র্য দের ব্রায়ার্য্র্র্য দের ব্রায়ার্য্র্র্য দের ব্রায়ার্য্র্র্য দের ব্রায়ার্য্র্র্য দের ব্রায়ার্য্র্র্র্য দের ব্রায়ার্য্র্র্র্যায় ব্রায়ার্য্র্র্র্যায় ব্রায়ার্য্র্র্র্যায় ব্রায়ার্য্র্র্র্যায় ব্রায় ব্র্বায় ব্রায় ব্রায় ব্রায় ব্রায় ব্র্বায় ব্রায় ব্রায় ব্রায় ব্রায় ব্রায় ব্রায় ব্র্র্যায় ব্রায় ব্র্র্যায় ব্রায় ব্র্র্যায ব্র্র্যায় ব্র্র্যায় ব্র্র্যায় ব্র্র্যায ব্র্র্যায ব্র্র্যায ব্র্র্যায় ব্র্র্যায ব্র্র্র্যায় ব্র্র্র্যায় ব্র্র্র্যায ব্র্র্র্র্র্যার ব্র্র্র্যায় ব্র্র্র্র্র্র্র্র্র্র্র্র্র্র্র্র্র্র্র</li></ul>
x	Statutory compliance	The Project Authorities should 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 date of commencing the land development work.	Complied

#### COMPLIANCE TO CONDITIONS OF LETTER File No. J-11011/228/2003-IA II Dated-12.05.2004 for 1.2 MTPA.

Α	Specific Conditio	n:	
No	Env. Parameter	Condition Description	Compliance Status
i	Air Quality Monitoring and Preservation	The gaseous and particulate emissions from various process units shall conform to standards prescribed by the state pollution Control Board. The company shall take appropriate measures to achieve the load /mass based standards prescribed from time to time . The State Board may specify more stringent standards for the relevant parameters keeping in view in the nature of the industry and its size and location. At no time the emission level shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.	Gaseous emission level from various processes conforms to the load /mass-based standard as notified by the Ministry on 19 <sup>th</sup> May 1993 and standard prescribed from time to time. In all the existing units adequate pollution control measures have been installed to maintain gaseous emission within prescribed standard. In the event of power failure in DRI automatically the DG starts and supply power to auxiliaries, hold the process and minimize the emission.
ï	Air Quality Monitoring and Preservation	In plant control measures for checking fugitive emissions from spillages, handling of raw materials and product shall be provided. Further specific measures such as ESP based dedusting system for sponge Iron plant, ESPs for DRI Kilns. Ventury scrubber and clarifier for BF stove gas cleaning, bag filters for BF dedusting stack. Bag filter for induction furnace, electric arc furnace and ladle furnace, ESPs for CPP and bag filter for raw material crusher area shall be provided. Data on fugitive emissions shall be regularly monitored and records maintained, Continuous stack monitoring system shall be installed in major stacks.	<ul> <li>Adequate control measures have been adopted to control fugitive dust generation</li> <li>ESP's have been provided in DRI-WHRB (12 nos.), AFBC (02nos.) &amp; CFBC (06 nos.) Boilers of CPP, Sinter Plant and pellet plant.</li> <li>Installation of 09 nos. of Bag filters at various building and junction houses of RMHS are and Dry Fog systems are installed in Iron ore and coal circuit crushing and screening areas. Fumes treatment plant has been installed at SMS-1 (4 nos.) and SMS-2(01 no).</li> <li>Dry BF Gas Cleaning system and bag filters have been provided for in plant de dusting of various units including DRI and Sinter plant.</li> <li>Details of Air pollution Control Devices installed is enclosed as Annexure-II.</li> <li>Fixed water sprinkler have been installed in stock yards, raw material handling areas and internal Concrete roads for dust suppression.</li> <li>Five numbers of high pressure mist beam has been installed in Raw material handling stockyard area.</li> </ul>

			<ul> <li>06 numbers of Mobile water sprinkling tankers are being engaged for periodical water sprinkling on all the internal roads within the plant premises.</li> <li>05 numbers of mechanized road sweepers have been engaged for continuous cleaning of concrete road inside the plant premises to control fugitive dust.</li> <li>In the following units fugitive emission is being monitored and report for the period April 2022 to September 2022 is enclosed as Annexure-V.</li> </ul>			
			No	Name of the units	Frequency monitorin	
			1	RMHS		<u> </u>
			2	DRI		
			3	Coke Oven		
			4	Captive Power Plant	Once in Month	onth
			5	Pellet plant		
			6	Sinter plant		
			7	Blast furnace		
			8	Steel melting		
			9	shop Lime plant		
		The plant shall be based on zero		ntly 2376 M3/hr of wa	iter drawing	from Hirakud
		discharge concept. There shall be no		voir for our existing op	-	
		discharge of effluent, which shall be fully	Details	s of Waste water/efflu	ent Treatme	ent facilities is
		recycled. As reflected in the EIA/EMP	as follo			
		report the waste water from raw water	No 01	Name of faci		Capacity
		treatment plant and filter backwash water ,after taking through settling tanks	01	Waste water Treatme	ent plant- i	750 M3/hr
		shall be used for moistening of ash, cooling of slag and horticulture. The DM	02	Waste water Treatmo	ent plant-2	750 M3/hr
iii	Water Quality Monitoring &	water plant effluent shall also be taken to settling tank after neutralization	03	Waste water Treatmo	ent plant-2	750 M3/hr
	Preservation	.Cooling tower blow down shall be reused for service water system .Water	04	Effluent treatment Pla	ant-CRM	500KLD
		from coal washery shall be treated in thickener and its overflow reused in the plant. The demostic waste water from	05	Plant	Treatment	75 M3/hr
		plant. The domestic waste water from township after treatment in STP shall be	06	Sewage Treatment F		500 KLD
		used for greenbelt development.	07	Sewage Treatment F		900 KLD
			08	Sewage Treatment F		900 KLD
			09	Reverse Osmosis Pl	ant	510 M3/hr
			• T	he waste water is bei	ng treated i	n waste water

			•	WWTP- plant p fighting benefic condition The pro- effluent oven tu reused All offic with ind Three r been p townshi In our e Reverse	remises f , process iation pla oning at ca ocess effl treatmen reated in l within pla e building lividual se numbers o provided ip maintai endeavor f e Osmos	treated water reused within for developing green belt, fire a make up water for, iron ore ant and pellet plant and ash aptive power plant. uent CRM is being treated in at plant and effluent from coke BETP of capacity 75 M3/hr and
iv	Waste Management	As reflected in the EIA/EMP report, solid waste generated in the form of slag from blast furnace(12800 TPA) shall be collected in the earmarked slag dump area and sold to cement plants, SMS slag from induction furnace and electrical arc furnace (183000TPA) shall be used for land filling or boulder, soling of roads, Scrap from SMS and other areas shall be recycled to the maximum possible extent .Dust from DRI unit and SMS shall be recycled or sold to outside parties. Ash from DR kilns and CPP shall be collected in earmarked ash dump areas, and provided to brick and cement manufacturers or used for back	Deta N o 01	Ils of So Unit s BF	lid waste Solid waste BF Slag SMS slag	Utilization The entire slag generating from BF is granulated and sold to cement manufacturers. Slag is being crushed and the metallic content is recovered and recycled through Sinter Plant .The residue after recovery is used for internal road making and in leveling of low lined areas in the plant.
		filling of abandoned mines.	03	DRI CSP & Rolli ng Mill	Char Scales & derbie s from CSP and Rolling mill	Char generate from DRI unit is blended with coal and used in AFBC and CFBC boilers of Captive Power plant Scales and debris generating from rolling mill and SMS is recycled in Sinter Plant

			05 Diffe Scrap Recycled In Steel melting rent Shop
v	Corporate Environmental Responsibility	All the recommendation of the Charter of Corporate Responsibility for Environmental Protection (CREP) for the integrated Iron and Steel Sectors shall be strictly implemented.	Recommendations made in the Charter of Corporate Responsibility for Environment Protection (CREP) are being implemented as per the guidelines laid for Integrated Iron & Steel Sector.
vi	Greenbelt	Green belt of adequate width and density shall be provided to mitigate the effects of fugitive emission all around the plant. A minimum 25% of the area shall be developed as green belt with local species in consultation with the DFO and as per CPCB's guidelines.	<ul> <li>We have constantly increases every year green coverage areas.</li> <li>We have developed greenbelt 9.28 % of the total area.</li> <li>We have planted 32188 nos. of tree in April 22 to Sept.22.</li> <li>Revised action plan to completion greenbelt over 33% of total project area by December 2024 is enclosed as Annexure -X</li> </ul>
vii	Water Quality Monitoring & Preservation	The company shall undertake rainwater harvesting measures to harvest the rain water for their won utilization as well as to recharge the ground water table.	BPSL has two water reservoirs having capacity 200000 M3 and 134000 M3 which help in rain water harvesting during monsoon M/s KRG Rain water foundation has conducted feasibility study in entire complex to assess rainwater harvesting potential and submited feasibility report with detailed plan, expenses, methodology etc. Based on the approved Feasibility report the construction of Rain Water harvesting Structures will be started will be completed within about 2 years.
viii	Human Health Environment	Occupational Health Surveillance of the worker shall be done on a regular basis and records maintained as per the Factories Act. The company shall install CO detectors to detect leakage of CO from the MBF. Cardiopulmonary Resuscitation facilities and mediated Oxygen cylinder facilities shall be provided.	<ul> <li>An Occupational Health Centre (OHC) has been setup within the plant for pre-joining and periodical medical check-up of all workers including contract labours.</li> <li>The OHC is having following facilities for providing health care to employees-</li> <li>Essential drug delivery through pharmacy.</li> <li>X ray services for diagnosis of musculoskeletal and internal abnormalities.</li> <li>Pathology section for conducting bedside diagnosis and disease screening.</li> <li>ECG facility to rule out cardiac abnormality.</li> <li>Physiotherapy set up to manage pain and stiffness in musculoskeletal illness and injury.</li> <li>Minor OT to repair wound and Dressing of wounds and ulcers.</li> <li>Clinic for diagnosis of common disease and injuries.</li> </ul>

			<ul> <li>Basic and Advanced Ambulance services.</li> <li>Facility for online training on preventable diseases.</li> <li>Audiometric Booth for diagnosis of hearing losses.</li> <li>As per the requirement of Factory Act 1948 all necessary record &amp; documents are maintained.</li> </ul>		
ix	Statutory compliance	The company shall obtain necessary approvals for diversion of 59 ha of forest land from the concerned agencies.	Both stage –I and Stage –II clearance granted for		
B	General Condition	s: Condition Description	Compliance Status		
No	Env. Parameter	The project authorities shall strictly	-		
i	Statutory compliance	adhere to the stipulation made by the Orissa Pollution Control Board and the State Government	Pollution Control Board and state government are		
iii	Air Quality Monitoring & Preservation	At least four ambient air quality monitoring stations shall be established in the down wind direction, as well as where max. Ground level concentrations of SPM, SO2 & NOx are anticipated in consultation with OSPCB. Data on ambient air quality and stack emissions should be regularly submitted to this Ministry including its Regional Office and the OSPCB/Central Pollution Control Board once in six months.	<ul> <li>Monitoring Stations have been installed within plant.</li> <li>CAAQMS-1-Near Township</li> <li>CAAQMS-2 Near Railway Gate</li> <li>CAAQMS-3-Behind CRM</li> <li>CAAQMS-4-Near ETP</li> <li>All stations have been established in consultation</li> <li>with the regional office OSPCB.</li> <li>Ambient Air Quality Monitoring data for the period</li> </ul>		
IV	Water Quality Monitoring & Preservation	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time.	Details of Waste water/effluent Treatment facilitiesNName of facilityCapacityo		

	]		7 Sewage Treatment Plant-2 900 KLD
			8 Sewage Treatment Plant-3 900 KLD
			9 Reverse Osmosis Plant 510 M3/hr
		The overall noise levels in and around	The entire treated water is being used inside the plant in various applications such as ash conditioning, sprinkling, horticulture, fire fighting etc. Analysis report of treated Effluent of effluent Treatment Plant (ETP) ,BETP & waste water of WWTP-1 ,WWTP-2 WWTP-3 for the period of April '22 to September'22 is enclosed as <b>Annexure-VI</b> All the noise prone area such as turbine house and
v	Noise Monitoring & Prevention	the plant area shall be kept well within the standards 85 dB(A) 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 (daytime) and 70 dB A (nighttime)	compressor house have been provided with adequate acoustics enclosure and silencer No employee has been deployed full working hours at noise prone area. Whenever any employee goes for he/she uses earplug/earmuffs. Noise level monitoring report for work zone and Ambient are for the period April'22 to September'22 is enclosed as <b>Annexure-XV(A&amp;B)</b>
vi	Human Health Environment	Proper housekeeping and adequate occupied health programmers shall be taken up. Occupational health surveillance program shall be done on a regular basis and records maintained.	implemented in the plant

	1		necessary record & documents are
			necessary record & documents are maintained.
vii	Corporate Environmental Responsibility	The company shall comply with all the environment protection measures and safeguards recommended in the EIA/EMP report. Further, the company shall undertake socio-economic development activities in the surrounding villages like community development programmers, educational programmers, drinking water supply and health care etc	<ul> <li>All the Environmental protection measures as suggested in EIA/EMP report have been implemented.</li> <li>BPSL continuously undertaking various community developments activities under its social economic development programme.</li> <li>These included construction /renovation of primary and secondary schools in nearby villages, providing financial assistances to educational institutions, construction of roads, construction of temples, providing drinking water in the periphery villages etc.</li> <li>Company is regularly conducting free health camps in association with District Administration and provide free of cost medicines to the patients.</li> </ul>
viii	Miscellaneous	A separate environmental management cell with full fledged laboratory facilities to carry out various management and monitoring function should be set up under the control of senior executive.	A full-fledged Environment Management Department is being operated to carry out various monitoring function headed by Senior Executive. Apart from that a NABL accredited third party engaged for monitoring of Environmental Parameter.
ix	Miscellaneous	The project authorities shall provide adequate funds recurring and non- recurring to implement the conditions stipulated by 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 shall not be diverted for any other purposes.	The funds allocated for installation of pollution control equipment and implementing environmental protection measures has been judiciously utilized to fulfill the conditions stipulated by the Ministry of Environment and Forests as well as the State pollution Control Board. We ensure that funds earmarked for the environmental protection measures has not diverted for any other purpose.
x	Statutory compliance	The Regional Office of this Ministry at Bhubaneswar/ Central Pollution Control Board/State Pollution Control Board will monitor the stipulated conditions. A Six- monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Six monthly compliance reports along with monitored data are regularly being submitted at the Regional Office of MoEF & CC as well as at OSPCB/CPCB. The last six-monthly report submitted on date 31.05.2022

	7		
		The company shall inform the public that	Information regarding issue of environmental
		the project has been accorded	clearance by the ministry was published in local
		environmental clearance by the ministry	newspapers.
		and copies of the clearance letter are	
		available with the state Pollution Control	
		Board/Committee and may also be seen	
		at website of the Ministry of Environment	
	Statutory	& Forests at http:/envfor.nic.in This shall	
xi	compliance	be advertised within seven days from	
		the state of issue of clearance letter, at	
		least in two local newspaper 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.	
		The project authorities shall inform the	Complied
		Regional Office as well as the Ministry,	
	Statutory	the date of financial closure and final	
xii	Statutory	approval of the project by the concerned	
	compliance	authorities and the date of commencing	
		the land development work.	

#### LIST OF ANNEXURES

Annexure No	Description
Annexure-I	List of CEMS
Annexure-II	List of Air Pollution Control Devices
Annexure-III	Ambient Air Quality Monitoring Result (April'22 to Sept'22)
Annexure-IV	Stack Monitoring Result (April'22 to Sept'22)
Annexure-V	Fugitive Emission Monitoring Result (April'22 to Sept'22)
Annexure-VI	Treated Effluent Analysis Result (April'22 to Sept'22)
Annexure-VII	Ground Water Quality Result
Annexure-VIII	List of Solid Waste
Annexure-IX	Solid and Hazardous waste analysis Result
Annexure-X	Greenbelt Action Plan
Annexure-XI	CSR Activity 2021-22
Annexure-XII	CSR Activity-2022-23
Annexure-XIII	Physical Target of Public Hearing Commitments
Annexure-XIV	Environment Management Capex
Annexure-XV(A&B)	Work Zone & Ambient Noise Monitoring Result (April'22 to Sept'22)
Annexure-XVI	Intimation letter to GP on grant of EC by the Ministry

	List o	of Continuous Emission Monitor	ring System
No	Station Id	Location	Parameter
1	CEMS-1	DRI-WHRB-1 Stack	PM
2	CEMS-2	DRI-WHRB-2 Stack	PM
3	CEMS-3	DRI-WHRB-3 Stack	PM
4	CEMS-4	DRI-WHRB-4 Stack	PM
5	CEMS-5	DRI-WHRB-5 Stack	PM
6	CEMS-6	DRI-WHRB-6Stack	PM
7	CEMS-7	DRI-WHRB-7Stack	PM
8	CEMS-8	DRI-WHRB-8Stack	PM
9	CEMS-9	DRI-WHRB-9 Stack	PM
10	CEMS-10	DRI-WHRB-10 Stack	PM
11	CEMS-11	DRI-WHRB-11 & 12 Stack	PM
12	CEMS-12	DRI-Dedusting 1&2 Stack	PM
13	CEMS-13	DRI-Dedusting 3&4 Stack	PM
14	CEMS-14	DRI-Dedusting 5&6 Stack	PM
15	CEMS-15	DRI-Dedusting 7&8 Stack	PM
16	CEMS-16	DRI-Dedusting 9 &10 Stack	PM
17	CEMS-17	DRI-Dedusting11&12 Stack	PM
18	CEMS-18	CPP 3x130MW UNIT-1	PM,SO2,NOx,Hg
19	CEMS-19	CPP 3x130MW UNIT-2	PM,SO2,NOx,Hg
20	CEMS-20	CPP 3x130MW UNIT-3(CFBC-5)	PM,SO2,NOx,Hg
21	CEMS-21	CPP3x130 MW Unit-3 (CFBC-6)	PM,SO2,NOx,Hg
22	CEMS-22	CPP 60 MW Stack	PM,SO2,NOx,Hg
23	CEMS-23	CPP 40 MW Stack	PM,SO2,NOx,Hg
24	CEMS-24	SMS-1 FTP-1	PM
25	CEMS-25	SMS-1 FTP-2	PM
26	CEMS-26	SMS-1 FTP-3	PM
27	CEMS-27	SMS-1 FTP-4	PM
28	CEMS-28	SMS-2 FTP	PM
29	CEMS-29	Pellet Plant processStack	PM,SO2,NOx
30	CEMS-30	Pellet Plant Dedusting	PM,
31	CEMS-31	Coke Oven -1 Stack-1	PM,SO2,NOx,CO
32	CEMS-32	Coke Oven-1 Stack-2	PM,SO2,NOx,CO
33	CEMS-33	Coke Oven -2 Process stack	PM ,SO2,NOx,CO
34	CEMS-34	Coke Oven -2 Dedusting Stack	PM
35	CEMS-35	BF-2 Casthouse Bagfilter Stack	PM,SO2,NOx,CO
36	CEMS-36	BF-2-Bagfilter connected to Stock House	PM
37	CEMS-30	BF-1Casthouse bagfilter stack	PM PM
38	CEMS-37	BF-1 GCP stack	PM PM
30 39	CEMS-38	Sinter plant-1 Charging Stack	PM,SO2,NOx
40	CEMS-39 CEMS-40	Sinterplant-1 Discharging stack	PM,302,N0x
40	CEMS-40	Sinter plant-1 Discharging stack	PM PM
41	CEMS-41 CEMS-42	Sinter plant-2 Dedusting Stack	PM PM
42		Jointer plant-2 Dedusting Stack	FIVI

## Annexure-II

## List of Air Pollution Control Device

S.N	Name Of the Unit	Pollution Control System	Capacity in (NM3/hr)	Stack height
DRI	Plant			
1.	DRI/WHRB-1	Electro Static Precipitator	120000	76
2	DRI/WHRB-2	Electro Static Precipitator	120000	76
3	DRI/WHRB-3	Electro Static Precipitator	120000	76
4	DRI/WHRB-4	Electro Static Precipitator	120000	76
5	DRI/WHRB-5	Electro Static Precipitator	250000	76
<u>6</u> 7	DRI/WHRB-6 DRI/WHRB-7	Electro Static Precipitator Electro Static Precipitator	250000 280000	76
8	DRI/WHRB-8	Electro Static Precipitator	280000	76
9	DRI/WHRB-9	Electro Static Precipitator	280000	76
10	DRI/WHRB-10	Electro Static Precipitator	280000	76
11	DRI/WHRB-11	Electro Static Precipitator	210000	76
12	DRI/WHRB-12	Electro Static Precipitator	210000	76
13	DRI Dedusting-5&6	Electro Static Precipitator	250000	45
14	DRI Dedusting 7&8	Electro Static Precipitator	250000	45
15	DRI De dusting 9&10	Electro Static Precipitator	350000	45
	DRI De dusting 1&2	Bag filter	350000	45
	DRI De dusting 3&4	Bag filter	350000	45
18	DRI De dusting 11&12	Bag filter	350000	45
	tive Power Plant	Electro Statio Draginitator	142000	76
19		Electro Static Precipitator	143000	
20	CPP 60 MWAFBC-2	Electro Static Precipitator	286000	95
21	CPP 3x130 MW Unit-1 CFBC-1	Electro Static Precipitator with hybrid Bag filter	650000	120
22	CPP 3x130 MW Unit-1 CFBC-2	Electro Static Precipitator	650000	120
23	CPP 3x130 MW Unit-2 CFBC-3	Electro Static Precipitator	650000	120
24	CPP 3x130 MW Unit-2 CFBC-4	Electro Static Precipitator	650000	120
25	CPP 3x130 MW Unit-3 CFBC-5	Electro Static Precipitator	650000	120
26	CPP 3x130 MW Unit-3 CFBC-6	Electro Static Precipitator	650000	120
Blas	t Furnace-1			
27	BF-Dry gas cleaning	Bag House, Gas Cleaning Plant	180000	30
28	BF-Cast house	Dust catcher Bag filter	220000	45
Blas	t Furnace-2			
29	BF-Stock House	Bag filter	610000	45
30	BF-Cast House	Bag filter	850000	45
Sinte	er Plant-1			
31	Sinter Plant Charging	Electro Static Precipitator	570000	75
32	Sinter plant Discharging	Electro Static Precipitator	450000	40

33	Sinter plant Dedusting	Electro Static Precipitator	190000	40
34	Sinter plant Do ducting	Electro Statio Drasinitator	190000	40
54	Sinter plant De dusting (Propertional Buiding)	Electro Static Precipitator	190000	40
Sint	er plant -2			
35	Sinter plant Process	Electro static Precipitator	700000	120
	Sinter plant Dedusting	Electro static Precipitator	600000	60
-	e Oven -2		504000	
37	Pushing Emission Control System	De dusting System (Bag filter)	504000	45
Stee	I Melting Shop-1			
38	SMS-1 EAF& LF -1	Fume Treatment Plant-1 (Bag House)	15000000	45
39	SMS-1 EAF&LF-2	Fume Treatment Plant-1 (Bag House)	15000000	45
40	SMS-1 EAF&LF-3	Fume Treatment Plant-3(Bag House)	14310000	45
41	SMS EAF&LF-4	Fume Treatment Plant-4(Bag House)	14310000	45
Stee	I Melting Shop-2			
42	SMS-2 EAF & LF	Fumes Treatment Plant(Bag House)	2328000	45
RMF	IS			
43	Crushing & screening areas of RMPP-1 Ore circuit	09 nos. of Bag Filter & Dry Fog System	50000	30
Lime	& Dolo Plant			
44	Lime Plant-1	Bag Filter	50000	50
45	Lime Plant-2	Bag Filter	50000	50
46	Lime Plant-3	Bag Filter	50000	50
CRN	Complex			
47	Acid Regeneration Plant	Wet Scrubbers	11530	34
48	Pickling Plant	Wet Scrubbers	15716	32
Wire	Rod & Bar Mill			
49	Re heating furnace	De dusting System/Bag filter	10000	85
50	De dusting	De dusting System/Bag filter	15000	34
Pelle	et Plant			
51	Wind box	Electro Static Precipitator	984000	45
52	Hood Exhaust	Electro Static Precipitator	420000	45
53	De dusting	Electro Static Precipitator	240000	45

# Summary of Ambient Air Quality Monthly Average Value

l	Wonting Average value												
	Ambient Air Quality Monitoring Station -1 Near Township												
	Pollutant	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>X</sub>	O <sub>3</sub>	CO						
Month	Standard	100 (µg/m³)	60 (µg/m³)	80 (µg/m <sup>3</sup> )	80 (µg/m <sup>3</sup> )	100(µg/m <sup>3</sup> )	2 (µg/m <sup>3</sup> )						
April-22		74.23	39.23	20.15	27.23	7.9	0.57						
May-22		71.40	38.60	19.60	26.2	8.3	0.61						
June-22		68.80	36.50	17.70	29.30	7.40	0.58						
July-22		64.60	35.40	19.70	26.7	7.2	0.62						
August-22		68.80	36.50	17.70	29.3	7.4	0.58						
September-22		66.80	35.90	18.30	31.8	9.3	0.64						

	An	nbient Air Qua	lity Monitoring	Station -2 Ne	ear Railway G	iate				
	Pollutant	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>X</sub>	O <sub>3</sub>	CO			
Month	Standard	100 (µg/m <sup>3</sup> )	60 (µg/m <sup>3</sup> )	80 (µg/m <sup>3</sup> )	80 (µg/m <sup>3</sup> )	100 (µg/m <sup>3</sup> )	2 (µg/m <sup>3</sup> )			
April-22		69.23	35.19	15.36	22.54	7.47	0.36			
May-22		67.80	35.40	14.60	24.30	6.80	0.35			
June-22		62.30	33.20	16.50	25.80	6.20	0.37			
July-22		61.80	34.60	17.20	24.60	6.10	0.41			
August-22		62.30	33.20	16.50	25.80	6.20	0.37			
September-22		68.30	37.30	17.20	19.20	7.80	0.41			

		Ambient Air Q	uality Monitori	ng Station -3	Behind CRN						
	Pollutant	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>X</sub>	O <sub>3</sub>	CO				
Month	Standard	100 (µg/m³)	60 (µg/m³)	80 (µg/m <sup>3</sup> )	80 (µg/m <sup>3</sup> )	100 (µg/m <sup>3</sup> )	2 (µg/m <sup>3</sup> )				
April-22		62.35	32.56	14.86	23.69	6.38	0.35				
May-22		59.60	31.7	12.5	20.8	5.8	0.32				
June-22		60.70	32.5	13.3	24.2	5.9	0.36				
July-22		58.90	31.8	14.8	22.8	5.4	0.39				
August-22		60.70	32.5	13.3	24.2	5.9	0.36				
September-22		61.80	31.90	14.60	25.3	6.9	0.44				

		Ambient Air	Quality Monitor	ring Station	-4 Near ETP						
Pollutant         PM <sub>10</sub> PM <sub>2.5</sub> SO <sub>2</sub> NO <sub>X</sub> O <sub>3</sub>											
Month	Standard	100 (µg/m³)	60 (µg/m³)	80 (µg/m <sup>3</sup> )	80 (µg/m <sup>3</sup> )	100 (µg/m <sup>3</sup> )	2 (µg/m <sup>3</sup> )				
June-22		52.10	28.3	14.4	23.6	6.2	0.33				
July-22		55.20	31.4	14.8	22.7	5.8	0.34				

August-22	52.10	28.3	14.4	23.6	6.2	0.33
September-22	58.30	30.20	16.30	26.3	6.7	0.38

# Stack Monitoring Report Period from April-22 to September-22

		Period fron		•	[Particulate N	latter (mg/N	lm3)]	
S.N.	Stack Name	Standard mg/Nm3	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
1	DRI/WHRB-A	50.00	14.39	24.1	26.8	10.2	8.6	11.6
2	DRI/WHRB-B	50.00	32.5	29.2	25.7	21.3	22.8	12.1
3	DRI-A & B -Dedusting	50.00	24.71	21.42	27.6	26.7	32.1	33.4
4	DRI/WHRB-C	50.00	10.21	10.0	32.5	27.30	12.6	20.29
5	DRI/WHRB-D	50.00	7.14	6.5	28.6	31.0	32.6	14.6
6	DRI-C & D -Dedusting	50.00	14.56	7.9	32.4	31.2	42.7	14.2
7	DRI/WHRB-E DRI/WHRB-F	50.00	29.99	27.6	S/d	22.7	32.3	18.7
9	DRI-E & F -Dedusting	50.00	22.86	23.8	34.0	16.8	19.2	16.7
10	DRI/WHRB-G	50.00 50.00	26.12	20.09 30.7	28.2 31.6	27.5 9.2	28.2 13.1	31.2 18.3
11	DRI/WHRB-H	50.00	30.46 18	20.7	31.0	9.2 13.3	9.3	21.1
12	DRI-G & H -Dedusting	50.00	10.88	38.2	33.1	32.3	9.3 31.6	35.6
13	DRI/WHRB-I	50.00	13.62	26.8	29.7	13.3	10.7	17.3
14	DRI/WHRB-J	50.00	10.66	20.0	31.3	15.0	21.8	22.4
15	DRI-I & J -Dedusting	50.00	28	33.5	35.3	18.2	32.2	38.3
16	DRI/WHRB-K & L	50.00	S/D	34.4	33.4	26.9	24.5	22.3
17	DRI-K & L -Dedusting	50.00	20.05	32.6	29.8	30.28	19.83	21.49
18	Power Plant 40MW	50.00	36.98	21.5	43.6	22.8	27.6	23.0
19	Power Plant 60MW	50.00	26.33	27.2	41.8	33.7	34.2	36.0
20	Power Plant 130MW-I	50.00	45.65	42.2	48.2	35.8	39.4	38.8
21	Power Plant 130MW-II	50.00	42.1	46.1	42.7	32.8	29.0	32.6
22	Power Plant 130MW-III (CFBC-5)	50.00	11.72	12.9	42.1	15.7	17.9	25.0
23	Power Plant 130MW-III(CFBC-6)	50.00	31.74	38.04	40.7	33.2	25.4	38.0
24	Sinter Plant Charging stack	50.00	47.5	43.6	45.2	29.3	46.3	42.8
25	Sinter Plant Discharging Stack	50.00	46.5	40.7	42.3	31.6	39.4	41.1
26	Sinter Plant De-dusting-I	50.00	40.4	42.4	47.8	45.6	45.6	48.3
27	Sinter Plant De-dusting-II	50.00	39.9	44.7	45.3	46.3	44.3	46.3
28	WHRB of coke oven Stack-I	50.00	43.67	48.8	37.3	36.4	27.9	32.1
29	WHRB of coke oven Stack-II	50.00	13.9	15.7	40.8	15.9	17.9	26.4
30	SMS-I-FTP-1	50.00	13.9	11.5	23.6	13.4	11.6	6.7
31 32	SMS-I,FTP-2	50.00	26.31	25.2	24.5	19.8	19.3	19.11
33	SMS-I FTP-3 SMS-I-FTP-4	50.00 50.00	32.71	27.6	29.3	16.4 9.4	24.3	28 22.0
34	SMS-II-FTP	50.00	14.22 12.9	24.8 13.57	26.8 27.7	9.4 14.2	11.2 8.42	22.0
35	Lime Kiln-I	50.00	42.1	41.4	43.4	41.3	46.3	42.3
36	Lime Kiln-II	50.00	44.2	37.8	38.2	38.4	shutdown	42.3
37	Lime Kiln-III	50.00	40	45.5	41.6	47.6	47.8	40.2
38	Blast Furnace-1 Cast house De- dusting	50.00	31.1	39.3	36.4	38.0	35.7	37.93
39	Blast Furnace-2 Cast house De-	50.00	40.9	39.27	32.41	34.44	25.89	29.6
40	Pellet Plant De-dusting	50.00	12.2	22.8	40.5	31.8	24.6	25.9
41	Pellet Plant Wind Box	50.00	13.1	21.1	41.3	31.4	18.6	27.5
42	Coke Oven-2 ,Process Stack	50.00	32.22	34.37	30.5	32.3	31.74	31.41
43	Coke Oven-2 ,Dedusting Stack	50.00	21.7	16.47	41.2	26.4	16.61	48.3

Annexure-V

	Fu	igitive Ei (Apr' 2	missior 2 to Sej		S			
No	Sampling Location	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Standard in (µg/m3)
1	Blast Furnace-I,Cast House	1324	976	1037	1121	1245	1134	
2	Blast Furnace-II Caste House	1015	1003	1122	1091	1268	1002	
3	Coke oven-I, Location-1	1120	1176	1325	1280	1321	1121	
4	Coke Oven-I, Location-2	1320	1402	1286	1245	1125	1195	3000
5	Coke Oven-II, Location-1	1332	1368	1453	1560	1129	1268	
6	Coke Oven-II, Location-2	1326	1523	1611	1580	1484	1329.00	
7	Day Bin areaDRI 1 & 2	1425	1561	1672	1621	1581	1321	
8	PSB & Char Discharging area DRI 1 & 2	1546	1867	1678	1432	1378	1432	
9	Day Bin area of DRI 3 & 4	1435	1526	1427	1630	1598	1419	
10	PSB & Char Discharging area DRI 3 & 4	1426	1486	1521	1521	1496	1321	
11	Day Bin area of DRI 5 & 6	1526	1537	1496	1520	1624	1329	
12	PSB & Char Discharging area DRI 5 & 6	1675	1867	1568	1345	1412	1234	2000
13	Day Bin area of DRI 7 & 8	1423	1523	1356	1429	1524	1429	
14	PSB & Char Discharging area DRI 7 & 8	1765	1654	1765	1342	1456	1298	
15	Day Bin area of DRI 9 & 10	1326	1428	1496	1521	1498	1411	
16	PSB & Char Discharging area DRI 9 & 10	1876	1678	1543	1456	1345	1234	
17	Daybin area of DRI 11 & 12	1591	1462	1395	1371	1534	1621	
18	PSB & Char Discharge area of DRI 11 &12	1356	1429	1521	1479	1624	1568	
19	Lime Plant Transfer point	1231	1086	1011	1175	1129	1021	
20	Lime Plant Kiln Area	1431	1537	1492	1408	1386	1426.00	2000

		1	1					
21	Lime Plant Delivery Building	1221	886	1321	1108	1221	1452.000	
22	Sinter Plant-1 Location-1	1329	1362	1538	1620	1588	1329	
23	Sinter Plant-2 Location-2	1121	1239	1261	1326	1198	1210	2000
24	SMS-I EAF 1 & 2 area	1326	1262	1135	1245	1189	1129.000	
25	SMS-I EAF 3 & 4 area	1029	946	1028	1032	1121	1028	3000
26	SMS-II,EAF-I Area	965	838	927	1006	1021	1086	
27	Pellet Plant, Location-1	826	696	824	821	1026	1129	
28	Pellet plant Location-2	826	734	763	792	831	869	
29	Tube mill Location-1	896	762	867	892	965	1032	2000
30	Tube mill Location-2	945	881	793	785	821	869	2000
31	CRM Location -1	1053	1017	1088	1102	1290	1186	
32	CRM Location-2	856	659	820	824	963	853	
33	RMHS-1	1429	1368	1579	1580	1488	1296	
34	RMHS-2	1456	1283	1546	1620	1429	1428	
35	RMHS-3	1679	1539	1674	1523	1524	1329	
36	RMHS-4	1326	1429	1256	1129	1059	1153	
37	WRM Bright Bar	956	1029	945	974	1008	1286	2000
38	WRM RH Furnace area	756	664	723	742	869	921	
39	CSP Caster area	987	1067	1152	1208	1123	1078	
40	CSP Tunnel furnace area	879	1087	1069	1145	1067	978	

## Treated Effluent water Analysis Result (ETP) (April-2022 to Sept-2022)

	( <b>F</b> )										
SI. No	Parameters	Unit	General Standard	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22		
1	рН	-	6 to 9	7.02	7.04	7.67	7.34	7.82	7.46		
2	Total Suspended Solids as TSS	mg/l	100	24.3	24.08	26	27	31	21.1		
3	Total disolve solid	mg/l	2100	892	823	857	889	834	795		
4	BOD (3 days at 27°C)	mg/l	30	13	17	15	16	16	14		
5	COD	mg/l	250	87.26	96.27	72	67	71	78		
6	Oil & Grease	mg/l	10	2.1	2.1	2	2.1	2.2	0.012		
7	Ammonical nitrogen (as N)	mg/l	50	ND	ND	ND	ND	ND	ND		
8	Iron (as Fe)	mg/l	3	0.3	0.26	0.28	0.24	0.27	0.81		
9	Total Chromium as Cr	mg/l	2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		
10	Cyanide (as CN)	mg/l	0.2	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
11	Phenol	mg/l	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		

## Treated Waste Water Analysis Result (WWTP-I)

## (April'22 to Sept'22)

SN	Parameters	Unit	General Standard	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
1	pH	-	6 to 9	7.14	7.14	7.38	6.62	7.06	7.39
2	Total Suspended Solids as TSS	mg/l	100	40.64	57.44	18	40.43	46.3	35.46
3	Total disolve solid	mg/l	2100	719	698	686	658	690	725
5	COD	mg/l	250	17.33	23.59	44	16.52	22.67	43.27
6	Oil & Grease	mg/l	10	1.8	2.1	2.4	1.9	1.5	1.8
7	Iron (as Fe)	mg/l	3	0.18	0.21	0.25	0.12	0.11	0.16

## Treated Waste Water Analysis Result (WWTP-II) (April'22 to Sept'22)

	( <b>F</b> )										
S.N	Parameters	Unit	General Standard	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22		
1	pH	-	6 to 9	7.34	7.56	7.46	6.69	7.22	6.6		
2	Total Suspended Solids as TSS	mg/l	100	35.99	31.21	21	36.39	36.26	38.06		
3	Total disolve solid	mg/l	2100	718	695	721	672	650	715		
4	COD	mg/l	250	43	24	28	24	82.5	132.59		
5	Oil & Grease	mg/l	10	2.3	2.9	3.2	2.1	2.5	2.1		
6	Iron (as Fe)	mg/l	3	0.28	0.2	0.29	0.21	0.2	0.2		

## Treated Waste Water Analysis Result (WWTP-III) (April'22 to Sept'22)

S.N	Parameters	Unit	General Standard	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
1	pH	-	6 to 9	7.04	7.02	7.21	7.01	7.05	6.94
2	Total Suspended Solids as TSS	mg/l	100	19.83	16.25	13	20.49	18.94	21.1
3	Total disolve solids	mg/l	2100	768	711	676	686	760	820
4	COD	mg/l	250	108.76	83.86	32	36	98.3	123.56
5	Oil & Grease	mg/l	10	2.9	3.2	4	2.65	2.4	1.95
6	Iron (as Fe)	mg/l	3	0.16	0.15	0.18	0.14	0.12	0.13

# **Treated Effluent Water Analysis Result (BETP-)**

## (April-2022 to Sept-2022)

SI. No	Parameters	Unit	General Standard	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
1	pH	-	6 to 9	6.72	6.79	7.15	7.32	7.13	7.25
2	Total Suspended Solids as TSS	mg/l	100	43	46	54	47	89	68.07
3	Total disolve solids	mg/l	2100	923	896	912	912	980	945
4	BOD (3 days at 27°C)	mg/l	30	14	17	13	18	12	9

5	COD	mg/l	250	145	156	152	175.3	145	154.13
6	Oil & Grease	mg/l	10	4.3	3.8	4.8	3.9	1	1.2
7	Ammonical nitrogen (as N)	mg/l	50	12.53	14.23	8.6	12	25.37	17.24
8	Iron (as Fe)	mg/l	3	1.09	1.21	1.28	1.28	1.12	1.09
9	Total Chromium as Cr	mg/l	2	< 0.05	< 0.07	< 0.05	< 0.08	< 0.08	< 0.07
10	Cyanide (as CN)	mg/l	0.2	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
11	Phenol	mg/l	<1.0	< 0.06	< 0.08	< 0.05	< 0.07	< 0.07	< 0.08

## Annexure-VII

# Summary of Ground water Quality

## Period from Apr'22 to Sept'22

No	Parameter	Unit	Standard as per IS 10500:2012	GW -1	GW -2	GW -3	GW- 4	GW-5
1	Colour	Hazen	5	<5	< 5	< 5	< 5	< 5
2	Odour		Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Taste		Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity	NTU	1	<1.0	<1.0	<1.0	<1.0	<1.0
5	pH Value		6.5 -8.5	6.98	7.17	7.23	7.15	7.29
6	Dissolved Solids	mg/l	500	280.67	272	275.35	268.69	279.67
7	Residual, free Chlorine	mg/l	0.2	ND	ND	ND	ND	ND
8	CaCO <sub>3</sub> )	mg/l	200	86.5	80	88.67	88.6	90.67
9	Calcium (as Ca )	mg/l	75	32.73	28.53	27.66	29.5	31.85
10	Magnesium (as Mg)	mg/l	30	2.7	4.45	4.13	4.23	3.86
11	Alkalinity	mg/l	200	60.56	62.8	64.78	64.98	62.78
12	Chloride (as Cl )	mg/l	250	25.26	20.6	25	23.5	25.8
13	Fluoride (as F)	mg/l	1	0.32	0.25	0.28	0.25	0.3
14	Sulphate (as SO <sub>4</sub> )	mg/l	200	13.65	12.56	12.8	10	12.45
15	Nitrate (as NO <sub>3</sub> )	mg/l	45	0.64	0.58	0.6	0.58	0.59
16	Chromium (as Cr <sup>+6</sup> )	mg/l	BDL	BDL	BDL	BDL	BDL	BDL
17	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	0.001	BDL	BDL	BDL	BDL	BDL
18	Iron (as Fe)	mg/l	1	0.35	0.32	0.28	0.25	0.24
19	Cyanide (as CN)	mg/l	0.05	BDL	BDL	BDL	0.09	BDL
20	Copper (as Cu)	mg/l	0.05	BDL	BDL	BDL	BDL	BDL
21	Manganese (as Mn)	mg/l	0.01	BDL	BDL	BDL	BDL	BDL
22	Mercury (as Hg)	mg/l	0.001	BDL	BDL	BDL	BDL	BDL
23	Cadmium (as Cd)	mg/l	0.003	BDL	BDL	BDL	BDL	BDL
24	Selenium (as Se)	mg/l	0.01	BDL	BDL	BDL	BDL	BDL
25	Arsenic (as As)	mg/l	0.01	BDL	BDL	BDL	BDL	BDL
26	Lead (as Pb)	mg/l	0.01	BDL	BDL	BDL	BDL	BDL
27	Zinc (as Zn)	mg/l	5	0.32	0.29	0.26	0.33	0.34
28	Aluminium as( Al)	mg/l	0.03	BDL	BDL	BDL	BDL	BDL
29	Boron (as B)	mg/l	0.5	BDL	BDL	BDL	BDL	BDL

tube well

## Annexure-VIII

#### **Details of Solid waste**

No	Units	Solid waste	Utilization
01	BF	BF Slag	The entire slag generating from BF is granulated and sold to cement manufacturers.
02	SMS	SMS slag	Slag is being crushed and the metallic content is recovered and recycled through Sinter Plant .The residue after recovery is used for internal road making and in leveling of low lined areas in the plant.
03	DRI	Char	Char generate from DRI unit is blended with coal and used in AFBC and CFBC boilers of Captive Power plant
04	CSP & Rolling Mill	Scales & derbies from CSP and Rolling mill	Scales and debris generating from rolling mill and SMS is recycled in Sinter Plant
05	Different Units	Scrap	Recycled In Steel melting shop
06	Captive Power Plant	Ash	The ash generated from CPP is being utilized in different area like fly ash brick manufacturing, low lying area filling, embankment rising and exhausted quarry void filling.



## Test Report



Print Date : 24/11/2021

#### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : KE	21-002313.001			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	13 00003256P
		Report Control No	KER0000180147			
Sample Described by Cu	stomer as : WASTES	SAMPLE				
Client Name	: BHUSHAN POWER AND	STEEL LIMITED				
Client Address	: Vill- Thelkoloi Post- Lapar	nga				
	: Tehshil- Rengali					
Postal Code	: 768232					
State	: Odisha					
Country	: INDIA					
Sample Type	: WASTE SAMPLE					
Received	: 06/11/2021					
Sample Qty. Recd.	1kg approx					
Sampling Date	02/11/2021					
Sampling Location	: EAF SLAG (SMS)					
Sampling Method	: SO IN MUL TE 176					
Test Start/End Date	: 06/11/2021 - 19/11/2021					
NABL Accredited Tests						
Analysis	Metho	bd	Result	Unit	Require	ement/Limit
					Sched	ule II
					Min	Max
NABL Group :	Pollution & Environment	Wastes (Liquid/SI	urry/Sludge/Solid/Se	emi-Solid)		
A19-2,4-Dinitrotolue	ene USEP/ &8270	A1311+ 3510C + 8041A D	<0.01	mg/L	-	0.13
A32-Methylethylketo		A 1311+5030C & 8260B	<0.01	mg/L	-	200.0

A32-Methylethylk		3270D SEPA 1311+5030C & 8260B	<0.01	mg/L	_	200.0
		SEPA 1311+5030C & 8260B	<0.01	0		5.0
A36-Pyridine				mg/L	-	
A34-Nitrobenzen	<b>e</b> U:	SEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
ABL Group :	Pollution & Environme	ent Wastes (Liquid/Slu	rry/Sludge/Solid/S	emi-Solid)		
ISCIPLINE:	CHEMICAL					
A2-Barium	U	SEPA 1311 & 200.7	0.22	mg/L	-	100
A3-Cadmium	U	SEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium an	d/or Chromium(III)	SEPA 1311 & 200.7	<0.05	mg/L	-	5.0
compounds						
A5-Lead	U	SEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic	U	SEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	U	SEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	U	SEPA 1311 & 200.7	0.11	mg/L	-	1.0
A9-Silver	U	SEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloro	ethane U	SEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834

Regd & Corp. Off : SGS House, 4B, A.S. Marg, Vikhroli (West), Mumbai-400083. Tel : (022) 25798421 to 28 www.sgs.com



### Test Report



10-704

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002313.001			JOE No ULR No :	KE21 <u>-</u> 002313 TC704721100003256P		
L Accredited Tests	Report Control No :	KER000018014	7			
Analysis	Method	Result	Unit	Requirement/Limit Schedule II		
				Min	Мах	
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0	
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5	
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100	
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50	
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03	
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0	
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70	
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5	
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200	
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5	
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13	
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10	
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7	
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5	
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02	
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008	
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4	
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100	
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400	
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2	
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0	

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834

Regd & Corp. Off : SGS House, 4B, A.S. Marg, Vikhroli (West), Mumbai-400083. Tel : (022) 25798421 to 28 www.sgs.com



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.			
<b>Report No</b> : KE21-002313.001			JOE No ULR No :	KE21-0023 TC704721	313 100003256P
Non-Accredited tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	Requirement/Lim Schedule II	
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No :	KE21-002313.002	JOE No ULR No :	KE21-002313 TC704721100003257P
	Report Control No : KER00001801	47	
Sample Described by	y Customer as : WASTE SAMPLE		
Client Name	: BHUSHAN POWER AND STEEL LIMITED		
Client Address	· Vill- Thelkoloi Post- Lapanga		
	: Tehshil- Rengali		
Postal Code	: 768232		
State	: Odisha		
Country	: INDIA		
Sample Type	: WASTE SAMPLE		
Received	: 06/11/2021		
Sample Qty. Recd.	: 1kg approx		
Sampling Date	: 02/11/2021		
Sampling Location	LRF SLUG (SMS)		
Sampling Method	: SO IN MUL TE 176		
Test Start/End Date	: 06/11/2021 - 19/11/2021		
NABL Accredited Te	sts		
Amahuala	Mathad Desult	11 !4	De surline se e st/l insit

Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Мах
NABL Group : Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
DISCIPLINE: CHEMICAL					
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-704

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002313.002			JOE No ULR No :	KE21 <u>-</u> 002313 TC704721100003257F	
L Accredited Tests	Report Control No :	KER0000180147			
Analysis	Method	Result	Unit	•	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.			
Report No : KE21-002313.002			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003257P
n-Accredited tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit Requirement Schedule II		
				Min	Мах
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

21-002313.003		JOE No ULR No :	KE21 <del>.</del> 002313 TC704721100003258P
Report Control No	: KER0000180147		
stomer as : WASTE SAMPLE			
: BHUSHAN POWER AND STEEL LIMITED			
: Vill- Thelkoloi Post- Lapanga			
: Tehshil- Rengali			
: 768232			
: Odisha			
: INDIA			
: WASTE SAMPLE			
: 06/11/2021			
: 1kg approx			
: 02/11/2021			
: BAG FILTER DUST (SMS)			
: SO IN MUL TE 176			
: 06/11/2021 - 19/11/2021			
	stomer as       WASTE SAMPLE         BHUSHAN POWER AND STEEL LIMITED         Vill- Thelkoloi Post- Lapanga         Tehshil- Rengali         768232         Odisha         INDIA         WASTE SAMPLE         06/11/2021         1kg approx         02/11/2021         BAG FILTER DUST (SMS)         SO IN MUL TE 176	Report Control No       : KER0000180147         stomer as       : WASTE SAMPLE         : BHUSHAN POWER AND STEEL LIMITED         : Vill- Thelkoloi Post- Lapanga         : Tehshil- Rengali         : 768232         : Odisha         : INDIA         : WASTE SAMPLE         : 06/11/2021         : 1kg approx         : 02/11/2021         : BAG FILTER DUST (SMS)         : SO IN MUL TE 176	ULR No :         ULR No :         Report Control No : KER0000180147         stomer as : WASTE SAMPLE         : BHUSHAN POWER AND STEEL LIMITED         : Vill- Thelkoloi Post- Lapanga         : Tehshil- Rengali         : 768232         : Odisha         : INDIA         : WASTE SAMPLE         : 06/11/2021         : 1kg approx         : 02/11/2021         : BAG FILTER DUST (SMS)         : SO IN MUL TE 176

Analysis	Method	Result	Unit	•	ement/Limit dule II
				Min	Max
NABL Group : Pollution & Envi	ironment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envi DISCIPLINE: CHEMICAL	ironment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	0.39	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	0.78	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	0.06	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.07	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date	:	24/11/2021
------------	---	------------

Report No : KE21-002313.003			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003258P		
Report Control No : KER0000180147							
Analysis	Method	Result	Unit	Requir Schee	ement/Limit Jule II		
				Min	Мах		
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0		
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5		
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100		
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50		
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03		
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0		
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70		
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5		
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200		
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5		
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13		
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10		
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7		
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5		
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02		
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008		
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4		
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100		
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400		
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2		
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0		

#### Page 2 of 3

document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at This http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834 SGS India Pvt. Ltd.



Report No : KE21-002313.003			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003258P
n-Accredited tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit Require Schedu		ement/Limit dule II
				Min	Мах
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	_	0.50

\_\_\_\_\_

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



KE21 002212 004

. . .

A5-Lead

A1-Arsenic

A7-Mercury

A8-Selenium

A15-1,2-Dichloroethane

A9-Silver

# Test Report



Print Date : 24/11/2021

KE01 000010

SAMPLE DRAWN B	Y SGS INDIA PVT. LTD.
----------------	-----------------------

Report No : K	E21-002313.004			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003259P
		Report Control No :	KER0000180147	7		
Sample Described by C	ustomer as :	WASTE SAMPLE				
Client Name	: BHUSHAN PO	WER AND STEEL LIMITED				
Client Address	: Vill- Thelkoloi P	ost- Lapanga				
	: Tehshil- Rengal	İ				
Postal Code	: 768232					
State	: Odisha					
Country	: INDIA					
Sample Type	: WASTE SAMPI	LE				
Received	: 06/11/2021					
Sample Qty. Recd.	: 1kg approx					
Sampling Date	: 02/11/2021					
Sampling Location	: MILLSCALE (C	SP)				
Sampling Method	: SO IN MUL TE	176				
Test Start/End Date	: 06/11/2021 - 19	/11/2021				
NABL Accredited Tests	;					
Analysis		Method	Result	Unit	Requirement/Lim	
					Scheo	dule II
					Min	Max
NABL Group :	Pollution & Envi	ronment Wastes (Liquid/Slu	irry/Sludge/Solid/S	emi-Solid)		
A19-2,4-Dinitrotolu	uene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylke	etone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine		USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene		USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : DISCIPLINE:	Pollution & Envi CHEMICAL	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/S	emi-Solid)		
A2-Barium		USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium		USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and compounds	/or Chromium(III)	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
			-0.05			

Page 1 of 3

< 0.05

< 0.05

<0.05

< 0.05

<0.05

< 0.01

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834

USEPA 1311 & 200.7

USEPA 1311 & 200.7

USEPA 1311 & 200.7

USEPA 1311 & 200.7

USEPA 1311 & 200.7 USEPA 1311+5030C & 8260B

Regd & Corp. Off : SGS House, 4B, A.S. Marg, Vikhroli (West), Mumbai-400083. Tel : (022) 25798421 to 28 www.sgs.com

5.0

5.0

0.20

1.0

50

0.5





Print Date : 24/11/2021

Report No : KE21-002313.004			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003259F
BL Accredited Tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	•	ement/Limit dule II
				Min	Max
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

### Page 2 of 3

document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at This http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834 SGS India Pvt. Ltd.



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.			
Report No : KE21-002313.004			JOE No ULR No :	KE21-0023 TC704721	313 100003259P
n-Accredited tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	Requirement/L Schedule II	
				Min	Мах
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : <sup>k</sup>	KE21-002313.005	JOE No ULR No :	KE21 <u>-</u> 002313 TC704721100003260P
	Report Control No : KER0000180147		
Sample Described by			
Client Name	: BHUSHAN POWER AND STEEL LIMITED		
Client Address	: Vill- Thelkoloi Post- Lapanga		
	: Tehshil- Rengali		
Postal Code	: 768232		
State	· Odisha		
Country	· INDIA		
Sample Type	: WASTE SAMPLE		
Received	: 06/11/2021		
Sample Qty. Recd.	: 1kg approx		
Sampling Date	: 02/11/2021		
Sampling Location	: SLUDGE FROM MILL (CSP)		
Sampling Method	: SO IN MUL TE 176		
Test Start/End Date	: 06/11/2021 - 19/11/2021		

### NABL Accredited Tests

Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Max
NABL Group : Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envi DISCIPLINE: CHEMICAL	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834

Regd & Corp. Off : SGS House, 4B, A.S. Marg, Vikhroli (West), Mumbai-400083. Tel : (022) 25798421 to 28 www.sgs.com

Member of the SGS Group (SGS SA)



A35-Pentachlorophenol

A39-Vinylchloride

A17-2,4,5-Trichlorophenol

A41-2,4-Dichlorophenoxyacetic acid

## **Test Report**



Print Date : 24/11/2021

100

400

0.2

10.0

	SAMPLE DRAWN BY S	GS INDIA PVT. LTD.		Line Date	• • •
Report No : KE21-002313.005	rt No : KE21-002313.005		JOE No ULR No :		
BL Accredited Tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	•	ement/Limit dule II
				Min	Max
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4

<0.05

< 0.05

<0.01

< 0.0100

mg/L

mg/L

mg/L

mg/L

### Page 2 of 3

document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at This http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834 SGS India Pvt. Ltd.

USEPA 1311+5030C & 8260B

USEPA1311+ 3510C + 8041A

USEPA 1311+5030C & 8260B

USEPA 1311+5030C & 8260B

&8270D



Report No : KE21-002313.005		: KER0000180147	JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003260P
n-Accredited tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	it Requireme Schedule	
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L		0.50

\_\_\_\_\_

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : KE	E21-002313.006		JOE No ULR No :	KE21-002313 TC704721100003261P
	Report Control No	: KER0000180147		
Sample Described by C	-			
Client Name	: BHUSHAN POWER AND STEEL LIMITED			
Client Address	· Vill- Thelkoloi Post- Lapanga			
	: Tehshil- Rengali			
Postal Code	768232			
State	· Odisha			
Country	INDIA			
Sample Type	: WASTE SAMPLE			
Received	: 06/11/2021			
Sample Qty. Recd.	1kg approx			
Sampling Date	02/11/2021			
Sampling Location	: MILL SCALE (WRM)			
Sampling Method	SO IN MUL TE 176			
Test Start/End Date	: 06/11/2021 - 19/11/2021			
NABL Accredited Tests				
Analysis	Method	Result	Unit	Requirement/Limit Schedule II
				Min Max
NABL Group :	Pollution & Environment Wastes (Liquid/s	Slurry/Sludge/Solid/Se	mi-Solid)	
A19-2,4-Dinitrotolu	ene USEPA1311+ 3510C + 8041A	<0.01	mg/L	- 0.13

A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/S	emi-Solid)		
DISCIPLINE: CHEMICAL					
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III)	USEPA 1311 & 200.7	0.35	mg/L	-	5.0
compounds					
A5-Lead	USEPA 1311 & 200.7	0.13	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



Ν

## Test Report



Print Date : 24/11/2021

#### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : KE21-002313.0	06		JOE No ULR No :	KE21 <u>+</u> 002313 TC704721100003261P
	Report Control No	: KER0000180147		
NABL Accredited Tests	-			
Analysis	Method	Result	Unit	Requirement/Limit
				Schedule II

				Min	Max
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



Report No : KE21-002313.006	Benerit Control No.	: KER0000180147	JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003261P
n-Accredited tests	Report Control No	: 110000100147			
Analysis	Method	Result	Unit	t Requirement Schedule II	
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L		0.50

\_\_\_\_\_

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No	: KE21-002313.007		JOE No ULR No :	KE21 <del>:</del> 002313 TC704721100003262P
	Report Control No	: KER0000180147		
Sample Described	by Customer as : WASTE SAMPLE			
Client Name	BHUSHAN POWER AND STEEL LIMITED			
Client Address	· Vill- Thelkoloi Post- Lapanga			
	Tehshil- Rengali			
Postal Code	768232			
State	• Odisha			
Country	· INDIA			
Sample Type	: WASTE SAMPLE			
Received	: 06/11/2021			
Sample Qty. Rec	I. : 1kg approx			
Sampling Date	: 02/11/2021			
Sampling Location	n : SLUDGE FROM MILL (WRM)			
Sampling Metho	SO IN MUL TE 176			

#### Test Start/End Date NABL Accredited Tests

: 06/11/2021 - 19/11/2021

Analysis	Method	Result	Unit	Requirement/Limit Schedule II	
				Min	Max
NABL Group : Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envi DISCIPLINE: CHEMICAL	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/So	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III)	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
compounds A5-Lead	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.06	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L		0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



A39-Vinylchloride

A41-2,4-Dichlorophenoxyacetic acid

## **Test Report**



Print Date : 24/11/2021

0.2

10.0

	SAMPLE DRAWN BY S	SAMPLE DRAWN BY SGS INDIA PVT. LTD.			. 201020
Report No : KE21-002313.007			JOE No ULR No :	=	
BL Accredited Tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	•	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A	<0.05	mg/L	-	2.0
A20-Benzene	&8270D USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400

<0.01

< 0.0100

mg/L

mg/L

### Page 2 of 3

document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at This http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834 SGS India Pvt. Ltd.

USEPA 1311+5030C & 8260B

USEPA 1311+5030C & 8260B



	SAMPLE DRAWN BY SGS INDIA PVT. LTD.				
Report No : KE21-002313.007			JOE No ULR No :	KE21-0023 TC704721	313 100003262P
n-Accredited tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	Requirement/Limit Schedule II	
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No :	KE21-002313.008	JOE No ULR No :	KE21 <del>.</del> 002313 TC704721100003263P
	Report Control No : KER	R0000180147	
Sample Described I	by Customer as : WASTE SAMPLE		
Client Name	: BHUSHAN POWER AND STEEL LIMITED		
Client Address	· Vill- Thelkoloi Post- Lapanga		
	· Tehshil- Rengali		
Postal Code	768232		
State	: Odisha		
Country	· INDIA		
Sample Type	: WASTE SAMPLE		
Received	: 06/11/2021		
Sample Qty. Recd	. 1kg approx		
Sampling Date	02/11/2021		
Sampling Locatio	n BAG FILTER DUST (LIME PLANT)		
Sampling Method	: SO IN MUL TE 176		

#### Test Start/End Date NABL Accredited Tests

: 06/11/2021 - 19/11/2021

Analysis	Method	Result	Unit	Requirement/Limit Schedule II	
				Min	Max
NABL Group : Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envi DISCIPLINE: CHEMICAL	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III)	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
compounds A5-Lead	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.06	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	_	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-704

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date	:	24/11/2021

Report No : KE21-002313.008			JOE No ULR No :	KE21 <u>-</u> 002313 TC704721100003263	
3L Accredited Tests	Report Control No :	KER000018014	7		
Analysis	Method	Result	Unit	•	ement/Limit dule II
				Min	Max
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



Report No : KE21-002313.008		: KER0000180147	JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003263P
-Accredited tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	t Requireme Schedule	
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L		0.50

\_\_\_\_\_

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : K	E21-002313.009		JOE No ULR No :	KE21 <u>-</u> 0023 <sup>-</sup> TC7047211	
	Report Control No	: KER0000180147			
Sample Described by C	Customer as : WASTE SAMPLE				
Client Name	: BHUSHAN POWER AND STEEL LIMITED				
Client Address	: Vill- Thelkoloi Post- Lapanga				
	: Tehshil- Rengali				
Postal Code	· 768232				
State	Odisha				
Country	- INDIA				
Sample Type	: WASTE SAMPLE				
Received	<u>:</u> 06/11/2021				
Sample Qty. Recd.	1kg approx				
Sampling Date	: 02/11/2021				
Sampling Location	: LIME DUST (LIME PLANT)				
Sampling Method	: SO IN MUL TE 176				
Test Start/End Date	: 06/11/2021 - 19/11/2021				
NABL Accredited Tests					
Analysis	Method	Result	Unit	Require Schedi	ment/Limit ule II
				Min	Max
NABL Group :	Pollution & Environment Wastes (Liq	uid/Slurry/Sludge/Solid/Se	mi-Solid)		

A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envir DISCIPLINE: CHEMICAL	conment Wastes (Liquid/Slu	ry/Sludge/Solid/S	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	0.15	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.07	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-704

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002313.009			JOE No ULR No :	KE21 <u>-</u> 002313 TC704721100003264F	
BL Accredited Tests	Report Control No	KER0000180147			
Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



Report No : KE21-002313.009	Deres 4 October 1 No.	: KER0000180147	JOE No ULR No :		
-Accredited tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	Requiremen Schedule II	
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L		0.50

\_\_\_\_\_

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : KI	E21-002313.010		JOE No ULR No :	KE21 <del>.</del> 002313 TC704721100003265P
	Report Control No	: KER0000180147		
Sample Described by C	-			
Client Name	: BHUSHAN POWER AND STEEL LIMITED			
Client Address	: Vill- Thelkoloi Post- Lapanga			
	: Tehshil- Rengali			
Postal Code	: 768232			
State	: Odisha			
Country	: INDIA			
Sample Type	: WASTE SAMPLE			
Received	<u>·</u> 06/11/2021			
Sample Qty. Recd.	: 1kg approx			
Sampling Date	: 02/11/2021			
Sampling Location	: ESP DUST (SINTER PLANT)			
Sampling Method	SO IN MUL TE 176			
Test Start/End Date	. 06/11/2021 - 19/11/2021			
NABL Accredited Tests				
Analysis	Method	Result	Unit	Requirement/Limit Schedule II
				Min Max
NABL Group :	Pollution & Environment Wastes (Liqu	id/Slurry/Sludge/Solid/Se	emi-Solid)	

NABL Group : Pollution	& Environment Wastes (Liquid/	Slurry/Sludge/Solid/S	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution		Slurry/Sludge/Solid/S	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium compounds	(III) USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L		0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-704

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002313.010			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003265P
BL Accredited Tests	Report Control No :	KER0000180147	7		
Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	' SGS INDIA PVT. LTD.			
<b>Report No</b> : KE21-002313.010			JOE No ULR No :	KE21-0023 TC704721	313 100003265P
Non-Accredited tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	Requirement/Lim Schedule II	
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : KE	E21-002313.011		JOE No ULR No :	KE21 <u>-</u> 002313 TC704721100003266P
	Report Control No	: KER0000180147		
Sample Described by C				
Client Name	: BHUSHAN POWER AND STEEL LIMITED			
Client Address	· Vill- Thelkoloi Post- Lapanga			
	: Tehshil- Rengali			
Postal Code	: 768232			
State	: Odisha			
Country	: INDIA			
Sample Type	: WASTE SAMPLE			
Received	: 06/11/2021			
Sample Qty. Recd.	: 1kg approx			
Sampling Date	: 02/11/2021			
Sampling Location	: BETP SLUDGE (COKE OVEN 2)			
Sampling Method	: SO IN MUL TE 176			
Test Start/End Date	: 06/11/2021 - 19/11/2021			
NABL Accredited Tests				
Analysis	Method	Result	Unit	Requirement/Limit Schedule II
				Min Max
NABL Group :	Pollution & Environment Wastes (Liquid	d/Slurry/Sludge/Solid/Se	mi-Solid)	

A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envir DISCIPLINE: CHEMICAL	ronment Wastes (Liquid/Slu	ry/Sludge/Solid/S	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.06	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-704

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002313.011			JOE No ULR No :	KE21 <u>-</u> 002313 TC704721100003266F	
BL Accredited Tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	Requir Scheo	ement/Limit Iule II
				Min	Max
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.			
Report No : KE21-002313.011			JOE No ULR No :	KE21-0023 TC704721	313 100003266P
on-Accredited tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	Unit Requiremen Schedule I	
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : <sup> </sup>	KE21-002313.012	JOE No ULR No :	KE21-002313 TC704721100003267P
	Report Control No : KER0000180147	,	
Sample Described by	Customer as : WASTE SAMPLE		
Client Name	: BHUSHAN POWER AND STEEL LIMITED		
Client Address	: Vill- Thelkoloi Post- Lapanga		
	: Tehshil- Rengali		
Postal Code	: 768232		
State	: Odisha		
Country	: INDIA		
Sample Type	: WASTE SAMPLE		
Received	: 06/11/2021		
Sample Qty. Recd.	: 1kg approx		
Sampling Date	: 02/11/2021		
Sampling Location	: DECANTER TANK TAR SLUDGE (COKE OVEN 2)		
Sampling Method	SO IN MUL TE 176		
Test Start/End Date	: 06/11/2021 - 19/11/2021		

### Test Start/End Date

Analysis	Method	Result	Unit	Requirement/Limit Schedule II	
				Min	Max
NABL Group : Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envi DISCIPLINE: CHEMICAL	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	0.08	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.06	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at This http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834 SGS India Pvt. Ltd.





10-704

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002313.012			JOE No ULR No :	KE21:002313 TC704721100003267F	
3L Accredited Tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Max
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



Report No : KE21-002313.012			JOE No ULR No :	KE21 <del>.</del> 002313 TC704721100003267F	
n-Accredited tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit Requirem Schedul		ement/Limit dule II
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

\_\_\_\_\_

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No :	KE21-002313.013	JOE No ULR No :	KE21 <del>.</del> 002313 TC704721100003268P
	Report Control No : KER0000180147		
Sample Described by	y Customer as : WASTE SAMPLE		
Client Name	: BHUSHAN POWER AND STEEL LIMITED		
Client Address	· Vill- Thelkoloi Post- Lapanga		
	: Tehshil- Rengali		
Postal Code	: 768232		
State	: Odisha		
Country	: INDIA		
Sample Type	· WASTE SAMPLE		
Received	: 06/11/2021		
Sample Qty. Recd.	1kg approx		
Sampling Date	: 02/11/2021		
Sampling Location	: TRALLING SLUDGE (PELLET AND BENEFICIATION PLANT)		
Sampling Method	: SO IN MUL TE 176		
Test Start/End Date	: 06/11/2021 - 19/11/2021		
NABL Accredited Tes	sts		

	Method	Result	Unit	Requirement/Limit Schedule II	
				Min	Max
Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
Jene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
tone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
	USEPA 1311 & 200.7	<0.05	mg/L	-	100
	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
/or Chromium(III)	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
thane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
	uene etone	Pollution & Environment         Wastes (Liquid/Slut Wastes (Liquid/Slut 8270D           wene         USEPA1311+ 3510C + 8041A &8270D           wtone         USEPA 1311+5030C & 8260B           USEPA 1311+5030C & 8260B           USEPA 1311+5030C & 8260B           USEPA 1311+5030C & 8260B           Pollution & Environment           Vastes (Liquid/Slut CHEMICAL           USEPA 1311 & 200.7           USEPA 1311 & 200.7	Pollution & Environment         Wastes (Liquid/Slurry/Sludge/Solid/Sol	Pollution & Environment         Wastes (Liquid/Slurry/Sludge/Solid/Semi-Solid)           uene         USEPA1311+ 3510C + 8041A         <0.01	Min         Min           Pollution & Environment         Wastes (Liquid/Slurry/Sludge/Solid/Semi-Solid)           Jene         USEPA1311+ 3510C + 8041A         <0.01         mg/L         -           Address         Min         Min         -         Min           Jene         USEPA1311+ 3510C + 8041A         <0.01         mg/L         -           Address         USEPA1311+5030C & 8260B         <0.01         mg/L         -           USEPA 1311+5030C & 8260B         <0.01         mg/L         -           Pollution & Environment         Wastes (Liquid/Slurry/Sludge/Solid/Semi-Solid)         -           CHEMICAL         USEPA 1311 & 200.7         <0.05         mg/L         -           UsePA 1311 & 200.7         <0.05         mg/L         -           USEPA 1311 & 200.7         <0.05         mg/L         -

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

SAMPLE DRAWN BY SGS INDIA PVT. LTD.									
Report No : KE21-002313.013			JOE No ULR No :	KE21 <u>-</u> 002313 TC704721100003268P					
	Report Control No	: KER0000180147							
BL Accredited Tests									
Analysis	Method	Result	Unit	Requirement/Limit Schedule II					
				Min	Max				
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0				
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5				
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100				
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50				
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03				
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0				
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70				
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5				
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200				
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5				
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13				
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10				
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7				
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5				
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02				
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008				
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4				
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100				
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400				
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2				
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0				

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834 SGS India Pvt. Ltd.



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.			
<b>Report No</b> : KE21-002313.013			JOE No ULR No :	KE21-0023 TC704721	313 100003268P
	Report Control No	: KER0000180147			
Non-Accredited tests					
Analysis	Method	Result	Unit	Require Scheo	ement/Limit Iule II
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

## Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : KE	21-002313.014		JOE No ULR No :	KE21 <del>.</del> 002313 TC704721100003269P
	Report Control No	: KER0000180147		
Sample Described by Cu	stomer as : WASTE SAMPLE			
Client Name	: BHUSHAN POWER AND STEEL LIMITED			
Client Address	· Vill- Thelkoloi Post- Lapanga			
	· Tehshil- Rengali			
Postal Code	768232			
State	Odisha			
Country	INDIA			
Sample Type	· WASTE SAMPLE			
Received	06/11/2021			
Sample Qty. Recd.	1kg approx			
Sampling Date	02/11/2021			
Sampling Location	ESP DUST (PELLET AND BENEFICIATION			
	PLANT)			
Sampling Method	SO IN MUL TE 176			
Test Start/End Date	: 06/11/2021 - 19/11/2021			
NABL Accredited Tests				
Analysis	Method	Result	Unit	Requirement/Limit

Analysis		Method	Result	Unit	Requir Scheo	ement/Limit Jule II
					Min	Max
NABL Group :	Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A19-2,4-Dinitroto	bluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethyl	ketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine		USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzen	le	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : DISCIPLINE:	Pollution & Envi CHEMICAL	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/So	emi-Solid)		
A2-Barium		USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium		USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium ar compounds	nd/or Chromium(III)	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead		USEPA 1311 & 200.7	0.26	mg/L	-	5.0
A1-Arsenic		USEPA 1311 & 200.7	0.29	mg/L	-	5.0
A7-Mercury		USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium		USEPA 1311 & 200.7	0.21	mg/L	-	1.0
A9-Silver		USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloro		USEPA 1311+5030C & 8260B	<0.01	mg/L		0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-704

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002313.014			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003269P
BL Accredited Tests	Report Control No :	KER000018014	7		
Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.			
<b>Report No : KE21-002313.014</b>			JOE No ULR No :	KE21-0023 TC704721	313 100003269P
	Report Control No	: KER0000180147			
Non-Accredited tests					
Analysis	Method	Result	Unit	Requir Scheo	ement/Limit Iule II
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : KE	E21-002313.015		JOE No ULR No :	KE21 <u>-</u> 002313 TC704721100003270P
	Report Control No	: KER0000180147		
Sample Described by C	-			
Client Name	: BHUSHAN POWER AND STEEL LIMITED			
Client Address	· Vill- Thelkoloi Post- Lapanga			
	: Tehshil- Rengali			
Postal Code	: 768232			
State	: Odisha			
Country	: INDIA			
Sample Type	: WASTE SAMPLE			
Received	: 06/11/2021			
Sample Qty. Recd.	· 1kg approx			
Sampling Date	02/11/2021			
Sampling Location	EP SLUDGE (CRM)			
Sampling Method	SO IN MUL TE 176			
Test Start/End Date	06/11/2021 - 19/11/2021			
NABL Accredited Tests				
Analysis	Method	Result	Unit	Requirement/Limit Schedule II
				Min Max
NABL Group :	Pollution & Environment Wastes (Liquid/S	Blurry/Sludge/Solid/Se	mi-Solid)	
A19-2.4-Dinitrotolu	USEPA1311+ 3510C + 8041A	<0.01	mg/L	- 0.13

				, ,	,		
A19-2,4-Dinitrotolu	iene	USEPA1: &8270D	311+ 3510C + 8041A	<0.01	mg/L	-	0.13
A32-Methylethylke	tone		311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine		USEPA 1	311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene		USEPA 1	311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group :	Pollution & Envir	onment	Wastes (Liquid/Slu	urry/Sludge/Solid/S	emi-Solid)		
DISCIPLINE:	CHEMICAL						
A2-Barium		USEPA 1	311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium		USEPA 1	311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and	/or Chromium(III)	USEPA 1	311 & 200.7	0.06	mg/L	-	5.0
compounds A5-Lead		USEPA 1	311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic		USEPA 1	311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury		USEPA 1	311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium		USEPA 1	311 & 200.7	<0.05	mg/L	-	1.0
A9-Silver		USEPA 1	311 & 200.7	<0.05	mg/L	-	5.0
			311+5030C & 8260B	<0.01	mg/L		0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-704

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002313.015			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003270F
L Accredited Tests	Report Control No :	KER0000180147	7		
Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.			
Report No : KE21-002313.015			JOE No ULR No :	KE21-0023 TC704721	313 100003270P
	Report Control No	: KER0000180147			
Non-Accredited tests					
Analysis	Method	Result	Unit	Requir Scheo	ement/Limit Iule II
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : KI	E21-002313.016	JOE No ULR No :	KE21 <del>.</del> 002313 TC704721100003271P
	Report Control No : KER000018014	7	
Sample Described by C	Customer as : WASTE SAMPLE		
Client Name	: BHUSHAN POWER AND STEEL LIMITED		
Client Address	: Vill- Thelkoloi Post- Lapanga		
	: Tehshil- Rengali		
Postal Code	: 768232		
State	: Odisha		
Country	: INDIA		
Sample Type	: WASTE SAMPLE		
Received	: 06/11/2021		
Sample Qty. Recd.	1kg approx		
Sampling Date	· 02/11/2021		
Sampling Location	GLASS WOOL (COMMON)		
Sampling Method	SO IN MUL TE 176		
Test Start/End Date	06/11/2021 - 19/11/2021		
NABL Accredited Tests			

Analysis	Method	Result	Unit	•	ement/Limit dule II
				Min	Мах
NABL Group : Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envi DISCIPLINE: CHEMICAL	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/So	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	4.58	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-704

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

10.0

SAMPLE DRAWN BY SGS INDIA PVT. LTD.							
Report No : KE21-002313.016			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003271F		
	Report Control No	: KER0000180147					
BL Accredited Tests							
Analysis	Method	Result	Unit	•	ement/Limit dule II		
				Min	Max		
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0		
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5		
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100		
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50		
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03		
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0		
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70		
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5		
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200		
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5		
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13		
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10		
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7		
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5		
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02		
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008		
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4		
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100		
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400		
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2		

< 0.0100

mg/L

\_

### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

A41-2,4-Dichlorophenoxyacetic acid

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834

USEPA 1311+5030C & 8260B



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.			
<b>Report No</b> : KE21-002313.016			JOE No ULR No :	KE21 <u>-</u> 002313 TC704721100003271	
	Report Control No	: KER0000180147			
Non-Accredited tests					
Analysis	Method	Result	Unit	Requirement/Limit Schedule II	
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



Depart No.

KE21-002313 017

# Test Report



Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

JOE No	KE21-002313	

Report No : RE	21-002515.017		ULR No :	TC704721100003272P
	Report Control No	: KER0000180147		
Sample Described by Cu	ustomer as : WASTE SAMPLE			
Client Name	: BHUSHAN POWER AND STEEL LIMITED			
Client Address	· Vill- Thelkoloi Post- Lapanga			
	: Tehshil- Rengali			
Postal Code	: 768232			
State	: Odisha			
Country	· INDIA			
Sample Type	: WASTE SAMPLE			
Received	: 06/11/2021			
Sample Qty. Recd.	: 1KG APPROX			
Sampling Date	02/11/2021			
Sampling Location	: WASTE GREASE (COMMON)			
Sampling Method	SO IN MUL TE 176			
Test Start/End Date	: 06/11/2021 - 19/11/2021			
NABL Accredited Tests				
Analysis	Mothod	Pocult	Unit	Poquiromont/Limit

Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Мах
NABL Group : Pollution & En	vironment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & En	vironment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
DISCIPLINE: CHEMICAL					
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L		0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002313.017			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003272F
L Accredited Tests	Report Control No :	KER000018014	7		
Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

### Page 2 of 3

document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at This http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834 SGS India Pvt. Ltd.



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.			
Report No : KE21-002313.017			JOE No ULR No :	KE21 <u>-</u> 002313 TC704721100003272P	
	Report Control No	: KER0000180147			
Non-Accredited tests					
Analysis	Method	Result	Unit	Requirement/Limit Schedule II	
				Min	Мах
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

## SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : KE	21-002313.018		JOE No ULR No :	KE21 <u>-</u> 002313 TC704721100003273P
	Report Control No	: KER0000180147		
Sample Described by C	ustomer as : WASTE SAMPLE			
Client Name	: BHUSHAN POWER AND STEEL LIMITED			
Client Address	· Vill- Thelkoloi Post- Lapanga			
	: Tehshil- Rengali			
Postal Code	: 768232			
State	: Odisha			
Country	: INDIA			
Sample Type	: WASTE SAMPLE			
Received	: 06/11/2021			
Sample Qty. Recd.	: 1KG APPROX			
Sampling Date	02/11/2021			
Sampling Location	SPENT IRON EXCHANGE RESIN (COMMON)			
Sampling Method	SO IN MUL TE 176			
Test Start/End Date	06/11/2021 - 19/11/2021			
ABL Accredited Tests				
Analysis	Method	Result	Unit	Requirement/Limit Schedule II

				ooneddie n	
				Min	Max
NABL Group : Pollution & Env	ironment Wastes (Liquid/Slu	rry/Sludge/Solid/S	Semi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Env DISCIPLINE: CHEMICAL	ironment Wastes (Liquid/Slu	rry/Sludge/Solid/S	Semi-Solid)		
A2-Barium	USEPA 1311 & 200.7	0.13	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	0.57	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.09	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L		0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-7047

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002313.018			JOE No ULR No :	KE21-0023 TC704721	313 100003273F
BL Accredited Tests	Report Control No :	KER000018014	7		
Analysis	Method	Result	Unit	Requir Scheo	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	' SGS INDIA PVT. LTD.			
Report No : KE21-002313.018			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	313 100003273P
on-Accredited tests	Report Control No	: KER0000180147			
Analysis	Method	Result	Unit	Requirement/Lin Schedule II	
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

\_\_\_\_\_

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Analysis	Method	Result	Unit	Requirement/Limit Schedule II
Test Start/End Date NABL Accredited Tests	<u>·</u> 06/11/2021 - 19/11/2021			
Sampling Method	: SO IN MULTE 176			
Sampling Location	: FLY ASH (130X3) UNIT 1 BOILER 2			
	-			
Sampling Date	01/11/2021			
Received Sample Qty. Recd.	1kg approx			
Sample Type	: WASTE SAMPLE • 06/11/2021			
•	•			
Country	· INDIA			
State	• Odisha			
Postal Code	• 768232			
	· Tehshil- Rengali			
Client Address	· Vill- Thelkoloi Post- Lapanga			
Sample Described by Cu Client Name	ustomer as : WASTE SAMPLE • BHUSHAN POWER AND STEEL LIMITED			
	Report Control No	: KER0000180143		
Report No : KE	21-002312.001		JOE No ULR No :	KE21 <u>-</u> 002312 TC704721100003240P

				Schedule II	
				Min	Max
NABL Group : Pollution & Env	ironment Wastes (Liquid/Slu	ry/Sludge/Solid/S	Semi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Env DISCIPLINE: CHEMICAL	ironment Wastes (Liquid/Slu	ry/Sludge/Solid/S	Semi-Solid)		
A2-Barium	USEPA 1311 & 200.7	0.38	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	0.13	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.10	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-7047

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002312.001			JOE No ULR No :	KE21 <del>.</del> 002312 TC704721100003240F	
BL Accredited Tests	Report Control No :	KER0000180143			
Analysis	Method	Result	Unit	Requir Scheo	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.				
Report No : KE21-002312.001			JOE No ULR No :			
n-Accredited tests	Report Control No	: KER0000180143				
Analysis	Method	Result			irement/Limit edule II	
				Min	Max	
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0	
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0	
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50	

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



**Report No** 

: KE21-002312.002

# Test Report



Print Date : 24/11/2021

KE21:-002312

JOE No

				ULR No :	TC704721	100003241P
		Report Control No :	KER000018014	3		
Sample Described by C	Customer as : WASTES	SAMPLE				
Client Name	: BHUSHAN POWER AND	STEEL LIMITED				
Client Address	: Vill- Thelkoloi Post- Lapan	iga				
	: Tehshil- Rengali					
Postal Code	<u>:</u> 768232					
State	: Odisha					
Country	: INDIA					
Sample Type	: WASTE SAMPLE					
Received	: 06/11/2021					
Sample Qty. Recd.	1kg approx					
Sampling Date	: 01/11/2021					
Sampling Location	: BOTTOM ASH (130X3) U	NIT 2 BOILER 2				
Test Start/End Date	: 06/11/2021 - 19/11/2021					
NABL Accredited Tests	, ,					
Analysis	Metho	od	Result	Unit	Requirement/Limi	
					Sche	dule II
					Min	Max
NABL Group :	Pollution & Environment	Wastes (Liquid/Slu	rry/Sludge/Solid/S	Semi-Solid)		
A19-2,4-Dinitrotolu	uene USEP/ &8270	A1311+ 3510C + 8041A D	<0.01	mg/L	-	0.13
A32-Methylethylke	tone USEP	A 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEP	A 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEP	A 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group :	Pollution & Environment	Wastes (Liquid/Slu	rry/Sludge/Solid/S	Semi-Solid)		
DISCIPLINE:	CHEMICAL					
A2-Barium		A 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium		A 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and	/or Chromium(III) USEP/	A 1311 & 200.7	<0.05	mg/L	-	5.0
compounds		A 4044 8 000 7	-0.05			5.0
A5-Lead		A 1311 & 200.7	< 0.05	mg/L	-	5.0
A1-Arsenic		A 1311 & 200.7	< 0.05	mg/L	-	5.0
A7-Mercury		A 1311 & 200.7	< 0.05	mg/L	-	0.20
A8-Selenium		A 1311 & 200.7	0.06	mg/L	-	1.0
A9-Silver		A 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroet		A 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A18-2,4,6-Trichlor	ophenol USEP/	A1311+ 3510C + 8041A	<0.05	mg/L	-	2.0

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834

Regd & Corp. Off : SGS House, 4B, A.S. Marg, Vikhroli (West), Mumbai-400083. Tel : (022) 25798421 to 28 www.sgs.com

&8270D





10-704

Print Date

: 24/11/2021

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Banart Cantral Na			10/04/21	100003241F
Report Control No :	KER0000180143			
Method	Result	Unit	•	ement/Limit Iule II
			Min	Мах
USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
	USEPA 1311+5030C & 8260B USEPA 1311+3510C & 8081A USEPA 1311+5030C & 8260B USEPA 1311+3510C & 8081A USEPA 1311+3510C & 8081A	USEPA 1311+5030C & 8260B         <0.01           USEPA 1311+5030C & 8260B         <0.01	USEPA 1311+5030C & 8260B       <0.01	Min       Min         USEPA 1311+5030C & 8260B       <0.01

### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.		Init Date	. 2000
Report No : KE21-002312.002			JOE No ULR No :	KE21 <del>.</del> 0023 TC704721	312 100003241P
	Report Control No	: KER0000180143			
on-Accredited tests					
Analysis	Method	Result	Unit	nit Requirement Schedule II	
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

**Print Date** 

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : KE	21-002312.003	JOE No ULR No :	KE21 <u>-</u> 002312 TC704721100003242P
	Report Control No : KER0000	)180143	
Sample Described by C			
Client Name	: BHUSHAN POWER AND STEEL LIMITED		
Client Address	: Vill- Thelkoloi Post- Lapanga		
	· Tehshil- Rengali		
Postal Code	768232		
State	Odisha		
Country	· INDIA		
Sample Type	· WASTE SAMPLE		
Received	: 06/11/2021		
Sample Qty. Recd.	1kg approx		
Sampling Date	· 01/11/2021		
Sampling Location	: WHRB DUST DRI 9		
Sampling Method	: SO IN MUL TE 176		
Test Start/End Date	: 06/11/2021 - 19/11/2021		
NABL Accredited Tests			
Analysis	Method Res	ult Unit	Requirement/Limit

		Sched		lule II		
					Min	Max
NABL Group : Pol	lution & Environment	Wastes (Liquid/Slu	rry/Sludge/Solid/S	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA13 &8270D	311+ 3510C + 8041A	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1	311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1	311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1	311+5030C & 8260B	<0.01	mg/L	-	2.0
INABE OFOUP .	lution & Environment EMICAL	Wastes (Liquid/Slu	rry/Sludge/Solid/S	emi-Solid)		
A2-Barium	USEPA 1	311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1	311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chi compounds	romium(III) USEPA 1	311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1	311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1	311 & 200.7	0.43	mg/L	-	5.0
A7-Mercury	USEPA 1	311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1	311 & 200.7	0.06	mg/L	-	1.0
A9-Silver	USEPA 1	311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1	311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

10.0

Report No : KE21-002312.003			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	312 100003242F
BL Accredited Tests	Report Control No	: KER0000180143			
Analysis	Method	Result	Unit	•	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2

< 0.0100

mg/L

### Page 2 of 3

document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at This http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

A41-2,4-Dichlorophenoxyacetic acid

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834 SGS India Pvt. Ltd.

USEPA 1311+5030C & 8260B



	SAMPLE DRAWN BY	' SGS INDIA PVT. LTD.				
Report No : KE21-002312.003			JOE No ULR No :	KE21-0023 TC704721	312 100003242P	
on-Accredited tests	Report Control No	: KER0000180143				
Analysis	Method	Result	•		uirement/Limit nedule II	
				Min	Max	
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0	
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0	
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50	

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : <sup>k</sup>	KE21-002312.004	JOE No ULR No :	KE21 <del>.</del> 002312 TC704721100003243P
	Report Control No : KER0000180143		
Sample Described by	Customer as : WASTE SAMPLE		
Client Name	: BHUSHAN POWER AND STEEL LIMITED		
Client Address	· Vill- Thelkoloi Post- Lapanga		
	Tehshil- Rengali		
Postal Code	. 768232		
State	: Odisha		
Country	· INDIA		
Sample Type	· WASTE SAMPLE		
Received	: 06/11/2021		
Sample Qty. Recd.	1kg approx		
Sampling Date	01/11/2021		
Sampling Location	CHAR ASH DRI 9 & 10		
Sampling Method	SO IN MUL TE 176		
Test Start/End Date	: 06/11/2021 - 19/11/2021		

## NABL Accredited Tests

Analysis	Method Result	Result	Unit	Requirement/Limit Schedule II	
				Min	Мах
IABL Group : Pollution & Env	ironment Wastes (Liquid/Slu	rry/Sludge/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid/Solid	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Env DISCIPLINE: CHEMICAL	ironment Wastes (Liquid/Slu	rry/Sludge/Solid/So	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	0.06	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	< 0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-7047

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002312.004			JOE No ULR No :	KE21 <u>-</u> 002312 TC704721100003243F	
BL Accredited Tests	Report Control No :	KER0000180143			
Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.			
<b>Report No</b> : KE21-002312.004			JOE No ULR No :	KE21-002312 TC70472110000324	
Non-Accredited tests	Report Control No	: KER0000180143			
Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

## SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : K	E21-002312.005		JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	312 100003244P
	Report Control N	o : KER0000180143	3		
Sample Described by C	Customer as : WASTE SAMPLE				
Client Name	: BHUSHAN POWER AND STEEL LIMITED	1			
Client Address	· Vill- Thelkoloi Post- Lapanga				
	: Tehshil- Rengali				
Postal Code	· 768232				
State	· Odisha				
Country	INDIA				
Sample Type	: WASTE SAMPLE				
Received	: 06/11/2021				
Sample Qty. Recd.	1kg approx				
Sampling Date	01/11/2021				
Sampling Location	KILN ACCRETION DRI 10				
Sampling Method	SO IN MUL TE 176				
Test Start/End Date	06/11/2021 - 19/11/2021				
NABL Accredited Tests	;				
Analysis	Method	Result	Unit	•	ement/Limit
				Scheo	lule II
				Min	Мах
NABL Group :	Pollution & Environment Wastes (I	Liquid/Slurry/Sludge/Solid/S	emi-Solid)		
A19-2,4-Dinitrotol	uene USEPA1311+ 3510C + 80 &8270D	041A <0.01	mg/L	-	0.13
A32-Methylethylke	etone USEPA 1311+5030C & 82	260B <0.01	mg/L	-	200.0
1					

A32-Methylethylketone	&8270D USEPA 1311+5030	C & 8260B <0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030		mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030		mg/L	-	2.0
NABL Group : Pollution & Env	ironment Wa	astes (Liquid/Slurry/Sludge/So	olid/Semi-Solid)		
DISCIPLINE: CHEMICAL					
A2-Barium	USEPA 1311 & 200	0.7 0.81	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200	0.7 <0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III)	USEPA 1311 & 200	0.7 <0.05	mg/L	-	5.0
compounds					
A5-Lead	USEPA 1311 & 200	0.7 <0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200	0.7 <0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200	0.7 <0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200	0.7 <0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200	0.7 <0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030	C & 8260B <0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-7047

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002312.005			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	312 100003244F
L Accredited Tests	Report Control No :	KER0000180143			
Analysis	Method	Result	Unit	•	ement/Limit dule II
				Min	Max
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.			
<b>Report No</b> : KE21-002312.005			JOE No ULR No :	KE21 <u>-</u> 002312 TC70472110000324	
Non-Accredited tests	Report Control No	: KER0000180143			
Analysis	Method	Result	Unit	Requir Sched	ement/Limit dule II
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

## SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : KE	21-002312.006		JOE No ULR No :	KE21 <u>-</u> 002312 TC704721100003245P
	Report Control No	: KER0000180143	,	
Sample Described by Co	ustomer as : WASTE SAMPLE			
Client Name	: BHUSHAN POWER AND STEEL LIMITED			
Client Address	· Vill- Thelkoloi Post- Lapanga			
	· Tehshil- Rengali			
Postal Code	: 768232			
State	: Odisha			
Country	: INDIA			
Sample Type	: WASTE SAMPLE			
Received	: 06/11/2021			
Sample Qty. Recd.	1kg approx			
Sampling Date	01/11/2021			
Sampling Location	GRANULATED SLAG, BLAST FURNACE			
Sampling Method	SO IN MUL TE 176			
Test Start/End Date	06/11/2021 - 19/11/2021			
NABL Accredited Tests				
Analysis	Method	Result	Unit	Requirement/Limit Schedule II

				Conce	
				Min	Max
IABL Group : Pollution & Env	ironment Wastes (Liquid/Slu	rry/Sludge/Solid/S	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Env DISCIPLINE: CHEMICAL	ironment Wastes (Liquid/Slu	rry/Sludge/Solid/S	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	0.34	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	_	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



A17-2,4,5-Trichlorophenol

A41-2,4-Dichlorophenoxyacetic acid

A39-Vinylchloride

# **Test Report**



Print Date : 24/11/2021

400

0.2

10.0

	SAMPLE DRAWN BY S	GS INDIA PVT. LTD.			
Report No : KE21-002312.006			JOE No ULR No :	KE21 <del>.</del> 0023 TC704721	312 100003245P
	Report Control No	: KER0000180143			
3L Accredited Tests					
Analysis	Method	Result	Unit	Requir Scheo	ement/Limit dule II
				Min	Max
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100

<0.05

<0.01

< 0.0100

mg/L

mg/L

mg/L

### Page 2 of 3

document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at This http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834 SGS India Pvt. Ltd.

USEPA1311+ 3510C + 8041A

USEPA 1311+5030C & 8260B

USEPA 1311+5030C & 8260B

&8270D



Report No : KE21-002312.006		KED0000400440	JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	312 100003245P
-Accredited tests	Report Control No	: KER0000180143			
Analysis	Method	Result	Unit	Requir Scheo	ement/Limit dule II
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L		0.50

\_\_\_\_\_

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

## SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Analysis	Method	Result	Unit	Requirement/Limit Schedule II
NABL Accredited Tests				
Test Start/End Date	: 06/11/2021 - 19/11/2021			
Sampling Method	: SO IN MUL TE 176			
Sampling Location	: DUST CATCHER BLAST FURNACE			
Sampling Date	: 01/11/2021			
Sample Qty. Recd.	: 1kg approx			
Received	: 06/11/2021			
Sample Type	: WASTE SAMPLE			
Country	: INDIA			
State	· Odisha			
Postal Code	· 768232			
	: Tehshil- Rengali			
Client Address	· Vill- Thelkoloi Post- Lapanga			
Client Name	: BHUSHAN POWER AND STEEL LIMITED			
Sample Described by C	· · · · · · · · · · · · · · · · · · ·	_ KER0000100140		
	Report Control No	· KER0000180143	ULR No :	TC704721100003246P
Report No : KE	21-002312.007		JOE No	KE21 <u>-</u> 002312

				Sched	ule li
				Min	Max
NABL Group : Pollution & E	nvironment Wastes (Liquid/Slu	rry/Sludge/Solid/S	Semi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & E DISCIPLINE: CHEMICAL	nvironment Wastes (Liquid/Slu	rry/Sludge/Solid/S	Semi-Solid)		
A2-Barium	USEPA 1311 & 200.7	0.18	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	1.34	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L		0.5

## Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



A39-Vinylchloride

A41-2,4-Dichlorophenoxyacetic acid

# Test Report



10-7047

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

0.2

10.0

Report No : KE21-002312.007			JOE No ULR No :	KE21 <u>-</u> 002312 TC704721100003246F	
Report Control No : KER0000180143					
Analysis	Method	Result	Unit	Requirement/Limit Schedule II	
				Min	Max
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	&8270D USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A	<0.05	mg/L	-	400

<0.01

< 0.0100

mg/L

mg/L

### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834

Regd & Corp. Off : SGS House, 4B, A.S. Marg, Vikhroli (West), Mumbai-400083. Tel : (022) 25798421 to 28 www.sgs.com

&8270D

USEPA 1311+5030C & 8260B

USEPA 1311+5030C & 8260B



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.			
Report No : KE21-002312.007			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	312 100003246P
	Report Control No	: KER0000180143			
Non-Accredited tests					
Analysis	Method	Result	Unit	Requir Scheo	ement/Limit Jule II
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

#### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

#### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : KE	21-002312.008	JOE No ULR No :	KE21 <u>-</u> 002312 TC704721100003247P
	Report Control No : KER0000180143		
Sample Described by Cu	-		
Client Name	: BHUSHAN POWER AND STEEL LIMITED		
Client Address	· Vill- Thelkoloi Post- Lapanga		
	: Tehshil- Rengali		
Postal Code	: 768232		
State	: Odisha		
Country	: INDIA		
Sample Type	: WASTE SAMPLE		
Received	<u>:</u> 06/11/2021		
Sample Qty. Recd.	: 1kg approx		
Sampling Date	: 01/11/2021		
Sampling Location	: DUST FROM GCP PLANT BF 1		
Sampling Method	: SO IN MUL TE 176		
Test Start/End Date	: 06/11/2021 - 19/11/2021		
NABL Accredited Tests			

Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Мах
NABL Group : Pollution & Env	ironment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Env DISCIPLINE: CHEMICAL	ironment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	0.54	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-7047

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002312.008			JOE No ULR No :	KE21 <u>-</u> 002312 TC704721100003247F	
L Accredited Tests	Report Control No :	KER0000180143			
Analysis	Method	Result	Unit	•	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



Report No : KE21-002312.008			JOE No ULR No :	KE21-0023 TC704721	312 100003247P
-Accredited tests	Report Control No	: KER0000180143			
Analysis	Method	Result	Unit	Requirement/Lir Schedule II	
				Min	Мах
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L		0.50

\_\_\_\_\_

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

#### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : Ki	E21-002312.009			JOE No ULR No :	KE21-0023 TC704721	312 100003248P
		Report Control No	: KER0000180143	3		
Sample Described by C		WASTE SAMPLE				
Client Name	: BHUSHAN POW	ER AND STEEL LIMITED				
Client Address	: Vill- Thelkoloi Po	st- Lapanga				
	: Tehshil- Rengali					
Postal Code	· 768232					
State	: Odisha					
Country	: INDIA					
Sample Type	: WASTE SAMPLE	Ē				
Received	: 06/11/2021					
Sample Qty. Recd.	: 1kg approx					
Sampling Date	: 01/11/2021					
Sampling Location	: GCP SLUDGE B	F-2				
Sampling Method	: SO IN MUL TE 1	76				
Test Start/End Date	: 06/11/2021 - 19/1	11/2021				
NABL Accredited Tests						
Analysis		Method	Result	Unit	Requir Scheo	ement/Limit dule II
					Min	Max
NABL Group :	Pollution & Enviro	onment Wastes (Liquid/S	Slurry/Sludge/Solid/S	emi-Solid)		
A19-2,4-Dinitrotolu	lene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylke	tone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine		USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene		USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : DISCIPLINE:	Pollution & Enviro	onment Wastes (Liquid/S	Slurry/Sludge/Solid/S	emi-Solid)		

NABL Group : Pollution & Env	ironment Wastes (Liquid/Slu	ırry/Sludge/Solid/S	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Env DISCIPLINE: CHEMICAL	ironment Wastes (Liquid/Slu	ırry/Sludge/Solid/S	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	0.06	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	2.81	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L		0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

	SAMPLE DRAWN BY S	GS INDIA PVT. LTD.			
Report No : KE21-002312.009			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	312 100003248P
	Report Control No	: KER0000180143			
BL Accredited Tests					
Analysis	Method	Result	Unit	Requir Scheo	ement/Limit Jule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

#### Page 2 of 3

document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at This http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834 SGS India Pvt. Ltd.



Report No : KE21-002312.009	Demont Constant No.	: KER0000180143	JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	312 100003248P
-Accredited tests	Report Control No	: KER0000180143			
Analysis	Method	Result	Unit	Requirement/Limit Schedule II	
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	_	0.50

\_\_\_\_\_

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

#### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No : K	E21-002312.010		JOE No ULR No :	KE21 <u>-</u> 002312 TC704721100003249P
	Report Control No	: KER0000180143		
Sample Described by C	-			
Client Name	: BHUSHAN POWER AND STEEL LIMITED			
Client Address	· Vill- Thelkoloi Post- Lapanga			
	: Tehshil- Rengali			
Postal Code	: 768232			
State	· Odisha			
Country	: INDIA			
Sample Type	: WASTE SAMPLE			
Received	: 06/11/2021			
Sample Qty. Recd.	: 1kg approx			
Sampling Date	: 01/11/2021			
Sampling Location	COLOUR COATING LINE WASTE CRM			
Sampling Method	SO IN MUL TE 176			
Test Start/End Date	06/11/2021 - 19/11/2021			
NABL Accredited Tests				
Analysis	Method	Result	Unit	Requirement/Limit
				Schedule II

				Min	Max
NABL Group : Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/S	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envi DISCIPLINE: CHEMICAL		, 0	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	0.36	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	0.23	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.21	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
	USEPA 1311+5030C & 8260B	<0.01	mg/L		0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-7047

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002312.010			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	312 100003249P
BL Accredited Tests	Report Control No :	KER000018014	3		
Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	' SGS INDIA PVT. LTD.			
Report No : KE21-002312.010			JOE No ULR No :	KE21-0023 TC704721	312 100003249P
on-Accredited tests	Report Control No	: KER0000180143			
Analysis	Method	Result	Unit	it Requirement/I Schedule II	
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

#### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

#### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

		JOE No ULR No :	KE21 <del>.</del> 002312 TC704721100003250P
ort Control No IPLE EEL LIMITED	: KER0000180143		

	Report Contro
Sample Described by C	ustomer as : WASTE SAMPLE
Client Name	: BHUSHAN POWER AND STEEL LIMIT
Client Address	: Vill- Thelkoloi Post- Lapanga
	: Tehshil- Rengali
Postal Code	<u>:</u> 768232
State	: Odisha
Country	: INDIA
Sample Type	: WASTE SAMPLE
Received	: 06/11/2021
Sample Qty. Recd.	: 1kg approx
Sampling Date	: 01/11/2021
Sampling Location	: ALKALI RESIDUE CRM
Sampling Method	: SO IN MUL TE 176
Test Start/End Date	. 06/11/2021 - 19/11/2021

: KE21-002312.011

### NABL Accredited Tests

**Report No** 

Analysis	Analysis Method Result	Result	Unit	Requirement/Limit Schedule II	
				Min	Max
NABL Group : Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envi DISCIPLINE: CHEMICAL	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III)	USEPA 1311 & 200.7	0.81	mg/L	-	5.0
compounds A5-Lead	USEPA 1311 & 200.7	0.57	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.07	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-7047

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002312.011			JOE No ULR No :	KE21 <del>.</del> 002312 TC704721100003250F	
L Accredited Tests	Report Control No :	KER000018014	3		
Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.				
Report No : KE21-002312.011			JOE No ULR No :	KE21-0023 TC704721	312 100003250P	
on-Accredited tests	Report Control No	: KER0000180143				
Analysis	Method	Result	Unit Require Sched		ement/Limit Iule II	
				Min	Max	
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0	
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0	
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50	

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

#### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

#### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No :	KE21-002312.013		JOE No ULR No :	KE21 <u>-</u> 002312 TC704721100003252P
	Report Control No	: KER0000180143		
Sample Described by	Customer as : WASTE SAMPLE			
Client Name	: BHUSHAN POWER AND STEEL LIMITED			
Client Address	· Vill- Thelkoloi Post- Lapanga			
	: Tehshil- Rengali			
Postal Code	768232			
State	· Odisha			
Country	· INDIA			
Sample Type	: WASTE SAMPLE			
Received	: 06/11/2021			
Sample Qty. Recd.	1kg approx			
Sampling Date	01/11/2021			
Sampling Location	ZINC DROSS CRM			
Sampling Method	SO IN MUL TE 176			
Test Start/End Date	: 06/11/2021 - 19/11/2021			
NABL Accredited Tes	ts			
Analysis	Method	Result	Unit	Requirement/Limit

Analysis	Method	Result	Unit	Schee	ement/Limit dule II
				Min	Max
NABL Group : Pollution &	Environment Wastes (Liquid/Slu	rry/Sludge/Solid/S	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & DISCIPLINE: CHEMICAL	Environment Wastes (Liquid/Slu	rry/Sludge/Solid/S	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	0.08	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(I compounds	II) USEPA 1311 & 200.7	0.06	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	0.07	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
			mg/L		0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-7047

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002312.013			JOE No ULR No :	KE21 <u>-</u> 002312 TC70472110000325	
BL Accredited Tests	Report Control No :	KER000018014	3		
Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.				
Report No : KE21-002312.013			JOE No ULR No :	KE21-0023 TC704721	312 100003252P	
on-Accredited tests	Report Control No	: KER0000180143				
Analysis	Method	Result			equirement/Limit Schedule II	
				Min	Мах	
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0	
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0	
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50	

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

#### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

#### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Report No :	KE21-002312.014	JOE No ULR No :	KE21-002312 TC704721100003253P
	Report Control No : KER0000180143	3	
Sample Described by	Customer as : WASTE SAMPLE		
Client Name	: BHUSHAN POWER AND STEEL LIMITED		
Client Address	: Vill- Thelkoloi Post- Lapanga		
	: Tehshil- Rengali		
Postal Code	: 768232		
State	: Odisha		
Country	: INDIA		
Sample Type	: WASTE SAMPLE		
Received	: 06/11/2021		
Sample Qty. Recd.	: 1kg approx		
Sampling Date	· 01/11/2021		
Sampling Location	: OIL & GREASE SKIMMING RESIDUE CRM		
Sampling Method	: SO IN MUL TE 176		
Test Start/End Date	: 06/11/2021 - 19/11/2021		

Analysis	alysis Method Result	Result	Unit	Requirement/Limit Schedule II	
				Min	Мах
NABL Group : Pollution & Envi	ronment Wastes (Liquid/Slui	ry/Sludge/Solid/Se	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envi DISCIPLINE: CHEMICAL	ronment Wastes (Liquid/Slu	ry/Sludge/Solid/Se	emi-Solid)		
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	0.08	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	0.33	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	0.06	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-7047

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002312.014			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	312 100003253P
BL Accredited Tests	Report Control No :	KER0000180143			
Analysis	Method	Result	Unit	Requir Scheo	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	SGS INDIA PVT. LTD.			
<b>Report No</b> : KE21-002312.014			JOE No ULR No :	KE21-0023 TC704721	312 100003253P
on-Accredited tests	Report Control No	: KER0000180143			
Analysis	Method	Result	Unit	Requir Sched	ement/Limit Iule II
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uanno

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

#### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





Print Date : 24/11/2021

### SAMPLE DRAWN BY SGS INDIA PVT. LTD.

1-002312.016		JOE No ULR No :	KE21 <u>-</u> 002312 TC704721100003255P
Report Control No	: KER0000180143		
•			
: BHUSHAN POWER AND STEEL LIMITED			
: Vill- Thelkoloi Post- Lapanga			
: Tehshil- Rengali			
: 768232			
: Odisha			
: INDIA			
: WASTE SAMPLE			
: 06/11/2021			
: 1kg approx			
: 01/11/2021			
: MAGNETIC SEPERATOR SLUDGE CRM			
: SO IN MUL TE 176			
: 06/11/2021 - 19/11/2021			
	stomer as       :       WASTE SAMPLE         :       BHUSHAN POWER AND STEEL LIMITED         :       Vill- Thelkoloi Post- Lapanga         :       Tehshil- Rengali         :       768232         :       Odisha         :       INDIA         :       WASTE SAMPLE         :       06/11/2021         :       1kg approx         :       01/11/2021         :       MAGNETIC SEPERATOR SLUDGE CRM         :       SO IN MUL TE 176	Report Control No       : KER0000180143         stomer as       : WASTE SAMPLE         : BHUSHAN POWER AND STEEL LIMITED         : Vill- Thelkoloi Post- Lapanga         : Tehshil- Rengali         : 768232         : Odisha         : INDIA         : WASTE SAMPLE         : 06/11/2021         : 1kg approx         : 01/11/2021         : MAGNETIC SEPERATOR SLUDGE CRM         : SO IN MUL TE 176	ULR No :         ULR No :         Report Control No       : KER0000180143         stomer as       : WASTE SAMPLE         :       BHUSHAN POWER AND STEEL LIMITED       :       Vill- Thelkoloi Post- Lapanga         :       Tehshil- Rengali       :       768232         :       Odisha       :       INDIA         :       WASTE SAMPLE       :       06/11/2021         :       1kg approx       :       01/11/2021         :       MAGNETIC SEPERATOR SLUDGE CRM       :       SO IN MUL TE 176

Analysis	Method	Result	Unit	•	ement/Limit dule II
				Min	Max
NABL Group : Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
A19-2,4-Dinitrotoluene	USEPA1311+ 3510C + 8041A &8270D	<0.01	mg/L	-	0.13
A32-Methylethylketone	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	200.0
A36-Pyridine	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	5.0
A34-Nitrobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	2.0
NABL Group : Pollution & Envi	ronment Wastes (Liquid/Slu	rry/Sludge/Solid/Se	emi-Solid)		
DISCIPLINE: CHEMICAL					
A2-Barium	USEPA 1311 & 200.7	<0.05	mg/L	-	100
A3-Cadmium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A4-Chromium and/or Chromium(III) compounds	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A5-Lead	USEPA 1311 & 200.7	0.07	mg/L	-	5.0
A1-Arsenic	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A7-Mercury	USEPA 1311 & 200.7	<0.05	mg/L	-	0.20
A8-Selenium	USEPA 1311 & 200.7	<0.05	mg/L	-	1.0
A9-Silver	USEPA 1311 & 200.7	<0.05	mg/L	-	5.0
A15-1,2-Dichloroethane	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5

Page 1 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834





10-7047

SAMPLE DRAWN BY SGS INDIA PVT. LTD.

Print Date : 24/11/2021

Report No : KE21-002312.016			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	312 100003255F
BL Accredited Tests	Report Control No :	KER000018014	3		
Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Мах
A18-2,4,6-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	2.0
A20-Benzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A25-Chlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	100
A24-Carbontetrachloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.50
A47-Chlordane	USEPA 1311+5030C & 8081A	<0.001	mg/L	-	0.03
A26-Chloroform	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	6.0
A14-1,1-Dichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.70
A16-1,4-Dichlorobenzene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	7.5
A27-Cresol (ortho + meta + para)	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	200
A30-Hexachlorobutadiene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A29-Hexachlorobenzene	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	.13
A57-Methoxychlor	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	10
A37-Tetrachloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.7
A38-Trichloroethylene	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.5
A51-Endrin	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.02
A53-Heptachlor & its Epoxide	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.008
A55-Lindane	USEPA 1311+3510C & 8081A	<0.001	mg/L	-	0.4
A35-Pentachlorophenol	USEPA 1311+5030C & 8260B	<0.05	mg/L	-	100
A17-2,4,5-Trichlorophenol	USEPA1311+ 3510C + 8041A &8270D	<0.05	mg/L	-	400
A39-Vinylchloride	USEPA 1311+5030C & 8260B	<0.01	mg/L	-	0.2
A41-2,4-Dichlorophenoxyacetic acid	USEPA 1311+5030C & 8260B	<0.0100	mg/L	-	10.0

#### Page 2 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834



	SAMPLE DRAWN BY	( SGS INDIA PVT. LTD.			
Report No : KE21-002312.016			JOE No ULR No :	KE21 <u>-</u> 0023 TC704721	312 100003255P
n-Accredited tests	Report Control No	: KER0000180143			
Analysis	Method	Result	Unit	Requir Schee	ement/Limit dule II
				Min	Max
2,4,5-TP (Silvex)	Qualitative	Absent	mg/L	-	1.0
A31-Hexachloroethane	Qualitative	Absent	mg/L	-	3.0
A61-Toxaphene	Qualitative	Absent	mg/L	-	0.50

Remark :

Per pro SGS India Private Ltd

SUMALLYA BHATTACHARJEE

Authorized Signatory

#### Per pro SGS India Private Ltd

Print Date

: 24/11/2021

 $\bigcirc$ Uamos

SATYA CHARAN MANNA Authorized Signatory \*\*\*\*End of Report\*\*\*\*

#### Page 3 of 3

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms\_and\_conditions.htm and Terms and Conditions for electronic documents www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested and such sample(s) are retained for 7 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from regulatory bodies are to be retained as specified. This document cannot be reproduced except in full, without prior written approval of the Company.

For any feedback or complaint please write to us at feedback.mlkolkata@sgs.com.

SGS India Pvt Ltd., CS Plot -512(p), Mouza, Hanspukuria, Diamond Harbour Rd. PO-Joka, South 24 Parganas. Kolkata - 700104. Phone:+916292153834

### Annexure-X

### ACTION PLAN FOR GREENBELT DEVELOPMENT

SI. No.	Details of plantation	Area
1	Total Project Area	1950.25 Acres
2	Area earmarked for greenbelt development	643.60 Acres
3	Greenbelt developed till 31.03.2021	181 Acres
4	Greenbelt proposed to develop by September 2023	300 Acres
5	Greenbelt proposed to develop by September 2024	162.6 Acres

Since many projects would be executed simultaneously greenbelt development to cover 33% of the plant area will be extended till September 2024.

However about 25% of total project area will be covered by greenbelt by September 2023.

	<b>`</b>		VITY -2021-22
SI. No.	Particulars		Total expenses
1	Community Developmen programs	t	₹ 51,18,235.20
2	Need based programs in area	DIZ	₹ 52,45,508.39
3	Bus Shelter		₹ 69,62,337.00
4	Public Amenities at Saml Jharsuguda	palpur &	₹ 1,01,17,247.21
5	Community Dispensary Renovation & Operationa	llisation	₹ 4,89,346.00
7	Mobile Health Unit		₹ 33,55,289.00
6	Covid Management Supp	ort	₹ 1,34,90,693.38
8	Drinking Water Supply		₹ 47,28,160.00
9	Waste Management		₹ 70,76,064.80
10	School & Anganwadi Transformation Mo School		₹ 1,42,75,570
11	Computer training lab		3 40 47 745 00
11	JSW Udaan Scholarship		₹ 13,47,715.00
12	Organising/ Sponsoring tournament/ players attire		₹ 1,27,516.80
13	Needs assessment study	'	₹ 14,17,770.00
14	Livelihood activities		₹ 4,00,162.00
15	Admin Expenses (5% of	Budget)	₹ 50,00,000.00
	Total		₹ 7,91,51,614.78
Operational in Jharsuguda Dis Programme Cor COMMUN	Search of Sambalpur & in 1 G.P. of trict st: ₹27,36,739/- TY DISPENSARY TY DISPENSARY COVID SUPP COVID SUPP COVID SUPP COVID SUPP	ENING CAMP	Katarbaga Govt. High School       -₹8.00 lakhs         New Rampela High School       -₹17.41 lakhs (direct)         RAIRAKHOL       Govt. High School, Kadaligarh       -₹7.00 lakhs         Govt. High School, Kadaligarh       -₹7.00 lakhs         Alasua Baba High School       -₹7.00 lakhs         MANESWAR       Budharaja Govt. High School       -₹7.00 lakhs         Total Program Cost: ₹44,41,000/-       -₹7.00 lakhs       -₹7.00 lakhs         SCHOOL & ANGANWADI TRANSFORMATION         Under the programme 6 Schools & 12 Anganwadi centers were renovated & revamped and handed over to the Block Administration.

### CSR ACTIVITY -2021-22

Annexure-XII

		Budget	Thomastic Upped
S.No	Thematic Head	(₹ inINR)	Thematic Head Total (₹)
1	Agrilively Hood	84,61,800	
2	Community Development	9,12,70,016	1,49,03,502
3	Education	5,74,20,000	1,62,32,400
4	Health & Nutrition	4,72,00,000	
5	Livelylihood	25,00,000	
6	Sports Promotion	15,00,000	50,000
7	Water	4,21,74,800	52,20,824
	Total	25,05,26,616	36406726

## Annexure-XIII

# PHYSICAL TARGET OF PUBLIC HEARING COMMITMENTS

No	Area		Schedule	
		FY 2022	FY 2023	FY 2024
1	Road Infrastructure	Construction of road in Derba (Repairing 3 km) and Thelkoloi service road (1km)	Construction of road in Sripura (2 km) and Khadiapalli (1km)	Construction of road in Dubhenchaper (3 km) and Lapanga(1km)
2	Rainwater harvesting	Construction of village pond at Lapanga	Construction of village pond at Dhubenchapper	Construction of village pond at Khariapalli
3	Healthcare facilities	Healthcare facility for local people in vicinity of the plant to address respiratory, skin, ENT issues etc. related to environmental pollution – Commencement of construction of building	Completion of construction	Procurement of equipment and engagement of medical staff (operational expenditure like staff salary and consumables to be borne by BPSL)
4	Drinking water	Allocation of funds towards government drinking water mission and the approved programmed would be communicated to MoEFCC through 6 monthly compliance report	-	-
5	Vocational training for women and youth	Tailoring, beautician and mushroom cultivation course - 200 women Vocational Training courses for local youth through local ITIs for following trade- Electrician, Welder Fitter Electrician Mason Moto winding	Tailoring, beautician and mushroom cultivation course - additional 200 women Electrician, welding, fitting and machining course for additional 100 local youth	Tailoring, beautician and mushroom cultivation course - additional 100 women Electrician, welding, fitting and machining course for additional 200 local youth

		Machining etc For about 100 local youth		
6	Education	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Thekoloi Hugh School and Dhubenchapar upper Primary school,Sripura High School & Bir Surendra Sai High School	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Thekoloi Upper Primary School,Lapanga High School,Saraswati Sishu Vidya Mandir & Sripura Upper Primary School	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Bisadhi Upper Primary School,Bir Surendra Sai Upper Primary School,Lapanga Upper Primary School & Sripura Upper Primary School
7	Electrification/Sol ar Street Lighting	Solar LED lights at Lapanga, Thelkoloi – 50 each village	Solar LED lights at Dhubenchapper, Derba - 50 each village	Solar LED lights at Khariapalli, Khinda – 50 each village

|--|

	Capex for Environment Management Plan (E	MP)
Environment	EMP	CAPEX
component		in Rs. Crore
Air quality	i)Installation of 4 nos. bag filter in SMS area with volume 1000000 Nm3/hr each for primary and secondary emission	71
	ii) ) Installation of bag filter in ZPF RMHS Section of capacity 550000 Nm3/hr	54
	iii) Bag filter of capacity 450000 Nm3/hr and 30000 Nm3/hr installation in Cement grinding unit iv) Cover Shed and silos for storage of fines	14.3
	LCP 4 - Process bag filter of 70000 Nm3/hr	1
	LCP 5 - Process bag filter of 120000 Nm3/hr	2.5
	Dedusting system common for LCP 4, 5, 6(4nos) Dedusting bagfilter-1.27800 Nm3/hr Dedusting bagfilter-2.58400 Nm3/hr Dedusting Bagfilter-3.66600 Nm3/hr	4.7
	Dedusting Bagfilter-4.7200 Nm3/hr	
	LCP 6 - Process bag filter of 120000 Nm3/hr	2.5
	v) Installation of ESP for waste gas (600000 Nm3/hr) of Sinter Plant and ESP for dedusting (2 x 300000 Nm3/hr)	110
	vi) Dedusting system for flux	15
	vii) ESP for 250 tph Boiler of capacity 105000 Nm <sup>3</sup> /hr	25
	viii) 4 Nos. tyre washing system at Plant Material Gate, SMS area, Sinter Plant RMPP area and Raw material handling yard	0.5
	ix) 4 Nos. road sweeper and vacuum cleaner	2
Water pollution	i) Installation of clarifier and RO in CETP with evaporator of capacity 500 m3/hr	25
	ii) Installation of RO in BOD plant of Coke Oven 2 (1.2 MTPA)	45
	iii) Installation of CRM ETP (1,200 m3/day) with equalization, neutralization, clarifier and facilities for treatment of chrome passivation waste water.	19
	iv) Augmentation of STP from 1900 m3/day to 2300	2
	m3/day v) Construction of 12 Nos. catchpits for storm water for proper treatment	2
Solid Waste	i) Installation of 150 tph + 300 tph slag crusher for utilization of SMS slag	5.5
	ii) Composting plant for plant MSW	0.2
	iii) Temporary storage area for hazardous waste with impermeable liner and covered shed at CRM. Coke Oven Plant and Rolling Mill area	1.5
Greenbelt	Development of 33% greenery inside the plant	30
development Rainwater harvesting	i) Groundwater recharging from rooftop rainwater	5
	ii) Pumping facility to transfer water from storm water catch pit to raw water reservoir	2
Socio-Economics	Implementation of activities for addressing issues raised during public hearing	50
Environmental Laboratory	Setting up of environmental laboratory	2
	Installation of OCEMS at all new project stacks, CAQMS and CEQMS	3
	Total	495.7

### Annexure-XV(A)

Summary of Workzone Noise Monitoring											
(Apr-22 to Sept-22)											
					Average	e Noise Level	in dB(A)	Stands			
Sl.No.	Name of the Unit	Location	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Standard as per factory Act 1950		
		Kiln main drive	76.50	72.50	76.90	71	73.25	74.00			
1	DRI -A	Lobe comp. House (Inside)	80.25	79.23	80.90	81.90	81.00	80.50			
		Lobe comp. House (Outside)	75.25	76.30	66.40	71	71.20	73.60			
		Kiln main drive	74.55	75.00	78.65	70.05	70.00	76.00			
2	DRI-B	Lobe comp. House (Inside)	78.95	77.00	78.65	76.5	75.60	73.60			
		Lobe comp. House (Outside)	73.2	72.50	81.00	64.25	73.25	74.30			
		Kiln main drive	70.20	71.30	61.50	73.60	68.20	63.0			
3	DRI-C	Lobe comp. House (Inside)	72.55	72.60	80.05	83.15	76.00	75.5			
		Lobe comp. House (Outside)	61.95	68.00	71.00	72.00	70.00	71.0			
		Kiln main drive	71.90	73.2	63.00	68.00	74.00	64.0			
4	DRI-D	Lobe comp. House (Inside)	79.80	71.0	75.00	73.50	74.00	73.8			
		Lobe comp. House (Outside)	72.05	73.1	74.30	71.30	75.00	68.0			
		Kiln main drive	73.35	72.5	71.00	69.50	72.00	66.0			
5	DRI-E	Lobe comp. House (Inside)	80.90	76.5	69.50	72.80	73.50	71.2			
		Lobe comp. House (Outside)	72.80	71.6	71.00	72.60	73.50	70.9	1		
		Kiln main drive	71.55	70.7	74.05	69.95	71.50	70.5			
6	DRI-F	Lobe comp. House (Inside)	79.80	70.5	81.55	78.15	69.50	71.6	1		
		Lobe comp. House (Outside)	70.10	71.1	63.75	64.35	68.30	66.5			
		Kiln main drive	72.10	76.7	70.50	73.00	75.6	76.2			
7	DRI-G	Lobe comp. House (Inside)	82.00	81.5	74.10	79.20	80.3	80.9	1		
		Lobe comp. House (Outside)	75.20	72.7	63.15	62.90	71.6	72.2	1		
		Kiln main drive	69.0	70.8	73.25	64.95	69.7	70.3	1		
8	DRI-H	Lobe comp. House (Inside)	75.6	67.4	76.50	69.90	66.5	67.0	1		
		Lobe comp. House (Outside)	69.9	77.7	64.25	65.00	76.80	78.5	1		
		Kiln main drive	73.10	82.2	70.35	67.60	83.50	84.7	1		
9	DRI-I	Lobe comp. House (Inside)	81.15	73.2	78.55	79.25	72.50	73.8	1		
		Lobe comp. House (Outside)	73.95	71.3	63.60	65.00	70.60	71.9	1		
		Kiln main drive	75.15	65.9	72.95	76.60	65.30	66.4	1		
10	DRI-J	Lobe comp. House (Inside)	79.40	71.7	74.05	74.50	78.00	78.1	1		
		Lobe comp. House (Outside)	75.90	67.8	67.15	62.40	71.15	73.1	1		

	DRI-K	Kiln main drive	72.25	60.7	74.15	70.20	72.05	69.4
11		Lobe comp. House (Inside)	81.15	68.9	79.65	79.75	74.05	72.1
		Lobe comp. House (Outside)	73.10	77.8	69.20	70.60	72.85	78.4
		Kiln main drive	77.30	72.5	71.65	73.75	72.25	79.3
12	DRI-L	Lobe comp. House (Inside)	75.40	73.8	74.15	76.30	71.05	74.1
		Lobe comp. House (Outside)	62.90	70.5	62.10	63.10	62.10	71.9
		Turbine-1	71.00	74.8	81.5	82.55	73.20	70.55
		Turbine-2	81.45	71.5	72.1	74.25	70.10	71.25
		Turbine-3	80.60	70.6	77.15	75.55	79.4	60.50
		Boiler-1	79.95	78.7	76.20	74.55	75.35	71.7
12	130 MW	Boiler-2	79.20	58.3	80.25	81.5	71.0	72.70
13	Power Plant	Boiler-3	81.15	70.6	77.95	81.05	72.25	74.60
		Boiler-4	81.95	71.4	80.8	75.85	73	73.40
		Boiler-5	81.05	73.5	78.7	75.7	74.15	72.80
		Boiler-6	78.05	72.3	75.10	76.15	76.35	71.7
		Feed Pump Area	77.60	71.7	68.5	66.10	73.35	62.70
	100 MW Power Plant	Turbine Area (40 MW)	79.55	70.4	69.55	76.80	70.5	73.80
14		Turbine Area (60 MW)	80.1	61.5	71.1	79	72.2	70.70
14		Feed Pump Area	76.80	72.6	71.80	72.80	64.10	70.5
		Boiler Area	81.05	69.5	79	75.6	79.8	66.50
	Blast Furnace-I	Cast House	82.15	78	68.05	72.15	75.9	58.40
		Blower House Turbo (Blower- 2)	87.1	76.3	72.65	72.65	71.5	67.80
15		Blower House Motorized (Blower-3)	68.3	63.4	63.95	73.15	72.70	75.6
		Gas Cleaning Plant	87.1	71.8	62	62.15	73.4	70.30
		Stock House	76.7	66.5	70.1	62.90	74.5	72.40
		Cast House	87.10	61	66.65	71.0	76.8	68.30
		Blower House Turbo (Blower- 2)	83.20	60.4	70.50	75.40	73.90	73.4
16	Blast Furnace-II	Blower House Motorized (Blower-3)	64	67.2	71	75	70.8	74.20
		Gas Cleaning Plant	75.25	59.6	62.05	68.15	72.8	72.50
		Stock House	78.75	55.4	65.65	63.5	64.3	77.60
		Blower House	74.30	62.4	78.20	80.50	79.35	67.5
17	Sinter Plant	Flux Charging area	78.15	69.1	78.95	73.55	75.35	71.7
		Proportional Building	76.25	61.5	76.0	74.1	70.95	67.80
10		Battery Area	77.4	66.9	75.6	79.05	72.25	60.70
18	Coke Oven-1	Coke Cutting & Screening Building	77.9	59.7	76.9	80.15	73	68.90

		Battery Area	77.5	65.2	75.15	74.50	74.15	77.8
19	Coke Oven-2	By-Product (Exhauster Area)	77.70	70.2	73.95	73.1	76.35	72.50
		Truck Tippling	66.05	71.6	68.825	67.85	73.35	73.80
		Stacking	72.95	63.90	68.425	72.05	70.5	70.50
20	RMPP - I	Coal Crushing Screening	67.2	72.60	69.875	67.95	72.20	74.8
		Ore Crushing & Screening	62.05	62.40	62.225	70.65	64.1	63.20
		Stacking & Reclaming -3	72.75	66.70	69.725	72.75	78.9	73.70
21	RMPP - II	Stacking & Reclaming -4	70.75	71.70	71.225	68.6	74.8	78.80
		Stacking & Reclaming -5	66.6	75.50	71.025	71.45	70.40	68.7
		Infron of Office	61.85	65.80	63.825	56.2	71.8	71.10
22	RMPP-III	Coal reclaiming area	73.4	74.50	73.95	69.75	72.6	67.15
		Belt press crushing area	75.75	71.70	73.725	61.6	73.8	59.55
22		Infront of office	61.4	76.70	69.025	55.90	75.90	68.4
23	Coal Washery -I	Near Silo	61.35	71.50	66.425	63.45	72.80	76.70
24		Infront of office	60.9	61.30	61.1	62.00	70.20	71.40
24	Coal Washery -II	Near Silo	70.45	65.60	68.025	68.05	71.60	73.10
	Lime Plant	Blower House	90.0	69.50	79.75	87.65	63.90	69.4
25		Kiln Area	74.35	74.60	74.475	79	73.9	74.10
		Lime Sizing Area	84.45	64.30	74.375	86.25	71.5	82.00
		Mill Area ( Addittive Mixing)	84.15	73.50	78.825	84.15	71.8	73.10
		Balling Disc Area	74.2	70.40	72.275	75.15	66.70	78.2
		Indurating machine Area	80.15	75.60	77.875	80.2	74.5	68.10
26		Screening Area	64.1	71.50	67.8	65.85	70.4	79.70
26	Pellete Plant	Updraught drying fan Area	66.25	66.20	66.225	69.5	71.6	72.60
		Wind Box Recuperation fan Area	70.90	61.70	66.3	72.85	73.70	72.9
		Cooling Air fan Area	67.05	74.70	70.875	67.55	71.5	67.60
		Dedusting ID fan Area	69.05	72.6	70.825	71.9	70.8	75.60
		Air Filtration Area	79.05	76.8	77.925	79	63.6	71.50
		Air Compressor Area	81.60	82.2	82.575	83.50	76.50	72.4
27	Owner Plant	Cooling Water System Area	79.15	78.9	79.025	75.85	71.9	74.80
27	Oxygen Plant	Air Purification Area	74.00	74.8	74.4	73.1	76.775	72.60
		Air Separation Area	73.65	70.4	72.025	76.25	72.05	71.20
		Distribution Area	76.80	71.8	74.3	77.20	72.35	64.7
		EAF - 1 Area	81.8	72.6	77.2	72.25	67.15	77.60
		EAF-2 Area	79.75	73.8	76.775	71.5	75.05	71.30
		EAF-3 Area	81.4	75.9	78.65	73.05	70.95	76.78

28	SMS - I	EAF-4 Area	74.5	72.8	73.65	72.05	72.00	72.1
		LAF 1& 2 Area	73.35	70.20	71.775	72.60	74.25	72.4
		LAF 3 & 4 Area	76.35	71.60	73.975	72.15	72.05	67.2
		Near Office	74.05	63.90	68.975	61.45	71.00	75.1
		EAF Area	79.90	72.60	79.9	78.60	64.15	71.0
		LRF Area	73.90	62.40	73.9	74.65	77.05	72.0
29	SMS - II	VD Area	70.75	66.70	70.75	71.60	71.60	74.3
29	51415 - 11	Caster Area	75.35	71.70	75.35	74.70	72.05	72.1
		Near Office	67.35	75.50	67.35	62.10	66.85	71.0
		Near Laboratory	67.95	65.80	67.95	68.70	62.25	64.2
		60MW+40MW (In side)	78.20	74.50	78.75	73.75	75.25	77.1
		CPP 3x130 MW UNIT 1 & 2 (inside)	80.65	71.70	80.65	78.15	73.15	71.6
	Air Compressor Station	CPP 3x130 MW UNIT -3 (inside)	83.55	76.70	83.55	77.70	77.15	79.8
	Station	CSP (INS)	84.20	80.10	83.1	78.00	79.00	75.9
		Blast Furnace (in side)	81.60	71.70	79.3	82.20	79.35	71.5
18		Pillet Plant (in side)	75.9	71.40	83.5	79.0	75.4	72.7
19	CSP	Down Coiler	73.7	63.40	74.1	78.4	71.0	73.4
19	0.51	Mill Strand	77.65	74.50	72.6	73.10	72.25	74.50
		Compressor House (IS)	80.35	72.70	73.5	76.60	73.00	76.80
20		Mill No-2	81.2	71.40	72.5	74.50	74.15	73.90
20	CRM	Near Corrugation Machine	80.85	73.80	66.3	62.40	76.35	70.80
		Near Chromating unit	80.2	72.70	62.3	70.20	73.35	72.80
21	WRM	Near Combination Air fan	69.25	69.3	72.5	65.4	70.5	64.30
<u>~ 1</u>		Compressor House (is)	73.15	74.1	71	72.1	72.2	73.1

### <u>Annexure-XV (B)</u>

Summary of Ambient Noise Monitoring (April'22 toSept'22)										
Monitoring Location										
	North Ea Bound Near Tov	dary	North W Bour Near Ma	dary	South West Side Boundary Near ETP		South East Side Boundary Near Railway Gate			
Month/Stan	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time		
dard	75 dB (A) Leq	70 dB (A) Leq	75 dB (A) Leq	70 dB (A) Leq	75 dB (A) Leq	70 dB (A) Leq	75 dB (A) Leq	70 dB (A) Leq		
Apr-22	71.0	65.3	67.7	66.3	65.2	63.2	65.1	60.5		
May-22	63.2	61.2	64.5	65.2	60.3	63.5	61.3	62.3		
Jun-22	62.5	63.2	63.7	59.6	60.3	61.2	63.2	60.9		
Jul-22	58.5	58.1	63.2	61.1	59.2	58.3	60.8	59.9		
Aug-22	60.3	59.3	62.3	60.5	59.2	58.6	64.5	60.2		
Sep-22	61.2	58.6	62.8	57.6	63.2	60.5	65.1	59.9		

Bhushan Power & Steel Ltd. Vill. : Theikoloi, P.O.: Lapanga-768212 Teh. : Rengali, Dist-Sambalpur (Odishi) INDIA T +91 (0)663 6636000 T +91 (0)663 2535203 / 216 T +91 (0)663 2562026 - 32 F +91 (0)663 2562011 / 039 orissa@bpsl.net, www.bpsl.net CIN : U27100DL1999PLC108350



24<sup>th</sup> December, 2016

The Sarpanch Khinda Grampanchayat Sambalpur Odisha

Subject: Information regarding accordance of Environmental Clearances

Dear Sir.

Inviting your kind reference on the above mentioned subject

We would like to inform you that Ministry of Environment Forest & Climate Change ,Government of India, New Delhi has issued the Environmental clearance to our proposal for expansion existing Steel plant (Crude steel ) capacity from 3.0 MTPA to 5.5 MTPA along with CPP from 560 MW to 710 MW vide its letter no:J-11011/40/2009-IA-II(I) dated 6<sup>th</sup> December 2016.

It is requested to kindly put up a copy of the letter in the display board of your office for information to general public

Thanking You,

Yours Faithfully.

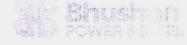
For, M/s Bhushan Power & Steel Ltd

RANJIT KUMAR GHOSH General Manager

Encl: Copy of EC letter as stated above

Khinda Gram Panchavai

New Defb. 1 #th Floor, Tolstoy House, 15-17 Tolstoy Marg, Connaught Place, New Defbi - 110 001 [T +91 (0) 11 30451000 [F +91 (0) 11 2371273. ] Kolsata, D.C. Millaneium Centre, 6th Floor, 46-D, Jawahar Lal Nehru Road, Kolkata - 71 [T +91 (0) 33 30512299 [F +91 (0) 33 30512235 INDIA Chandidiam : 3 Industrial Area, Phose - 1, Chandigath - 150 002 [T +91 (0) 172 3911705 [F +91 (0) 172 3911704 INDIA il in tou sin agested i Uppedate nam i iske T =9, (clood 2535205) 216 T +91 (0)665 2552026 - 32 F +91 (0)653 2562011 / 039 onssel/operioal, www.bpd.net CIN : U27100DL1999PLC108350



24<sup>th</sup> December, 2016

The Sarpanch Lapanga Grampanchayat Sambalpur Odisha

Subject: Information regarding accordance of Environmental Clearances

Dear Sir.

Inviting your kind reference on the above mentioned subject,

We would like to inform you that Ministry of Environment Forest & Climate Change, Government of India. New Delhi has issued the Environmental clearances to our proposal for expansion existing Steel plant (Crude Steel) capacity from 3.0 MTPA to 5.5 MTPA along with CPP from 560 MW to 710 MW vide its letter no: J-11011/40/2009-IA-II (I) dated 6<sup>th</sup> December 2016.

It is requested to kindly put up a copy of the letter in the display board of your office for information to general public

Thanking You.

Yours Faithfully,

For, M/s Bhushan Power & Steel Ltd

RANJUT KUMAR GHOSH General Manager

Encl: Copy of EC letter as stated above

Rabi Couptain Sarpanch

Sarpanch Sarpanga Gram Panchayat Sarpanch Lapanga Panchayat,