



Ref: 2175 /HPSL/U2/CP/22-23/2175

Dated- 24.11.2022

To,
The Scientist,
Ministry of Environment, Forest & Climate Change,
Integrated Regional Office, Aranya Bhawan,
North Block, Sector-19, Naya Raipur,
Atal Nagar, Chhattisgarh - 492002

Sub: Submission of Half Yearly Environment Clearance Compliance Report of the conditions stipulated in Environmental clearance for the period of April 2022 to September 2022

Ref: Environmental Clearance F.No. J-11011/836/2008/IA.II(I) Dated 11.02.2009

Respected Sir,

With reference to above subject, we are enclosing herewith Half Yearly Environment Clearance Compliance Report of the conditions stipulated in Environmental clearance accorded by MOEF vide F.No.J-11011/836/2008/IA.II(I) Dated 11.02.2009 for the period of April 2022 to September 2022 in respect of Hira Power and Steels Ltd. Unit-II (Ferro Division), Urla Industrial Complex, Raipur (C.G.)

We hope you will find the above Half Yearly Environment Clearance Compliance Report up to your satisfaction. Your valuable guidance further in this regard shall be highly appreciated.

Kindly acknowledge the receipt of the same.

Yours faithfully,

For, HIRA POWER AND STEELS LIMITED, UNIT- II
(Ferro Division)

Authorized Signatory

Encl: As Above

Hira Power & Steels Limited

An ISO 9001:2015 certified company
CIN : U24117CT1984PLC002512

Registered Office & Works : Khasra No. 511/1, 512/2, Urla Industrial Complex, Raipur - 492003, Chhattisgarh, India

P : +91 771 4082500, 4082600, **F :** +91 771 4082501, **E :** admin@hpslindia.com

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Copy to:

1. The Director, Zonal Office, Central Pollution Control Board, 4th Floor, Sahkar Bhawan, North TT Nagar, Bhopal-462003.
2. The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhawan, North Block, Sector-19, Atal Nagar, Raipur (CG) – 492 002.
3. The Regional Officer, Regional Office, Chhattisgarh Environment Conservation Board Commercial Complex Chhattisgarh Housing Board Colony, Kabir Nagar, Raipur (CG) – 492 001.

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HALF YEARLY COMPLIANCE REPORT
OF
THE CONDITIONS STIPULATED IN
ENVIRONMENTAL CLEARANCE
FOR
THE PERIOD OF
APRIL 2022 – SEPTEMBER 2022

HIRA POWER & STEELS LTD.
UNIT-II (FERRO DIVISION)
Urla Industrial Complex, Raipur (C.G.) 492003

**HIRA POWER & STEELS**

Project : Hira Power and Steels Limited
 Urla Industrial Complex, Raipur, Chhattisgarh-492 003

Compliance report of the conditions stipulated in Environmental Clearance
 Half Yearly Compliance report for the period of April 2022 – September 2022

Environmental Clearance

Compliance status report of the conditions stipulated in Environmental Clearance accorded by MoEF vide letter F.No. J-11011/836/2008-IA II (I) Dated: 11th February 2019 for expansion of Ferro alloys plant [Unit- II, Si-Mn (9,000 TPA)/Fe-Mn (9,000 TPA)] total manufacturing capacity 18,000 MTPA at Khasra No. 513/1, 513/2, 513/3, 513/4, Urla Industrial Complex, Raipur, Chhattisgarh.

Sr. No.	A. Specific Conditions	Compliance Status	
i.	Continuous monitoring for all the stacks and sufficient air pollution control equipments viz. fume extraction system with bag filters, ID fan and stack of adequate height to submerged arc furnace and electrostatic precipitator to captive power plant shall be provided to control emissions below 50 mg/NM ³ as proposed.	Continuous emission monitoring facility have been installed to the common stack of 3.0 & 3.6 MVA submerged arc furnaces, stack attached to 6.0 MVA submerged arc furnace and to the common stack of 12MT/Heat CLU converter & Thermic plant.	
		Particulars	3.0 MVA submerged arc furnaces, 3.6 MVA submerged arc furnaces, 6.0 MVA submerged arc furnace, 12MT/Heat CLU converter, 600 MTPA Thermic Plant
		Pollution control Equipments	Offline pulse jet bag filter
		Air pollution control equipments are designed to achieve the given norms. Emission from all stacks is well within prescribed limit. Monthly monitoring report is being submitted regularly to CECB.	
ii.	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fume and dust extraction system with bag filters shall be provided at the material transfer and discharge points to control fugitive emissions. Further, specific measures like water sprinkling around the coal stockpiles and asphalting or concreting of the roads shall be done to control to reduce the dust generation and fugitive emissions during handling.	All the plant control measures have been taken to reduce fugitive emission. Please refer to Annexure-1 for Photographs and Annexure-2 for Fugitive Emission Report.	





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		FUGITIVE EMISSION REPORT				
		Sr. No.	Area	Unit	Parameter	Limit (MoEF & CC Notification)
		1	A&B Furnace	µg/m ³	1498	2000
		2	C&D Furnace	µg/m ³	1438	2000
		3	CLU Converter	µg/m ³	1568	2000
		4	Raw Material Yard	µg/m ³	1420	2000
		5	CHP Area	µg/m ³	1642	2000
iii.	Secondary fugitive emission 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 the CPCB shall be followed.	Is being complied with.				
iv.	Total requirement of the water from Chhattisgarh Ispat Bhumi Ltd. shall not exceed 30m ³ /day. All the cooling tower blow down and treated effluent shall be recycled/reused in the process, dust suppression and green belt development. Domestic waste water shall be treated in septic tank followed by soak pit and used in green belt development. No waste water shall be discharged outside the factor premises and zero discharge shall be adopted.	Agreed / is being complied with. "Zero" discharge has been adopted. No waste water is being discharged outside the factory premises.				
v.	Prior permission for the drawl of 30m ³ /day water from Chhattisgarh Ispat Bhumi Ltd. shall be obtained from the concerned department.	We have obtained prior permission for drawl of 100 KL/Day from Central Groundwater Authority (CGWA) which is Attached as Annexure-3 & 500 KL/Day water from Chhattisgarh State Industrial Development Corporation Limited. Attached as Annexure-4 .				





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Compliance report of the conditions stipulated in Environmental Clearance

vi.

All the Ferro Alloys 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. Otherwise, hazardous substance shall be recovered from the slag and the output waste and the disposed in secured landfill as per CPCB guidelines. All the granulated slag shall be provided to cement / brick manufacturers for bricks. No granulated slag shall be used for road construction and filling low lying areas. ETP sludge after drying shall be used as fertilizer for green belt development. Used oil shall be sold to recyclers / re-processors.

Is being complied with.

TCLP test report of all the slags is Attached as **Annexure 5**.

TCLP test shown that generated slag is non-hazardous in nature.

- Fe-Mn slag is used as raw material for Si-Mn production or sold to SiMn manufacturers.
- Si-Mn slag is used as aggregate for civil work & land filling.
- Used/spent oil is being used in manufacturing of copper pad, heating ladle & machinery lubrication.
- In case of excess quantity used oil will be sold to CECB/CPCB authorized recyclers only.

TCLP REPORT			
Sample.	Parameter	Limit	Result
Fe-Mn Slag	Iron as Fe	-	71.2
	Manganese as Mn	10.0	5.7
	Zinc as Zn	250	51.3
	Lead as Pb	5.0	1.2
	Cadmium as Cd	1.0	N.D.
	Chromium as Cr	5.0	N.D.
	Arsenic as AS	5.0	N.D.
	Mercury as Hg	0.2	N.D.
Sample.	Parameter	Limit	Result
Thermite Slag	Iron as Fe	-	78.1
	Manganese as Mn	10.0	6.2
	Zinc as Zn	250	30.7
	Lead as Pb	5.0	1.2
	Cadmium as Cd	1.0	N.D.
	Chromium	5.0	N.D.



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			as Cr		
			Arsenic as AS	5.0	N.D.
			Mercury as Hg	0.2	N.D.
		Sample.	Parameter	Limit	Result
		MOx Dust	Iron as Fe	-	70.0
			Manganese as Mn	10.0	6.9
			Zinc as Zn	250	78.2
			Lead as Pb	5.0	2.6
			Cadmium as Cd	1.0	N.D.
			Chromium as Cr	5.0	N.D.
			Arsenic as AS	5.0	N.D.
			Mercury as Hg	0.2	N.D.
		Sample.	Parameter	Limit	Result
		Bag Filter Dust	Iron as Fe	-	37.2
			Manganese as Mn	10.0	7.4
			Zinc as Zn	250	58.4
			Lead as Pb	5.0	2.8
			Cadmium as Cd	1.0	N.D.
			Chromium as Cr	5.0	N.D.
			Arsenic as AS	5.0	N.D.
			Mercury as Hg	0.2	N.D.
		Sample.	Parameter	Limit	Result
		AOD Slag	Iron as Fe	-	16.7
			Manganese as Mn	10.0	8.9





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			Zinc as Zn	250	61.2
			Lead as Pb	5.0	3.9
			Cadmium as Cd	1.0	N.D.
			Chromium as Cr	5.0	N.D.
			Arsenic as AS	5.0	N.D.
			Mercury as Hg	0.2	N.D.
		Sample.	Parameter	Limit	Result
		Fly Ash	Iron as Fe	-	51.4
			Manganese as Mn	10.0	4.2
			Zinc as Zn	250	78.1
			Lead as Pb	5.0	3.9
			Cadmium as Cd	1.0	N.D.
			Chromium as Cr	5.0	N.D.
			Arsenic as AS	5.0	N.D.
			Mercury as Hg	0.2	N.D.
vii.	Slag produced in Ferro Manganese (Fe-Mn) production shall be used in manufacture Silico Manganese (Si-Mn)	Is being complied with.			
viii.	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 its composition, end use of solid/hazardous waste should be submitted to the Ministry's Regional Office at Bhopal, CECB and CPCB.	Is being complied with. Solid waste utilization report is being submitted to the Ministry's Regional Office at Nagpur, CECB and CPCB and it is attached as Annexure-6 .			
ix.	As proposed Green belt shall be developed in at least 34% within and around the plant premises as per the CPCB guidelines in consultation with DFO.	33.28 % has been developed inside factory premises and Total of more than 40% of plantation is being developed including the outside plantation. Certified survey report by third party for Green Belt is Attached as Annexure-7 .			



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x.	All the recommendations made in the charter on Corporate Responsibility for Environment Protection (CREP) for the Ferro Alloys units shall be strictly implemented.	Complied.
xi.	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. The housing may be in the form of temporary structures to be removed after the completion of the projects.	Complied.
Sr. No.	A. General Conditions	Compliance Status
i.	The project authorities must strictly adhere to the stipulations made by the Chhattisgarh Environment Conservation Board (CECB) and the State Government.	Agreed & noted for compliance.
ii.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	Agreed & noted for compliance.
iii.	The gaseous emission from the various process units shall conform to the load/mass based standards notified by the Ministry on 19 th May, 1993 and standards for the relevant parameters keeping in view the nature of the industry and its size and location. 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 limits.	Complied.
iv.	Continuous stack monitoring facilities for all the major stacks and adequate air pollution control system shall be provided to keep emission levels below within permissible limits and reports submitted to the Ministry's Regional Office at Bhopal and CECB/CPCB once in a six month.	Continuous emission monitoring facility have been installed to the common stack of 3.0 & 3.6 MVA submerged arc furnaces, common stack attached to 2 x 5.5 MVA submerged arc furnace, stack attached to 6.0 MVA submerged arc furnace and to the common stack of 12MT/Head CLU converter & Thermic plant. Adequate air pollution control system have been provided to keep the emission level well



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within permissible limits and monitoring report is being submitted regularly to the Regional Office & Head Office of the CECB, Raipur.

Sr. No.	Monitoring Stack	Month	Measured Concentration (mg/Nm ³)
1	AB Furnace (3.0 & 3.6 MVA Submerged Arc Furnace)	April'22	34.8
2		May'22	32.6
3		June'22	30.2
4		July'22	32.2
5		Aug.'22	34.8
6		Sept.'22	36.2
Sr. No.	Monitoring Stack	Month	Measured Concentration (mg/Nm ³)
1	C Furnace (5.5 MVA Submerged Arc Furnace)	April'22	40.4
2		May'22	42.8
3		June'22	40.2
4		July'22	42.8
5		Aug.'22	40.8
6		Sept.'22	42.2
Sr. No.	Monitoring Stack	Month	Measured Concentration (mg/Nm ³)
1	D Furnace (5.5 MVA)	April'22	32.4
2		May'22	34.6





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		3	Submerged Arc Furnace)	June'22	32.8
		4		July'22	36.4
		5		Aug.'22	38.4
		6		Sept.'22	36.8
		Sr. No	Monitoring Stack	Month	Measured Concentration (mg/Nm ³)
		1	E Furnace (6.0 MVA Submerged Arc Furnace)	April'22	38.8
		2		May'22	36.0
		3		June'22	34.6
		4		July'22	38.4
		5		Aug.'22	34.6
		6		Sept.'22	36.2
		Sr. No	Monitoring Stack	Month	Measured Concentration (mg/Nm ³)
		1	CLU Converter (12 MT/Heat)	April'22	26.8
		2		May'22	28.2
		3		June'22	26.8
		4		July'22	24.6
		5		Aug.'22	22.8
		6		Sept.'22	24.6
		Sr.	Monitoring	Month	Measured





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			No	Stack		Concentration (mg/Nm³)	
			1	Captive Power Plant (20 MW)	April'22	36.8	
			2		May'22	38.6	
			3		June'22	36.0	
			4		July'22	42.4	
			5		Aug.'22	42.5	
			6		Sept.'22	40.8	
v.	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM, SO ² , and NO _x are anticipated in consultation with CECB. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhopal and the CECB/CPCB once in six month.	Is being complied with.					
		Data on ambient air quality and stack emission is being submitted regularly to the Regional Office of the Ministry and CECB/CPCB. Please refer to the Annexure-8 (Stack emission data) mentioned above and Annexure-9 (Ambient air quality data) mentioned below:-					
		Sr. No	Month	Near CHP Area			
				PM ₁₀ (µg/ m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/ m ³)	NO _x (µg/ m ³)
		1	April'22	86.4	42.8	20.4	32.4
		2	May'22	92.4	46.8	20.8	36.8
		3	June'22	90.6	42.0	18.8	34.2
		4	July'22	84.4	38.2	14.6	34.2
		5	Aug.'22	74.8	30.4	12.8	32.6
		6	Sept.'22	64.2	24.4	14.8	26.6
		Sr. No	Month	Beside Silo			
				PM ₁₀ (µg/ m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/ m ³)	NO _x (µg/ m ³)
		1	April'22	72.8	46.4	18.4	34.8
		2	May'22	84.8	48.2	16.4	30.2
		3	June'22	86.8	44.2	12.4	36.2
		4	July'22	78.2	40.5	10.6	30.8
		5	Aug.'22	70.8	32.8	8.6	28.4





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		6	Sept.'22	60.6	28.2	8.2	22.4
		Sr. No	Month	Solar Panel Area			
				PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)
		1	April'22	84.8	48.2	16.8	26.4
		2	May'22	88.2	52.8	12.8	34.2
		3	June'22	92.2	40.8	14.8	33.2
		4	July'22	82.8	34.6	12.8	36.2
		5	Aug.'22	68.8	28.6	14.4	22.8
		6	Sept.'22	58.4	26.2	10.8	26.2
		Sr. No	Month	Main Gate			
				PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)
		1	April'22	76.2	34.8	16.6	30.8
		2	May'22	80.6	32.8	18.4	32.8
		3	June'22	84.6	36.8	16.4	38.8
		4	July'22	74.5	30.2	16.6	34.4
		5	Aug.'22	60.4	24.8	10.8	26.4
		6	Sept.'22	62.8	30.2	12.4	30.8
vi.	Industrial waste water shall be properly collected treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	Is being complied with. Effluent Treatment Scheme is attached as Annexure-10 . The treated water from siltation tank is utilized for Dust suppression, Water Sprinkling & Ash Conditioning. Wastewater Analysis Report is attached as Annexure-11 .					
		Effluent Analysis Report (April 2022)					
		Sr. No	Location	Unit	Limit	Inlet Water	Outlet Water
		1	pH	-	5.5 to 9.0	9.22	7.67
		2	TSS	mg /L	100	68.0	12.6





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		3	COD	mg /L	250	79.3	40.8
		4	BOD	mg /L	30	16.4	6.8
		5	Oil & Grease	mg /L	10	1.9	N.D.
		Effluent Analysis Report (May 2022)					
		S . N o	Paramete r	Un it	Limit	Inlet Water	Outlet Water
		1	pH	-	5.5 to 9.0	8.97	8.55
		2	TSS	mg /L	100	48.0	18.0
		3	COD	mg /L	250	68.0	42.0
		4	BOD	mg /L	30	8.4	7.6
		5	Oil & Grease	mg /L	10	1.2	N.D.
		Effluent Analysis Report (June 2022)					
		S . N o	Paramete r	Un it	Limit	Inlet Water	Outlet Water
		1	pH	-	5.5 to 9.0	7.93	7.24
		2	TSS	mg /L	100	54.0	14.0
		3	COD	mg /L	250	74.0	34.0
		4	BOD	mg /L	30	6.8	3.4
		5	Oil & Grease	mg /L	10	1.4	N.D.
		Effluent Analysis Report (July 2022)					





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S. No	Parameter	Unit	Limit	Inlet Water	Outlet Water
1	pH	-	5.5 to 9.0	7.82	7.18
2	TSS	mg/L	100	68.0	20.0
3	COD	mg/L	250	86.0	24.0
4	BOD	mg/L	30	7.2	2.8
5	Oil & Grease	mg/L	10	1.2	N.D.
Effluent Analysis Report (Aug. 2022)					
S. No	Parameter	Unit	Limit	Inlet Water	Outlet Water
1	pH	-	5.5 to 9.0	7.64	7.34
2	TSS	mg/L	100	82.0	24.0
3	COD	mg/L	250	74.0	34.0
4	BOD	mg/L	30	8.4	3.6
5	Oil & Grease	mg/L	10	1.4	N.D.
Effluent Analysis Report (Sept. 2022)					
S. No	Parameter	Unit	Limit	Inlet Water	Outlet Water
1	pH	-	5.5 to 9.0	7.55	7.18
2	TSS	mg/L	100	62.0	22.0
3	COD	mg	250	54.0	22.0





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			/L					
	4	BOD	mg /L	30	16.2	6.4		
	5	Oil & Grease	mg /L	10	1.0	N.D.		
vii.	Is being complied with. Please refer Annexure-12 for Noise Monitoring Report.							
	Noise Monitoring Report- April 2022							
	S. No	Location	Unit	Limit		Result		
				DAY	NIGHT	DAY	NIGHT	
	1	Near CHP Area	Db (A)	75	70	64.8	48.8	
	2	Beside Silo	Db (A)			66.2	50.8	
	3	Solar Panel Area	Db (A)			61.2	52.8	
	4	Main Gate	Db (A)			64.2	56.5	
	Noise Monitoring Report – May 2022							
	S. No	Location	Unit	Limit		Result		
				DAY	NIGHT	DAY	NIGHT	
		1	Near CHP Area	Db (A)	75	70	68.2	46.6
		2	Beside Silo	Db (A)			62.9	52.4
		3	Solar Panel Area	Db (A)			60.1	54.2

The overall noise levels in and around the plant area shall be kept well within the standards (85dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (Night time).





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4	Main Gate	Db (A)			66.5	52.9
Noise Monitoring Report - June 2022						
S. No	Location	Unit	Limit		Result	
			DAY	NIGHT	DAY	NIGHT
1	Near CHP Area	Db (A)	75	70	68.6	54.6
2	Beside Silo	Db (A)			62.2	58.8
3	Solar Panel Area	Db (A)			64.8	50.2
4	Main Gate	Db (A)			60.5	56.8
Noise Monitoring Report - July 2022						
S. No	Location	Unit	Limit		Result	
			DAY	NIGHT	DAY	NIGHT
1	Near CHP Area	Db (A)	75	70	68.6	54.6
2	Beside Silo	Db (A)			62.2	58.8
3	Solar Panel Area	Db (A)			64.8	50.2
4	Main Gate	Db (A)			60.5	56.8
Noise Monitoring Report – Aug. 2022						
S. N	Location	Unit	Limit		Result	





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Urla Industrial Complex, Raipur, Chhattisgarh-492 003

Compliance report of the conditions stipulated in Environmental Clearance

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HIRA POWER & STEELS

Project :

Hira Power and Steels Limited

Urfa Industrial Complex, Raipur, Chhattisgarh-492 003

Compliance report of the conditions stipulated in Environmental Clearance

x.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP reports. 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.	Complying. Company has constructed cremation center, toilets and intensive plantation have been done in surrounding areas.								
xi.	The project authorities shall provide Rs. 15.00 Lakhs earmarked towards the capital cost and recurring cost per annum for environmental pollution control measure shall be judiciously used to implement the conditions stipulated by the Ministry of Environment & Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Ministry including its Regional Office at Bhopal. The fund so provided should not be diverted for any other purpose.	<p>Sufficient budget have been allocated towards capital cost & recurring cost per annum for environmental pollution control measures as per conditions stipulated by Ministry of Environment and Forests as well as the State Government.</p> <table> <tr> <th rowspan="2">Sr. No</th><th colspan="2">Environmental Pollution Control Measures</th></tr> <tr> <th>Facility</th><th>Capital Cost and Recurring Cost for period of April '22 Sept. '22 (Lakhs)</th></tr> <tr> <td>01.</td><td>3.0 MVA, 3.6 MVA & 6.0 MVA submerged arc furnace, 12MT/Heat CLU converter and 600 MTPA Thermic Plant</td><td>165.73</td></tr> </table>	Sr. No	Environmental Pollution Control Measures		Facility	Capital Cost and Recurring Cost for period of April '22 Sept. '22 (Lakhs)	01.	3.0 MVA, 3.6 MVA & 6.0 MVA submerged arc furnace, 12MT/Heat CLU converter and 600 MTPA Thermic Plant	165.73
Sr. No	Environmental Pollution Control Measures									
	Facility	Capital Cost and Recurring Cost for period of April '22 Sept. '22 (Lakhs)								
01.	3.0 MVA, 3.6 MVA & 6.0 MVA submerged arc furnace, 12MT/Heat CLU converter and 600 MTPA Thermic Plant	165.73								
xii.	The Regional Office of the Ministry at Bhopal/CPCB/CECB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Is being complied with. Please refer to our letter No. 2033 /HPSL /U2 / CPP/22-23/2033, dated 31.05.2022 for the period of October 2021 to March 2022. Attached as Annexure-14 .								





HIRA POWER & STEELS

Project

Hira Power and Steels Limited
Urla Industrial Complex, Raipur, Chhattisgarh-492 003

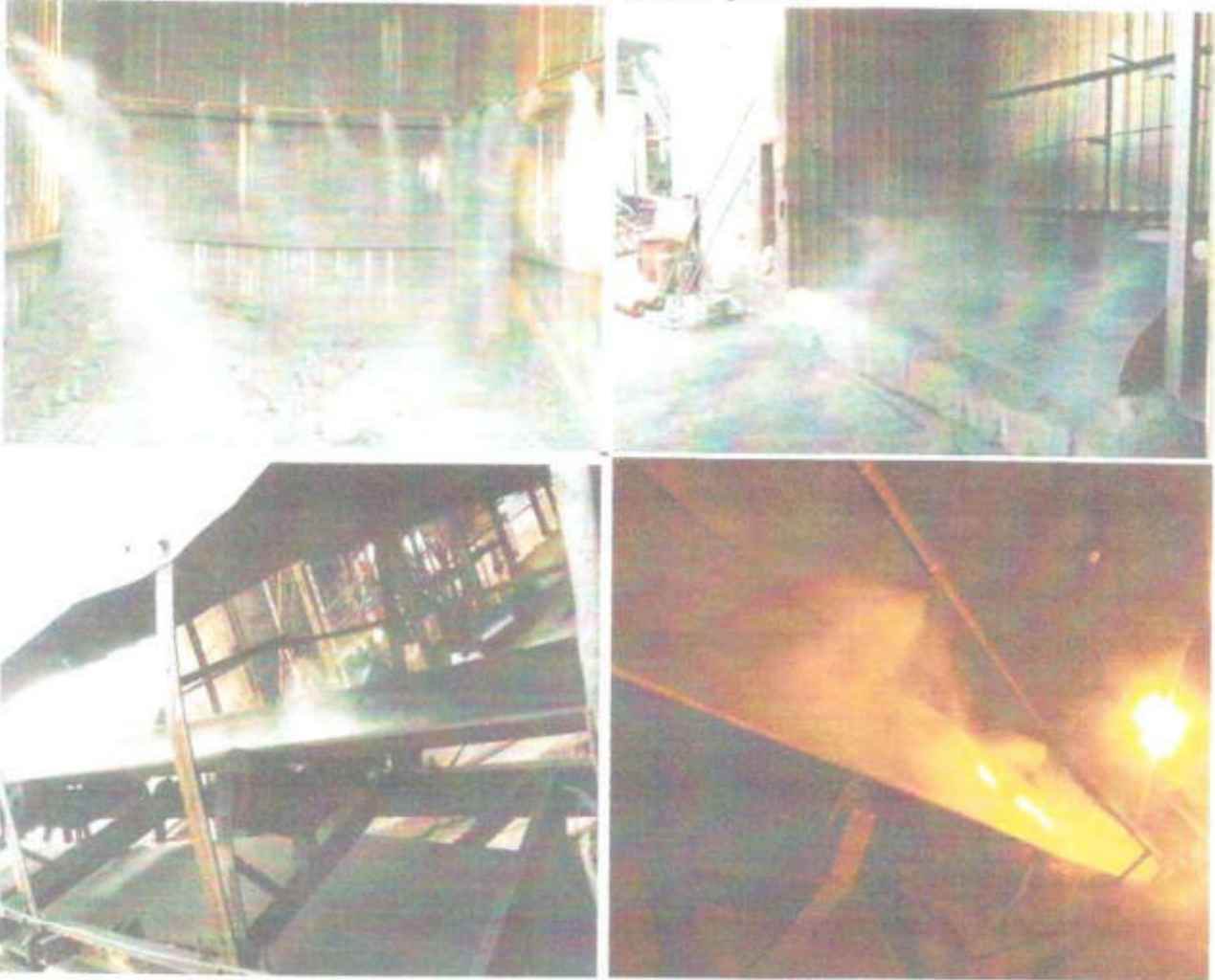
Compliance report of the conditions stipulated in Environmental Clearance

xiii.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letters are available with CECB and may also be seen at website of Ministry of Environment & 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 should be forwarded to the Regional Office.	Complied.
xiv.	Project authority 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.	Date of Financial Closure – November 2009. Date of Final Approval of the project by the concerned authorities - 24 September 2009. Date of Commencing the land development work- October 2009.



Measures taken to control the fugitive emission

1. Fogging system on conveyor belts and transfer points



2. Covered shed for crusher



3. RCC Road, Pneumatic sweeping and water sprinkling



RCC Road



Pneumatic Sweeping



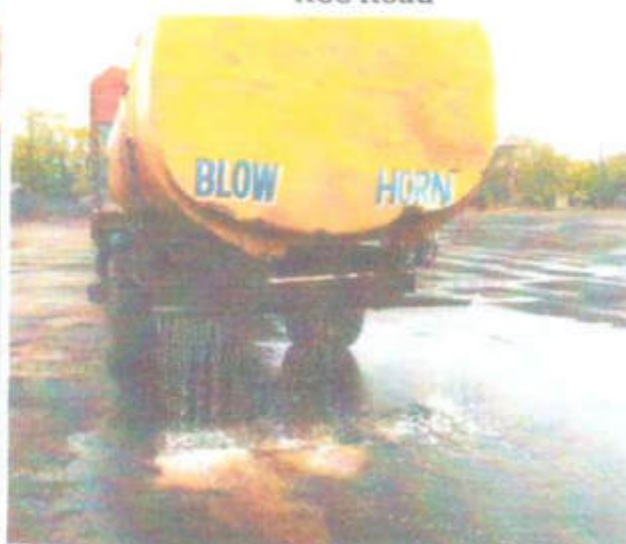
RCC Road



RCC Road



Static Sprinklers



Mobile Sprinklers



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO		UES/TR/22-23/0344	
		LAB REF NO		UES/22-23/FE/0383	
		DATE OF SAMPLING		16/04/2022	
		DATE OF RECEIPT		17/04/2022	
		DATE OF REPORT		22/04/2022	
		DATE OF ANALYSIS		Start:17/04/2022	END:22/04/2022
SAMPLE DETAILS					
MONITORING FOR		FUGITIVE EMISSION			
CUSTOMER REF. NO. & DATE		P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021			
SAMPLING LOCATION		A & B FURNACE			
DURATION OF SAMPLING		8 HOURS			
SAMPLE COLLECTED BY		LABORATORY CHEMIST			
SAMPLING PROCEDURE		AS PER METHOD REFERENCE			
SAMPLE QUANTITY/PACKING		GMF FILTER PAPER (8 X 10 INCH): 1X1 NO.			

TEST REPORT

SR. NO.	PARAMETER	UNIT	RESULT	MOEF & CC Notification	METHOD REFERENCE
			A & B FURNACE		
1	Total Suspended Particulate Matter (as SPM)	$\mu\text{g}/\text{m}^3$	1498	2000	EPA Method IO-2.1

Note: All results are on the basis of 8 hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- The report for publication, arbitration or as legal dispute is forbidden.
- Test sample will be retained for 15days after issue of test report unless otherwise agreed with customer.
- This is for information as the party has asked for above test(s) only

 22/04/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS 22/04/22 AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO	UES/TR/22-23/0345	
		LAB REF NO	UES/22-23/FE/0384	
		DATE OF SAMPLING	16/04/2022	
		DATE OF RECEIPT	17/04/2022	
		DATE OF REPORT	22/04/2022	
		DATE OF ANALYSIS	Start:17/04/2022	END:22/04/2022
SAMPLE DETAILS				
MONITORING FOR		FUGITIVE EMISSION		
CUSTOMER REF. NO. & DATE		P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
SAMPLING LOCATION		C & D FURNACE		
DURATION OF SAMPLING		8 HOURS		
SAMPLE COLLECTED BY		LABORATORY CHEMIST		
SAMPLING PROCEDURE		AS PER METHOD REFERENCE		
SAMPLE QUANTITY/PACKING		GMF FILTER PAPER (8 X 10 INCH): 1X1 NO.		

TEST REPORT

SR. NO.	PARAMETER	UNIT	RESULT	MOEF & CC Notification	METHOD REFERENCE
			C & D FURNACE		
1	Total Suspended Particulate Matter (as SPM)	µg/m ³	1438	2000	EPA Method IO-2.1

Note: All results are on the basis of 8 hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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 REVIEWED BY	 For ULTIMATE ENVIROLYTICAL SOLUTIONS	 AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO		UES/TR/22-23/0346	
		LAB REF NO		UES/22-23/FE/0385	
		DATE OF SAMPLING		16/04/2022	
		DATE OF RECEIPT		17/04/2022	
		DATE OF REPORT		22/04/2022	
		DATE OF ANALYSIS		Start:17/04/2022	END:22/04/2022
SAMPLE DETAILS					
MONITORING FOR		FUGITIVE EMISSION			
CUSTOMER REF. NO. & DATE		P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021			
SAMPLING LOCATION		CONVERTOR CLU			
DURATION OF SAMPLING		8 HOURS			
SAMPLE COLLECTED BY		LABORATORY CHEMIST			
SAMPLING PROCEDURE		AS PER METHOD REFERENCE			
SAMPLE QUANTITY/PACKING		GMF FILTER PAPER (8 X 10 INCH): 1X1 NO.			

TEST REPORT

SR. NO.	PARAMETER	UNIT	RESULT	MOEF & CC Notification	METHOD REFERENCE
			CONVERTOR CLU		
1	Total Suspended Particulate Matter (as SPM)	µg/m ³	1568	2000	EPA Method IO-2.1

Note: All results are on the basis of 8 hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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 22/04/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS 22/04/22 AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
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Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer		REPORT NO	UES/TR/22-23/0347	
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO	UES/22-23/FE/0386	
		DATE OF SAMPLING	16/04/2022	
		DATE OF RECEIPT	17/04/2022	
		DATE OF REPORT	22/04/2022	
		DATE OF ANALYSIS	Start:17/04/2022	END:22/04/2022
SAMPLE DETAILS				
MONITORING FOR		FUGITIVE EMISSION		
CUSTOMER REF. NO. & DATE		P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
SAMPLING LOCATION		RAW MATERIAL YARD		
DURATION OF SAMPLING		8 HOURS		
SAMPLE COLLECTED BY		LABORATORY CHEMIST		
SAMPLING PROCEDURE		AS PER METHOD REFERENCE		
SAMPLE QUANTITY/PACKING		GMF FILTER PAPER (8 X 10 INCH): 1X1 NO.		

TEST REPORT

SR. NO.	PARAMETER	UNIT	RESULT	MOEF & CC Notification	METHOD REFERENCE
			RAW MATERIAL YARD		
1	Total Suspended Particulate Matter (as SPM)	$\mu\text{g}/\text{m}^3$	1420	2000	EPA Method IO-2.1

Note: All results are on the basis of 8 hour sampling.

REMARKS: RESULTS ARE AS ABOVE

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 REVIEWED BY	 For ULTIMATE ENVIROLYTICAL SOLUTIONS	 AUTHORIZED SIGNATORY
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-----End of the test report-----



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Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviron@gmail.com

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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO		UES/TR/22-23/0348	
		LAB REF NO		UES/22-23/FE/0387	
		DATE OF SAMPLING		16/04/2022	
		DATE OF RECEIPT		17/04/2022	
		DATE OF REPORT		22/04/2022	
		DATE OF ANALYSIS		Start:17/04/2022	END:22/04/2022
SAMPLE DETAILS					
MONITORING FOR		FUGITIVE EMISSION			
CUSTOMER REF. NO. & DATE		P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021			
SAMPLING LOCATION		CHP AREA			
DURATION OF SAMPLING		8 HOURS			
SAMPLE COLLECTED BY		LABORATORY CHEMIST			
SAMPLING PROCEDURE		AS PER METHOD REFERENCE			
SAMPLE QUANTITY/PACKING		GMF FILTER PAPER (8 X 10 INCH): 1X1 NO.			

TEST REPORT

SR. NO.	PARAMETER	UNIT	RESULT	MOEF & CC Notification	METHOD REFERENCE
			CHP AREA		
1	Total Suspended Particulate Matter (as SPM)	$\mu\text{g}/\text{m}^3$	1642	2000	EPA Method IO-2.1

Note: All results are on the basis of 8 hour sampling.

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 REVIEWED BY	 For ULTIMATE ENVIROLYTICAL SOLUTIONS	 AUTHORIZED SIGNATORY
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-----End of the test report-----



भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	M/s Hira Power And Steels Limited Unit li		
Project Address:	Urla Industrial Area		
Town:	Birgaon (m)	Block:	Dharsiwa
District:	Raipur	State:	Chhattisgarh
Pin Code:			
Communication Address:	Hira Power And Steels Ltd. Unit li, Urla Industrial Area, K.h. No. 511/1, 512/2, Dharsiwa, Raipur, Chhattisgarh - 492003		
Address of CGWB Regional Office:	Central Ground Water Board North Central Chhattisgarh, 2nd Floor, Lk Corporate And Logistic Park, Dhamtari Road, Nh-30, Dumartarai, Raipur, Chhattisgarh - 492015		

1. **NOC No.:** CGWA/NOC/IND/ORIG/2021/12176
 2. **Application No.:** 21-4/1506/CT/IND/2018
 3. **Category:** Critical (GWRE 2017)
 4. **Project Status:** Existing Project
 5. **NOC Type:** New
 6. **Valid from:** 10/06/2021
 7. **Valid up to:** 09/06/2024
 8. **Ground Water Abstraction Permitted:**

Fresh Water		Saline Water		Dewatering		Total	
m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year
100.00	31820.00						

9. Details of ground water abstraction /Dewatering structures

Total Existing No.:4

Total Proposed No.:2

	DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu
Abstraction Structure*	0	0	4	0	0	0	0	0	2	0	0	0

*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit;MPu-Mine Pumps

10. Ground Water Abstraction/Restoration Charges paid (Rs.): 381840.00

11. Number of Piezometers(Observation wells) to be constructed/ monitored & Monitoring mechanism. No. of Piezometers Monitoring Mechanism

	Manual	DWLR**	DWLR With Telemetry
**DWLR - Digital Water Level Recorder	1	0	1

(Compliance Conditions given overleaf)

This is an auto generated document & need not to be signed.

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Phone: (011) 23383561 Fax: 23382051, 23386743

Website: cgwa-noc.gov.in

पानी बचाये - जीवन बचाये
SAVE WATER - SAVE LIFE

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

Mandatory conditions:

- 1) Installation of tamper proof digital water flow meter with telemetry on all the abstraction structure(s) shall be mandatory for all users seeking No Objection Certificate and intimation regarding their installation shall be communicated to the CGWA within 30 days of grant of No Objection Certificate.
- 2) Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year.
- 3) Construction of purpose-built observation wells (piezometers) for ground water level monitoring shall be mandatory as per Section 14 of Guidelines. Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-II of the guidelines.
- 4) Proponents shall monitor quality of ground water from the abstraction structure(s) once in a year. Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analysed in NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.
- 5) In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWA for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.
- 6) In case of mining project the firm shall submit water quality report of mine discharge/ seepage from Govt. approved/ NABL accredited lab.
- 7) The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.
- 8) Industries abstracting ground water in excess of 100 m³/d shall undertake annual water audit through certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.
- 9) Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment (Protection) Act, 1986.
- 10) This NOC is subject to prevailing Central/State Government rules/laws/orders or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.

General conditions:

- 11) No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
- 12) The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
- 13) Proponents shall install roof top rain water harvesting in the premise as per the existing building bye laws in the premise.
- 14) The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising thereupon.
- 15) In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.
- 16) Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste water.
- 17) Whenever the NOC is for abstraction of saline water and the existing wells (s) is / are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.
- 18) Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
- 19) In case of violation of any NOC conditions, the applicant shall be liable to pay the penalties as per Section 15 of Guidelines.
- 20) This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
- 21) The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.
- 22) In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 60 days of taking over possession of the premises.
- 23) This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/Court orders in cases related to ground water or any other related matters.
- 24) Proponents, who have installed/constructed artificial recharge structures in compliance of the NOC granted to them previously and have availed rebate of upto 50% (fifty percent) in the ground water abstraction charges/ground water restoration charges, shall continue to regularly maintain artificial recharge structures.
- 25) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, pharmaceutical, other hazardous units etc. (as per CPCBE list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution as per Annexure III of the guidelines.
- 26) In case of new infrastructure projects having ground water abstraction of more than 20 m³/day, the firm/entity shall ensure implementation of dual water supply system in the projects.
- 27) In case of infrastructure projects, paved/parking area must be covered with interlocking/perforated tiles or other suitable measures to ensure groundwater infiltration/harvesting.
- 28) In case of coal and other base metal mining projects, the project proponent shall use the advance dewatering technology (by construction of series of dewatering abstraction structures) to avoid contamination of surface water.
- 29) The NOC issued is conditional subject to the conditions mentioned in the Public notice dated 27.01.2021 failing which penalty/EC/cancellation of NOC shall be imposed as the case may be.
- 30) This NOC is issued subject to the clearance of Expert Appraisal Committee (EAC) (if applicable).

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



Chhattisgarh State Industrial Development Corporation Limited
(A Government of Chhattisgarh Undertaking)
(ISO 9001:2015 Certified)

First Floor, Udyog Bhawan, Ring Road No.-1, Telibandha, Raipur-492006 (C.G.)

CIN : U45203CT1981SG001853, PAN : AABCM6288N, GST Regn. No. : 22AABCM6288NSZY

Phone No. : 0771-6002071, 72, 73, Fax No. : 0771-2583794

Website: www.csidc.in, Email address: csidc_raipur@yahoo.com, csidc.cg@nic.in

No./CSIDC/EE/DIV.-II/2020-21/

Raipur, Dated 22/01/2021

15479

**WATER AVAILABILITY/ NON-AVAILABILITY
CERTIFICATE FOR FRESH/TREATED WATER**

TO WHOMSOEVER IT MAY CONCERN

This is to certificate that this office of Chhattisgarh State Industrial Development Corporation Ltd. is providing fresh water supply to the tune of **500 KLD** to the firm **M/s Hira Power & Steels, Located at Urla Industrial Complex, Block/Taluka Dharshiwa Distt. Raipur State Chhattisgarh**

Executive Engineer
EXECUTIVE ENGINEER
CSIDC LIMITED,
RAIPUR



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer		REPORT NO.	UES/TR/21-22/04028
TO, HIRA POWER & STEELS LIMITED PLOT NO. 557, 563 & 564, URLA INDUSTRIAL COMPLEX, URLA, RAIPUR - 492003, CHHATTISGARH, INDIA		LAB REF NO.	UES/21-22/MISC/09919
		DATE OF SAMPLING	19/09/2022
		DATE OF RECEIPT	20/09/2022
		DATE OF REPORT	24/09/2022
		DATE OF ANALYSIS	Start:20/09/2022 END:24/09/2022
SAMPLE DETAILS			
CUSTOMER SAMPLE ID	AOD SLAG	CUSTOMER REF. NO. & DATE	VERBAL COMMUNICATION DATED: 17/09/2022
SAMPLE TYPE	SLAG	SAMPLE CONDITION AT RECEIPT	OK
SAMPLE COLLECTED BY	CUSTOMER	QUANTITY RECEIVED	1 KG.

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMIT SCHEDULE II (See rule 3 (1) (17) (ii))	RESULT
1	Iron as Fe	mg/l	USEPA METHOD-1311	-	16.7
2	Manganese as Mn	mg/l	USEPA METHOD-1311	10.0	8.9
3	Zinc as Zn	mg/l	USEPA METHOD-1311	250	61.2
4	Lead as Pb	mg/l	USEPA METHOD-1311	5.0	3.9
5	Cadmium as Cd	mg/l	USEPA METHOD-1311	1.0	N.D.
6	Chromium as Cr	mg/l	USEPA METHOD-1311	5.0	N.D.
7	Arsenic as As	mg/l	USEPA METHOD-1311	5.0	N.D.
8	Mercury as Hg	mg/l	USEPA METHOD-1311	0.2	N.D.

Note: N.D. - Not Detected

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- > The above analysis report refers to the particular sample received at our end and the use of the report for publication, arbitration or as legal dispute is forbidden.
- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

 24/03/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer		REPORT NO.	UES/TR/21-22/04029
TO,		LAB REF NO.	UES/21-22/MISC/09920
HIRA POWER & STEELS LIMITED		DATE OF SAMPLING	19/09/2022
PLOT NO. 557, 563 & 564,		DATE OF RECEIPT	20/09/2022
URLA INDUSTRIAL COMPLEX, URLA,		DATE OF REPORT	24/09/2022
RAIPUR - 492003, CHHATTISGARH, INDIA		DATE OF ANALYSIS	Start:20/09/2022 END:24/09/2022
SAMPLE DETAILS			
CUSTOMER SAMPLE ID	Fe Mn SLAG	CUSTOMER REF. NO. & DATE	VERBAL COMMUNICATION DATED: 17/09/2022
SAMPLE TYPE	SLAG	SAMPLE CONDITION AT RECEIPT	OK
SAMPLE COLLECTED BY	CUSTOMER	QUANTITY RECEIVED	1 KG.

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMIT SCHEDULE II (See rule 3 (1) (17) (v))	RESULT
1	Iron as Fe	mg/l	USEPA METHOD-1311	-	71.2
2	Manganese as Mn	mg/l	USEPA METHOD-1311	10.0	5.7
3	Zinc as Zn	mg/l	USEPA METHOD-1311	250	51.3
4	Lead as Pb	mg/l	USEPA METHOD-1311	5.0	1.2
5	Cadmium as Cd	mg/l	USEPA METHOD-1311	1.0	N.D.
6	Chromium as Cr	mg/l	USEPA METHOD-1311	5.0	N.D.
7	Arsenic as As	mg/l	USEPA METHOD-1311	5.0	N.D.
8	Mercury as Hg	mg/l	USEPA METHOD-1311	0.2	N.D.

Note: N.D. - Not Detected

REMARKS: RESULTS ARE AS ABOVE

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 24/09/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer TO, HIRA POWER & STEELS LIMITED PLOT NO. 557, 563 & 564, URLA INDUSTRIAL COMPLEX, URLA, RAIPUR - 492003, CHHATTISGARH, INDIA		REPORT NO.	UES/TR/21-22/04030	
		LAB REF NO.	UES/21-22/MISC/09921	
		DATE OF SAMPLING	19/09/2022	
		DATE OF RECEIPT	20/09/2022	
		DATE OF REPORT	24/09/2022	
		DATE OF ANALYSIS	Start:20/09/2022	END:24/09/2022
SAMPLE DETAILS				
CUSTOMER SAMPLE ID	Fly Ash	CUSTOMER REF. NO. & DATE	VERBAL COMMUNICATION DATED: 17/09/2022	
SAMPLE TYPE	SLAG	SAMPLE CONDITION AT RECEIPT	OK	
SAMPLE COLLECTED BY	CUSTOMER	QUANTITY RECEIVED	1 KG.	

TEST REPORT					
SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMIT SCHEDULE II [See rule 3 (1) (17) (ii)]	RESULT
1	Iron as Fe	mg/l	USEPA METHOD-1311	-	51.4
2	Manganese as Mn	mg/l	USEPA METHOD-1311	10.0	4.2
3	Zinc as Zn	mg/l	USEPA METHOD-1311	250	78.1
4	Lead as Pb	mg/l	USEPA METHOD-1311	5.0	3.9
5	Cadmium as Cd	mg/l	USEPA METHOD-1311	1.0	N.D.
6	Chromium as Cr	mg/l	USEPA METHOD-1311	5.0	N.D.
7	Arsenic as As	mg/l	USEPA METHOD-1311	5.0	N.D.
8	Mercury as Hg	mg/l	USEPA METHOD-1311	0.2	N.D.

Note: N.D. - Not Detected

REMARKS: RESULTS ARE AS ABOVE

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 24/09/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer		REPORT NO.	UES/TR/21-22/04031
TO, HIRA POWER & STEELS LIMITED PLOT NO. 557, 563 & 564, URLA INDUSTRIAL COMPLEX, URLA, RAIPUR - 492003, CHHATTISGARH, INDIA		LAB REF NO.	UES/21-22/MISC/09922
		DATE OF SAMPLING	19/09/2022
		DATE OF RECEIPT	20/09/2022
		DATE OF REPORT	24/09/2022
		DATE OF ANALYSIS	Start:20/09/2022 END:24/09/2022
SAMPLE DETAILS			
CUSTOMER SAMPLE ID	MOx DUST	CUSTOMER REF. NO. & DATE	VERBAL COMMUNICATION DATED: 17/09/2022
SAMPLE TYPE	SLAG	SAMPLE CONDITION AT RECEIPT	OK
SAMPLE COLLECTED BY	CUSTOMER	QUANTITY RECEIVED	1 KG.

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMIT SCHEDULE II (See rule 3 (1) (17) (ii))	RESULT
1	Iron as Fe	mg/l	USEPA METHOD-1311	-	70.0
2	Manganese as Mn	mg/l	USEPA METHOD-1311	10.0	6.9
3	Zinc as Zn	mg/l	USEPA METHOD-1311	250	78.2
4	Lead as Pb	mg/l	USEPA METHOD-1311	5.0	2.6
5	Cadmium as Cd	mg/l	USEPA METHOD-1311	1.0	N.D.
6	Chromium as Cr	mg/l	USEPA METHOD-1311	5.0	N.D.
7	Arsenic as As	mg/l	USEPA METHOD-1311	5.0	N.D.
8	Mercury as Hg	mg/l	USEPA METHOD-1311	0.2	N.D.

Note: N.D. - Not Detected

REMARKS: RESULTS ARE AS ABOVE

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 24/09/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer		REPORT NO.	UES/TR/21-22/04032
TO, HIRA POWER & STEELS LIMITED PLOT NO. 557, 563 & 564, URLA INDUSTRIAL COMPLEX, URLA, RAIPUR - 492003, CHHATTISGARH, INDIA		LAB REF NO.	UES/21-22/MISC/09923
		DATE OF SAMPLING	19/09/2022
		DATE OF RECEIPT	20/09/2022
		DATE OF REPORT	24/09/2022
		DATE OF ANALYSIS	Start:20/09/2022 END:24/09/2022
SAMPLE DETAILS			
CUSTOMER SAMPLE ID	POLLUTION DUST	CUSTOMER REF. NO. & DATE	VERBAL COMMUNICATION DATED: 17/09/2022
SAMPLE TYPE	SLAG	SAMPLE CONDITION AT RECEIPT	OK
SAMPLE COLLECTED BY	CUSTOMER	QUANTITY RECEIVED	1 KG.

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMIT SCHEDULE II [See rule 3 (1) (17) (ii)]	RESULT
1	Iron as Fe	mg/l	USEPA METHOD-1311	-	37.2
2	Manganese as Mn	mg/l	USEPA METHOD-1311	10.0	7.4
3	Zinc as Zn	mg/l	USEPA METHOD-1311	250	58.4
4	Lead as Pb	mg/l	USEPA METHOD-1311	5.0	2.8
5	Cadmium as Cd	mg/l	USEPA METHOD-1311	1.0	N.D.
6	Chromium as Cr	mg/l	USEPA METHOD-1311	5.0	N.D.
7	Arsenic as As	mg/l	USEPA METHOD-1311	5.0	N.D.
8	Mercury as Hg	mg/l	USEPA METHOD-1311	0.2	N.D.

Note: N.D. - Not Detected

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 24/09/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer		REPORT NO.	UES/TR/21-22/04033
TO, HIRA POWER & STEELS LIMITED PLOT NO. 557, 563 & 564, URLA INDUSTRIAL COMPLEX, URLA, RAIPUR - 492003, CHHATTISGARH, INDIA		LAB REF NO.	UES/21-22/MISC/09924
		DATE OF SAMPLING	19/09/2022
		DATE OF RECEIPT	20/09/2022
		DATE OF REPORT	24/09/2022
		DATE OF ANALYSIS	Start:20/09/2022 END:24/09/2022
SAMPLE DETAILS			
CUSTOMER SAMPLE ID	THERMITE SLAG	CUSTOMER REF. NO. & DATE	VERBAL COMMUNICATION DATED: 17/09/2022
SAMPLE TYPE	SLAG	SAMPLE CONDITION AT RECEIPT	OK
SAMPLE COLLECTED BY	CUSTOMER	QUANTITY RECEIVED	1 KG.

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMIT SCHEDULE II [See rule 3 (1) (17) (ii)]	RESULT
1	Iron as Fe	mg/l	USEPA METHOD-1311	-	78.1
2	Manganese as Mn	mg/l	USEPA METHOD-1311	10.0	6.2
3	Zinc as Zn	mg/l	USEPA METHOD-1311	250	30.7
4	Lead as Pb	mg/l	USEPA METHOD-1311	5.0	1.2
5	Cadmium as Cd	mg/l	USEPA METHOD-1311	1.0	N.D.
6	Chromium as Cr	mg/l	USEPA METHOD-1311	5.0	N.D.
7	Arsenic as As	mg/l	USEPA METHOD-1311	5.0	N.D.
8	Mercury as Hg	mg/l	USEPA METHOD-1311	0.2	N.D.

Note: N.D. - Not Detected

REMARKS: RESULTS ARE AS ABOVE

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 24/09/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS AUTHORIZED SIGNATORY
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-----End of the test report-----



क्रमांक : 2029/एचपीएसएल/2022-23/2029

दिनांक: 18.05.2022

प्रति,
श्रीमान क्षेत्रीय अधिकारी,
क्षेत्रीय कार्यालय,
छ.ग. पर्यावरण संरक्षण मण्डल,
कबीर नगर, व्यवसायिक परिसर,
छ.ग. गृह निर्माण मण्डल कालोनी,
कबीर नगर, रायपुर (छ.ग.)

विषय: वर्ष 2021-22 (अप्रैल 2021 से मार्च 2022) तक की अवधि में ताप विद्युत से जनित फ्लाइ ऐश यूटिलाईजेशन की वार्षिक रिपोर्ट प्रेषित करने के संबंध में।

संदर्भ: आपका पत्र क्र0. 508/क्षेका/छ.प.सं.मं/2022 रायपुर दिनांक 17.05.2022

महोदय,

उपरोक्त विषयांतर्गत संदर्भित पत्र के माध्यम से आपके द्वारा दिनांक 01.04.2021 से 31.03.2022 तक की अवधि में जनित फ्लाइ ऐश यूटिलाईजेशन के संबंध में चाही गई जानकारी आपके द्वारा प्रदत्त प्रपत्र में भरकर सादर संलग्न कर प्रेषित की जा रही है।

ज्ञातव्य हो कि वित्तीय वर्ष 2021-22 (दिनांक 01.04.2021 से 31.03.2022 तक) की अवधि का वार्षिक विवरण पत्रक (Annual Return) हमारे पत्र क्र0. 2023/HPSL/2022-23/2023 दिनांक 05.05.2022 के माध्यम से आपके कार्यालय को प्रेषित की जा चुकी है, जिसकी छायाप्रति आपके सुलभ संदर्भ हेतु सादर संलग्न है।

सधन्यवाद

भवदीय,
वास्ते, हीरा पॉवर एण्ड स्टील्स लिमिटेड, यूनिट -II

अधिकृत हस्ताक्षरकर्ता

प्रतिलिपि: श्रीमान सदस्य सचिव, छ.ग. पर्यावरण संरक्षण मण्डल, नवा रायपुर अटलनगर,
जिला-रायपुर (छ.ग.) को सूचनार्थ प्रेषित।

Hira Power & Steels Limited

An ISO 9001:2015 Certified Company

CIN : U24117CT1984PLC002512

Registered Office & Works : Khasra No. 511/1, 512/2, Urla Industrial Complex, Raipur - 492003, Chhattisgarh, India

P : +91 771 4082500, 4082600, F : +91 771 4082501, E : admin@hpslindia.com

www.hpslindia.com, www.hiragroup.com

स्थापित कोल आधारित थर्मल पॉवर प्लांट उद्योगों से उत्पन्न फ्लाई ऐश की उपयोगिता की स्थिति के संबंध में जानकारी

(दिनांक 01.04.2021 से 31.03.2022 तक की अवधि का विवरण)

क्र०.	थर्मल पॉवर उद्योग का नाम एवं पता	क्षमता (मेगावॉट में)	उत्पन्न फ्लाई ऐश की मात्रा (दिन. 01.04.2021 से दिनांक 31.03.2022 तक की अवधि में)	सीमेंट प्लांट में प्रदाय	ईट निर्माण	भू-भराव	ऐश-ड्राईक हाईट/रैजिंग/निर्माण	कृषि कार्य हेतु	खदान में भराव	अन्य (जिस प्रयोजन में फ्लाई ऐश का उपयोग किया गया है, उसकी संक्षिप्त जानकारी दें)	कुल	प्रतिशत उपयोग
01	हीरा पॉवर एण्ड स्टील्स लिमिटेड, खसरा नं. 511/1, 512/2, उरला औद्योगिक क्षेत्र, रायपुर-492003 (छ.ग.)	20 MW	86299.51	0.00	86299.51	0.00	0.00	0.00	0.00	0.00	86299.51	100%
02												



Ref: 2023/HPSL/2022-23/2023

Date: 05.05.2022

To,
The Regional Officer,
Regional Office,
Chhattisgarh Environment Conservation Board,
Commercial Complex, Chhattisgarh Housing Board Colony,
Kabir Nagar, Raipur (C.G.)

Sub: Fly ash utilization annual report / return for the financial year 2021 – 22

Respected Sir,

With reference to above cited subject, we are submitting herewith fly ash utilization annual report / return (Annexure – I) for the financial year 2021 - 22 (**April 1st 2021 to March 31st 2022**) for your ready reference and record, please.

Fly ash is being disposed off by us systematically & scientifically as per Fly Ash Notification dated 14th September, 1999 and its amendments by MoEF&CC.

Kindly acknowledge the receipt of the same.

Thanking You,

Yours faithfully,

For, **HIRA POWER AND STEELS LIMITED, UNIT – II**


Anil Authorized Signatory

Encl: A/a

- CC: 1. The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhavan, North Block, Sector – 19, Atal Nagar, District - Raipur (C. G.) 492 002
2. The Regional Director, Central Pollution Control Board, 3rd Floor, Sahkar Bhawan, North TT Nagar, Bhopal -462003
3. The Scientist, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Aranya Bhawan, North Block, Sector-19, Atal Nagar, District - Raipur (C. G.) 492 002.

HIRA POWER & STEELS LIMITED, (UNIT – II)

Khasra No. 511/1, 512/2, Urla Industrial Complex, Raipur (C.G.) – 492 003

FLY ASH GENERATION & UTILIZATION REPORT FOR THE FINANCIAL YEAR 2018-19 (April 1st 2021 to March 31th 2022)

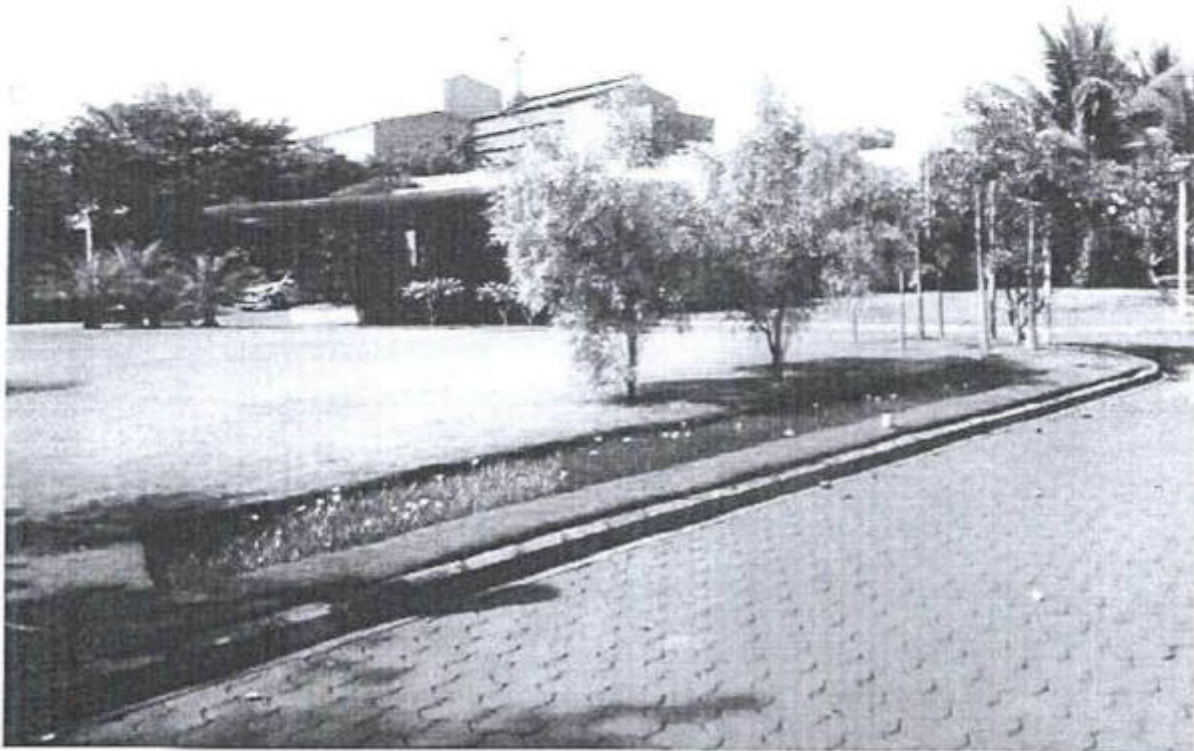
Sr. No.	Month	Fly Ash Generation in the Month (MT)	Supply to the Cement Plant (MT)	Brick Manufacturing (MT)	Land Filling (MT)	Ash Dyke Raising / Construction (MT)	Agriculture (MT)	Mine Filling (MT)	Any Other Use (MT)	Total (MT)	Percentage (%)
4	Apr-21	7902.92	0.00	7902.92	0.00	0.00	0.00	0.00	0.00	7902.92	100.00
5	May-21	6081.49	0.00	6081.49	0.00	0.00	0.00	0.00	0.00	6081.49	100.00
6	Jun-21	7728.42	0.00	7728.42	0.00	0.00	0.00	0.00	0.00	7728.42	100.00
7	Jul-21	7566.17	0.00	7566.17	0.00	0.00	0.00	0.00	0.00	7566.17	100.00
8	Aug-21	7325.52	0.00	7325.52	0.00	0.00	0.00	0.00	0.00	7325.52	100.00
9	Sep-21	8462.85	0.00	8462.85	0.00	0.00	0.00	0.00	0.00	8462.85	100.00
10	Oct-21	6384.26	0.00	6384.26	0.00	0.00	0.00	0.00	0.00	6384.26	100.00
11	Nov-21	5979.37	0.00	5979.37	0.00	0.00	0.00	0.00	0.00	5979.37	100.00
12	Dec-21	8353.28	0.00	8353.28	0.00	0.00	0.00	0.00	0.00	8353.28	100.00
13	Jan-22	7442.96	0.00	7442.96	0.00	0.00	0.00	0.00	0.00	7442.96	100.00
14	Feb-22	6605.83	0.00	6605.83	0.00	0.00	0.00	0.00	0.00	6605.83	100.00
15	Mar-22	6466.44	0.00	6466.44	0.00	0.00	0.00	0.00	0.00	6466.44	100.00
Total		86299.51	0.00	86299.51	0.00	0.00	0.00	0.00	0.00	86299.51	86299.51



HIRA

HIRA POWER & STEELS

UNIT - II

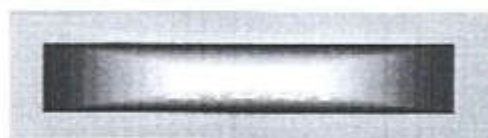


[PLANTATION SURVEY & EVALUATION REPORT] 2019 - 20, 2020-21

SEIDR

SURVEY & EVALUATION BY - SOCIETY FOR ENVIRONMENT & INTEGRATED DEVELOPMENT DAVID ID

GREENBELT: SURVEY & EVALUATION REPORT OF GEM/S HIRA POWER



S. N.	PARTICULARS	PAGE
1.	Executive Summary (Introduction)	1
2.	Project Objective, Plantation Details	2
3.	Road Side Plantation, Methodology	3
4.	Plantation Species and Measurement	4 -6
5.	Survival Percentage of Planted Plants	6
6.	Photographs	7 - 15
7.	Gradation	16
8.	Certificate	17
9.	Discussion and Suggestion	18
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11.	Team Involved in Survey	20
12.	ABOUT "SEIDR"	21-22

SEIDR

SURVEY & EVALUATION BY : SOCIETY FOR ENVIRONMENT & INTEGRATED DEVELOPMENT RAIPUR

Evaluation of Greenbelt Development
For

M/s HIRA POWER & STEEL LTD. UNIT - II

Plot No. 557, 563 & 564 Urla, Industrial Complex, Urla,
Raipur

Survey & Evaluation by - "Society for
Environment & Integrated Development
Raipur" Raipur (CG)

EXECUTIVE SUMMARY

1. INTRODUCTION

M/s HIRA POWER&STEEL LTD.is working at three places in the state of Chhattisgarh:-

2. Regd. Office/ Works - M/s HIRA POWER AND STEEL LIMITED- Unit - II, 511/1, 512/2, Urla Industrial Complex, Raipur, Pin code - 492003 (C. G.)
3. Project Started - As Per information provided by M/s HIRAPOWER&STEEL Ltd. Raipur, Details of Projects are as Under :-

I. HIRA POWER AND STEEL, URLA (Raipur) Plant -

1. EC- F.No. J-11011/836/2008-IA-II (I) MoEF, New Delhi - 11003 for Ferro Alloy plant - 600 MTPA for production of Low Medium Carbon Ferro Manganese (Ferro Alloys) - 18,000 MTPA.
2. Ferro Alloys -30,000 MTPA, Or 56,000 MTPA Pig Iron from 2x5.5 MVA Submerged Arc Furnaces
3. Captive Power Plant - 20 MW

4. Plant Area:-

Hira power & Steel Ltd. Urla (Raipur) Plant - Total Land Area - 17.59 Ha. (Approx) (Plantation Area - 5.86 Hectare Approx)

M/s HIRA POWER&STEEL LTD

The green belt helps to capture the fugitive emission and attenuate the noise apart from improving the aesthetic quality of the region in the total area of the project site (Core Zone). 33% area shall be developed as green belt along the periphery of the plant in Hira Power & Steel - Unit -II whereas 33% (as they come under notified industrial area) plant shall be developed as green belt area. Development of green belt and other forms of greenery at road side and plantation in nearest project affected villages shall also be helpful to improve ecological conditions and biodiversity status of the area.

Survey and Evaluation work was allotted by M/s HIRA POWER&STEEL LTD. to our organization - "SOCIETY FOR ENVIRONMENT & INTEGRATED DEVELOPMENT RAIPUR" for which one work orders was issued dtd.21/12/2020 via S.O. No. 7200003029/U102.

5. PROJECT OBJECTIVE

Plant species act as bio-monitoring agent to monitor the air environment as well as it keeps and maintains the project environment healthy by providing more oxygen. The two areas of air pollution i.e. gases and dust need to be urgently by using plants. Keeping this in mind, alleviate measures have been suggested to develop green belt based on local and physical conditions of the areas by taking the cognizance of "Green with Purpose" drive.

6. PLANTATION DETAILS

7. Area of Plantation (Green Belt):- During the field survey and field study by our technical team it has been found that plantation work was started from start of each project and is continued till date.

A. Urla Plant Unit-2, - 5.86 Ha. (Approx) in Campus Area.

B. Aerodrome Garden development area.

C. Road Side area - 3 ½ K. M. (Approx) in campus Area.

8. Details of Year wise Plantation:-

Road side plantation survey till date as per details given below:-

M/s HIRA POWER&STEEL LTD.

A. Main gate to Jai hind chowk to near Police station and around

s.n.	Species	No. of Survival plants
1.	Kesiasemia, Peltophorum, Gulmohar, Karanj, Sissoo, Alatonia, Pipal,	1434

B. Plantation done by Hira Power & Steel Ltd. up to 2019-20, 2020-21

Year	Unit -2	Road Side	Airport Garden
UP TO 2019-20	14000+1252	2600	2500
2020-21	1326	0	0
Total =	16578	2600	2500

9. Plantation Sites:-

Plantation work is in progress along the plant boundary wall and inside the plant premises. Plantation work has been done along the road side. Plantation survey has been carried out by expert team with the help of officers of M/s HIRA POWER & STEEL Ltd. Following sapling was planted by M/s HIRA POWER & STEEL Ltd.

- I. At Unit - 2, plant Campus Area -
 - A. Plant premises area.
 - B. Admin building (Office area)
- II. Road Side area.
- III. Airport Garden

• Road side Plantation -

s.n.	Location of plantation	Length in Kilometer
1	Unit -II main gate to Young India Choak, Police Station around Road both side	3 ½ K M (Approx)

Boundary wall has been constructed on the places, Raipur factory, Due to this construction expected damages from cattle and unwanted social elements were controlled.

Irrigation facility was also provided at five places by drip water pipe line and tanker due to this the growth of plants has been observed very well.

10. METHODOLOGY

- All planted areas were inspected.
- All small plants were counted and taken their measurement and same has been recorded.
- Height and girth of plants and saplings have been measured.
- Survival percentage has been recorded.
- Many places were pictures of plantation.



11. M/s HIRA POWER & STEEL LTD.

A. UNIT -II- PLANTATION SPECIES AND MEASUREMENT

S.N	Species	Average		Maximum		Minimum	
		Girth (cm)	Height (m)	Girth (m)	Height (m)	Girth (cm)	Height (m)
1.	Peltophorum	10.5	5.30	80	15	4	4.0
2.	Alastonia	18.4	6.93	54	13	4	3.0
3.	Parkia	5.7	4.1	9	5.50	4	3.0
4.	Kesiasemia	25	5.65	45	10.50	3	0.90
5.	Shisham	40.0	8.04	80	12	20	5
6.	Sirsa	7.5	4.5	12	6.5	4	3.1
7.	Badam	28	6.2	45	8.50	12	2.0
8.	Coconut	40	8.25	60	12	28	5
9.	Karanj	28	3.3	62	47	5	2
10.	Washingtonia	57.8	3.08	90	9.0	40	2
11.	Spethodia	7.30	2.58	14	4.25	2	1.30
12.	Nilgiri	11.61	2.93	20	4.50	4	1.10
13.	Shisham	20.30	4.20	26	5.50	15	3
14.	Gulmohar	9	3.3	12	5	6	1.2
15.	Konocarpes	17.5	5.06	20	6.05	9	2
16.	Neem	11.66	2.61	14	3.10	5	0.95
17.	Karanj	5.12	1.06	10	2.50	2	0.50
18.	Alastonia	13	3.68	16	5	13	2.50
19.	Champa	20.5	5.8	52	12.0	6	3
20.	Sitafal	14.60	4.42	16	5.50	13	4.00
21.	Kaner	7.14	2.98	12	4.00	4	2.00
22.	Kachnar	38.58	10.51	52	13	25	6.50
23.	Areca Pam	14.08	3.52	32	8.00	6	4.00
24.	Bottle brush	8.12	2.13	18	6.50	4	1.20
25.	Kadmba	12.3	5.3	24	7.50	6	4.00
26.	Acacia	6.75	3.65	16	7.50	3	2

D. AIRO DROME GARDEN - PLANTATION SPECIES AND MEASUREMENT

S.N.	Species	Average		Maximum		Minimum	
		Girth (cm)	Height (m)	Girth (cm)	Height (m)	Girth (cm)	Height (m)
1.	Spathodea	45	5.9	65	10	20	4.5
2.	Champa	25	2.7	30	3.5	20	2
3.	Cycus	104	4.16	115	5	75	2.50
4.	Tikoma	6.5	1.75	12	2.6	4	1.20
5.	Akash neem	64.75	14	80	15	45	12
6.	Kaner	8.8	1.75	60	1.80	8	1.75
7.	Bottle palm	34.5	5.6	40	6.5	25	5.00
8.	Arjun	30	7.12	70	12	12	4.00
9.	Peltophorum	54.6	7.6	160	14	20	6
10.	Nilgiri	114.4	17	130	18	1.10	10
11.	Alastonia	41	9.2	50	12	30	6
12.	Gulmohar	61.3	7.6	83	12	40	8
13.	Karanj	20.4	4.9	35	8.00	10	3.5
14.	Kachnar	23.8	4.9	35	8	10	3.5
15.	Coconut	76.4	12.14	115	16	55	6
16.	Bottle brush	34.8	56	40	6.5	25	5
17.	Bottle palm	72.2	5.0	80	5	55	3.5

G. M/s HIRA POWER&STEEL LTD.(Road Side Plantation 3 ½ K M (Approx))

S.N.	Species	Average		Maximum		Minimum	
		Girth (cm)	Height (m)	Girth (cm)	Height (m)	Girth (cm)	Height (m)
1.	Tikoma	9.8	4.08	20	6	3	2.5
2.	Neem	9.7	3.2	15	5.5	5	2.00
3.	Alastonia	42.8	4.5	60	7	20	2.5
4.	Khamar	29.3	6.3	35	10	12	3.00
5.	Kesiyasemia	24.8	8.4	38	2.5	4	1.5
6.	Siras	7.4	3.2	14	5.50	2	1.5
7.	Kadamba	9.3	3.3	14	5.00	5	2.00
8.	Gulmohar	33.4	9	45	12	15	5

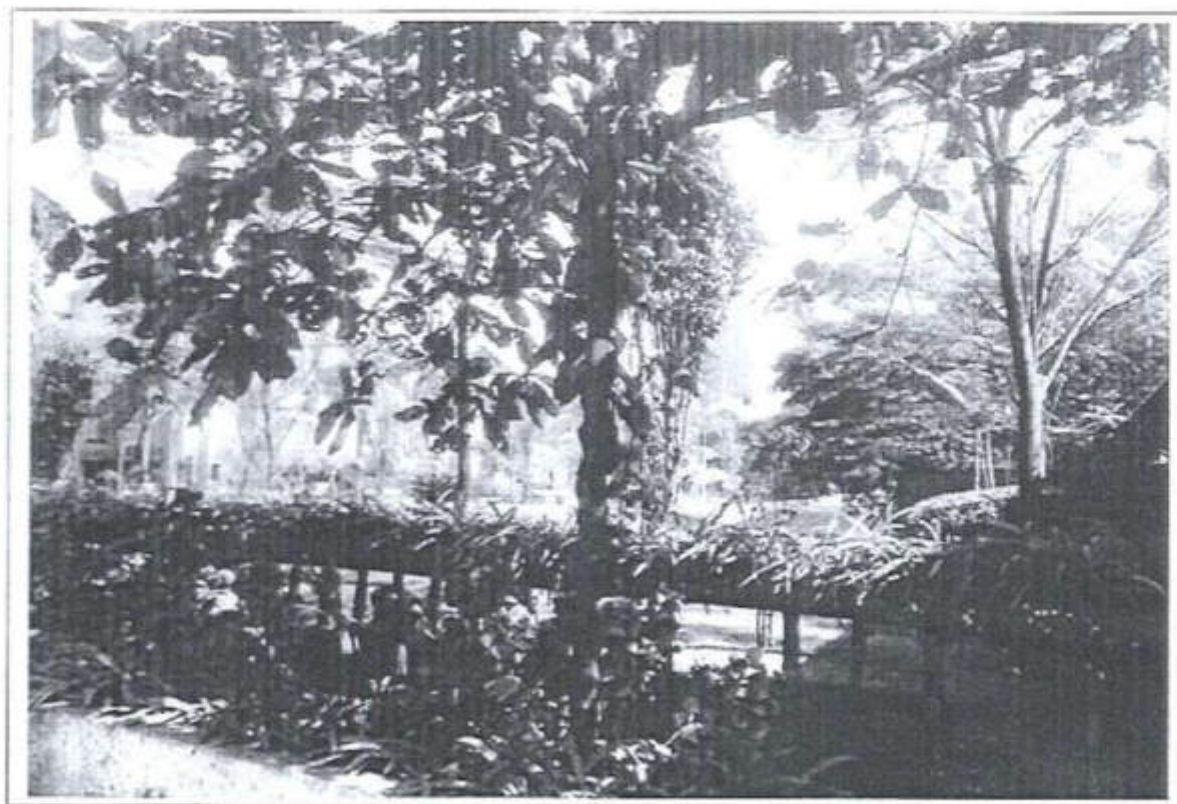
M/s HIRA POWER & STEEL LIMITED.

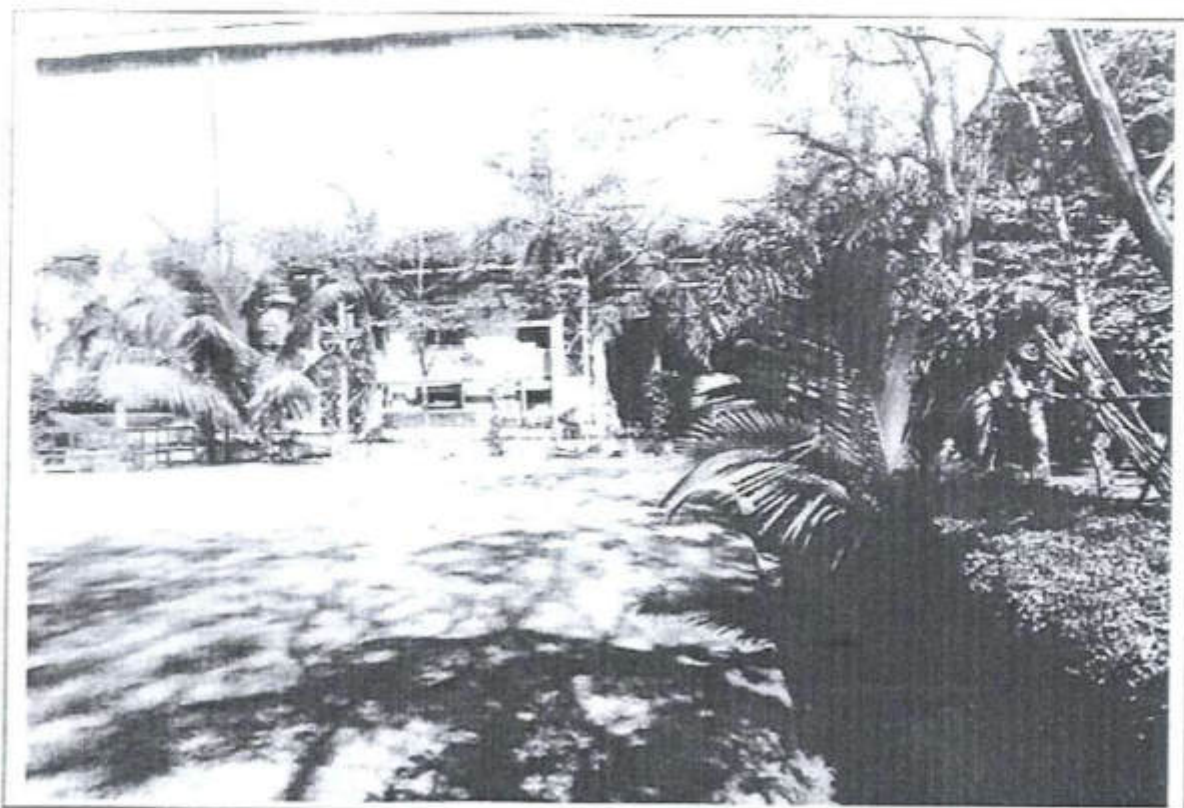
9.	Kaner	20	5.3	28	7.5	10	2.5
10.	Sisoo	28.7	5.54	45	7.00	18	4.5
11.	Arjun	77	10.6	90	12	60	8
12.	Karanj	14	2.4	18	3.50	10	2.00
13.	Kadmba	45	6.2	55	10	55	4
14.	Teek (Sagoun)	12	3.01	30	5.5	6	0.90
15.	Amaltas	12.6	3.5	20	4.5	10	2.00
16.	Gulmohar	53	8.4	65	12	45	4.00

17. Number of Plantation and Survival Percentage

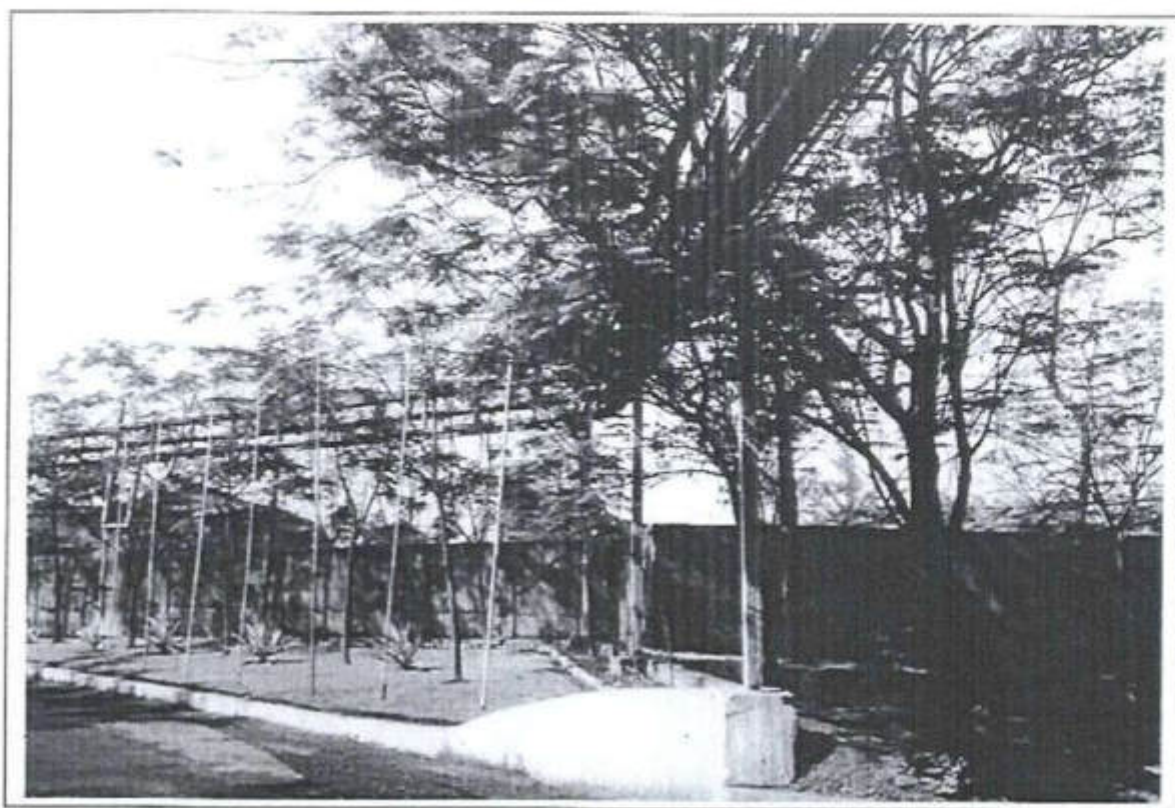
PLANTED SPECIES AND PLANTS NUMBERS				
S. N.	PLANTED SPECIES	PLANTED SPECIES NO.	SURVIVAL PLANTED	SURVIVAL PERCENTAGE
M/s HIRAPOWER&STEEL Ltd.				
1.	Unit -II (Including Admin Building)			
	Peltophorum, Alastonia, Parkia, Kesiasemia, Sirsa, Badam, Coconut, Karanj, Washingtonia, Spethodia, Nilgiri, Shisham, Gulmohar, Conocarpes, Neem, Karanj, Alastonia, Champa, Sitafal, Kaner, Kachnar, Areca Pam, Bottle Brush, Kadmba, Acacia, Shoobabul	16578	14428	87%
3.	Road Side			
	Neem, Alastonia, Khamar, Kesiyas amia, Siras, Kadamba, Gulmohar, Kaner, Sisoo, Arjun, Karanj etc.	2600	1434	55%
4.	Air port Garden			
	Spathodea, Champa, Cycus, Tikoma, Akash neem, Kaner, Bottle palm, Arjun, Peltophorum, Nilgiri, Alastonia, Gulmohar, Karanj, Kachnar, Coconut, Bottlebrush, Bottle Palm etc.	2500	1874	75%
	Grand Total=	21678	17736	

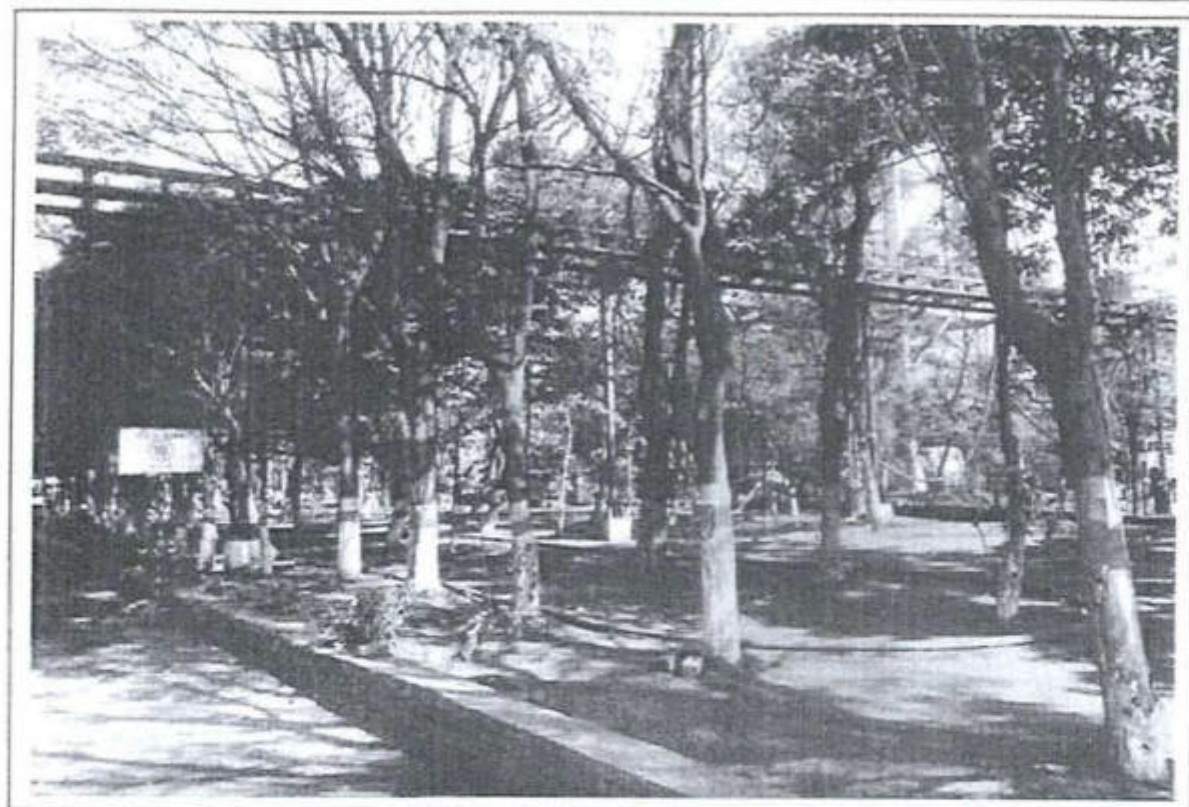
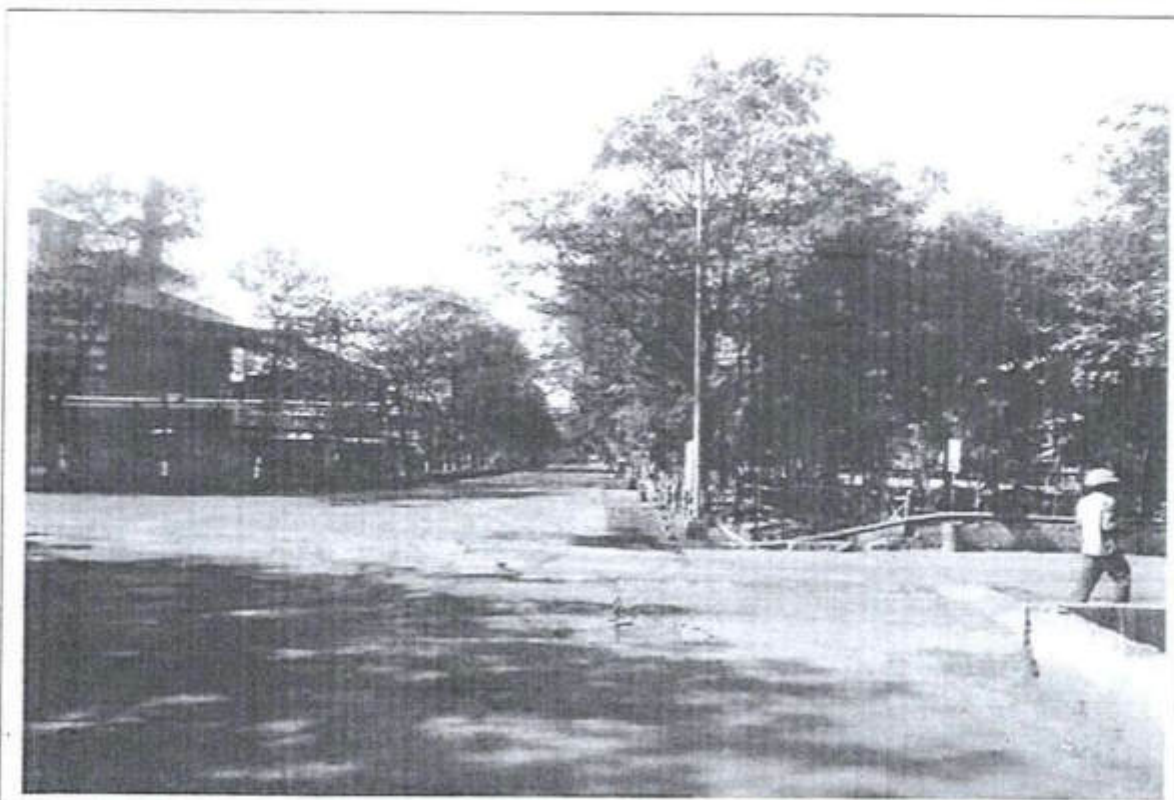
Note : - Coal yard, Crusher yard, Kirtiman van, Near Pond, Near Power store Diesel tank. In the above area mentioned places or area shoobabul are very dense.



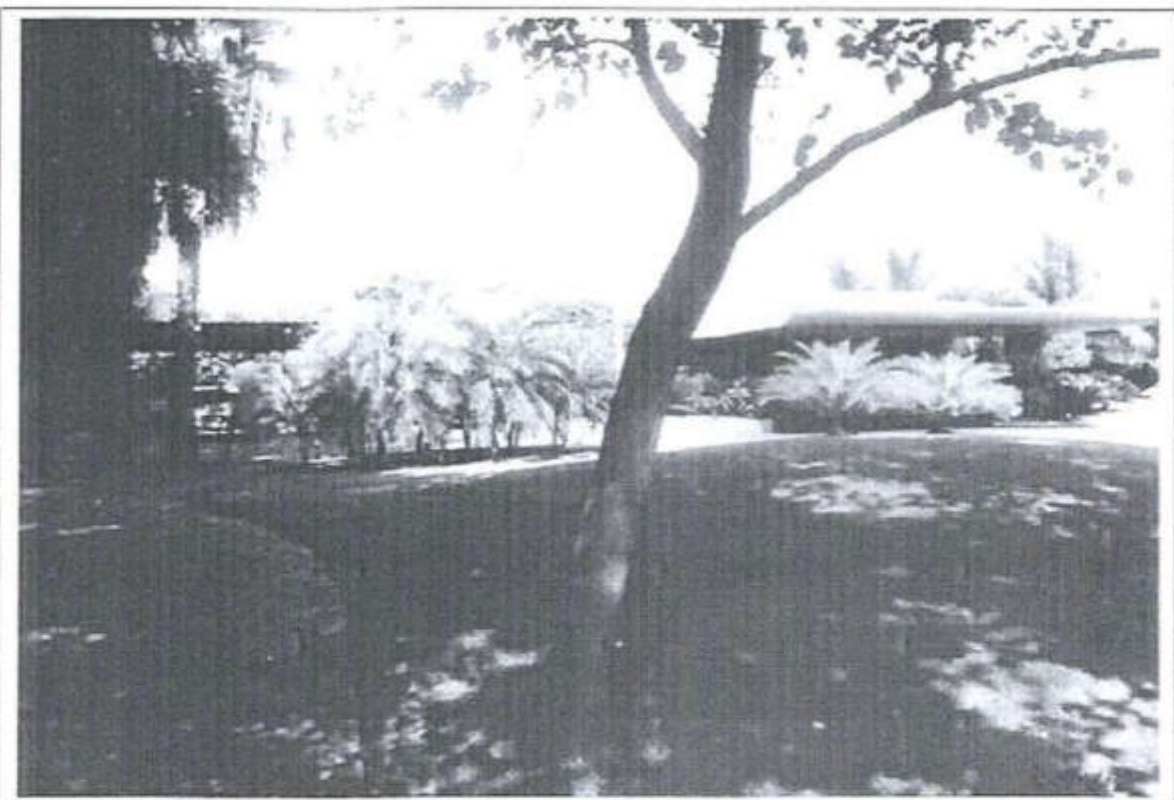
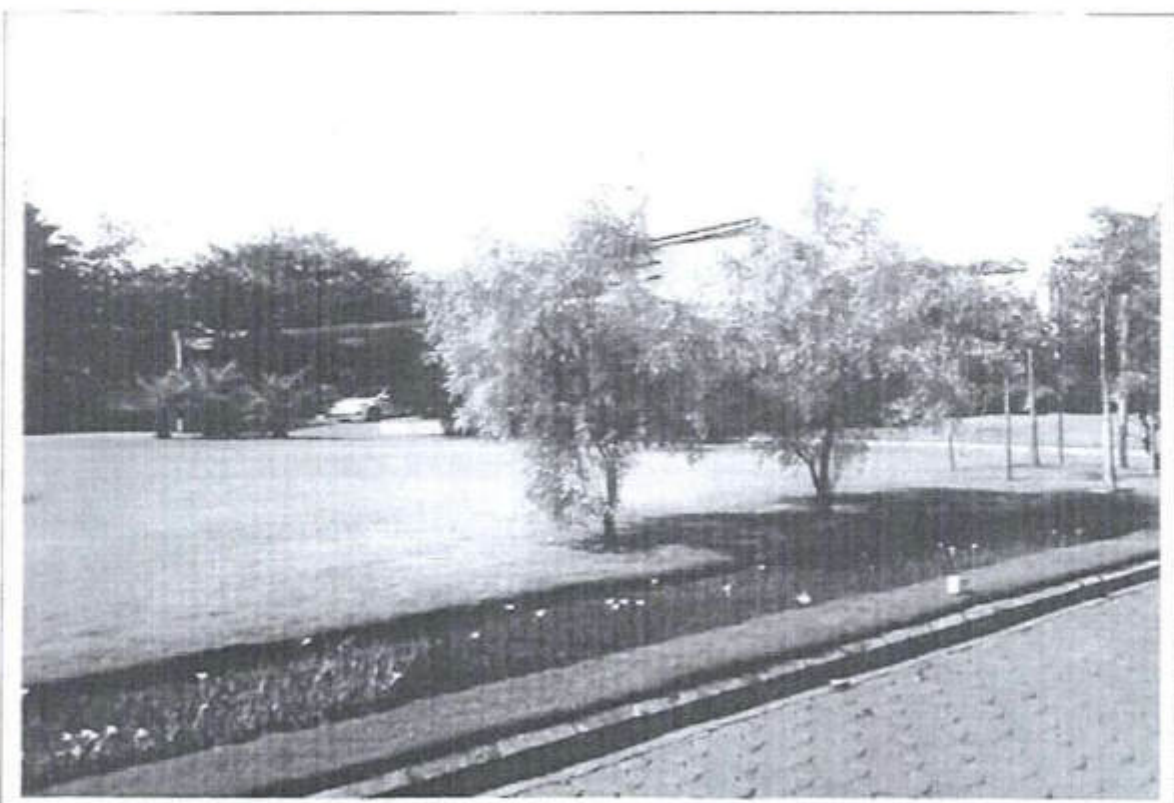


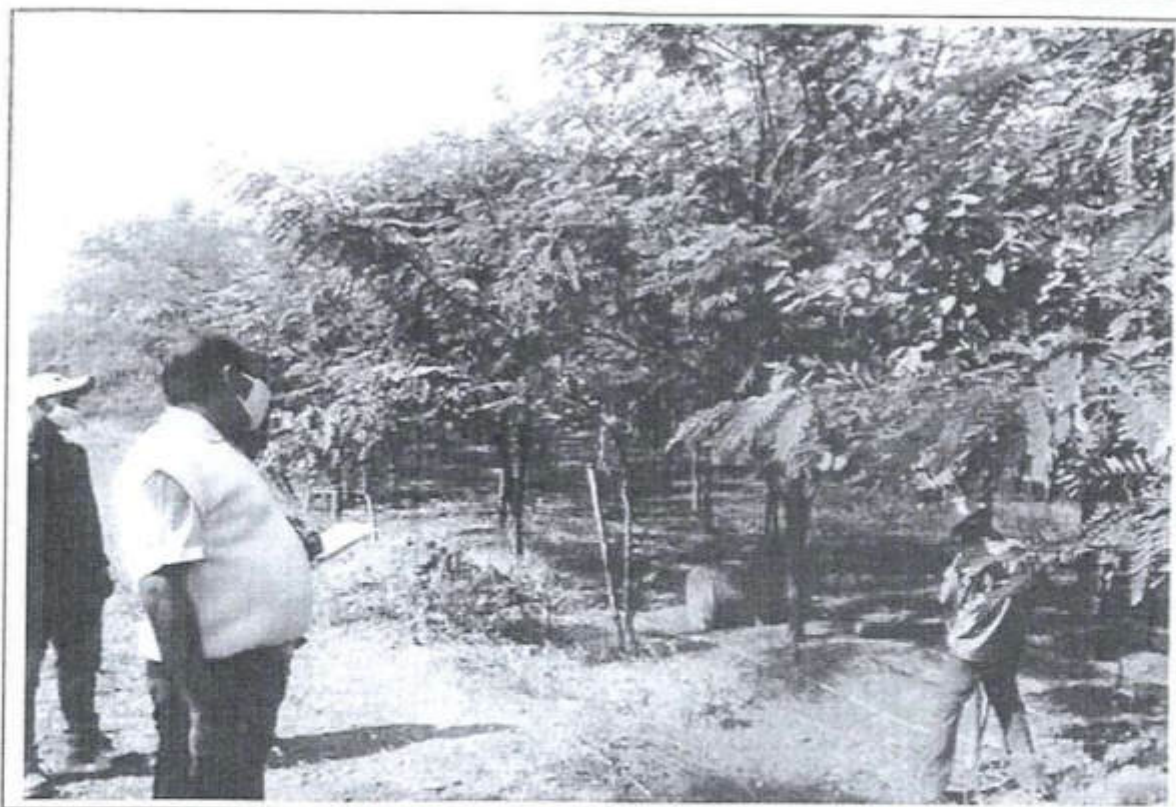
M/s HIRA POWER & STEEL LIMITED.

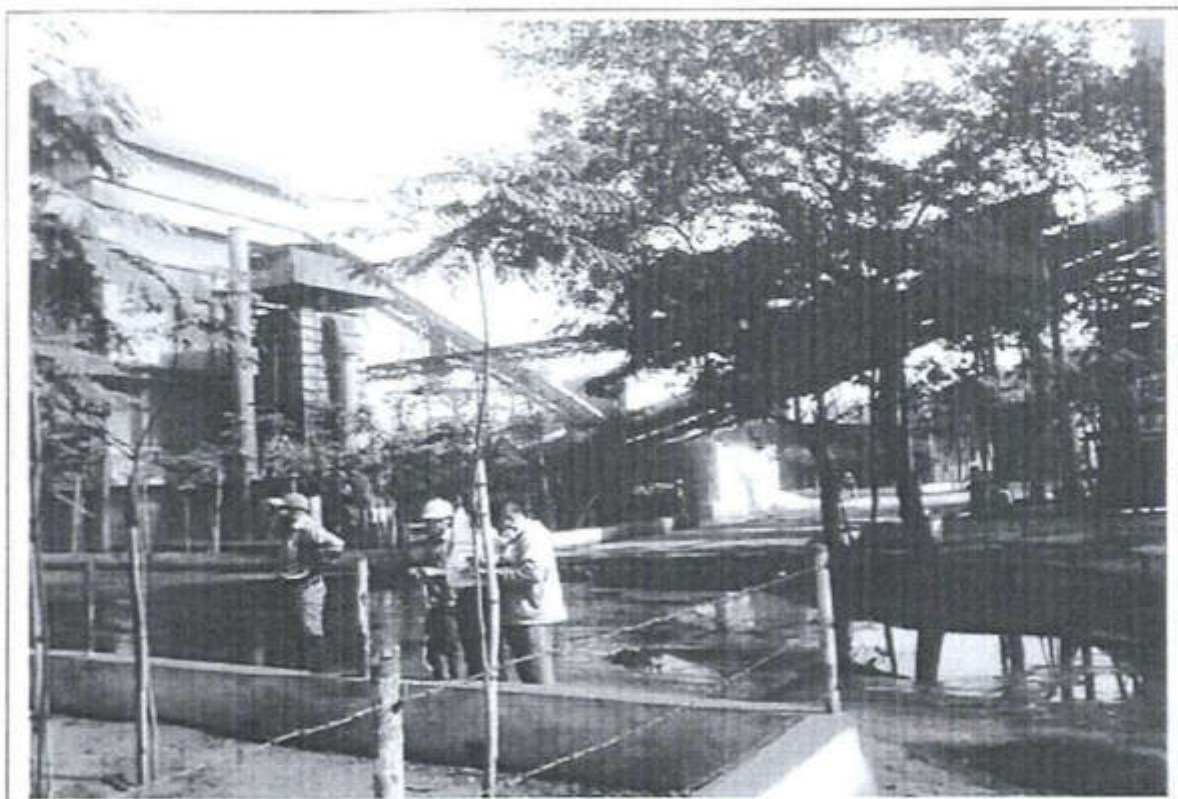




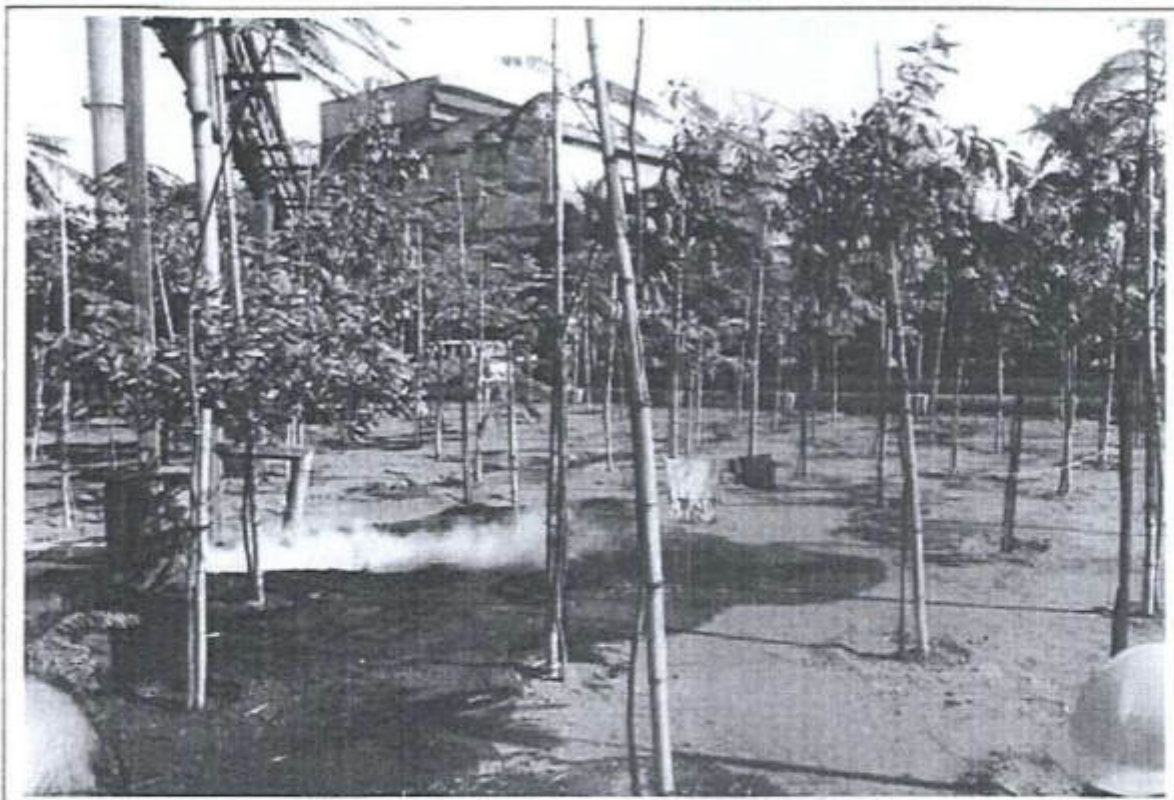
M/s HIRA POWER & STEEL LIMITED.











9. GRADING OF PLANTATION

M/s HIRAPOWER&STEEL LTD. - Unit - II

Grading of Plantation on scale of 1 to 10

Qualitative Aspects	Survival	8.50
	Health of Plantation	8.00
	Maintenance	8.00
	Sustainability	8.00

Grading of project plantation on scale 1 to 10

Overall Grading of Plantation	Outstanding (excellent) (8 - 10)	Very Good (5 < 8)	Good (3 < 5)	Poor (> 3)
	8.12			

E. GRADE CARD-

M/s HIRAPOWER&STEEL LTD. - Road Side

Grading of Plantation on scale of 1 to 10

Qualitative Aspects	Survival	6.00
	Health of Plantation	7.00
	Maintenance	6.00
	Sustainability	6.00

Grading of project plantation on scale 1 to 10

Overall Grading of Plantation	Outstanding (excellent) (8 - 10)	Very Good (5 < 8)	Good (3 < 5)	Poor (> 3)
		6.25		

F. GRADE CARD-

M/s HIRAPOWER&STEEL LTD. - Aerodrome Garden

Grading of Plantation on scale of 1 to 10

Qualitative Aspects	Survival	9.00
	Health of Plantation	9.00
	Maintenance	9.00
	Sustainability	9.00

Grading of project plantation on scale 1 to 10

Overall Grading of Plantation	Outstanding (excellent) (8 - 10)	Very Good (5 < 8)	Good (3 < 5)	Poor (> 3)
	9.00			

CERTIFICATE

CERTIFIED THAT OUR SURVEY AND EVALUATION EXPERT TEAM COUNTED ALL TREE, PLANTS, SAPLING OF M/S HIRA POWER AND STEEL LTD. UNIT -2, RAIPUR, AND FOUND 14428 OF TOTAL 16578 PLANTED PLANTS AND COVERED AS GREEN BELT 14.26 ACRES (APP.) AREAS.

DATE :12/01/2021

"SEIDR"



"SOCIETY FOR ENVIRONMENT & INTEGRATED
DEVELOPMENT RAIPUR"

10. DISCUSSION HELD WITH OFFICER AND MANEGMENT OF M/s HIRA POWER&STEEL LTD.AS UNDER -

1. Mr. Rahul Agarwal (President)
2. Mr. Aviral Tiwari (Senior Engineer Environment)
3. Mr. Mahesh Kumar Verma (Senior Officer Horticulture)

11. SUGGESTIONS FOR THE IMPROVEMENT

1. Species - Fast growing species should be planted.
2. Plant should be planted after one year age.Minimum length - 1 meter or above.
3. Irrigation facility should be provided to planted plants.
4. Space should be 2×2, 3×3 and maximum 4×4 according to maximum girth of trees after maturity.
5. Germination lime - Humic Oxide should be used for better results.
6. Manure - Compost,Vermi compost for good age Urea, Dap, Zhaim should be used.
7. Priority to broader leaves plants should be planted.
8. Following species may be chosen for plantation - Khamar, Shisham, Teak, Kadamba, Acacia, Pelt form, Arjun, Neem, Semal, Jamun, Karanj, Sissu, Mahuwa, Ashok, Nilgiri, Pipal, Amaltas, Bottlepam, KesiaSamia, etc.
9. Termite& Other pests control should be done by Cholorocyper, Imida combine.
10. Plants should be planted regularly every year.
11. Soil of Pits should be change with manure before plantation.
12. In water locked area Kahua should be planted.
13. Hard and dry area Teak should be planted.
14. For maintain of survival percentage casually replacement should be done every year.

A WORD OF APPRECIATION

We appreciate all management officers and staff of HIRA POWER&STEEL I.TD. Who has taken step to develop the green belt & greeneryness of area. We found that sapling has taken care well after plantaion.

We apperciate the commitment and care taken by the management for developing the green belt & greenery within & outside of plant permises.



"Society for Environment & Integrated Development Raipur"

THE TEAM INVOLVED IN SURVEY & EVALUATION

S.n.	Name	Job	Experience
1	Shri D K Tiwari	Team Leader	Self Employ 15years experience of monitoring & evaluation & micro planning
2	Shri Kamlesh Dubey	Coordinator	6 years experience of monitoring & evaluation Industrial Plantation
3	Shri Jasvir Singh Virdi	Investigator	7years experience of monitoring & evaluation Industrial Plantation

EXECUTIVE BODY OF "SEIDR"

NO.	Post	Name	Experience
1	President	Shri S. K. Roy	Retd. A.C.F. C.G. Govt.
2	Vice President	Smt. Shobh Mishra	Professional
3	Secretary	Smt. Asha Tiwari	Teacher (Private)
4	Treasurer	Shri D. K. Tiwari	Professional



ABOUT THE EVALUATION AGENCY

Organization profile

Name of Organization *Society for Environment & Integrated Development Raipur, Non Government Organization (NGO) And working as Development and welfare.*

No. & Date of registration *C. G. State - 3270. Date - 01/03/2011*

Registration *Under Society Registration Act, - 1973.*

Address *J-9/A, ShriRam Nagar, Phase -I, Street - II, Post Office Shankar Nagar Raipur, (C.G.) Pin Code - 492007.*

Phone *+91- 771-3557342*

Chief Functionary *Mr. S. K. Roy (Retd. Forest S.D.O.)
Mob. No. 094255 - 02223*

Contact Person *Mr. D K Triwari (Retd. Forest Range Officer)
Mob. No. 96695 - 77114, 98261 - 86818*

Mail at *seidraipur@gmail.com*

Bank with *State Bank of India, Vip Estate, Vip colony Raipur (C.G)
Account No. - 35731546052
IFS Code - SBI N0013004, SWIFT*

SEIDR MISSION

Is to release the creative energies resources and aspirations of the poor. Especially tribes, equality and women to seek and obtain opportunities for full effective sustainable participation in social, economic, political and cultural life of society and nation.

SEIDR VISION

SEIDR is society based on the values of genuine democracy, equality and peace for all its citizens, where people and government play their respective roles effectively with transparency and accountability.

Area of Operation

Intensively in all districts of Chhattisgarh state, with trained technical and professional staff.

OTHER MEMBER OF EXECUTIVE BODY

No.	Name	Experience
1	Kamlesh Dubey	Professional
2	Prabhat Panday	Electrical Engineer
3	Jasveer Singh Virdi	Professional
4	Varun Tiwari	Labor Court Lawyer
5	Smt. Nirmala	Labor Court Lawyer
6	Prdeep Sahu	Professional
7	Akhil Shrivastava	Professional



THANK YOU.



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/0337	
	LAB REF NO.	UES/22-23/ST/0375	
	DATE OF SAMPLING	16/04/2022	
	DATE OF RECEIPT	17/04/2022	
	DATE OF REPORT	22/04/2022	
	DATE OF ANALYSIS	Start:17/04/2022	End:22/04/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	3.0 & 3.6 MVA Submerged Arc Furnace 'A & B' (Combine Stack)		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity		3.0 & 3.6 MVA SUBMERGED ARC FURNACE 'A & B' (COMBINE STACK)		
Stack Attached To		BAG FILTER		
Material of Construction		MILD STEEL PLATE		
Height of the stack from ground level (Meter)		30.0 MTR		
Stack Diameter		1.4 MTR		
Stack Shape At Top		CIRCULAR		
Type of Fuel		ELECTRICITY		
Total Electrical Load (KW)		3.0 MVA & 3.6 MVA		
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	85
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	13.03
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	61321.5
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	34.8

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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-----End of the test report-----



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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/0338	
	LAB REF NO.	UES/22-23/ST/0376	
	DATE OF SAMPLING	16/04/2022	
	DATE OF RECEIPT	17/04/2022	
	DATE OF REPORT	22/04/2022	
	DATE OF ANALYSIS	Start:17/04/2022	End:22/04/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	5.5 MVA Submerged Arc Furnace 'C'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity			5.5 MVA SUBMERGED ARC FURNACE 'C'	
Stack Attached To			BAG FILTER	
Material of Construction			MILD STEEL PLATE	
Height of the stack from ground level (Meter)			35.0 MTR	
Stack Diameter			1.4 MTR	
Stack Shape At Top			CIRCULAR	
Type of Fuel			ELECTRICITY	
Total Electrical Load (KW)			5.5 MVA	
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	111
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	5.58
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	24931.4
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	40.4

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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/0339	
	LAB REF NO.	UES/22-23/ST/0377	
	DATE OF SAMPLING	16/04/2022	
	DATE OF RECEIPT	17/04/2022	
	DATE OF REPORT	22/04/2022	
	DATE OF ANALYSIS	Start:17/04/2022	End:22/04/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	5.5 MVA Submerged Arc Furnace 'D'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity				5.5 MVA SUBMERGED ARC FURNACE 'D'
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				35.0 MTR
Stack Diameter				1.4 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				5.5 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	128
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	5.33
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	21816.0
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	32.4

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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/0340	
	LAB REF NO.	UES/22-23/ST/0378	
	DATE OF SAMPLING	16/04/2022	
	DATE OF RECEIPT	17/04/2022	
	DATE OF REPORT	22/04/2022	
	DATE OF ANALYSIS	Start:17/04/2022	End:22/04/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	6 MVA Submerged Arc Furnace 'E'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity				6 MVA SUBMERGED ARC FURNACE 'E'
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				40.0 MTR
Stack Diameter				2.0 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				6.0 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	98
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	6.4
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	58110.5
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	38.8

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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/0341	
	LAB REF NO.	UES/22-23/ST/0379	
	DATE OF SAMPLING	16/04/2022	
	DATE OF RECEIPT	17/04/2022	
	DATE OF REPORT	22/04/2022	
	DATE OF ANALYSIS	Start:17/04/2022	End:22/04/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	CLU Converter & Thermite (Combine Stack)		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity				CLU CONVERTER & THERMITE (COMBINE STACK)
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				35.0 MTR
Stack Diameter				2.295 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				650 KW
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	107
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	11.2
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	130733.9
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	40	26.8

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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/0342	
	LAB REF NO.	UES/22-23/ST/0380	
	DATE OF SAMPLING	16/04/2022	
	DATE OF RECEIPT	17/04/2022	
	DATE OF REPORT	22/04/2022	
	DATE OF ANALYSIS	Start:17/04/2022	End:22/04/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	20 MW AFBC		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity		20 MW AFBC		
Stack Attached To		ESP		
Material of Construction		RCC		
Height of the stack from ground level (Meter)		73.0 MTR		
Stack Diameter		2.83 MTR		
Stack Shape At Top		CIRCULAR		
Type of Fuel		COAL		
Total Electrical Load (KW)		20 KW		
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	146
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	22.62
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	366693.3
Sulphur Dioxide (SO ₂)	mg/Nm ³	IS 11255 (Part 2):1985, RA 2003	600	248.6
Oxides of Nitrogen (NO _x)	mg/Nm ³	IS 11255 (Part 7):2005, RA 2012	300	124.2
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	36.8
Carbon Monoxide (CO)	mg/ Nm ³	IS 13270	-	4.4
Hg	mg/ Nm ³	USEPA Method No. 29	0.03	N.D.

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Name & Address Of The Customer

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/22-23/0350
LAB REF NO.	UES/22-23/ST/0392
DATE OF SAMPLING	16/04/2022
DATE OF RECEIPT	17/04/2022
DATE OF REPORT	22/04/2022
DATE OF ANALYSIS	Start:17/04/2022 END: 22/04/2022

SAMPLE DETAILS

Monitoring For	DG Stack Emission Monitoring
Customer Ref. No.	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021
Sampling Location	DG Set - 1500 KVA (Power Plant 20 MW)
Sample Collected By	Laboratory Chemist
Sampling Procedure	As Per Method Reference.
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No., Hg: 500ml X 1 No. Glass Bottle & 500ml X 3 NO. PVC Bottle.

TEST REPORT

Stack details

Stack Identity	DG Set - 1500 KVA (Power Plant 20 MW)			
Stack Attached to	DG-SET - 1500 KVA			
Material of construction	MS Plate			
Stack height above ground level	7.3 meter			
Stack diameter	280 mm			
Stack shape at top	Circular			
Type of fuel	HSD			
Parameter	Unit	Result	Limit	Method Reference
Flue gas Temperature	°C	156	-	IS 11255 (Part 3):2008
Flue gas velocity	m/s	10.4	-	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	1600.5	-	IS 11255 (Part 3):2008
Total Particulate Matter (PM) (Corrected at 15 % O ₂)	mg/Nm ³	34.2	75	IS 11255 (Part 1):1985, RA 2003
Sulphur Dioxide (SO ₂)	mg/Nm ³	30.8	-	IS 11255 (Part 2):1985, RA 2003
Oxides of Nitrogen (NO _x)(Corrected at 15 % O ₂) Dry Basis	ppm	224	360	IS 11255 (Part 7):2005, RA 2012
Non-Methane hydrocarbon (NMHC) (Corrected at 15 % O ₂)	mg/Nm ³	22	100	APHA METHOD 109, P-259
Carbon Monoxide (CO)	mg/Nm ³	126	150	APHA METHOD 130, P-359

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Name & Address Of The Customer

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/22-23/0877
LAB REF NO.	UES/22-23/ST/01451
DATE OF SAMPLING	10/05/2022
DATE OF RECEIPT	12/05/2022
DATE OF REPORT	17/05/2022
DATE OF ANALYSIS	Start:12/05/2022 End:17/05/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	3.0 & 3.6 MVA Submerged Arc Furnace 'A & B' (Combine Stack)
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity	3.0 & 3.6 MVA SUBMERGED ARC FURNACE 'A & B' (COMBINE STACK)			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	30.0 MTR			
Stack Diameter	1.4 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	3.0 MVA & 3.6 MVA			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	92
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	12.4
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	56075.5
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	32.6

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO.		UES/TR/22-23/0878	
		LAB REF NO.		UES/22-23/ST/01452	
		DATE OF SAMPLING		10/05/2022	
		DATE OF RECEIPT		12/05/2022	
		DATE OF REPORT		17/05/2022	
		DATE OF ANALYSIS		Start:12/05/2022	End:17/05/2022
SAMPLE DETAILS					
Monitoring For		Stack Emission Monitoring			
Customer Ref. No. & Date		P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021			
Sampling Location		5.5 MVA Submerged Arc Furnace 'C'			
Sample Collected By		Laboratory Chemist			
Sampling Procedure		IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing		Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,			

TEST REPORT

Stack details

Stack Identity	5.5 MVA SUBMERGED ARC FURNACE 'C'
Stack Attached To	BAG FILTER
Material of Construction	MILD STEEL PLATE
Height of the stack from ground level (Meter)	35.0 MTR
Stack Diameter	1.4 MTR
Stack Shape At Top	CIRCULAR
Type of Fuel	ELECTRICITY
Total Electrical Load (KW)	5.5 MVA

Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	106
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	6.24
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	27176.2
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	42.8

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HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO.		UES/TR/22-23/0879	
		LAB REF NO.		UES/22-23/ST/01453	
		DATE OF SAMPLING		10/05/2022	
		DATE OF RECEIPT		12/05/2022	
		DATE OF REPORT		17/05/2022	
		DATE OF ANALYSIS		Start:12/05/2022	End:17/05/2022
SAMPLE DETAILS					
Monitoring For		Stack Emission Monitoring			
Customer Ref. No. & Date		P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021			
Sampling Location		5.5 MVA Submerged Arc Furnace 'D'			
Sample Collected By		Laboratory Chemist			
Sampling Procedure		IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing		Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,			

TEST REPORT

Stack details

Stack Identity	5.5 MVA SUBMERGED ARC FURNACE 'D'			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	35.0 MTR			
Stack Diameter	1.4 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	5.5 MVA			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	124
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	5.58
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	23200.0
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	34.6

REMARKS: RESULTS ARE AS ABOVE

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Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/0880	
	LAB REF NO.	UES/22-23/ST/01454	
	DATE OF SAMPLING	10/05/2022	
	DATE OF RECEIPT	12/05/2022	
	DATE OF REPORT	17/05/2022	
	DATE OF ANALYSIS	Start:12/05/2022	End:17/05/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	6 MVA Submerged Arc Furnace 'E'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details

Stack Identity	6 MVA SUBMERGED ARC FURNACE 'E'			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	40.0 MTR			
Stack Diameter	2.0 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	6.0 MVA			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	116
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	6.2
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	55495.2
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	36.0

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/0881	
	LAB REF NO.	UES/22-23/ST/01455	
	DATE OF SAMPLING	10/05/2022	
	DATE OF RECEIPT	12/05/2022	
	DATE OF REPORT	17/05/2022	
	DATE OF ANALYSIS	Start:12/05/2022	End:17/05/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	CLU Converter & Thermite (Combine Stack)		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details

Stack Identity	CLU CONVERTER & THERMITE (COMBINE STACK)			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	35.0 MTR			
Stack Diameter	2.295 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	650 KW			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	102
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	10.8
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	127745.6
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	40	28.2

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/0882	
	LAB REF NO.	UES/22-23/ST/01456	
	DATE OF SAMPLING	10/05/2022	
	DATE OF RECEIPT	12/05/2022	
	DATE OF REPORT	17/05/2022	
	DATE OF ANALYSIS	Start:12/05/2022	End:17/05/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	20 MW AFBC		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details

Stack Identity	20 MW AFBC			
Stack Attached To	ESP			
Material of Construction	RCC			
Height of the stack from ground level (Meter)	73.0 MTR			
Stack Diameter	2.83 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	COAL			
Total Electrical Load (KW)	20 KW			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	122
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	20.4
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	348332.7
Sulphur Dioxide (SO ₂)	mg/Nm ³	IS 11255 (Part 2):1985, RA 2003	600	268
Oxides of Nitrogen (NO _x)	mg/Nm ³	IS 11255 (Part 7):2005, RA 2012	300	146
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	38.6
Carbon Monoxide (CO)	mg/ Nm ³	IS 13270	-	4.8
Hg	mg/ Nm ³	USEPA Method No. 29	0.03	N.D.

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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/01622	
	LAB REF NO.	UES/22-23/ST/02031	
	DATE OF SAMPLING	04/06/2022	
	DATE OF RECEIPT	05/06/2022	
	DATE OF REPORT	11/06/2022	
	DATE OF ANALYSIS	Start:06/06/2022	End:11/06/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	3.0 & 3.6 MVA Submerged Arc Furnace 'A & B' (Combine Stack)		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity	3.0 & 3.6 MVA SUBMERGED ARC FURNACE 'A & B' (COMBINE STACK)			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	30.0 MTR			
Stack Diameter	1.4 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	3.0 MVA & 3.6 MVA			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	98
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	10.8
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	48050.1
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	30.2

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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/01623	
	LAB REF NO.	UES/22-23/ST/02032	
	DATE OF SAMPLING	04/06/2022	
	DATE OF RECEIPT	05/06/2022	
	DATE OF REPORT	11/06/2022	
	DATE OF ANALYSIS	Start:06/06/2022	End:11/06/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	5.5 MVA Submerged Arc Furnace 'C'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity	5.5 MVA SUBMERGED ARC FURNACE 'C'			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	35.0 MTR			
Stack Diameter	1.4 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	5.5 MVA			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	102
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	8.20
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	36093.3
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	40.2

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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/01624	
	LAB REF NO.	UES/22-23/ST/02033	
	DATE OF SAMPLING	04/06/2022	
	DATE OF RECEIPT	05/06/2022	
	DATE OF REPORT	11/06/2022	
	DATE OF ANALYSIS	Start:06/06/2022	End:11/06/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	5.5 MVA Submerged Arc Furnace 'D'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity				5.5 MVA SUBMERGED ARC FURNACE 'D'
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				35.0 MTR
Stack Diameter				1.4 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				5.5 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	118
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	6.42
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	27102.0
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	32.8

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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/01625	
	LAB REF NO.	UES/22-23/ST/02034	
	DATE OF SAMPLING	04/06/2022	
	DATE OF RECEIPT	05/06/2022	
	DATE OF REPORT	11/06/2022	
	DATE OF ANALYSIS	Start:06/06/2022	End:11/06/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	6 MVA Submerged Arc Furnace 'E'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity				6 MVA SUBMERGED ARC FURNACE 'E'
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				40.0 MTR
Stack Diameter				2.0 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				6.0 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	108
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	6.9
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	61005.2
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	34.6

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Name & Address Of The Customer

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/22-23/01626	
LAB REF NO.	UES/22-23/ST/02035	
DATE OF SAMPLING	04/06/2022	
DATE OF RECEIPT	05/06/2022	
DATE OF REPORT	11/06/2022	
DATE OF ANALYSIS	Start:06/06/2022	End:11/06/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	CLU Converter & Thermite (Combine Stack)
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity	CLU CONVERTER & THERMITE (COMBINE STACK)			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	35.0 MTR			
Stack Diameter	2.295 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	650 KW			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	114
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	9.6
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	110030.3
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	40	26.8

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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/01627	
	LAB REF NO.	UES/22-23/ST/02036	
	DATE OF SAMPLING	04/06/2022	
	DATE OF RECEIPT	05/06/2022	
	DATE OF REPORT	11/06/2022	
	DATE OF ANALYSIS	Start:06/06/2022	End:11/06/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	20 MW AFBC		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity				20 MW AFBC
Stack Attached To				ESP
Material of Construction				RCC
Height of the stack from ground level (Meter)				73.0 MTR
Stack Diameter				2.83 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				COAL
Total Electrical Load (KW)				20 KW
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	124
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	19.8
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	336379.8
Sulphur Dioxide (SO ₂)	mg/Nm ³	IS 11255 (Part 2):1985, RA 2003	600	298
Oxides of Nitrogen (NO _x)	mg/Nm ³	IS 11255 (Part 7):2005, RA 2012	300	162
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	36.0
Carbon Monoxide (CO)	mg/ Nm ³	IS 13270	-	4.6
Hg	mg/ Nm ³	USEPA Method No. 29	0.03	N.D.

REMARKS: RESULTS ARE AS ABOVE

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- > This is for information as the party has asked for above results only

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-----End of the test report-----

Report No.	UES/TR/22-23/01551
LAB REF NO.	UES/22-23/ST/03287
DATE OF SAMPLING	14/07/2022 to 15/07/2022
DATE OF RECEIPT	15/07/2022
DATE OF REPORT	22/07/2022
DATE OF ANALYSIS	Start:15/07/2022 End:22/07/2022
SAMPLE DETAILS	
Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 720004006/U102, DATED: 16/06/2022
Sampling Location	3.0 & 3.6 MVA Submerged Arc Furnace 'A & B' (Combine Stack)
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO.: 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.

TEST REPORT

Stack details				3.0 & 3.6 MVA SUBMERGED ARC FURNACE 'A & B' (COMBINE STACK)	
Stack Identity				BAG FILTER	
Stack Attached To				MILD STEEL PLATE	
Material of Construction				30.0 MTR	
Height of the stack from ground level (Meter)				1.4 MTR	
Stack Diameter				CIRCULAR	
Stack Shape At Top				ELECTRICITY	
Type of Fuel				3.0 MVA & 3.6 MVA	
Total Electrical Load (KW)					
Parameter	Unit	Method Reference	Limit	Result	
Flue Gas Temperature	°C	IS :11255: (Part -3) 2008	-	104	
Flue Gas Velocity	M/s	IS :11255: (Part -3) 2008	-	11.2	
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3) 2008	-	49036.1	
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255: (Part -1):1985, RA 2003	50	32.2	

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End of the test report

Name & Address of The Customer		REPORT NO.	UES/TR/22-23/01552
To,		LAB REF NO.	UES/22-23/5T/03288
HIRA POWER AND STEEL LTD.		DATE OF SAMPLING	14/07/2022 to 15/07/2022
KHASRA NO.: 511/1, 512/2,		DATE OF RECEIPT	15/07/2022
URLA INDUSTRIAL AREA		DATE OF REPORT	22/07/2022
RAIPUR (C. G.) 492003		DATE OF ANALYSIS	Start:15/07/2022 End:22/07/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022		
Sampling Location	5.5 MVA Submerged Arc Furnace 'C'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009, Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity	5.5 MVA SUBMERGED ARC FURNACE 'C'			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	35.0 MTR			
Stack Diameter	1.4 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	5.5 MVA			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	96
Flue Gas Velocity	M/s	IS :11255 : (Part -3):2008	-	9.62
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	43032.3
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 : (Part -1):1985, RA 2003	50	42.8

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End of the test report

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO.	UES/TR/22-23/01553	
		LAB REF NO.	UES/22-23/ST/03289	
		DATE OF SAMPLING	14/07/2022 to 15/07/2022	
		DATE OF RECEIPT	15/07/2022	
		DATE OF REPORT	22/07/2022	
		DATE OF ANALYSIS	Start:15/07/2022	End:22/07/2022
SAMPLE DETAILS				
Monitoring For		Stack Emission Monitoring		
Customer Ref. No. & Date		P.O. NO. 7200004006/U102, DATED: 16/06/2022		
Sampling Location		5.5 MVA Submerged Arc Furnace 'D'		
Sample Collected By		Laboratory Chemist		
Sampling Procedure		IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing		Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity		5.5 MVA SUBMERGED ARC FURNACE 'D'		
Stack Attached To		BAG FILTER		
Material of Construction		MILD STEEL PLATE		
Height of the stack from ground level (Meter)		35.0 MTR		
Stack Diameter		1.4 MTR		
Stack Shape At Top		CIRCULAR		
Type of Fuel		ELECTRICITY		
Total Electrical Load (KW)		5.5 MVA		
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	112
Flue Gas Velocity	M/s	IS :11255 : (Part -3):2008	-	6.56
Total Gas Quantity	Nm ³ /h	IS :11255 : (Part -3):2008	-	28124.7
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 : (Part -1) 1985, RA 2003	50	36.4

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End of the test report

Name & Address of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/01554	
	LAB REF NO.	UES/22-23/ST/03290	
	DATE OF SAMPLING	14/07/2022 to 15/07/2022	
	DATE OF RECEIPT	15/07/2022	
	DATE OF REPORT	22/07/2022	
	DATE OF ANALYSIS	Start:15/07/2022	End:22/07/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022		
Sampling Location	6 MVA Submerged Arc Furnace 'E'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details					6 MVA SUBMERGED ARC FURNACE 'E' BAG FILTER MILD STEEL PLATE 40.0 MTR 2.0 MTR CIRCULAR ELECTRICITY 6.0 MVA
Stack Identity					
Stack Attached To					
Material of Construction					
Height of the stack from ground level (Meter)					
Stack Diameter					
Stack Shape At Top					
Type of Fuel					
Total Electrical Load (KW)					
Parameter	Unit	Method Reference	Limit	Result	
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	104	
Flue Gas Velocity	M/s	IS :11255 : (Part -3): 2008	-	6.4	
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3): 2008	-	57185.5	
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 : (Part -1):1985, RA 2003	50	38.4	

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End of the test report

Name & Address of the Customer		REPORT NO.	UES/TR/22-23/01555	
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO.	UES/22-23/ST/03291	
		DATE OF SAMPLING	14/07/2022 to 15/07/2022	
		DATE OF RECEIPT	15/07/2022	
		DATE OF REPORT	22/07/2022	
		DATE OF ANALYSIS	Start:15/07/2022	End:22/07/2022
SAMPLE DETAILS				
Monitoring For	Stack Emission Monitoring			
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022			
Sampling Location	CLU Converter & Thermite (Combine Stack)			
Sample Collected By	Laboratory Chemist			
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009, Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,			

TEST REPORT

Stack details				
Stack Identity	CLU CONVERTER & THERMITE (COMBINE STACK)			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	35.0 MTR			
Stack Diameter	2.295 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	650 KW			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	106
Flue Gas Velocity	M/s	IS :11255 : (Part -3):2008	-	9.2
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	107671.6
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 : (Part -1):1985, RA 2003	40	24.6

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AUTHORIZED SIGNATORY

End of the test report

Name & Address Of The Customer		REPORT NO.	UES/TR/22-23/01556	
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO.	UES/22-23/ST/03292	
		DATE OF SAMPLING	14/07/2022 to 15/07/2022	
		DATE OF RECEIPT	15/07/2022	
		DATE OF REPORT	22/07/2022	
		DATE OF ANALYSIS	Start:15/07/2022	End:22/07/2022
SAMPLE DETAILS				
Monitoring For		Stack Emission Monitoring		
Customer Ref. No. & Date		P.O. NO. 7200004006/U102, DATED: 16/06/2022		
Sampling Location		20 MW AFBC		
Sample Collected By		Laboratory Chemist		
Sampling Procedure		IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing		Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity		20 MW AFBC		
Stack Attached To		ESP		
Material of Construction		RCC		
Height of the stack from ground level (Meter)		73.0 MTR		
Stack Diameter		2.83 MTR		
Stack Shape At Top		CIRCULAR		
Type of Fuel		COAL		
Total Electrical Load (KW)		20 KW		
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255 (Part -3):2008	-	126
Flue Gas Velocity	M/s	IS :11255 (Part -3):2008	-	18.2
Total Gas Quantity	Nm ³ /h	IS :11255 (Part -3):2008	-	309830.1
Sulphur Dioxide (SO ₂)	mg/Nm ³	IS 11255 (Part 2):1985, RA 2003	600	242
Oxides of Nitrogen (NO _x)	mg/Nm ³	IS 11255 (Part 7):2005, RA 2012	300	182
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 (Part -1):1985, RA 2003	50	42.4
Carbon Monoxide (CO)	mg/ Nm ³	IS 13270:2019	-	4.8
Hg	mg/ Nm ³	USEPA Method No. 29	0.03	N.D.

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For ULTIMATE ENVIROLYTICAL SOLUTIONS	
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer		REPORT NO.	UES/TR/22-23/02398
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO.	UES/22-23/ST/07027
		DATE OF SAMPLING	17/08/2022
		DATE OF RECEIPT	18/08/2022
		DATE OF REPORT	22/08/2022
		DATE OF ANALYSIS	Start:18/08/2022 End:22/08/2022
SAMPLE DETAILS			
Monitoring For		Stack Emission Monitoring	
Customer Ref. No. & Date		P.O. NO. 7200004006/U102, DATED: 16/06/2022	
Sampling Location		3.0 & 3.6 MVA Submerged Arc Furnace 'A & B' (Combine Stack)	
Sample Collected By		Laboratory Chemist	
Sampling Procedure		IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003	
Sample Quantity/Packing		Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,	

TEST REPORT

Stack details				
Stack Identity			3.0 & 3.6 MVA SUBMERGED ARC FURNACE 'A & B' (COMBINE STACK)	
Stack Attached To			BAG FILTER	
Material of Construction			MILD STEEL PLATE	
Height of the stack from ground level (Meter)			30.0 MTR	
Stack Diameter			1.4 MTR	
Stack Shape At Top			CIRCULAR	
Type of Fuel			ELECTRICITY	
Total Electrical Load (KW)			3.0 MVA & 3.6 MVA	
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	108
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	12.6
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	54587.1
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	34.8

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer		REPORT NO.	UES/TR/22-23/02399
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO.	UES/22-23/ST/07028
		DATE OF SAMPLING	17/08/2022
		DATE OF RECEIPT	18/08/2022
		DATE OF REPORT	22/08/2022
		DATE OF ANALYSIS	Start:18/08/2022 End:22/08/2022
SAMPLE DETAILS			
Monitoring For		Stack Emission Monitoring	
Customer Ref. No. & Date		P.O. NO. 7200004006/U102, DATED: 16/06/2022	
Sampling Location		5.5 MVA Submerged Arc Furnace 'C'	
Sample Collected By		Laboratory Chemist	
Sampling Procedure		IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003	
Sample Quantity/Packing		Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,	

TEST REPORT

Stack details				
Stack Identity				5.5 MVA SUBMERGED ARC FURNACE 'C'
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				35.0 MTR
Stack Diameter				1.4 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				5.5 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	98
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	10.2
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	45380.6
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	40.8

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer		REPORT NO.	UES/TR/22-23/02400	
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO.	UES/22-23/ST/07029	
		DATE OF SAMPLING	17/08/2022	
		DATE OF RECEIPT	18/08/2022	
		DATE OF REPORT	22/08/2022	
		DATE OF ANALYSIS	Start:18/08/2022	End:22/08/2022
SAMPLE DETAILS				
Monitoring For	Stack Emission Monitoring			
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022			
Sampling Location	5.5 MVA Submerged Arc Furnace 'D'			
Sample Collected By	Laboratory Chemist			
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,			

TEST REPORT

Stack details				
Stack Identity			5.5 MVA SUBMERGED ARC FURNACE 'D'	
Stack Attached To			BAG FILTER	
Material of Construction			MILD STEEL PLATE	
Height of the stack from ground level (Meter)			35.0 MTR	
Stack Diameter			1.4 MTR	
Stack Shape At Top			CIRCULAR	
Type of Fuel			ELECTRICITY	
Total Electrical Load (KW)			5.5 MVA	
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	116
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	7.28
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	30890.5
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	38.4

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer		REPORT NO.	UES/TR/22-23/02401
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO.	UES/22-23/ST/07030
		DATE OF SAMPLING	17/08/2022
		DATE OF RECEIPT	18/08/2022
		DATE OF REPORT	22/08/2022
		DATE OF ANALYSIS	Start:18/08/2022 End:22/08/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 720004006/U102, DATED: 16/06/2022		
Sampling Location	6 MVA Submerged Arc Furnace 'E'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity		6 MVA SUBMERGED ARC FURNACE 'E'		
Stack Attached To		BAG FILTER		
Material of Construction		MILD STEEL PLATE		
Height of the stack from ground level (Meter)		40.0 MTR		
Stack Diameter		2.0 MTR		
Stack Shape At Top		CIRCULAR		
Type of Fuel		ELECTRICITY		
Total Electrical Load (KW)		6.0 MVA		
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	108
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	7.2
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	63658.4
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	34.6

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 22/08/22 REVIEWED BY	 For ULTIMATE ENVIROLYTICAL SOLUTIONS	 22/08/22 AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer		REPORT NO.	UES/TR/22-23/02402	
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO.	UES/22-23/ST/07031	
		DATE OF SAMPLING	17/08/2022	
		DATE OF RECEIPT	18/08/2022	
		DATE OF REPORT	22/08/2022	
		DATE OF ANALYSIS	Start:18/08/2022	End:22/08/2022
SAMPLE DETAILS				
Monitoring For	Stack Emission Monitoring			
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022			
Sampling Location	CLU Converter & Thermite (Combine Stack)			
Sample Collected By	Laboratory Chemist			
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,			

TEST REPORT

Stack details				
Stack Identity				CLU CONVERTER & THERMITE (COMBINE STACK)
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				35.0 MTR
Stack Diameter				2.295 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				650 KW
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	92.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	8.6
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	104510.3
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	40	22.8

REMARKS: RESULTS ARE AS ABOVE

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/02800	
	LAB REF NO.	UES/22-23/ST/07828	
	DATE OF SAMPLING	17/08/2022	
	DATE OF RECEIPT	18/08/2022	
	DATE OF REPORT	22/08/2022	
	DATE OF ANALYSIS	Start:18/08/2022	End:22/08/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022		
Sampling Location	20 MW AFBC		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity			20 MW AFBC	
Stack Attached To			ESP	
Material of Construction			RCC	
Height of the stack from ground level (Meter)			73.0 MTR	
Stack Diameter			2.83 MTR	
Stack Shape At Top			CIRCULAR	
Type of Fuel			COAL	
Total Electrical Load (KW)			20 KW	
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	124
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	21.8
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	370362.7
Sulphur Dioxide (SO ₂)	mg/Nm ³	IS 11255 (Part 2):1985, RA 2003	600	246
Oxides of Nitrogen (NO _x)	mg/Nm ³	IS 11255 (Part 7):2005, RA 2012	300	123
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	42.5
Carbon Monoxide (CO)	mg/ Nm ³	IS 13270:2019	-	4.8
Hg	mg/ Nm ³	USEPA Method No. 29	0.03	N.D.

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/03099	
	LAB REF NO.	UES/22-23/ST/08292	
	DATE OF SAMPLING	23/09/2022	
	DATE OF RECEIPT	24/09/2022	
	DATE OF REPORT	29/09/2022	
	DATE OF ANALYSIS	Start:24/09/2022	End:29/09/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022		
Sampling Location	3.0 & 3.6 MVA Submerged Arc Furnace 'A & B' (Combine Stack)		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity				3.0 & 3.6 MVA SUBMERGED ARC FURNACE 'A & B' (COMBINE STACK)
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				30.0 MTR
Stack Diameter				1.4 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				3.0 MVA & 3.6 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	112
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	14.2
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	60879.6
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	36.2

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HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer		REPORT NO.	UES/TR/22-23/03100	
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO.	UES/22-23/ST/08293	
		DATE OF SAMPLING	23/09/2022	
		DATE OF RECEIPT	24/09/2022	
		DATE OF REPORT	29/09/2022	
		DATE OF ANALYSIS	Start:24/09/2022	End:29/09/2022
SAMPLE DETAILS				
Monitoring For	Stack Emission Monitoring			
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022			
Sampling Location	5.5 MVA Submerged Arc Furnace 'C'			
Sample Collected By	Laboratory Chemist			
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,			

TEST REPORT

Stack details				
Stack Identity				5.5 MVA SUBMERGED ARC FURNACE 'C'
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				35.0 MTR
Stack Diameter				1.4 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				5.5 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	106
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	12.6
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	54875.1
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	42.2

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HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer		REPORT NO.	UES/TR/22-23/03101	
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO.	UES/22-23/ST/08294	
		DATE OF SAMPLING	23/09/2022	
		DATE OF RECEIPT	24/09/2022	
		DATE OF REPORT	29/09/2022	
		DATE OF ANALYSIS	Start:24/09/2022	End:29/09/2022
SAMPLE DETAILS				
Monitoring For	Stack Emission Monitoring			
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022			
Sampling Location	5.5 MVA Submerged Arc Furnace 'D'			
Sample Collected By	Laboratory Chemist			
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,			

TEST REPORT

Stack details				
Stack Identity				5.5 MVA SUBMERGED ARC FURNACE 'D'
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				35.0 MTR
Stack Diameter				1.4 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				5.5 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	110
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	8.62
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	37149.5
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	36.8

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Rekha
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Chandana
29/09/22

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HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/03102	
	LAB REF NO.	UES/22-23/ST/08095	
	DATE OF SAMPLING	23/09/2022	
	DATE OF RECEIPT	24/09/2022	
	DATE OF REPORT	29/09/2022	
	DATE OF ANALYSIS	Start:24/09/2022	End:29/09/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022		
Sampling Location	6 MVA Submerged Arc Furnace 'E'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity				6 MVA SUBMERGED ARC FURNACE 'E'
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				40.0 MTR
Stack Diameter				2.0 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				6.0 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	104
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	7.8
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	69695.0
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	36.2

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Chandrup
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HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/03103	
	LAB REF NO.	UES/22-23/ST/08296	
	DATE OF SAMPLING	23/09/2022	
	DATE OF RECEIPT	24/09/2022	
	DATE OF REPORT	29/09/2022	
	DATE OF ANALYSIS	Start:24/09/2022	End:29/09/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022		
Sampling Location	CLU Converter & Thermite (Combine Stack)		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity	CLU CONVERTER & THERMITE (COMBINE STACK)			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	35.0 MTR			
Stack Diameter	2.295 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	650 KW			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	98.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	8.2
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	91848.5
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	40	24.6

REMARKS: RESULTS ARE AS ABOVE

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Tammy
29/09/22

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/22-23/03104	
	LAB REF NO.	UES/22-23/ST/08297	
	DATE OF SAMPLING	23/09/2022	
	DATE OF RECEIPT	24/09/2022	
	DATE OF REPORT	29/09/2022	
	DATE OF ANALYSIS	Start:24/09/2022	End:29/09/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022		
Sampling Location	20 MW AFBC		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity	20 MW AFBC			
Stack Attached To	ESP			
Material of Construction	RCC			
Height of the stack from ground level (Meter)	73.0 MTR			
Stack Diameter	2.83 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	COAL			
Total Electrical Load (KW)	20 KW			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	120
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	22.6
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	387861.9
Sulphur Dioxide (SO ₂)	mg/Nm ³	IS 11255 (Part 2):1985, RA 2003	600	262
Oxides of Nitrogen (NO _x)	mg/Nm ³	IS 11255 (Part 7):2005, RA 2012	300	148
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	40.8
Carbon Monoxide (CO)	mg/ Nm ³	IS 13270:2019	-	6.2
Hg	mg/ Nm ³	USEPA Method No. 29	0.03	N.D.

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Chandrap
29/09/22

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviron@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer		Report No.	UES/TR/22-23/0336	
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Lab Ref No.	UES/22-23/AAQM/0371-0374	
		Date of Sampling	16/04/2022 to 17/04/2022	
		Date of Receipt	17/04/2022	
		Date of Report	22/04/2022	
		Date of Analysis	Start:17/04/2022	End:22/04/2022
SAMPLE DETAILS				
Monitoring For	Ambient Air Quality Monitoring			
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate			
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021			
Duration Of Sampling	As per CPCB norms			
Sample Collected By	Laboratory Chemist			
Sampling Procedure	As Per Method Reference			
Sample Quantity/Packing	Filter Paper (PM ₁₀): 1X1 No., Filter Paper (PM _{2.5}): 1X1 No. SO ₂ : 30mLX1 No. PVC Bottle, NO ₂ : 30mLX1 NO. PVC Bottle,			

Test Method for Ambient Air Quality Monitoring

Parameter	Method Reference
Particulate Matter size less than 10 microns (PM ₁₀)	IS:5182: (Part-23):2006 & CPCB Guidelines Vol.-I
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS:5182: (Part-24):2019 & CPCB Guidelines Vol.-I
Sulphur Dioxide (SO ₂)	IS:5182: (Part-2):2001, RA 2006 & CPCB Guidelines Vol.-I
Nitrogen Dioxide (NO ₂)	IS:5182: (Part-6):2006 & CPCB Guidelines Vol.-I

TEST REPORT

Parameter	Unit	NAAQM Standard	Results			
			Near CHP Area	Beside Silo	Solar Panel Area	Near Main Gate
PM ₁₀	µg/m ³	100	86.4	72.8	84.8	76.2
PM _{2.5}	µg/m ³	60	42.8	46.4	48.2	34.8
SO ₂	µg/m ³	80	20.4	18.4	16.8	16.6
NO ₂	µg/m ³	80	32.4	34.8	26.4	30.8
CO	mg/m ³	4.0	0.24	0.18	0.34	0.28

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer		Report No.	UES/TR/22-23/0876	
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Lab Ref No.	UES/22-23/AAQM/01447-01450	
		Date of Sampling	10/05/2022 to 11/05/2022	
		Date of Receipt	12/05/2022	
		Date of Report	17/05/2022	
		Date of Analysis	Start:12/05/2022	End:17/05/2022
SAMPLE DETAILS				
Monitoring For	Ambient Air Quality Monitoring			
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate			
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021			
Duration Of Sampling	As per CPCB norms			
Sample Collected By	Laboratory Chemist			
Sampling Procedure	As Per Method Reference			
Sample Quantity/Packing	Filter Paper (PM ₁₀): 1X1 No., Filter Paper (PM _{2.5}): 1X1 No. SO ₂ : 30mlX1 No. PVC Bottle, NO ₂ : 30mlX1 NO. PVC Bottle,			

Test Method for Ambient Air Quality Monitoring

Parameter	Method Reference
Particulate Matter size less than 10 microns (PM ₁₀)	IS:5182:(Part-23):2006 & CPCB Guidelines Vol.-I
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS:5182:(Part-24):2019 & CPCB Guidelines Vol.-I
Sulphur Dioxide (SO ₂)	IS:5182:(Part-2):2001, RA 2006 & CPCB Guidelines Vol.-I
Nitrogen Dioxide (NO ₂)	IS:5182:(Part-6):2006 & CPCB Guidelines Vol.-I

TEST REPORT

Parameter	Unit	NAAQM Standard	Results			
			Near CHP Area	Beside Silo	Solar Panel Area	Near Main Gate
PM ₁₀	µg/m ³	100	92.4	84.8	88.2	80.6
PM _{2.5}	µg/m ³	60	46.8	48.2	52.8	32.8
SO ₂	µg/m ³	80	20.8	16.4	12.8	18.4
NO ₂	µg/m ³	80	36.8	30.2	34.2	32.8
CO	mg/m ³	4.0	0.18	0.21	0.42	0.64

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- > This is for information as the party has asked for above test(s) only.

 17/05/22 REVIEWED BY	 For ULTIMATE ENVIROLYTICAL SOLUTIONS	 17/05/22 AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviron@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Report No.	UES/TR/22-23/01621	
		Lab Ref No.	UES/22-23/AAQM/02027-2030	
		Date of Sampling	04/06/2022 to 05/06/2022	
		Date of Receipt	06/06/2022	
		Date of Report	11/06/2022	
		Date of Analysis	Start:06/06/2022	End:11/06/2022
SAMPLE DETAILS				
Monitoring For	Ambient Air Quality Monitoring			
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate			
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021			
Duration Of Sampling	As per CPCB norms			
Sample Collected By	Laboratory Chemist			
Sampling Procedure	As Per Method Reference			
Sample Quantity/Packing	Filter Paper (PM ₁₀): 1X1 No., Filter Paper (PM _{2.5}): 1X1 No. SO ₂ : 30mlX1 No. PVC Bottle, NO ₂ : 30mlX1 NO. PVC Bottle,			

Test Method for Ambient Air Quality Monitoring

Parameter	Method Reference
Particulate Matter size less than 10 microns (PM ₁₀)	IS:5182: (Part-23):2006 & CPCB Guidelines Vol.-I
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS:5182: (Part-24):2019 & CPCB Guidelines Vol.-I
Sulphur Dioxide (SO ₂)	IS:5182: (Part-2):2001, RA 2006 & CPCB Guidelines Vol.-I
Nitrogen Dioxide (NO ₂)	IS:5182: (Part-6):2006 & CPCB Guidelines Vol.-I

TEST REPORT

Parameter	Unit	NAAQM Standard	Results			
			Near CHP Area	Beside Silo	Solar Panel Area	Near Main Gate
PM ₁₀	µg/m ³	100	90.6	86.8	92.2	84.6
PM _{2.5}	µg/m ³	60	42.0	44.2	40.8	36.8
SO ₂	µg/m ³	80	18.8	12.4	14.8	16.4
NO ₂	µg/m ³	80	34.2	36.2	33.2	38.8
CO	mg/m ³	4.0	0.13	0.31	0.32	0.54

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[Signature]
11/06/22

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[Signature]
11/06/22

AUTHORIZED SIGNATORY

-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Report No. UES/TR/22-23/01550 Lab Ref No. UES/22-23/AAQM/03283-03286 Date of Sampling 14/07/2022 to 15/07/2022 Date of Receipt 15/07/2022 Date of Report 22/07/2022 Date of Analysis Start:15/07/2022 End:22/07/2022
SAMPLE DETAILS		
Monitoring For	Ambient Air Quality Monitoring	
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate	
Customer Ref. No. & Date	P.O. NO. 720004006/U102, DATED: 16/06/2022	
Duration Of Sampling	As per CPCB norms	
Sample Collected By	Laboratory Chemist	
Sampling Procedure	As Per Method Reference	
Sample Quantity/Packing	Filter Paper (PM ₁₀), 1X1 No., Filter Paper (PM _{2.5}), 1X1 No. SO ₂ : 30mX1 No. PVC Bottle, NO ₂ : 30mX1 NO. PVC Bottle.	

Test Method for Ambient Air Quality Monitoring

Parameter	Method Reference
Particulate Matter size less than 10 microns (PM ₁₀)	IS:5182: (Part-23):2006 & CPCB Guidelines Vol.-I
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS:5182: (Part-24):2019 & CPCB Guidelines Vol.-I
Sulphur Dioxide (SO ₂)	IS:5182: (Part-2):2001, RA 2006 & CPCB Guidelines Vol.-I
Nitrogen Dioxide (NO ₂)	IS:5182: (Part-6):2006 & CPCB Guidelines Vol.-I

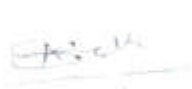

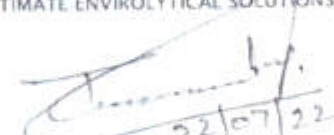
TEST REPORT

Parameter	Unit	NAAQM Standard	Results			
			Near CHP Area	Beside Silo	Solar Panel Area	Near Main Gate
PM ₁₀	µg/m ³	100	84.4	78.2	82.8	74.5
PM _{2.5}	µg/m ³	60	38.2	40.5	34.6	30.2
SO ₂	µg/m ³	80	14.6	10.6	12.8	16.6
NO ₂	µg/m ³	80	34.2	30.8	36.2	34.4
CO	mg/m ³	4.0	0.29	0.20	0.24	0.21

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- This is for information as the party has asked for above test(s) only.

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End of the test report



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Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Report No.	UES/TR/22-23/02397	
		Lab Ref No.	UES/22-23/AAQM/07023-07026	
		Date of Sampling	17/08/2022 to 18/08/2022	
		Date of Receipt	18/08/2022	
		Date of Report	22/08/2022	
		Date of Analysis	Start:18/08/2022	End:22/08/2022
SAMPLE DETAILS				
Monitoring For	Ambient Air Quality Monitoring			
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate			
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022			
Duration Of Sampling	As per CPCB norms			
Sample Collected By	Laboratory Chemist			
Sampling Procedure	As Per Method Reference			
Sample Quantity/Packing	Filter Paper (PM ₁₀): 1X1 No., Filter Paper (PM _{2.5}): 1X1 No. SO ₂ : 30mlX1 No. PVC Bottle, NO ₂ : 30mlX1 NO. PVC Bottle,			

Test Method for Ambient Air Quality Monitoring

Parameter	Method Reference
Particulate Matter size less than 10 microns (PM ₁₀)	IS:5182:(Part-23):2006 & CPCB Guidelines Vol.-I
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS:5182:(Part-24):2019 & CPCB Guidelines Vol.-I
Sulphur Dioxide (SO ₂)	IS:5182:(Part-2):2001, RA 2006 & CPCB Guidelines Vol.-I
Nitrogen Dioxide (NO ₂)	IS:5182:(Part-6):2006 & CPCB Guidelines Vol.-I

TEST REPORT

Parameter	Unit	NAAQM Standard	Results			
			Near CHP Area	Beside Silo	Solar Panel Area	Near Main Gate
PM ₁₀	µg/m ³	100	74.8	70.8	68.8	60.4
PM _{2.5}	µg/m ³	60	30.4	32.8	28.6	24.8
SO ₂	µg/m ³	80	12.8	8.6	14.4	10.8
NO ₂	µg/m ³	80	32.6	28.4	22.8	26.4
CO	mg/m ³	4.0	0.34	0.19	0.33	0.28

REMARKS: RESULTS ARE AS ABOVE

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address of The Customer

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

Report No.	UES/TR/22-23/03098	
Lab Ref No.	UES/22-23/AAQM/08288-08291	
Date of Sampling	23/09/2022 to 24/09/2022	
Date of Receipt	24/09/2022	
Date of Report	29/09/2022	
Date of Analysis	Start: 24/09/2022	End: 29/09/2022

SAMPLE DETAILS

Monitoring For	Ambient Air Quality Monitoring
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022
Duration Of Sampling	As per CPCB norms
Sample Collected By	Laboratory Chemist
Sampling Procedure	As Per Method Reference
Sample Quantity/Packing	Filter Paper (PM ₁₀): 1X1 No., Filter Paper (PM _{2.5}): 1X1 No. SO ₂ : 30mlX1 No. PVC Bottle, NO ₂ : 30mlX1 NO. PVC Bottle,

Test Method for Ambient Air Quality Monitoring

Parameter	Method Reference
Particulate Matter size less than 10 microns (PM ₁₀)	IS:5182:(Part-23):2006 & CPCB Guidelines Vol.-I
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS:5182:(Part-24):2019 & CPCB Guidelines Vol.-I
Sulphur Dioxide (SO ₂)	IS:5182:(Part-2):2001, RA 2006 & CPCB Guidelines Vol.-I
Nitrogen Dioxide (NO ₂)	IS:5182:(Part-6):2006 & CPCB Guidelines Vol.-I

TEST REPORT

Parameter	Unit	NAAQM Standard	Results			
			Near CHP Area	Beside Silo	Solar Panel Area	Near Main Gate
PM ₁₀	µg/m ³	100	64.2	60.6	58.4	62.8
PM _{2.5}	µg/m ³	60	24.4	28.2	26.2	30.2
SO ₂	µg/m ³	80	14.8	8.2	10.8	12.4
NO ₂	µg/m ³	80	26.6	22.4	26.2	30.8
CO	mg/m ³	4.0	0.44	0.20	0.26	0.34

REMARKS: RESULTS ARE AS ABOVE

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Belk
29/09/22

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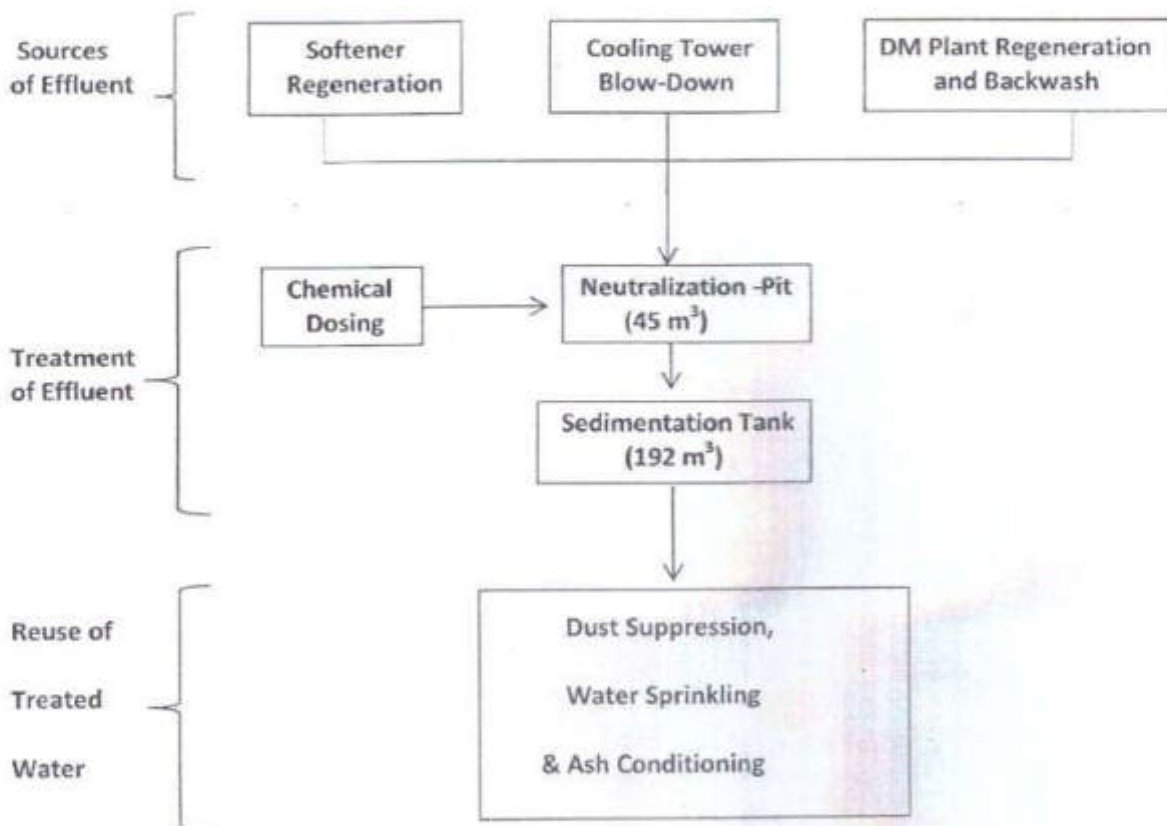
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[Signature]
29/09/22
AUTHORIZED SIGNATORY

-----End of the test report-----

EFFLUENT TREATMENT SCHEME

No waste water is discharged outside factory premises. Waste water generated from Cooling Tower Blow-down, Softener Regeneration and Backwash & DM Water Regeneration and Backwash is taken to Neutralization-Pit (45 m³) where sample is taken and after Analysis chemical dosing is done along with air scouring and then after chemical dosing the water is sent to Sedimentation tank (192 m³) for settling of suspended particles. After sedimentation the treated water is used for Dust suppression, Water sprinkling on the road and Ash conditioning. Hence, Zero liquid discharge condition is maintained.





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Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
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Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Report No	UES/TR/22-23/0343	
		Lab. Ref. No.	UES/22-23/W/0381-0382	
		Date of Sampling	16/04/2022	
		Date of Receipt	17/04/2022	
		Date of Report	22/04/2022	
		Date of Analysis	Start:17/04/2022	End: 22/04/2022
SAMPLE DETAILS				
Customer Sample ID	Siltration Tank Water	Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021	
Sample Type	1. Inlet Water 2. Outlet Water	Sample Condition At Receipt	Ok	
Packing of Sample	Jerry Cane (3 ltr. *2) Glass bottle (1 ltr. *2)	Sample Collected By	Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx. 4 Ltr. each	

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER CONSENT	Inlet Water	Outlet Water
1	pH Value at 25.2°C	-	IS:3025: (Part-11): 1983, RA 2012	5.5 To 9.0	9.22	7.67
2	Total Suspended Solid	mg/L	IS:3025: (Part-17): 1984, RA 2012	100	68.0	12.6
3	Chemical Oxygen Demand	mg/L	IS:3025: (Part-58): 2006, RA 2012	250	79.3	40.0
4	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025: (Part-44): 1993 RA 2014	30	16.4	6.8
5	Oil & Grease	mg/L	IS:3025: (Part-39): 1986	10	1.9	N.D.

Note : mg/lit.: milligram per liter. N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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-----End of the test report-----



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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Report No	UES/TR/22-23/0883	
		Lab. Ref. No.	UES/22-23/W/01457-01458	
		Date of Sampling	10/05/2022	
		Date of Receipt	12/05/2022	
		Date of Report	17/05/2022	
		Date of Analysis	Start:12/05/2022	End: 17/05/2022
SAMPLE DETAILS				
Customer Sample ID	Siltration Tank Water	Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021	
Sample Type	1. Inlet Water 2. Outlet Water	Sample Condition At Receipt	Ok	
Packing of Sample	Jerry Cane (3 ltr. *2) Glass bottle (1 ltr. *2)	Sample Collected By	Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx. 4 Ltr. each	

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER CONSENT	Inlet Water	Outlet Water
1	pH Value at 25.2°C	-	IS:3025:(Part-11): 1983, RA 2012	5.5 To 9.0	8.97	8.55
2	Total Suspended Solid	mg/L	IS:3025:(Part-17): 1984, RA 2012	100	48.0	18.0
3	Chemical Oxygen Demand	mg/L	IS:3025:(Part-58):2006, RA 2012	250	68.0	42.0
4	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025:(Part-44):1993 RA 2014	30	8.4	7.6
5	Oil & Grease	mg/L	IS:3025:(Part-39):1986	10	1.2	N.D.

Note : mg/lit.: milligram per liter. N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

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- > This is for information as the party has asked for above test(s) only.

Shadi
17/05/22

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Shadi
17/05/22

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-----End of the test report-----



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Name & Address Of The Customer		Report No	UES/TR/22-23/01628	
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Lab. Ref. No.	UES/22-23/W/02037-02038	
		Date of Sampling	04/06/2022	
		Date of Receipt	06/06/2022	
		Date of Report	11/06/2022	
		Date of Analysis	Start:06/06/2022	End: 11/06/2022
SAMPLE DETAILS				
Customer Sample ID	Siltration Tank Water	Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021	
Sample Type	1. Inlet Water 2. Outlet Water	Sample Condition At Receipt	Ok	
Packing of Sample	Jerry Cane (3 ltr. *2) Glass bottle (1 ltr. *2)	Sample Collected By	Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx. 4 Ltr. each	

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER CONSENT	Inlet Water	Outlet Water
1	pH Value at 25.2°C	-	IS:3025: (Part-11): 1983, RA 2012	5.5 To 9.0	7.93	7.24
2	Total Suspended Solid	mg/L	IS:3025: (Part-17): 1984, RA 2012	100	54.0	14.0
3	Chemical Oxygen Demand	mg/L	IS:3025: (Part-58): 2006, RA 2012	250	74.0	34.0
4	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025: (Part-44): 1993 RA 2014	30	6.8	3.4
5	Oil & Grease	mg/L	IS:3025: (Part-39): 1986	10	1.4	N.D.

Note : mg/lit.: milligram per liter. N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

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- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
- > This is for information as the party has asked for (s) only.

 11/06/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS 11/06/22 AUTHORIZED SIGNATORY
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-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Report No	UES/TR/22-23/01557
		Lab. Ref. No.	UES/22-23/W/03293-03294
		Date of Sampling	14/07/2022 to 15/07/2022
		Date of Receipt	15/07/2022
		Date of Report	22/07/2022
		Date of Analysis	Start:15/07/2022 End: 22/07/2022
SAMPLE DETAILS			
Customer Sample ID	Siltration Tank Water	Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022
Sample Type	1. Inlet Water 2. Outlet Water	Sample Condition At Receipt	Ok
Packing of Sample	Jerry Cane (3 ltr. *2) Glass bottle (1 ltr. *2)	Sample Collected By	Laboratory Chemist
Other Details	Sealed	Quantity Received	Approx. 4 Ltr. each

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER CONSENT	Inlet Water	Outlet Water
1	pH Value at 25.2°C	-	IS:3025: (Part-11): 1983, RA 2012	5.5 To 9.0	7.82	7.18
2	Total Suspended Solid	mg/l.	IS:3025: (Part-17): 1984, RA 2012	100	68.0	20.0
3	Chemical Oxygen Demand	mg/l.	IS:3025: (Part-38): 2006, RA 2012	250	86.0	24.0
4	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025: (Part-44): 1993 RA 2012	30	7.2	2.8
5	Oil & Grease	mg/L	IS:3025: (Part-39): 1986	10	1.2	N.D.

Note : mg/lit., milligram per liter. N.D., Not Detected.

REMARKS: RESULTS ARE AS ABOVE

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- This is for information as the party has asked for (above test/s) only.

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-----End of the test report-----



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Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer		Report No	UES/TR/22-23/02404
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Lab. Ref. No.	UES/22-23/W/07033-07034
		Date of Sampling	17/08/2022
		Date of Receipt	18/08/2022
		Date of Report	22/08/2022
		Date of Analysis	Start:18/08/2022 End: 22/08/2022
SAMPLE DETAILS			
Customer Sample ID	Siltration Tank Water	Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022
Sample Type	1. Inlet Water 2. Outlet Water	Sample Condition At Receipt	Ok
Packing of Sample	Jerry Cane (3 ltr. *2) Glass bottle (1 ltr. *2)	Sample Collected By	Laboratory Chemist
Other Details	Sealed	Quantity Received	Approx. 4 Ltr. each

TEST REPORT						
SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER CONSENT	Inlet Water	Outlet Water
1	pH Value at 25.2°C	-	IS:3025: (Part-11): 1983, RA 2012	5.5 To 9.0	7.64	7.34
2	Total Suspended Solid	mg/L	IS:3025: (Part-17): 1984, RA 2012	100	82.0	24.0
3	Chemical Oxygen Demand	mg/L	IS:3025: (Part-58): 2006, RA 2012	250	74.0	34.0
4	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025: (Part-44): 1993 RA 2014	30	8.4	3.6
5	Oil & Grease	mg/L	IS:3025: (Part-39): 1986	10	1.4	N.D.

Note : mg/lit.: milligram per liter. N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- The use of the report for publication, arbitration or as legal dispute is forbidden.
- Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
- This is for information as the party has asked for above test(s) only.

 22/08/22 REVIEWED BY	 For ULTIMATE ENVIROLYTICAL SOLUTIONS	 22/08/22 AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Report No	UES/TR/22-23/03105	
		Lab. Ref. No.	UES/22-23/W/08298-08299	
		Date of Sampling	23/09/2022	
		Date of Receipt	24/09/2022	
		Date of Report	29/09/2022	
		Date of Analysis	Start:24/09/2022	End:29/09/2022
SAMPLE DETAILS				
Customer Sample ID	Siltration Tank Water	Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022	
Sample Type	1. Inlet Water 2.Outlet Water	Sample Condition At Receipt	Ok	
Packing of Sample	Jerry Cane (3 ltr. *2) Glass bottle (1 ltr. *2)	Sample Collected By	Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx. 4Ltr. each	

TEST REPORT						
SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER CONSENT	Inlet Water	Outlet Water
1	pH Value at 25.2°C	-	IS:3025:(Part-11): 1983, RA 2012	5.5 To 9.0	7.55	7.18
2	Total Suspended Solid	mg/L	IS:3025:(Part-17): 1984, RA 2012	100	62.0	22.0
3	Chemical Oxygen Demand	mg/L	IS:3025:(Part-58):2006, RA 2012	250	54.0	22.0
4	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025:(Part-44):1993 RA 2014	30	16.2	6.4
5	Oil & Grease	mg/L	IS:3025:(Part-39):1986	10	1.0	N.D.

Note:mg/lit.: milligram per liter. N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- > This is for information as the party has asked for above test(s) only.

[Signature]
29/09/22

REVIEWED BY



For ULTIMATE ENVIROLYTICAL SOLUTIONS

[Signature]
29/09/22

AUTHORIZED SIGNATORY

-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO.	UES/TR/22-23/0349
		LAB REF NO.	UES/22-23/N/0388-0391
		DATE OF REPORT	22/04/2022
		DATE OF SAMPLING	16/04/2022
SAMPLE DETAILS			
Monitoring For	Noise Level Monitoring		
Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021		
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	Manufacturer's Instruction		

TEST REPORT

LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY	NIGHT	DAY	NIGHT
Near CHP Area	dB(A)	64.8	48.8	75 dB(A)	70 dB(A)
Beside Silo	dB(A)	66.2	50.8		
Solar Panel Area	dB(A)	61.2	52.8		
Near Main Gate	dB(A)	64.2	56.5		

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- This is for information as the party has asked for above test(s) only.

 22/04/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS 22/04/22 AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer		REPORT NO.	UES/TR/22-23/0884
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO.	UES/22-23/N/01459-01462
		DATE OF REPORT	17/05/2022
		DATE OF SAMPLING	10/05/2022
SAMPLE DETAILS			
Monitoring For	Noise Level Monitoring		
Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021		
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	Manufacturer's Instruction		

TEST REPORT					
LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY	NIGHT	DAY	NIGHT
Near CHP Area	dB(A)	68.2	46.6	75 dB(A)	70 dB(A)
Beside Silo	dB(A)	62.9	52.4		
Solar Panel Area	dB(A)	60.1	54.2		
Near Main Gate	dB(A)	66.5	52.9		

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- > This is for information as the party has asked for above test(s) only.

REVIEWED BY



For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer		REPORT NO.	UES/TR/22-23/01629
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO.	UES/22-23/N/02039-02042
		DATE OF REPORT	11/06/2022
		DATE OF SAMPLING	05/06/2022
SAMPLE DETAILS			
Monitoring For	Noise Level Monitoring		
Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021		
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	Manufacturer's Instruction		

TEST REPORT					
LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY	NIGHT	DAY	NIGHT
Near CHP Area	dB(A)	68.6	54.6	75 dB(A)	70 dB(A)
Beside Silo	dB(A)	62.2	58.8		
Solar Panel Area	dB(A)	64.8	50.2		
Near Main Gate	dB(A)	60.5	56.8		

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- > Test sample will be retained for 15days after issue of test report unless otherwise agreed with customer.
- > This is for information as the party has asked for above test(s) only.

REVIEWED BY

[Signature]
11/06/22



For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

[Signature]
11/06/22

-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO. UES/TR/22-23/0158 LAB REF NO. UES/22-23/N/03295-03298 DATE OF REPORT 22/07/2022 DATE OF SAMPLING 16/07/2022 to 15/07/2022
SAMPLE DETAILS		
Monitoring For	Noise Level Monitoring	
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022	
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate	
Sample Collected By	Laboratory Chemist	
Sampling Procedure	Manufacturer's Instruction	

TEST REPORT

LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY	NIGHT	DAY	NIGHT
Near CHP Area	dB(A)	68.6	54.6		
Beside Silo	dB(A)	62.2	58.8	75 dB(A)	70 dB(A)
Solar Panel Area	dB(A)	64.8	50.2		
Near Main Gate	dB(A)	60.5	56.8		

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- This is for information as the party has asked for above test(s) only.

REVIEWED BY



For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address of The Customer To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO.	UES/TR/22-23/02405
		LAB REF NO.	UES/22-23/N/07035-07038
		DATE OF REPORT	22/08/2022
		DATE OF SAMPLING	17/08/2022 to 18/08/2022
SAMPLE DETAILS			
Monitoring For	NOISE LEVEL MONITORING		
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022		
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	Manufacturer's Instruction		

TEST REPORT

LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY	NIGHT	DAY	NIGHT
Near CHP Area	dB(A)	64.4	52.5	75 dB(A)	70 dB(A)
Beside Silo	dB(A)	60.8	56.9		
Solar Panel Area	dB(A)	68.2	54.4		
Near Main Gate	dB(A)	66.4	50.8		

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- This is for information as the party has asked for above test(s) only.

 22/08/22 REVIEWED BY	 For ULTIMATE ENVIROLYTICAL SOLUTIONS	 22/08/22 AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address of The Customer		REPORT NO.	UES/TR/22-23/03106
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO.	UES/22-23/N/08300-08303
		DATE OF REPORT	29/09/2022
		DATE OF SAMPLING	23/09/2022 to 24/09/2022
SAMPLE DETAILS			
Monitoring For	NOISE LEVEL MONITORING		
Customer Ref. No. & Date	P.O. NO. 7200004006/U102, DATED: 16/06/2022		
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	Manufacturer's Instruction		

TEST REPORT					
LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY	NIGHT	DAY	NIGHT
Near CHP Area	dB(A)	60.2	50.2	75 dB(A)	70 dB(A)
Beside Silo	dB(A)	62.6	54.4		
Solar Panel Area	dB(A)	68.4	52.8		
Near Main Gate	dB(A)	58.6	56.2		

REMARKS: RESULTS ARE AS ABOVE
Terms & conditions

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- > Test sample will be retained for 15days after issue of test report unless otherwise agreed with customer.
- > This is for information as the party has asked for above test(s) only.

Belh
29/09/22

REVIEWED BY


For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-----End of the test report-----



छत्तीसगढ़ शासन श्रम विभाग

Welcome:- Date:- 06/05/2022



Record For Year

2022 ▼

If You have already entered the below form then click on add Worker Button given in List

FactoryName	MedicalOfficers	EntryDate	UAN_NO	ISCFTPP	ISCFTPP		
HIRA POWER & STEEL LTD. UNIT-II (FERRO ALLOYS DIVISION)	Dr.Pavan Kumar Gautam	14/03/2022	11402928270352	FORM-21	0	ADD_WORKER	Edit Details

View Workers Details

FactoryName	MedicalOfficers	Qualification	ContactNo	EntryDate	UAN_NO	Workers	EnteredWorkers	ISCFTPP	ForYear	
HIRA POWER & STEEL LTD. UNIT-II (FERRO ALLOYS DIVISION)				19/04/2017	11402928270352	250	384	FORM-21	2017	View Worker List
HIRA POWER & STEEL LTD. UNIT-II (FERRO ALLOYS DIVISION)	Dr.Pavan Kumar Gautam	M.B.B.S., MD(MEDICINE)	9685691056	14/03/2022	11402928270352	550	605	FORM-21	2022	View Worker List
HIRA POWER & STEEL LTD. UNIT-II (FERRO ALLOYS DIVISION)	Dr.Pavan Kumar Gautam	MBBS MD Medicine	0771408252	13/07/2018	11402928270352	500	376	FORM-21	2018	View Worker List
HIRA POWER & STEEL LTD. UNIT-II (FERRO ALLOYS DIVISION)	Dr.Pawan S.Gautam	MBBS MD Medicine	07714082525	17/05/2019	11402928270352	500	415	FORM-21	2019	View Worker List
HIRA POWER & STEEL LTD. UNIT-II (FERRO ALLOYS DIVISION)	Mr. Pavan Kuamr Gautam	MBBS, MD (MEDICINE)	9685691056	04/06/2020	11402928270352	500	390	FORM-21	2020	View Worker List
HIRA POWER & STEEL LTD. UNIT-II (FERRO ALLOYS DIVISION)	Dr.Pavan Kumar Gautam	MBBS, MD (MEDICINE)	9685691056	14/06/2021	11402928270352	550	606	FORM-21	2021	View Worker List

Remarks :

FormYear	FormType	CheckedBy	Status	Remark	RemarkDate
2019	FORM-21	Dr.PRATEEK KHARE	VIOLATION OF FACTORY ACT	1)AS PER THE ENTRIES MADE IN THE PORTAL , IN TYPE OF EXAMINATION,IN DATE OF EMPLOYMENT AND DATE OF EXAMINATION IT IS CLEAR THAT false entries has been done or PRE EMPLOYMENT AND PERIODIC MEDICAL EXAMINATION IS NOT DONE IN TIME WHICH IS VIOLATION OF RULE 41C AND 131 OF FACTORIES ACT. (2)all the test reports not uploaded like usg etc.(3)TEST AS PER RULE 107 SCHEDULE 20 NOT DONE.(4)GIVE A COPY OF MEDICAL REPORTS TO ALL THE WORKERS.WORKERS HAVING POSITIVE FINDINGS SHOULD BE REGULARLY FOLLOW UP BY THE FACTORY MEDICAL OFFICER AND CARE SHOULD BE TAKEN THAT THEY SHOULD NOT BE EMPLOYED IN THOSE AREA WHERE THERE DISEASE GET AGGRAVATED.	29/07/2019
2017	FORM-21	Dr.PRATEEK KHARE	REPEAT AUDIOMETRY TEST AND DO TEST OF MANGANESE ACCORDING TO SCHEDULE 20 OF RULE 107	REPEAT AUDIOMETRY TEST BECAUSE ACCORDING TO FACTORIES ACT AUDIOMETRY HAS TO BE DONE FROM 125 TO 8000 FREQUENCY BUT THE TEST HAS BEEN DONE FROM 500 TO 6000 FREQUENCY HENCE IT CANNOT BE ACCEPTED.ALSO FACTORIES COME UNDER rule 107 of C.G. factories rules 1962 IT IS A FERRO ALLOYS PLANT WHICH USES MANGANESE. HENCE TEST OF MANGANESE ACCORDING TO SCHEDULE 20 OF RULE 107 HAS NOT BEEN DONE TEST BECAUSE ACCORDING TO FACTORIES ACT AUDIOMETRY HAS TO BE DONE FROM 125 TO 8000 FREQUENCY BUT THE TEST HAS BEEN DONE FROM 500 TO 6000 FREQUENCY HENCE IT CANNOT BE ACCEPTED. ALSO FACTORIES COME UNDER rule 107 of C.G. factories rules 1962 IT IS A FERRO ALLOY PLANT WHICH USES MANGANESE. HENCE TEST OF MANGANESE	15/11/2017

				ACCORDING TO SHEDULE20 OF RULE 107 HAS NOT BEEN DONE.ONLY BLOOD MANGANESE LEVEL OF 86 WORKERS DONE REST OF TEST OF SCHEDULE NOT DONE AND MENTIONED.	
2020	FORM-21	Dr.PRATEEK KHARE	.	<p>1)COVID-19- SCREENING OF WORKERS SHOULD BE DONE AS PER GOVERNMENT GUIDELINE FOR COVID 19 BEFORE APPOINTING WORK AND REGULAR FOLLOW UP SHOULD ALSO BE DONE. PLEASE TAKE ALL PERSONAL PROTECTION PRECAUTION IN FACTORY LIKE HAND WASHING,SOCIAL DISTANCING,FACE MASK AND WORK RELATED PPES. People with COVID-19 have had a wide range of symptoms reported – ranging from mild symptoms to severe illness. Symptoms may appear 2-14 days after exposure to the virus. People with these symptoms or combinations of symptoms may have COVID-19: • Cough • Shortness of breath or difficulty breathing Or at least two of these symptoms: • Fever • Chills • Repeated shaking with chills • Muscle pain • Headache • Sore throat • New loss of taste or smell, COUNSEL AND AWARE WORKERS ABOUT COVID 19.IF ANY SUSPECTED CASE COME TO YOUR NOTICE IMMEDIATELY INFORM TO AUTHORITY.(2)GIVE A COPY OF MEDICAL REPORTS TO ALL THE WORKERS.WORKERS HAVING POSITIVE FINDINGS SHOULD BE REGULARLY FOLLOW UP BY THE FACTORY MEDICAL OFFICER AND CARE SHOULD BE TAKEN THAT THEY SHOULD NOT BE EMPLOYED IN THOSE AREA WHERE THERE DISEASE GET AGGRAVATED.(3)AS PER FORM 4" Number of workers to be ordinarily employed in the factory : 500" BUT MEDICAL REPORTS OF ONLY 139 WORKERS UPLOADED HENCE INCOMPLETE.(4)test are not done as per cg factories rule 1962 rule107 prescribed under section 87 of factories act 1948</p>	04/12/2020
2018	FORM-21	Dr.PRATEEK KHARE	VIOLATION OF RULE 41C AND 131 OF FACTORIES ACT	<p>AS PER THE ENTRIES MADE IN THE PORTAL , IN TYPE OF EXAMINATION,IN DATE OF EMPLOYMENT AND DATE OF EXAMINATION IT IS CLEAR THAT PRE EMPLOYMENT AND PERIODIC MEDICAL EXAMINATION IS NOT DONE IN TIME WHICH IS VIOLATION OF RULE 41C AND 131 OF FACTORIES ACT . AS PER THE SECTION 41C OF FACTORIES ACT1948 IT IS THE RESPONSIBILITY OF FACTORY OCCUPIER TO MAINTAIN ACCURATE AND UP TO DATE HEALTH RECORDS & PROVIDE FOR MEDICAL EXAMINATION OF EVERY WORKER BEFORE EMPLOYMENT AND IN PERIODIC INTERVAL NOT EXCEEDING TWELVE MONTH.</p>	27/12/2018

Ref: 2033/HPSL/U2/PPP/22-23/2033

Dated-31.05.2022

To,
The Scientist,
Ministry of Environment, Forest & Climate Change,
Integrated Regional Office, Aranya Bhawan,
North Block, Sector-19, Naya Raipur,
Atal Nagar, Chhattisgarh - 492002

Sub: Submission of Half Yearly Environment Clearance Compliance Report of the conditions stipulated in Environmental clearance for the period of October 2021 to March 2022

Ref: Environmental Clearance F.No. J-11011/836/2008/IA.II(I) Dated 11.02.2009

Respected Sir,

With reference to above subject, we are enclosing herewith Half Yearly Environment Clearance Compliance Report of the conditions stipulated in Environmental clearance accorded by MOEF vide F.No.J-11011/836/2008/IA.II(I) Dated 11.02.2009 for the period of October 2021 to March 2022 in respect of Hira Power and Steels Ltd. Unit-II (Ferro Division), Urla Industrial Complex, Raipur (C.G.)

We hope you will find the above Half Yearly Environment Clearance Compliance Report upto your satisfaction. Your valuable guidance further in this regard shall be highly appreciated.

Kindly acknowledge the receipt of the same.

Yours faithfully,

For, **HIRA POWER AND STEELS LIMITED, UNIT- II**
(Ferro Division)



Anirudh

Authorized Signatory

Encl: As Above

Hira Power & Steels Limited

An ISO 9001:2015 certified company
CIN : U24117CT1984PLC002512

Registered Office & Works : Khasra No. 511/1, 512/2, Urla Industrial Complex, Raipur - 492003, Chhattisgarh, India

P : +91 771 4082500, 4082600, **F :** +91 771 4082501, **E :** admin@hpslindia.com

www.hpslindia.com, www.hiragroupindia.com

Copy to:

1. The Director, Zonal Office, Central Pollution Control Board, 4th Floor, Sahkar Bhawan, North TT Nagar, Bhopal-462003.
2. The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhawan, North Block, Sector-19, Atal Nagar, Raipur (CG) – 492 002.
3. The Regional Officer, Regional Office, Chhattisgarh Environment Conservation Board Commercial Complex Chhattisgarh Housing Board Colony, Kabir Nagar, Raipur (CG) – 492 001.

Hira Power & Steels Limited

An ISO 9001:2015 certified company
CIN : U24117CT1984PLC002512

Registered Office & Works : Khasra No. 511/1, 512/2, Urla Industrial Complex, Raipur - 492003, Chhattisgarh, India

P : +91 771 4082500, 4082600, **F :** +91 771 4082501, **E :** admin@hpslindia.com

www.hpslindia.com, www.hiragroupindia.com



HALF YEARLY COMPLIANCE REPORT
OF
THE CONDITIONS STIPULATED IN
ENVIRONMENTAL CLEARANCE
FOR
THE PERIOD OF
OCTOBER 2021 – MARCH 2022

HIRA POWER & STEELS LTD.

UNIT-II (FERRO DIVISION)

Urla Industrial Complex, Raipur (C.G.) 492003



HIRA POWER & STEELS

Project : Hira Power and Steels Limited
 Urla Industrial Complex, Raipur, Chhattisgarh-492 003

Compliance report of the conditions stipulated in Environmental Clearance
 Half Yearly Compliance report for the period of October 2021 – March 2022

Environmental Clearance

Compliance status report of the conditions stipulated in Environmental Clearance accorded by MoEF vide letter F.No. J-11011/836/2008-IA II (I) Dated: 11th February 2019 for expansion of Ferro alloys plant [Unit- II, Si-Mn (9,000 TPA)/Fe-Mn (9,000 TPA)] total manufacturing capacity 18,000 MTPA at Khasra No. 513/1, 513/2, 513/3, 513/4, Urla Industrial Complex, Raipur, Chhattisgarh.

Sr. No.	A. Specific Conditions	Compliance Status					
i.	Continuous monitoring for all the stacks and sufficient air pollution control equipments viz. fume extraction system with bag filters, ID fan and stack of adequate height to submerged arc furnace and electrostatic precipitator to captive power plant shall be provided to control emissions below 50 mg/NM ³ as proposed.	<p>Continuous emission monitoring facility have been installed to the common stack of 3.0 & 3.6 MVA submerged arc furnaces, stack attached to 6.0 MVA submerged arc furnace and to the common stack of 12MT/Heat CLU converter & Thermic plant.</p> <table><tr><td>Particulars</td><td>3.0 MVA submerged arc furnaces, 3.6 MVA submerged arc furnaces, 6.0 MVA submerged arc furnace, 12MT/Heat CLU converter, 600 MTPA Thermic Plant</td></tr><tr><td>Pollution control Equipments</td><td>Offline pulse jet bag filter</td></tr></table> <p>Air pollution control equipments are designed to achieve the given norms. Emission from all stacks is well within prescribed limit. Monthly monitoring report is being submitted regularly to CECB.</p>		Particulars	3.0 MVA submerged arc furnaces, 3.6 MVA submerged arc furnaces, 6.0 MVA submerged arc furnace, 12MT/Heat CLU converter, 600 MTPA Thermic Plant	Pollution control Equipments	Offline pulse jet bag filter
Particulars	3.0 MVA submerged arc furnaces, 3.6 MVA submerged arc furnaces, 6.0 MVA submerged arc furnace, 12MT/Heat CLU converter, 600 MTPA Thermic Plant						
Pollution control Equipments	Offline pulse jet bag filter						
ii.	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fume and dust extraction system with bag filters shall be provided at the material transfer and discharge points to control fugitive emissions. Further, specific measures like water sprinkling around the coal stockpiles and asphalting or concreting of the roads shall be done to control to reduce the dust generation and fugitive emissions during handling.	<p>All the plant control measures have been taken to reduce fugitive emission. Please refer to Annexure-1 for Photographs and Annexure-2 for Fugitive Emission Report.</p>					



**HIRA POWER & STEELS**

Project

Hira Power and Steels Limited
Uria Industrial Complex, Raipur, Chhattisgarh-492 003

Compliance report of the conditions stipulated in Environmental Clearance

		FUGITIVE EMISSION REPORT				
		Sr. No.	Area	Unit	Parameter	Limit (MoEF & CC Notification)
		1	A&B Furnace	µg/m ³	1558	2000
		2	C&D Furnace	µg/m ³	1428	2000
		3	CLU Converter	µg/m ³	1540	2000
		4	Raw Material Yard	µg/m ³	1430	2000
		5	CHP Area	µg/m ³	1495	2000
iii.	Secondary fugitive emission 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 the CPCB shall be followed.	Is being complied with.				
iv.	Total requirement of the water from Chhattisgarh Ispat Bhumi Ltd. shall not exceed 30m ³ /day. All the cooling tower blow down and treated effluent shall be recycled/reused in the process, dust suppression and green belt development. Domestic waste water shall be treated in septic tank followed by soak pit and used in green belt development. No waste water shall be discharged outside the factor premises and zero discharge shall be adopted.	Agreed / is being complied with. "Zero" discharge has been adopted. No waste water is being discharged outside the factory premises.				
v.	Prior permission for the drawl of 30m ³ /day water from Chhattisgarh Ispat Bhumi Ltd. shall be obtained from the concerned department.	We have obtained prior permission for drawl of 100 KL/Day from Central Groundwater Authority (CGWA) which is Attached as Annexure-3 & 500 KL/Day water from Chhattisgarh State Industrial Development Corporation Limited. Attached as Annexure-4 .				





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Compliance report of the conditions stipulated in Environmental Clearance

Is being complied with.

TCLP test report of all the slags is Attached as **Annexure 5**.

TCLP test shown that generated slag is non-hazardous in nature.

- Fe-Mn slag is used as raw material for Si-Mn production or sold to SiMn manufacturers.
- Si-Mn slag is used as aggregate for civil work & land filling.
- Used/spent oil is being used in manufacturing of copper pad, heating ladle & machinery lubrication.
- In case of excess quantity used oil will be sold to CECB/CPCB authorized recyclers only.

vi. All the Ferro Alloys 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. Otherwise, hazardous substance shall be recovered from the slag and the output waste and the disposed in secured landfill as per CPCB guidelines. All the granulated slag shall be provided to cement / brick manufacturers for bricks. No granulated slag shall be used for road construction and filling low lying areas. ETP sludge after drying shall be used as fertilizer for green belt development. Used oil shall be sold to recyclers / re-processors.

TCLP REPORT

Sample.	Parameter	Limit	Result
Fe-Mn Slag	Iron as Fe	-	70.6
	Manganese as Mn	10.0	5.9
	Zinc as Zn	250	48.2
	Lead as Pb	5.0	1.4
	Cadmium as Cd	1.0	0.86
	Chromium as Cr	5.0	2.2
	Arsenic as AS	5.0	N.D.
	Mercury as Hg	0.2	N.D.
Sample.	Parameter	Limit	Result
Thermite Slag	Iron as Fe	-	85.4
	Manganese as Mn	10.0	6.8
	Zinc as Zn	250	32.7
	Lead as Pb	5.0	3.8
	Cadmium as Cd	1.0	0.6
	Chromium as Cr	5.0	4.2





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			Arsenic as AS	5.0	N.D.
			Mercury as Hg	0.2	N.D.
		Sample.	Parameter	Limit	Result
		MOx Dust	Iron as Fe	-	75.0
			Manganese as Mn	10.0	7.4
			Zinc as Zn	250	85.1
			Lead as Pb	5.0	2.3
			Cadmium as Cd	1.0	0.8
			Chromium as Cr	5.0	4.6
			Arsenic as AS	5.0	N.D.
			Mercury as Hg	0.2	N.D.
		Sample.	Parameter	Limit	Result
		Bag Filter Dust	Iron as Fe	-	28.4
			Manganese as Mn	10.0	6.2
			Zinc as Zn	250	124.4
			Lead as Pb	5.0	3.2
			Cadmium as Cd	1.0	0.89
			Chromium as Cr	5.0	2.7
			Arsenic as AS	5.0	N.D.
			Mercury as Hg	0.2	N.D.
		Sample.	Parameter	Limit	Result
		AOD Slag	Iron as Fe	-	16.4
			Manganese as Mn	10.0	8.4
			Zinc as Zn	250	58.7





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				Lead as Pb	5.0	4.2
				Cadmium as Cd	1.0	0.54
				Chromium as Cr	5.0	3.5
				Arsenic as AS	5.0	N.D.
				Mercury as Hg	0.2	N.D.
		Sample.	Parameter	Limit	Result	
		Fly Ash	Iron as Fe	-	55.9	
			Manganese as Mn	10.0	4.7	
			Zinc as Zn	250	86.1	
			Lead as Pb	5.0	4.8	
			Cadmium as Cd	1.0	0.84	
			Chromium as Cr	5.0	3.4	
			Arsenic as AS	5.0	N.D.	
			Mercury as Hg	0.2	N.D.	
vii.	Slag produced in Ferro Manganese (Fe-Mn) production shall be used in manufacture Silico Manganese (Si-Mn)	Is being complied with.				
viii.	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 its composition, end use of solid/hazardous waste should be submitted to the Ministry's Regional Office at Bhopal, CECB and CPCB.	Is being complied with. Solid waste utilization report is being submitted to the Ministry's Regional Office at Nagpur, CECB and CPCB and it is attached as Annexure-6 .				
ix.	As proposed Green belt shall be developed in at least 34% within and around the plant premises as per the CPCB guidelines in consultation with DFO.	33.28 % has been developed inside factory premises and Total of more than 40% of plantation is being developed including the outside plantation. Certified survey report by third party for Green Belt is Attached as Annexure-7 .				





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x.	All the recommendations made in the charter on Corporate Responsibility for Environment Protection (CREP) for the Ferro Alloys units shall be strictly implemented.	Complied.
xi.	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. The housing may be in the form of temporary structures to be removed after the completion of the projects.	Complied.
Sr. No.	A. General Conditions	Compliance Status
i.	The project authorities must strictly adhere to the stipulations made by the Chhattisgarh Environment Conservation Board (CECB) and the State Government.	Agreed & noted for compliance.
ii.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	Agreed & noted for compliance.
iii.	The gaseous emission from the various process units shall conform to the load/mass based standards notified by the Ministry on 19 th May, 1993 and standards for the relevant parameters keeping in view the nature of the industry and its size and location. 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 limits.	Complied.



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iv.

Continuous stack monitoring facilities for all the major stacks and adequate air pollution control system shall be provided to keep emission levels below within permissible limits and reports submitted to the Ministry's Regional Office at Bhopal and CECB/CPCB once in a six month.

Continuous emission monitoring facility have been installed to the common stack of 3.0 & 3.6 MVA submerged arc furnaces, common stack attached to 2 x 5.5 MVA submerged arc furnace, stack attached to 6.0 MVA submerged arc furnace and to the common stack of 12MT/Head CLU converter & Thermic plant.

Adequate air pollution control system have been provided to keep the emission level well within permissible limits and monitoring report is being submitted regularly to the Regional Office & Head Office of the CECB, Raipur.

Sr. No	Monitoring Stack	Month	Measured Concentration (mg/Nm ³)
1	AB Furnace (3.0 & 3.6 MVA Submerged Arc Furnace)	Oct-21	38.5
2		Nov-21	38.9
3		Dec-21	42.2
4		Jan-22	37.1
5		Feb-22	38.5
6		Mar-22	39.5
Sr. No	Monitoring Stack	Month	Measured Concentration (mg/Nm ³)
1	C Furnace (5.5 MVA Submerged Arc Furnace)	Oct-21	35.9
2		Nov-21	39.5
3		Dec-21	38.7
4		Jan-22	36.9
5		Feb-22	37.4





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		6		Mar-22	37.2
		Sr. No	Monitoring Stack	Month	Measured Concentration (mg/Nm³)
		1	D Furnace (5.5 MVA Submerged Arc Furnace)	Oct-21	38.6
		2		Nov-21	37.8
		3		Dec-21	36.5
		4		Jan-22	38.9
		5		Feb-22	36.5
		6		Mar-22	35.9
		Sr. No	Monitoring Stack	Month	Measured Concentration (mg/Nm³)
		1	E Furnace (6.0 MVA Submerged Arc Furnace)	Oct-21	38.6
		2		Nov-21	39.4
		3		Dec-21	38.8
		4		Jan-22	39.5
		5		Feb-22	38.5
		6		Mar-22	38.4
		Sr. No	Monitoring Stack	Month	Measured Concentration





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					(mg/Nm ³)	
	1	CLU Converter (12 MT/Heat)	Oct-21	29.5		
	2		Nov-21	28.5		
	3		Dec-21	29.9		
	4		Jan-22	28.5		
	5		Feb-22	28.4		
	6		Mar-22	28.6		
	Sr. No	Monitorin g Stack	Month	Measured Concentratio n (mg/Nm ³)		
	1	Captive Power Plant (20 MW)	Oct-21	42.8		
	2		Nov-21	38.6		
	3		Dec-21	46.4		
	4		Jan-22	45.8		
	5		Feb-22	45.5		
	6		Mar-22	45.9		
v.	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM, SO ² , and NO _x are anticipated in consultation with CECB. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhopal and the CECB/CPCB once in six month.		Is being complied with.			
			Data on ambient air quality and stack emission is being submitted regularly to the Regional Office of the Ministry and CECB/CPCB. Please refer to the Annexure-8 (Stack emission data) mentioned above and Annexure-9 (Ambient air quality data) mentioned below:-			
	Sr. No	Month	Near CHP Area			
			PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)
	1	Oct-21	78.4	33.5	17.4	29.80





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					4		
		2	Nov-21	86.8	45.5	19.7	29.5
		3	Dec-21	79.5	33.5	17.4	29.2
		4	Jan-22	82.2	44.2	17.8	27.9
		5	Feb-22	78.5	35.5	14.4	26.6
		6	Mar-22	77.5	40.1	15.7	25.6
		Sr. No	Month	Beside Silo			
				PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)
		1	Oct-21	80.5	39.8	12.6	26.8
		2	Nov-21	75.2	41.1	12.5	30.8
		3	Dec-21	75.2	39.5	14.5	26.5
		4	Jan-22	80.5	41.5	16.9	26.8
		5	Feb-22	80.1	39.8	15.8	27.6
		6	Mar-22	80.5	42.2	16.2	26.9
		Sr. No	Month	Solar Panel Area			
				PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)
		1	Oct-21	85.25	44.90	17.4 5	28.96
		2	Nov-21	79.5	43.5	17.9	23.6
		3	Dec-21	70.5	34.4	15.3	23.8
		4	Jan-22	76.6	39.5	15.8	25.5
		5	Feb-22	75.2	40.4	14.2	28.0
		6	Mar-22	74.4	39.0	14.9	25.4
		Sr. No	Month	Main Gate			
				PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)
		1	Oct-21	79.86	39.87	14.5 6	28.25
		2	Nov-21	70.4	39.8	13.8	24.8
		3	Dec-21	68.5	32.5	14.8	25.8





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Compliance report of the conditions stipulated in Environmental Clearance

		<table><tr><td>4</td><td>Jan-22</td><td>70.1</td><td>37.4</td><td>16.5</td><td>26.6</td></tr><tr><td>5</td><td>Feb-22</td><td>68.7</td><td>32.5</td><td>15.5</td><td>27.1</td></tr><tr><td>6</td><td>Mar-22</td><td>70.1</td><td>36.8</td><td>15.8</td><td>26.8</td></tr></table>	4	Jan-22	70.1	37.4	16.5	26.6	5	Feb-22	68.7	32.5	15.5	27.1	6	Mar-22	70.1	36.8	15.8	26.8																																																						
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vi.	<p>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. The treated waste water shall be utilized for plantation purpose.</p>	<p>Is being complied with. Effluent Treatment Scheme is attached as Annexure-10. The treated water from siltation tank is utilized for Dust suppression, Water Sprinkling & Ash Conditioning. Wastewater Analysis Report is attached as Annexure-11.</p> <table><tr><th colspan="6">Effluent Analysis Report (October 2021)</th></tr><tr><th>S . N o</th><th>Location</th><th>Un it</th><th>Limit</th><th>Inlet Water</th><th>Outlet Water</th></tr><tr><td>1</td><td>pH</td><td>-</td><td>5.5 to 9.0</td><td>7.25</td><td>7.75</td></tr><tr><td>2</td><td>TSS</td><td>mg /L</td><td>100</td><td>145.0</td><td>23.0</td></tr><tr><td>3</td><td>COD</td><td>mg /L</td><td>250</td><td>138.0</td><td>32.0</td></tr><tr><td>4</td><td>BOD</td><td>mg /L</td><td>30</td><td>28.1</td><td>8.6</td></tr><tr><td>5</td><td>Oil & Grease</td><td>mg /L</td><td>10</td><td>1.7</td><td>N.D.</td></tr><tr><th colspan="6">Effluent Analysis Report (November 2021)</th></tr><tr><th>S . N o</th><th>Paramete r</th><th>Un it</th><th>Limit</th><th>Inlet Water</th><th>Outlet Water</th></tr><tr><td>1</td><td>pH</td><td>-</td><td>5.5 to 9.0</td><td>7.10</td><td>7.78</td></tr><tr><td>2</td><td>TSS</td><td>mg /L</td><td>100</td><td>162.0</td><td>22.0</td></tr><tr><td>3</td><td>COD</td><td>mg /L</td><td>250</td><td>153.0</td><td>34.0</td></tr></table>	Effluent Analysis Report (October 2021)						S . N o	Location	Un it	Limit	Inlet Water	Outlet Water	1	pH	-	5.5 to 9.0	7.25	7.75	2	TSS	mg /L	100	145.0	23.0	3	COD	mg /L	250	138.0	32.0	4	BOD	mg /L	30	28.1	8.6	5	Oil & Grease	mg /L	10	1.7	N.D.	Effluent Analysis Report (November 2021)						S . N o	Paramete r	Un it	Limit	Inlet Water	Outlet Water	1	pH	-	5.5 to 9.0	7.10	7.78	2	TSS	mg /L	100	162.0	22.0	3	COD	mg /L	250	153.0	34.0
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		4	BOD	mg /L	30	27.8	7.40
		5	Oil & Grease	mg /L	10	1.9	N.D.
		Effluent Analysis Report (December 2021)					
		S. No	Parameter	Unit	Limit	Inlet Water	Outlet Water
		1	pH	-	5.5 to 9.0	7.19	7.85
		2	TSS	mg /L	100	165	25.5
		3	COD	mg /L	250	168	29.8
		4	BOD	mg /L	30	29.4	8.4
		5	Oil & Grease	mg /L	10	1.5	N.D.
		Effluent Analysis Report (January 2022)					
		S. No	Parameter	Unit	Limit	Inlet Water	Outlet Water
		1	pH	-	5.5 to 9.0	7.05	7.95
		2	TSS	mg /L	100	165	28.0
		3	COD	mg /L	250	132	36
		4	BOD	mg /L	30	26.6	7.1
		5	Oil & Grease	mg /L	10	2.0	N.D.





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Compliance report of the conditions stipulated in Environmental Clearance

		<table><tr><th colspan="6">Effluent Analysis Report (February 2022)</th></tr><tr><th>S. No</th><th>Parameter</th><th>Unit</th><th>Limit</th><th>Inlet Water</th><th>Outlet Water</th></tr><tr><td>1</td><td>pH</td><td>-</td><td>5.5 to 9.0</td><td>7.09</td><td>7.80</td></tr><tr><td>2</td><td>TSS</td><td>mg /L</td><td>100</td><td>160</td><td>18.0</td></tr><tr><td>3</td><td>COD</td><td>mg /L</td><td>250</td><td>152.0</td><td>26.0</td></tr><tr><td>4</td><td>BOD</td><td>mg /L</td><td>30</td><td>26.2</td><td>6.3</td></tr><tr><td>5</td><td>Oil & Grease</td><td>mg /L</td><td>10</td><td>1.5</td><td>N.D.</td></tr><tr><th colspan="6">Effluent Analysis Report (March 2022)</th></tr><tr><th>S. No</th><th>Parameter</th><th>Unit</th><th>Limit</th><th>Inlet Water</th><th>Outlet Water</th></tr><tr><td>1</td><td>pH</td><td>-</td><td>5.5 to 9.0</td><td>7.10</td><td>7.88</td></tr><tr><td>2</td><td>TSS</td><td>mg /L</td><td>100</td><td>163</td><td>21</td></tr><tr><td>3</td><td>COD</td><td>mg /L</td><td>250</td><td>138</td><td>25</td></tr><tr><td>4</td><td>BOD</td><td>mg /L</td><td>30</td><td>27</td><td>8.3</td></tr><tr><td>5</td><td>Oil & Grease</td><td>mg /L</td><td>10</td><td>1.6</td><td>N.D.</td></tr></table>	Effluent Analysis Report (February 2022)						S. No	Parameter	Unit	Limit	Inlet Water	Outlet Water	1	pH	-	5.5 to 9.0	7.09	7.80	2	TSS	mg /L	100	160	18.0	3	COD	mg /L	250	152.0	26.0	4	BOD	mg /L	30	26.2	6.3	5	Oil & Grease	mg /L	10	1.5	N.D.	Effluent Analysis Report (March 2022)						S. No	Parameter	Unit	Limit	Inlet Water	Outlet Water	1	pH	-	5.5 to 9.0	7.10	7.88	2	TSS	mg /L	100	163	21	3	COD	mg /L	250	138	25	4	BOD	mg /L	30	27	8.3	5	Oil & Grease	mg /L	10	1.6	N.D.
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vii.	The overall noise levels in and around the plant area shall be kept well within the standards (85dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (Night time).	Is being complied with. Please refer Annexure-12 for Noise Monitoring Report.																																																																																				





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Noise Monitoring Report- October 2021

S. No	Location	Unit	Limit		Result	
			DAY	NIGHT	DAY	NIGHT
1	Near CHP Area	Db (A)	75	70	71.5	67.8
2	Beside Silo	Db (A)			70.4	62.5
3	Solar Panel Area	Db (A)			69.8	58.5
4	Main Gate	Db (A)			65.1	56.5

Noise Monitoring Report - November 2021

S. No	Location	Unit	Limit		Result	
			DAY	NIGHT	DAY	NIGHT
1	Near CHP Area	Db (A)	75	70	72.2	68.5
2	Beside Silo	Db (A)			70.4	64.1
3	Solar Panel Area	Db (A)			68.5	63.2
4	Main Gate	Db (A)			62.5	55.5

Noise Monitoring Report - December 2021

S. No	Location	Unit	Limit		Result	
			DAY	NIGHT	DAY	NIGHT





HIRA POWER & STEELS

Project

Hira Power and Steels Limited
 Urla Industrial Complex, Raipur, Chhattisgarh-492 003

Compliance report of the conditions stipulated in Environmental Clearance

		1	Near CHP Area	Db (A)	75	70	72.2	65.5	
		2	Beside Silo	Db (A)			70.2	63.4	
		3	Solar Panel Area	Db (A)			69.8	61.2	
		4	Main Gate	Db (A)			62.5	54.8	
		Noise Monitoring Report - January 2022							
		S. No	Location	Unit	Limit		Result		
					DAY	NIGHT	DAY	NIGHT	
		1	Near CHP Area	Db (A)	75	70	72.9	65.5	
		2	Beside Silo	Db (A)			71.2	62.2	
		3	Solar Panel Area	Db (A)			69.2	60.8	
		4	Main Gate	Db (A)			65.5	52.2	
		Noise Monitoring Report - February 2022							
		S. No	Location	Unit	Limit		Result		
					DAY	NIGHT	DAY	NIGHT	
		1	Near CHP Area	Db (A)	75	70	71.5	65.5	
		2	Beside Silo	Db (A)			70.0	61.2	
		3	Solar Panel Area	Db (A)			68.8	59.8	
		4	Main Gate	Db (A)			63.3	52.3	





HIRA POWER & STEELS

Project

Hira Power and Steels Limited
 Urla Industrial Complex, Raipur, Chhattisgarh-492 003

Compliance report of the conditions stipulated in Environmental Clearance

		Noise Monitoring Report - March 2022						
		S. No	Location	Unit	Limit		Result	
					DAY	NIGHT	DAY	NIGHT
		1	Near CHP Area	Db (A)	75	70	70.5	65.9
		2	Beside Silo	Db (A)			71.2	64.3
		3	Solar Panel Area	Db (A)			68.9	61.1
		4	Main Gate	Db (A)			61.2	57.7
viii.	Occupation health surveillance of the workers shall be done on a regular basis and records maintained as per the Factory Act.	Please refer to Annexure-13 for Occupation Health surveillance of the workers maintained as per the Factory Act.						
ix.	The company shall develop surface water harvesting structure to harvest the rain water for utilization in the lean season besides reaching the ground water table.	Complied.						
x.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP reports. 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.	Complying. Company has constructed cremation center, toilets and intensive plantation have been done in surrounding areas.						



**HIRA POWER & STEELS**

Project

Hira Power and Steels Limited

Urla Industrial Complex, Raipur, Chhattisgarh-492 003

Compliance report of the conditions stipulated in Environmental Clearance

xi.	<p>The project authorities shall provide Rs. 15.00 Lakhs earmarked towards the capital cost and recurring cost per annum for environmental pollution control measure shall be judiciously used to implement the conditions stipulated by the Ministry of Environment & Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Ministry including its Regional Office at Bhopal. The fund so provided should not be diverted for any other purpose.</p>	<p>Sufficient budget have been allocated towards capital cost & recurring cost per annum for environmental pollution control measures as per conditions stipulated by Ministry of Environment and Forests as well as the State Government.</p> <table border="1"> <thead> <tr> <th data-bbox="863 568 938 763">Sr. No</th><th data-bbox="938 568 1198 763">Environmental Pollution Control Measures</th><th data-bbox="1198 568 1517 763">Capital Cost and Recurring Cost for the period of Oct'21-Mar'22 (Lakhs)</th></tr> </thead> <tbody> <tr> <td data-bbox="863 763 938 1061">01.</td><td data-bbox="938 763 1198 1061">3.0 MVA, 3.6 MVA & 6.0 MVA submerged arc furnace, 12MT/Heat CLU converter and 600 MTPA Thermic Plant</td><td data-bbox="1198 763 1517 1061">181.76</td></tr> </tbody> </table>	Sr. No	Environmental Pollution Control Measures	Capital Cost and Recurring Cost for the period of Oct'21-Mar'22 (Lakhs)	01.	3.0 MVA, 3.6 MVA & 6.0 MVA submerged arc furnace, 12MT/Heat CLU converter and 600 MTPA Thermic Plant	181.76
Sr. No	Environmental Pollution Control Measures	Capital Cost and Recurring Cost for the period of Oct'21-Mar'22 (Lakhs)						
01.	3.0 MVA, 3.6 MVA & 6.0 MVA submerged arc furnace, 12MT/Heat CLU converter and 600 MTPA Thermic Plant	181.76						
xii.	<p>The Regional Office of the Ministry at Bhopal/CPCB/CECB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.</p>	<p>Is being complied with. Please refer to our letter No. 1039/HPSL/U2/CP/21-22/1039, dated 16.11.2021 for the period of April 2021 to September 2021. Attached as Annexure-14.</p>						
xiii.	<p>The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letters are available with CECB and may also be seen at website of Ministry of Environment & 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 should be forwarded to the Regional Office.</p>	<p>Complied.</p>						





HIRA POWER & STEELS

Project : Hira Power and Steels Limited
Urla Industrial Complex, Raipur, Chhattisgarh-492 003

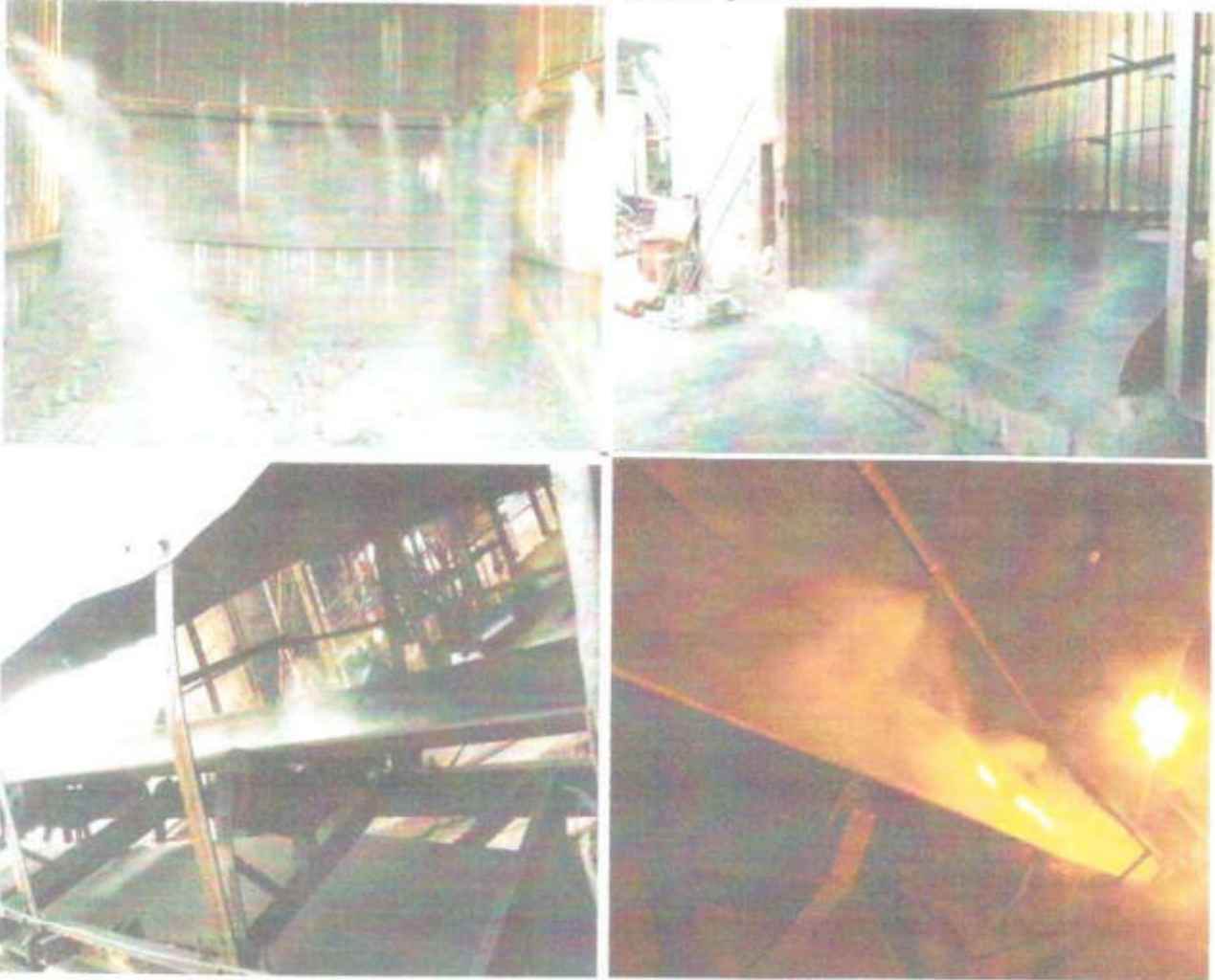
Compliance report of the conditions stipulated in Environmental Clearance

xiv.	Project authority 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.	<p>Date of Financial Closure – November 2009.</p> <p>Date of Final Approval of the project by the concerned authorities - 24 September 2009.</p> <p>Date of Commencing the land development work- October 2009.</p>
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Measures taken to control the fugitive emission

1. Fogging system on conveyor belts and transfer points



2. Covered shed for crusher



3. RCC Road, Pneumatic sweeping and water sprinkling



RCC Road



Pneumatic Sweeping



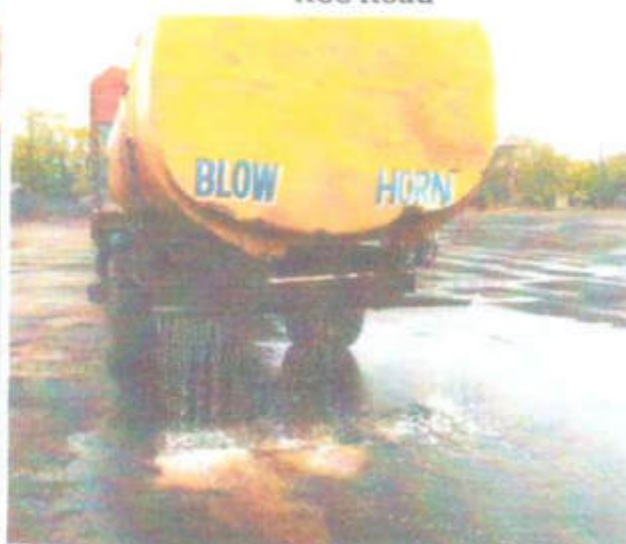
RCC Road



RCC Road



Static Sprinklers



Mobile Sprinklers

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO	UES/TR/21-22/09215
LAB REF NO	UES/21-22/FE/015082
DATE OF SAMPLING	25/11/2021 to 26/11/2021
DATE OF RECEIPT	26/11/2021
DATE OF REPORT	29/11/2021
DATE OF ANALYSIS	START:26/11/2021 END:29/11/2021

SAMPLE DETAILS

MONITORING FOR	FUGITIVE EMISSION
CUSTOMER REF. NO. & DATE	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
SAMPLING LOCATION	A & B FURNACE
DURATION OF SAMPLING	8 HOURS
SAMPLE COLLECTED BY	LABORATORY CHEMIST
SAMPLING PROCEDURE	AS PER METHOD REFERENCE
SAMPLE QUANTITY/PACKING	GMF FILTER PAPER (8 X 10 INCH): 1X1 NO.

TEST REPORT

SR. NO.	PARAMETER	UNIT	RESULT	MOEF & CC Notification	METHOD REFERENCE
			A & B FURNACE		
1	Total Suspended Particulate Matter (as SPM)	µg/m ³	1558	2000	EPA Method IO-2.1

Note: All results are on the basis of 8 hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- The report for publication, arbitration or as legal dispute is forbidden.
- Test sample will be retained for 15days after issue of test report unless otherwise agreed with customer.
- This is for information as the party has asked for above test(s) only

 29/11/21 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  29/11/21 AUTHORIZED SIGNATORY
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-----End of the test report-----

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO	UES/TR/21-22/09216
LAB REF NO	UES/21-22/FE/015083
DATE OF SAMPLING	25/11/2021 to 26/11/2021
DATE OF RECEIPT	26/11/2021
DATE OF REPORT	29/11/2021
DATE OF ANALYSIS	START:26/11/2021 END:29/11/2021

SAMPLE DETAILS

MONITORING FOR	FUGITIVE EMISSION
CUSTOMER REF. NO. & DATE	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
SAMPLING LOCATION	C & D FURNACE
DURATION OF SAMPLING	8 HOURS
SAMPLE COLLECTED BY	LABORATORY CHEMIST
SAMPLING PROCEDURE	AS PER METHOD REFERENCE
SAMPLE QUANTITY/PACKING	GMF FILTER PAPER (8 X 10 INCH): 1X1 NO.

TEST REPORT

SR. NO.	PARAMETER	UNIT	RESULT	MOEF & CC Notification	METHOD REFERENCE
			C & D FURNACE		
1	Total Suspended Particulate Matter (as SPM)	µg/m ³	1428	2000	EPA Method IO-2.1

Note: All results are on the basis of 8 hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- This is for information as the party has asked for above test(s) only

 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  AUTHORIZED SIGNATORY
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-----End of the test report-----

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO	UES/TR/21-22/09217
LAB REF NO	UES/21-22/FE/015084
DATE OF SAMPLING	25/11/2021 to 26/11/2021
DATE OF RECEIPT	26/11/2021
DATE OF REPORT	29/11/2021
DATE OF ANALYSIS	START:26/11/2021 END:29/11/2021

SAMPLE DETAILS

MONITORING FOR	FUGITIVE EMISSION
CUSTOMER REF. NO. & DATE	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
SAMPLING LOCATION	CONVERTOR CLU
DURATION OF SAMPLING	8 HOURS
SAMPLE COLLECTED BY	LABORATORY CHEMIST
SAMPLING PROCEDURE	AS PER METHOD REFERENCE
SAMPLE QUANTITY/PACKING	GMF FILTER PAPER (8 X 10 INCH): 1X1 NO.

TEST REPORT

SR. NO.	PARAMETER	UNIT	RESULT	MOEF & CC Notification	METHOD REFERENCE
			CONVERTOR CLU		
1	Total Suspended Particulate Matter (as SPM)	µg/m ³	1540	2000	EPA Method IO-2.1

Note: All results are on the basis of 8 hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  AUTHORIZED SIGNATORY
---	---	--

-----End of the test report-----

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO	UES/TR/21-22/09218
LAB REF NO	UES/21-22/FE/015085
DATE OF SAMPLING	25/11/2021 to 26/11/2021
DATE OF RECEIPT	26/11/2021
DATE OF REPORT	29/11/2021
DATE OF ANALYSIS	START:26/11/2021 END:29/11/2021

SAMPLE DETAILS	
MONITORING FOR	FUGITIVE EMISSION
CUSTOMER REF. NO. & DATE	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
SAMPLING LOCATION	RAW MATERIAL YARD
DURATION OF SAMPLING	8 HOURS
SAMPLE COLLECTED BY	LABORATORY CHEMIST
SAMPLING PROCEDURE	AS PER METHOD REFERENCE
SAMPLE QUANTITY/PACKING	GMF FILTER PAPER (8 X 10 INCH): 1X1 NO.

TEST REPORT

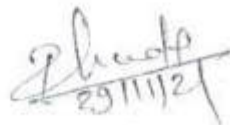

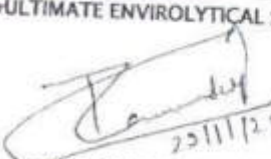
SR. NO.	PARAMETER	UNIT	RESULT	MOEF & CC Notification	METHOD REFERENCE
			RAW MATERIAL YARD		
1	Total Suspended Particulate Matter (as SPM)	$\mu\text{g}/\text{m}^3$	1430	2000	EPA Method IO-2.1

Note: All results are on the basis of 8 hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  AUTHORIZED SIGNATORY
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-----End of the test report-----

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

<i>Name & Address Of The Customer</i>		REPORT NO	UES/TR/21-22/09219
To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		LAB REF NO	UES/21-22/FE/015086
		DATE OF SAMPLING	25/11/2021 to 26/11/2021
		DATE OF RECEIPT	26/11/2021
		DATE OF REPORT	29/11/2021
		DATE OF ANALYSIS	START:26/11/2021 END:29/11/2021
SAMPLE DETAILS			
MONITORING FOR	FUGITIVE EMISSION		
CUSTOMER REF. NO. & DATE	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
SAMPLING LOCATION	CHP AREA		
DURATION OF SAMPLING	8 HOURS		
SAMPLE COLLECTED BY	LABORATORY CHEMIST		
SAMPLING PROCEDURE	AS PER METHOD REFERENCE		
SAMPLE QUANTITY/PACKING	GMF FILTER PAPER (8 X 10 INCH): 1X1 NO.		

TEST REPORT

SR. NO.	PARAMETER	UNIT	RESULT	MOEF & CC Notification	METHOD REFERENCE
			CHP AREA		
1	Total Suspended Particulate Matter (as SPM)	µg/m ³	1495	2000	EPA Method IO-2.1

Note: All results are on the basis of 8 hour sampling.

REMARKS: RESULTS ARE AS ABOVE

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 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  AUTHORIZED SIGNATORY
---	---	---

-----End of the test report-----



भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	M/s Hira Power And Steels Limited Unit li		
Project Address:	Urla Industrial Area		
Town:	Birgaon (m)	Block:	Dharsiwa
District:	Raipur	State:	Chhattisgarh
Pin Code:			
Communication Address:	Hira Power And Steels Ltd. Unit li, Urla Industrial Area, K.h. No. 511/1, 512/2, Dharsiwa, Raipur, Chhattisgarh - 492003		
Address of CGWB Regional Office:	Central Ground Water Board North Central Chhattisgarh, 2nd Floor, Lk Corporate And Logistic Park, Dhamtari Road, Nh-30, Dumartarai, Raipur, Chhattisgarh - 492015		

- | | | | |
|----------------------------|------------------------------|------------------------|------------|
| 1. NOC No.: | CGWA/NOC/IND/ORIG/2021/12176 | 3. Category: | Critical |
| 2. Application No.: | 21-4/1506/CT/IND/2018 | (GWRE 2017) | |
| 4. Project Status: | Existing Project | 5. NOC Type: | New |
| 6. Valid from: | 10/06/2021 | 7. Valid up to: | 09/06/2024 |

8. Ground Water Abstraction Permitted:

Fresh Water		Saline Water		Dewatering		Total	
m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year
100.00	31820.00						

9. Details of ground water abstraction /Dewatering structures

Total Existing No.:4

Total Proposed No.:2

	DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu
Abstraction Structure*	0	0	4	0	0	0	0	0	2	0	0	0

*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit;MPu-Mine Pumps

10. Ground Water Abstraction/Restoration Charges paid (Rs.): 381840.00

11. Number of Piezometers(Observation wells) to be constructed/ monitored & Monitoring mechanism. No. of Piezometers Monitoring Mechanism

	Manual	DWLR**	DWLR With Telemetry
**DWLR - Digital Water Level Recorder	1	0	1

(Compliance Conditions given overleaf)

This is an auto generated document & need not to be signed.

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Phone: (011) 23383561 Fax: 23382051, 23386743

Website: cgwa-noc.gov.in

पानी बचाये - जीवन बचाये
SAVE WATER - SAVE LIFE

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

Mandatory conditions:

- 1) Installation of tamper proof digital water flow meter with telemetry on all the abstraction structure(s) shall be mandatory for all users seeking No Objection Certificate and intimation regarding their installation shall be communicated to the CGWA within 30 days of grant of No Objection Certificate.
- 2) Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year.
- 3) Construction of purpose-built observation wells (piezometers) for ground water level monitoring shall be mandatory as per Section 14 of Guidelines. Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-II of the guidelines.
- 4) Proponents shall monitor quality of ground water from the abstraction structure(s) once in a year. Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analysed in NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.
- 5) In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWA for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.
- 6) In case of mining project the firm shall submit water quality report of mine discharge/ seepage from Govt. approved/ NABL accredited lab.
- 7) The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.
- 8) Industries abstracting ground water in excess of 100 m³/d shall undertake annual water audit through certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.
- 9) Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment (Protection) Act, 1986.
- 10) This NOC is subject to prevailing Central/State Government rules/laws/orders or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.

General conditions:

- 11) No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
- 12) The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
- 13) Proponents shall install roof top rain water harvesting in the premise as per the existing building bye laws in the premise.
- 14) The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising thereupon.
- 15) In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.
- 16) Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste water.
- 17) Whenever the NOC is for abstraction of saline water and the existing wells (s) is / are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.
- 18) Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
- 19) In case of violation of any NOC conditions, the applicant shall be liable to pay the penalties as per Section 15 of Guidelines.
- 20) This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
- 21) The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.
- 22) In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 60 days of taking over possession of the premises.
- 23) This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/Court orders in cases related to ground water or any other related matters.
- 24) Proponents, who have installed/constructed artificial recharge structures in compliance of the NOC granted to them previously and have availed rebate of upto 50% (fifty percent) in the ground water abstraction charges/ground water restoration charges, shall continue to regularly maintain artificial recharge structures.
- 25) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, pharmaceutical, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution as per Annexure III of the guidelines.
- 26) In case of new infrastructure projects having ground water abstraction of more than 20 m³/day, the firm/entity shall ensure implementation of dual water supply system in the projects.
- 27) In case of infrastructure projects, paved/parking area must be covered with interlocking/perforated tiles or other suitable measures to ensure groundwater infiltration/harvesting.
- 28) In case of coal and other base metal mining projects, the project proponent shall use the advance dewatering technology (by construction of series of dewatering abstraction structures) to avoid contamination of surface water.
- 29) The NOC issued is conditional subject to the conditions mentioned in the Public notice dated 27.01.2021 failing which penalty/EC/cancellation of NOC shall be imposed as the case may be.
- 30) This NOC is issued subject to the clearance of Expert Appraisal Committee (EAC) (if applicable).

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



Chhattisgarh State Industrial Development Corporation Limited
(A Government of Chhattisgarh Undertaking)
(ISO 9001:2015 Certified)

First Floor, Udyog Bhawan, Ring Road No.-1, Telibandha, Raipur-492006 (C.G.)

CIN : U45203CT1981SG001853, PAN : AABCM6288N, GST Regn. No. : 22AABCM6288NSZY

Phone No. : 0771-6002071, 72, 73, Fax No. : 0771-2583794

Website: www.csidc.in, Email address: csidc_raipur@yahoo.com, csidc.cg@nic.in

No./CSIDC/EE/DIV.-II/2020-21/

Raipur, Dated 22/01/2021

15479

WATER AVAILABILITY/ NON-AVAILABILITY
CERTIFICATE FOR FRESH/TREATED WATER
TO WHOMSOEVER IT MAY CONCERN

This is to certificate that this office of Chhattisgarh State Industrial Development Corporation Ltd. is providing fresh water supply to the tune of **500 KLD** to the firm **M/s Hira Power & Steels, Located at Urla Industrial Complex, Block/Taluka Dharshiwa Distt. Raipur State Chhattisgarh**

Executive Engineer
EXECUTIVE ENGINEER
CSIDC LIMITED,
RAIPUR



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

TO, HIRA POWER & STEELS LIMITED PLOT NO. 557, 563 & 564, URLA INDUSTRIAL COMPLEX, URLA, RAIPUR - 492003, CHHATTISGARH, INDIA		REPORT NO.	UES/TR/21-22/06528
		LAB REF NO.	UES/21-22/MISC/011329
		DATE OF SAMPLING	28/01/2022
		DATE OF RECEIPT	28/01/2022
		DATE OF REPORT	02/02/2022
		DATE OF ANALYSIS	Start:28/01/2022 END:02/02/2022
SAMPLE DETAILS			
CUSTOMER SAMPLE ID	Fe Mn SLAG	CUSTOMER REF. NO. & DATE	VERBAL COMMUNICATION DATED: 28/01/2022
SAMPLE TYPE	SLAG	SAMPLE CONDITION AT RECEIPT	OK
SAMPLE COLLECTED BY	CUSTOMER	QUANTITY RECEIVED	1 KG.

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMIT SCHEDULE II [See rule 3 (1) (17) (ii)]	RESULT
1	Iron as Fe	mg/l	USEPA METHOD-1311	-	70.6
2	Manganese as Mn	mg/l	USEPA METHOD-1311	10.0	5.9
3	Zinc as Zn	mg/l	USEPA METHOD-1311	250	48.2
4	Lead as Pb	mg/l	USEPA METHOD-1311	5.0	1.4
5	Cadmium as Cd	mg/l	USEPA METHOD-1311	1.0	0.86
6	Chromium as Cr	mg/l	USEPA METHOD-1311	5.0	2.2
7	Arsenic as As	mg/l	USEPA METHOD-1311	5.0	N.D.
8	Mercury as Hg	mg/l	USEPA METHOD-1311	0.2	N.D.

Note: N.D. - Not Detected

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

 02/02/22		For ULTIMATE ENVIROLYTICAL SOLUTIONS 02/02/22
REVIEWED BY		AUTHORIZED SIGNATORY

-----End of the test report-----

TO, HIRA POWER & STEELS LIMITED PLOT NO. 557, 563 & 564, URLA INDUSTRIAL COMPLEX, URLA, RAIPUR - 492003, CHHATTISGARH, INDIA		REPORT NO.	UES/TR/21-22/06532	
		LAB REF NO.	UES/21-22/MISC/011333	
		DATE OF SAMPLING	28/01/2022	
		DATE OF RECEIPT	28/01/2022	
		DATE OF REPORT	02/02/2022	
		DATE OF ANALYSIS	Start:28/01/2022	END:02/02/2022
SAMPLE DETAILS				
CUSTOMER SAMPLE ID	THERMITE SLAG	CUSTOMER REF. NO. & DATE	VERBAL COMMUNICATION DATED: 28/01/2022	
SAMPLE TYPE	SLAG	SAMPLE CONDITION AT RECEIPT	OK	
SAMPLE COLLECTED BY	CUSTOMER	QUANTITY RECEIVED	1 KG.	

TEST REPORT

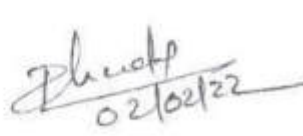

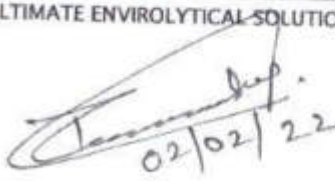
SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMIT SCHEDULE II [See rule 3 (1) (17) (ii)]	RESULT
1	Iron as Fe	mg/l	USEPA METHOD-1311	-	85.4
2	Manganese as Mn	mg/l	USEPA METHOD-1311	10.0	6.8
3	Zinc as Zn	mg/l	USEPA METHOD-1311	250	32.7
4	Lead as Pb	mg/l	USEPA METHOD-1311	5.0	3.8
5	Cadmium as Cd	mg/l	USEPA METHOD-1311	1.0	0.6
6	Chromium as Cr	mg/l	USEPA METHOD-1311	5.0	4.2
7	Arsenic as As	mg/l	USEPA METHOD-1311	5.0	N.D.
8	Mercury as Hg	mg/l	USEPA METHOD-1311	0.2	N.D.

Note: N.D. - Not Detected

REMARKS: RESULTS ARE AS ABOVE

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 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  AUTHORIZED SIGNATORY
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-----End of the test report-----

TO, HIRA POWER & STEELS LIMITED PLOT NO. 557, 563 & 564, URLA INDUSTRIAL COMPLEX, URLA, RAIPUR - 492003, CHHATTISGARH, INDIA		REPORT NO.	UES/TR/21-22/06531	
		LAB REF NO.	UES/21-22/MISC/011332	
		DATE OF SAMPLING	28/01/2022	
		DATE OF RECEIPT	28/01/2022	
		DATE OF REPORT	02/02/2022	
		DATE OF ANALYSIS	Start:28/01/2022	END:02/02/2022
SAMPLE DETAILS				
CUSTOMER SAMPLE ID	POLLUTION DUST	CUSTOMER REF. NO. & DATE	VERBAL COMMUNICATION DATED: 28/01/2022	
SAMPLE TYPE	SLAG	SAMPLE CONDITION AT RECEIPT	OK	
SAMPLE COLLECTED BY	CUSTOMER	QUANTITY RECEIVED	1 KG.	

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMIT SCHEDULE II [See rule 3 (1) (17) (ii)]	RESULT
1	Iron as Fe	mg/l	USEPA METHOD-1311	-	28.4
2	Manganese as Mn	mg/l	USEPA METHOD-1311	10.0	6.2
3	Zinc as Zn	mg/l	USEPA METHOD-1311	250	124.4
4	Lead as Pb	mg/l	USEPA METHOD-1311	5.0	3.2
5	Cadmium as Cd	mg/l	USEPA METHOD-1311	1.0	0.89
6	Chromium as Cr	mg/l	USEPA METHOD-1311	5.0	2.7
7	Arsenic as As	mg/l	USEPA METHOD-1311	5.0	N.D.
8	Mercury as Hg	mg/l	USEPA METHOD-1311	0.2	N.D.

Note: N.D. - Not Detected

REMARKS: RESULTS ARE AS ABOVE

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- Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

 02/02/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  02/02/22 AUTHORIZED SIGNATORY
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-----End of the test report-----

TO, HIRA POWER & STEELS LIMITED PLOT NO. 557, 563 & 564, URLA INDUSTRIAL COMPLEX, URLA, RAIPUR - 492003, CHHATTISGARH, INDIA	REPORT NO.	UES/TR/21-22/06530	
	LAB REF NO.	UES/21-22/MISC/011331	
	DATE OF SAMPLING	28/01/2022	
	DATE OF RECEIPT	28/01/2022	
	DATE OF REPORT	02/02/2022	
	DATE OF ANALYSIS	Start:28/01/2022	END:02/02/2022
SAMPLE DETAILS			
CUSTOMER SAMPLE ID	MOx DUST	CUSTOMER REF. NO. & DATE	VERBAL COMMUNICATION DATED: 28/01/2022
SAMPLE TYPE	SLAG	SAMPLE CONDITION AT RECEIPT	OK
SAMPLE COLLECTED BY	CUSTOMER	QUANTITY RECEIVED	1 KG.

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMIT SCHEDULE II [See rule 3 (1) (17) (ii)]	RESULT
1	Iron as Fe	mg/l	USEPA METHOD-1311	-	75.0
2	Manganese as Mn	mg/l	USEPA METHOD-1311	10.0	7.4
3	Zinc as Zn	mg/l	USEPA METHOD-1311	250	85.1
4	Lead as Pb	mg/l	USEPA METHOD-1311	5.0	2.3
5	Cadmium as Cd	mg/l	USEPA METHOD-1311	1.0	0.8
6	Chromium as Cr	mg/l	USEPA METHOD-1311	5.0	4.6
7	Arsenic as As	mg/l	USEPA METHOD-1311	5.0	N.D.
8	Mercury as Hg	mg/l	USEPA METHOD-1311	0.2	N.D.

Note: N.D. - Not Detected

REMARKS: RESULTS ARE AS ABOVE

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 02/02/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  02/02/22 AUTHORIZED SIGNATORY
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-----End of the test report-----

TO, HIRA POWER & STEELS LIMITED PLOT NO. 557, 563 & 564, URLA INDUSTRIAL COMPLEX, URLA, RAIPUR - 492003, CHHATTISGARH, INDIA		REPORT NO.	UES/TR/21-22/06529	
		LAB REF NO.	UES/21-22/MISC/01330	
		DATE OF SAMPLING	28/01/2022	
		DATE OF RECEIPT	28/01/2022	
		DATE OF REPORT	02/02/2022	
		DATE OF ANALYSIS	Start:28/01/2022	END:02/02/2022
SAMPLE DETAILS				
CUSTOMER SAMPLE ID	Fly Ash	CUSTOMER REF. NO. & DATE	VERBAL COMMUNICATION DATED: 28/01/2022	
SAMPLE TYPE	SLAG	SAMPLE CONDITION AT RECEIPT	OK	
SAMPLE COLLECTED BY	CUSTOMER	QUANTITY RECEIVED	1 KG.	

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMIT SCHEDULE II [See rule 3 (1) (17) (ii)]	RESULT
1	Iron as Fe	mg/l	USEPA METHOD-1311	-	55.9
2	Manganese as Mn	mg/l	USEPA METHOD-1311	10.0	4.7
3	Zinc as Zn	mg/l	USEPA METHOD-1311	250	86.1
4	Lead as Pb	mg/l	USEPA METHOD-1311	5.0	4.8
5	Cadmium as Cd	mg/l	USEPA METHOD-1311	1.0	0.84
6	Chromium as Cr	mg/l	USEPA METHOD-1311	5.0	3.4
7	Arsenic as As	mg/l	USEPA METHOD-1311	5.0	N.D.
8	Mercury as Hg	mg/l	USEPA METHOD-1311	0.2	N.D.

Note: N.D. - Not Detected

REMARKS: RESULTS ARE AS ABOVE

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 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  AUTHORIZED SIGNATORY
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-----End of the test report-----

TO, HIRA POWER & STEELS LIMITED PLOT NO. 557, 563 & 564, URLA INDUSTRIAL COMPLEX, URLA, RAIPUR - 492003, CHHATTISGARH, INDIA		REPORT NO.	UES/TR/21-22/06527	
		LAB REF NO.	UES/21-22/MISC/011328	
		DATE OF SAMPLING	28/01/2022	
		DATE OF RECEIPT	28/01/2022	
		DATE OF REPORT	02/02/2022	
		DATE OF ANALYSIS	Start:28/01/2022	END:02/02/2022
SAMPLE DETAILS				
CUSTOMER SAMPLE ID	AOD SLAG	CUSTOMER REF. NO. & DATE	VERBAL COMMUNICATION DATED: 28/01/2022	
SAMPLE TYPE	SLAG	SAMPLE CONDITION AT RECEIPT	OK	
SAMPLE COLLECTED BY	CUSTOMER	QUANTITY RECEIVED	1 KG.	

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMIT SCHEDULE II [See rule 3 (1) (17) (ii)]	RESULT
1	Iron as Fe	mg/l	USEPA METHOD-1311	-	16.4
2	Manganese as Mn	mg/l	USEPA METHOD-1311	10.0	8.4
3	Zinc as Zn	mg/l	USEPA METHOD-1311	250	58.7
4	Lead as Pb	mg/l	USEPA METHOD-1311	5.0	4.2
5	Cadmium as Cd	mg/l	USEPA METHOD-1311	1.0	0.54
6	Chromium as Cr	mg/l	USEPA METHOD-1311	5.0	3.5
7	Arsenic as As	mg/l	USEPA METHOD-1311	5.0	N.D.
8	Mercury as Hg	mg/l	USEPA METHOD-1311	0.2	N.D.

Note: N.D. - Not Detected

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 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  AUTHORIZED SIGNATORY
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-----End of the test report-----



Ref: 2023/HPSL/2022-23/2023

Date: 05.05.2022

To,
The Regional Officer,
Regional Office,
Chhattisgarh Environment Conservation Board,
Commercial Complex, Chhattisgarh Housing Board Colony,
Kabir Nagar, Raipur (C.G.)

Sub: Fly ash utilization annual report / return for the financial year 2021 – 22

Respected Sir,

With reference to above cited subject, we are submitting herewith fly ash utilization annual report / return (Annexure – I) for the financial year 2021 - 22 (April 1st 2021 to March 31st 2022) for your ready reference and record, please.

Fly ash is being disposed off by us systematically & scientifically as per Fly Ash Notification dated 14th September, 1999 and its amendments by MoEF&CC.

Kindly acknowledge the receipt of the same.

Thanking You,

Yours faithfully,

For, HIRA POWER AND STEELS LIMITED, UNIT – II

Authorized Signatory

Encl: A/a

- CC: 1. The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhavan, North Block, Sector – 19, Atal Nagar, District - Raipur (C. G.) 492 002
2. The Regional Director, Central Pollution Control Board, 3rd Floor, Sahkar Bhawan, North TT Nagar, Bhopal -462003
3. The Scientist, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Aranya Bhawan, North Block, Sector-19, Atal Nagar, District - Raipur (C. G.) 492 002.

Hira Power & Steels Limited
An ISO 9001:2015 Certified Company
CIN : U24117CT1984PLC002512

Registered Office & Works : Khasra No. 511/1, 512/2, Urla Industrial Complex, Raipur - 492003, Chhattisgarh, India
P : +91 771 4082500, 4082600, F : +91 771 4082501, E : admin@hpslindia.com
www.hpslindia.com, www.hiragroup.com

HIRA POWER & STEELS LIMITED, (UNIT – II)

Khasra No. 511/1, 512/2, Urla Industrial Complex, Raipur (C.G.) – 492 003

FLY ASH GENERATION & UTILIZATION REPORT FOR THE FINANCIAL YEAR 2018-19 (April 1st 2021 to March 31st 2022)

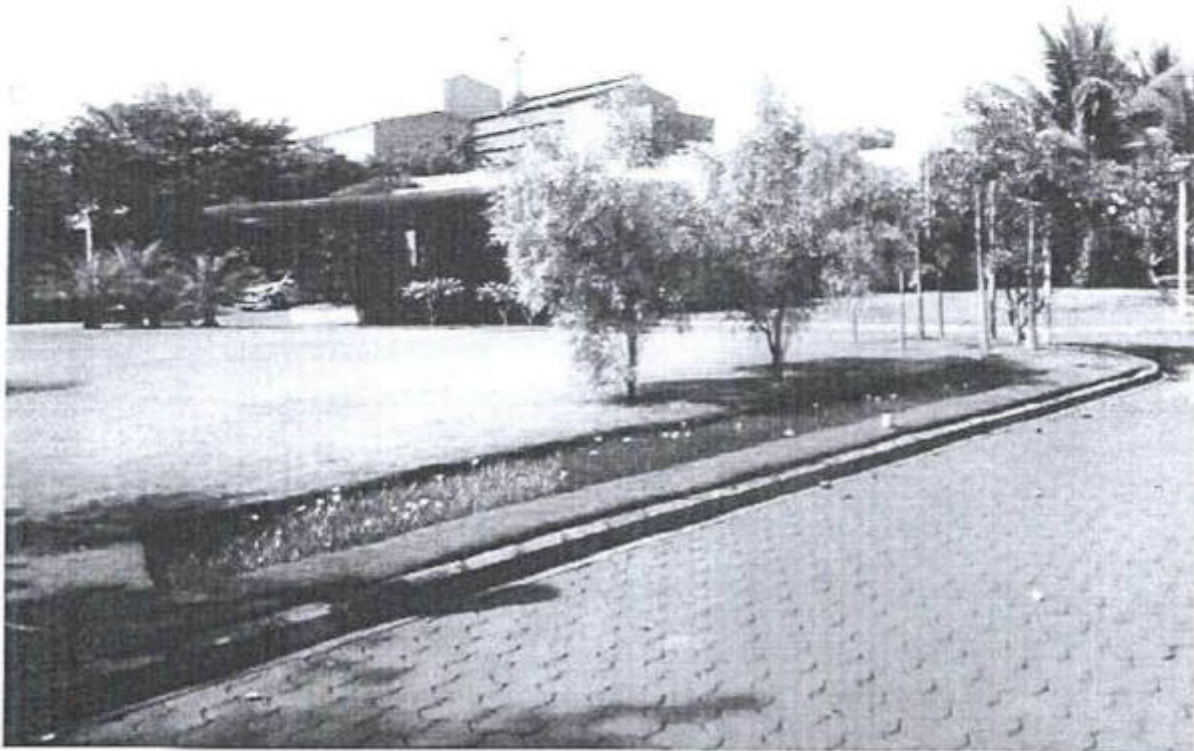
Sr. No.	Month	Fly Ash Generation in the Month (MT)	Supply to the Cement Plant (MT)	Brick Manufacture ring (MT)	Land Filling (MT)	Ash Dyke Raising / Construction (MT)	Agriculture (MT)	Mine Filling (MT)	Any Other Use (MT)	Total (MT)	Percentage (%)
4	Apr-21	7902.92	0.00	7902.92	0.00	0.00	0.00	0.00	0.00	7902.92	100.00
5	May-21	6081.49	0.00	6081.49	0.00	0.00	0.00	0.00	0.00	6081.49	100.00
6	Jun-21	7728.42	0.00	7728.42	0.00	0.00	0.00	0.00	0.00	7728.42	100.00
7	Jul-21	7566.17	0.00	7566.17	0.00	0.00	0.00	0.00	0.00	7566.17	100.00
8	Aug-21	7325.52	0.00	7325.52	0.00	0.00	0.00	0.00	0.00	7325.52	100.00
9	Sep-21	8462.85	0.00	8462.85	0.00	0.00	0.00	0.00	0.00	8462.85	100.00
10	Oct-21	6384.26	0.00	6384.26	0.00	0.00	0.00	0.00	0.00	6384.26	100.00
11	Nov-21	5979.37	0.00	5979.37	0.00	0.00	0.00	0.00	0.00	5979.37	100.00
12	Dec-21	8353.28	0.00	8353.28	0.00	0.00	0.00	0.00	0.00	8353.28	100.00
13	Jan-22	7442.96	0.00	7442.96	0.00	0.00	0.00	0.00	0.00	7442.96	100.00
14	Feb-22	6605.83	0.00	6605.83	0.00	0.00	0.00	0.00	0.00	6605.83	100.00
15	Mar-22	6466.44	0.00	6466.44	0.00	0.00	0.00	0.00	0.00	6466.44	100.00
Total		86299.51	0.00	86299.51	0.00	0.00	0.00	0.00	0.00	86299.51	86299.51



HIRA

HIRA POWER & STEELS

UNIT - II



[PLANTATION SURVEY & EVALUATION REPORT] 2019 - 20, 2020-21

SEIDR

SURVEY & EVALUATION BY - SOCIETY FOR ENVIRONMENT & INTEGRATED DEVELOPMENT DAIRYID

GREENBELT: SURVEY & EVALUATION REPORT OF GEM/S HIRA POWER

S. N.	PARTICULARS	PAGE
1.	Executive Summary (Introduction)	1
2.	Project Objective, Plantation Details	2
3.	Road Side Plantation, Methodology	3
4.	Plantation Species and Measurement	4 -6
5.	Survival Percentage of Planted Plants	6
6.	Photographs	7 - 15
7.	Gradation	16
8.	Certificate	17
9.	Discussion and Suggestion	18
10.	A word of Appreciation	19
11.	Team Involved in Survey	20
12.	ABOUT "SEIDR"	21-22

SEIDR

SURVEY & EVALUATION BY : SOCIETY FOR ENVIRONMENT & INTEGRATED DEVELOPMENT RAIPUR

Evaluation of Greenbelt Development
For

M/s HIRA POWER & STEEL LTD. UNIT - II

Plot No. 557, 563 & 564 Urla, Industrial Complex, Urla,
Raipur

Survey & Evaluation by - "Society for
Environment & Integrated Development
Raipur" Raipur (CG)

EXECUTIVE SUMMARY

1. INTRODUCTION

M/s HIRA POWER&STEEL LTD.is working at three places in the state of Chhattisgarh:-

2. Regd. Office/ Works - M/s HIRA POWER AND STEEL LIMITED- Unit - II, 511/1, 512/2, Urla Industrial Complex, Raipur, Pin code - 492003 (C. G.)
3. Project Started - As Per information provided by M/s HIRAPOWER&STEEL Ltd. Raipur, Details of Projects are as Under :-

I. HIRA POWER AND STEEL, URLA (Raipur) Plant -

1. EC- F.No. J-11011/836/2008-IA-II (I) MoEF, New Delhi - 11003 for Ferro Alloy plant - 600 MTPA for production of Low Medium Carbon Ferro Manganese (Ferro Alloys) - 18,000 MTPA.
2. Ferro Alloys -30,000 MTPA, Or 56,000 MTPA Pig Iron from 2x5.5 MVA Submerged Arc Furnaces
3. Captive Power Plant - 20 MW

4. Plant Area:-

Hira power & Steel Ltd. Urla (Raipur) Plant - Total Land Area - 17.59 Ha. (Approx) (Plantation Area - 5.86 Hectare Approx)

M/s HIRA POWER&STEEL LTD

The green belt helps to capture the fugitive emission and attenuate the noise apart from improving the aesthetic quality of the region in the total area of the project site (Core Zone). 33% area shall be developed as green belt along the periphery of the plant in Hira Power & Steel - Unit -II whereas 33% (as they come under notified industrial area) plant shall be developed as green belt area. Development of green belt and other forms of greenery at road side and plantation in nearest project affected villages shall also be helpful to improve ecological conditions and biodiversity status of the area.

Survey and Evaluation work was allotted by M/s HIRA POWER&STEEL LTD. to our organization - "SOCIETY FOR ENVIRONMENT & INTEGRATED DEVELOPMENT RAIPUR" for which one work orders was issued dtd.21/12/2020 via S.O. No. 7200003029/U102.

5. PROJECT OBJECTIVE

Plant species act as bio-monitoring agent to monitor the air environment as well as it keeps and maintains the project environment healthy by providing more oxygen. The two areas of air pollution i.e. gases and dust need to be urgently by using plants. Keeping this in mind, alleviate measures have been suggested to develop green belt based on local and physical conditions of the areas by taking the cognizance of "Green with Purpose" drive.

6. PLANTATION DETAILS

7. Area of Plantation (Green Belt):- During the field survey and field study by our technical team it has been found that plantation work was started from start of each project and is continued till date.

A. Urla Plant Unit-2, - 5.86 Ha. (Approx) in Campus Area.

B. Aerodrome Garden development area.

C. Road Side area - 3 ½ K. M. (Approx) in campus Area.

8. Details of Year wise Plantation:-

Road side plantation survey till date as per details given below:-

M/s HIRA POWER&STEEL LTD.

A. Main gate to Jai hind chowk to near Police station and around

s.n.	Species	No. of Survival plants
1.	Kesiasemia, Peltophorum, Gulmohar, Karanj, Sissoo, Alatonia, Pipal,	1434

B. Plantation done by Hira Power & Steel Ltd. up to 2019-20, 2020-21

Year	Unit -2	Road Side	Airport Garden
UP TO 2019-20	14000+1252	2600	2500
2020-21	1326	0	0
Total =	16578	2600	2500

9. Plantation Sites:-

Plantation work is in progress along the plant boundary wall and inside the plant premises. Plantation work has been done along the road side. Plantation survey has been carried out by expert team with the help of officers of M/s HIRA POWER & STEEL Ltd. Following sapling was planted by M/s HIRA POWER & STEEL Ltd.

- I. At Unit - 2, plant Campus Area -
 - A. Plant premises area.
 - B. Admin building (Office area)
- II. Road Side area.
- III. Airport Garden

• Road side Plantation -

s.n.	Location of plantation	Length in Kilometer
1	Unit -II main gate to Young India Choak, Police Station around Road both side	3 ½ K M (Approx)

Boundary wall has been constructed on the places, Raipur factory, Due to this construction expected damages from cattle and unwanted social elements were controlled.

Irrigation facility was also provided at five places by drip water pipe line and tanker due to this the growth of plants has been observed very well.

10. METHODOLOGY

- All planted areas were inspected.
- All small plants were counted and taken their measurement and same has been recorded.
- Height and girth of plants and saplings have been measured.
- Survival percentage has been recorded.
- Many places were pictures of plantation.



11. M/s HIRA POWER & STEEL LTD.

A. UNIT -II- PLANTATION SPECIES AND MEASUREMENT

S.N	Species	Average		Maximum		Minimum	
		Girth (cm)	Height (m)	Girth (m)	Height (m)	Girth (cm)	Height (m)
1.	Peltophorum	10.5	5.30	80	15	4	4.0
2.	Alastonia	18.4	6.93	54	13	4	3.0
3.	Parkia	5.7	4.1	9	5.50	4	3.0
4.	Kesiasemia	25	5.65	45	10.50	3	0.90
5.	Shisham	40.0	8.04	80	12	20	5
6.	Sirsa	7.5	4.5	12	6.5	4	3.1
7.	Badam	28	6.2	45	8.50	12	2.0
8.	Coconut	40	8.25	60	12	28	5
9.	Karanj	28	3.3	62	47	5	2
10.	Washingtonia	57.8	3.08	90	9.0	40	2
11.	Spethodia	7.30	2.58	14	4.25	2	1.30
12.	Nilgiri	11.61	2.93	20	4.50	4	1.10
13.	Shisham	20.30	4.20	26	5.50	15	3
14.	Gulmohar	9	3.3	12	5	6	1.2
15.	Konocarpes	17.5	5.06	20	6.05	9	2
16.	Neem	11.66	2.61	14	3.10	5	0.95
17.	Karanj	5.12	1.06	10	2.50	2	0.50
18.	Alastonia	13	3.68	16	5	13	2.50
19.	Champa	20.5	5.8	52	12.0	6	3
20.	Sitafal	14.60	4.42	16	5.50	13	4.00
21.	Kaner	7.14	2.98	12	4.00	4	2.00
22.	Kachnar	38.58	10.51	52	13	25	6.50
23.	Areca Pam	14.08	3.52	32	8.00	6	4.00
24.	Bottle brush	8.12	2.13	18	6.50	4	1.20
25.	Kadmba	12.3	5.3	24	7.50	6	4.00
26.	Acacia	6.75	3.65	16	7.50	3	2

D. AIRO DROME GARDEN - PLANTATION SPECIES AND MEASUREMENT

S.N.	Species	Average		Maximum		Minimum	
		Girth (cm)	Height (m)	Girth (cm)	Height (m)	Girth (cm)	Height (m)
1.	Spathodea	45	5.9	65	10	20	4.5
2.	Champa	25	2.7	30	3.5	20	2
3.	Cycus	104	4.16	115	5	75	2.50
4.	Tikoma	6.5	1.75	12	2.6	4	1.20
5.	Akash neem	64.75	14	80	15	45	12
6.	Kaner	8.8	1.75	60	1.80	8	1.75
7.	Bottle palm	34.5	5.6	40	6.5	25	5.00
8.	Arjun	30	7.12	70	12	12	4.00
9.	Peltophorum	54.6	7.6	160	14	20	6
10.	Nilgiri	114.4	17	130	18	1.10	10
11.	Alastonia	41	9.2	50	12	30	6
12.	Gulmohar	61.3	7.6	83	12	40	8
13.	Karanj	20.4	4.9	35	8.00	10	3.5
14.	Kachnar	23.8	4.9	35	8	10	3.5
15.	Coconut	76.4	12.14	115	16	55	6
16.	Bottle brush	34.8	56	40	6.5	25	5
17.	Bottle palm	72.2	5.0	80	5	55	3.5

G. M/s HIRA POWER&STEEL LTD.(Road Side Plantation 3 ½ K M (Approx))

S.N.	Species	Average		Maximum		Minimum	
		Girth (cm)	Height (m)	Girth (cm)	Height (m)	Girth (cm)	Height (m)
1.	Tikoma	9.8	4.08	20	6	3	2.5
2.	Neem	9.7	3.2	15	5.5	5	2.00
3.	Alastonia	42.8	4.5	60	7	20	2.5
4.	Khamar	29.3	6.3	35	10	12	3.00
5.	Kesiyasemia	24.8	8.4	38	2.5	4	1.5
6.	Siras	7.4	3.2	14	5.50	2	1.5
7.	Kadamba	9.3	3.3	14	5.00	5	2.00
8.	Gulmohar	33.4	9	45	12	15	5

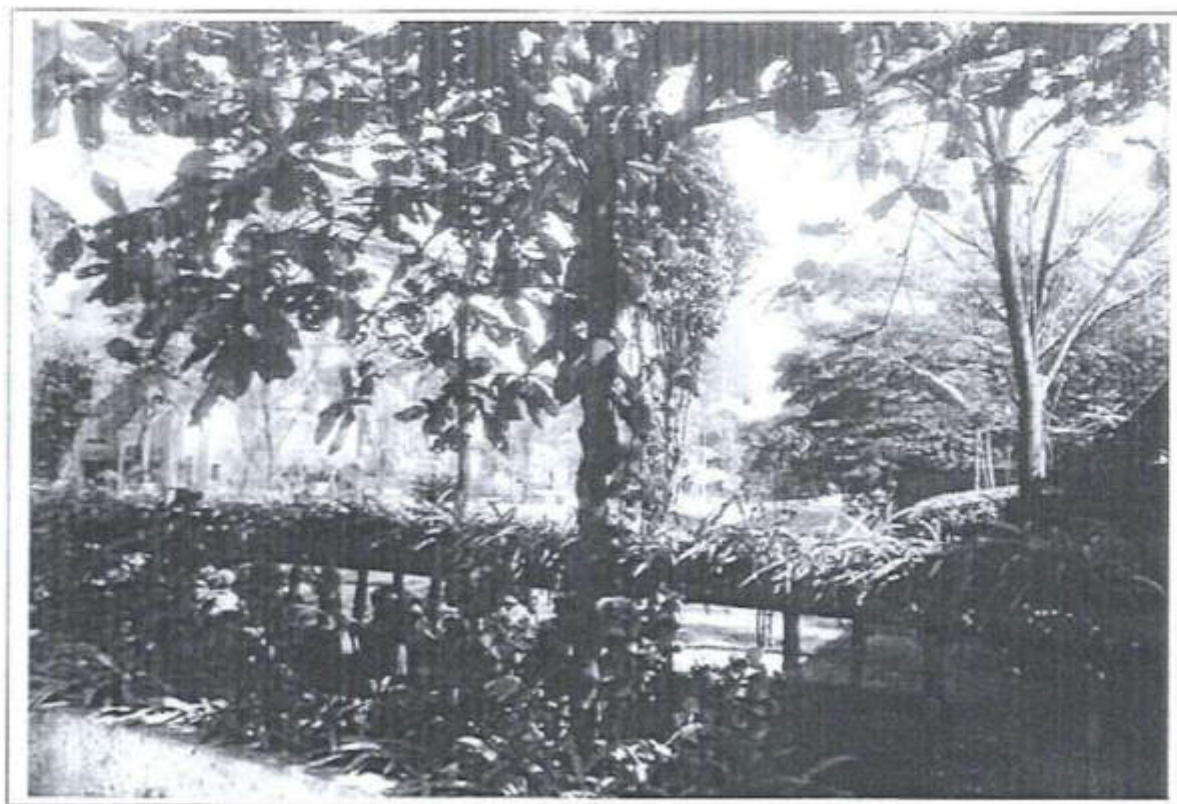
M/s HIRA POWER & STEEL LIMITED.

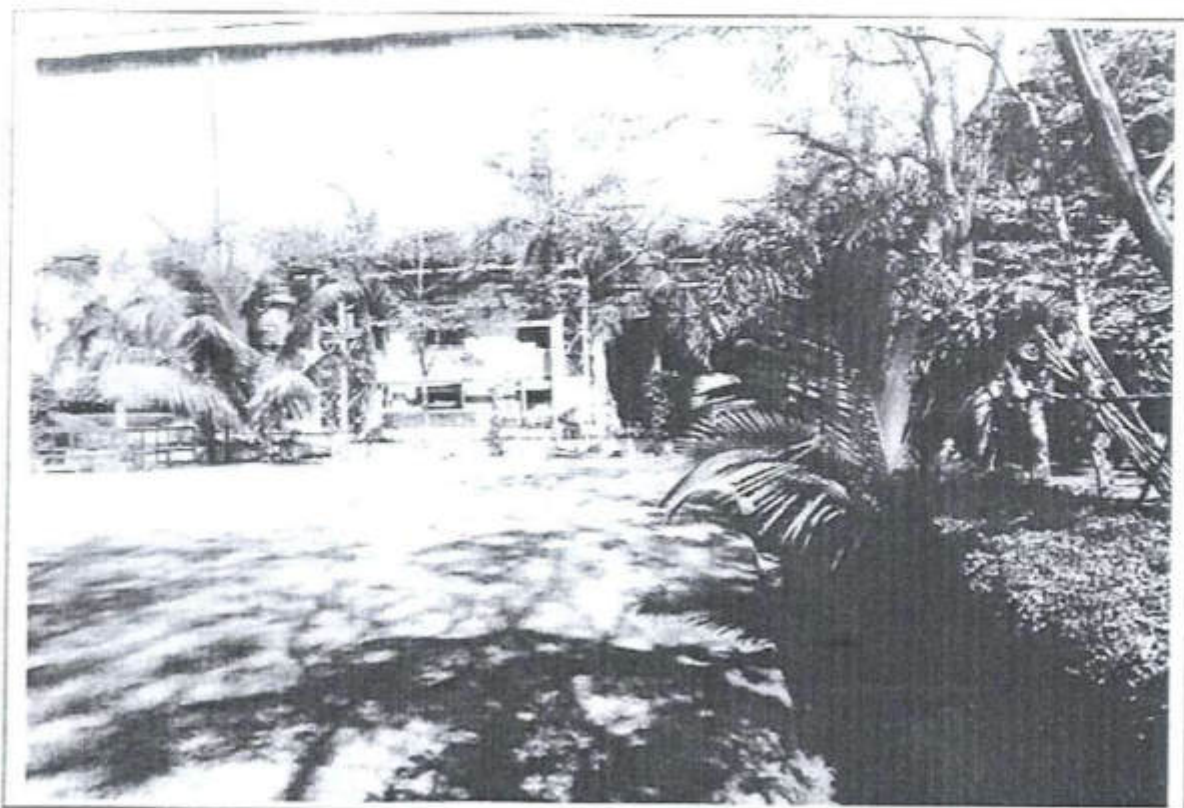
9.	Kaner	20	5.3	28	7.5	10	2.5
10.	Sisoo	28.7	5.54	45	7.00	18	4.5
11.	Arjun	77	10.6	90	12	60	8
12.	Karanj	14	2.4	18	3.50	10	2.00
13.	Kadmba	45	6.2	55	10	55	4
14.	Teek (Sagoun)	12	3.01	30	5.5	6	0.90
15.	Amaltas	12.6	3.5	20	4.5	10	2.00
16.	Gulmohar	53	8.4	65	12	45	4.00

17. Number of Plantation and Survival Percentage

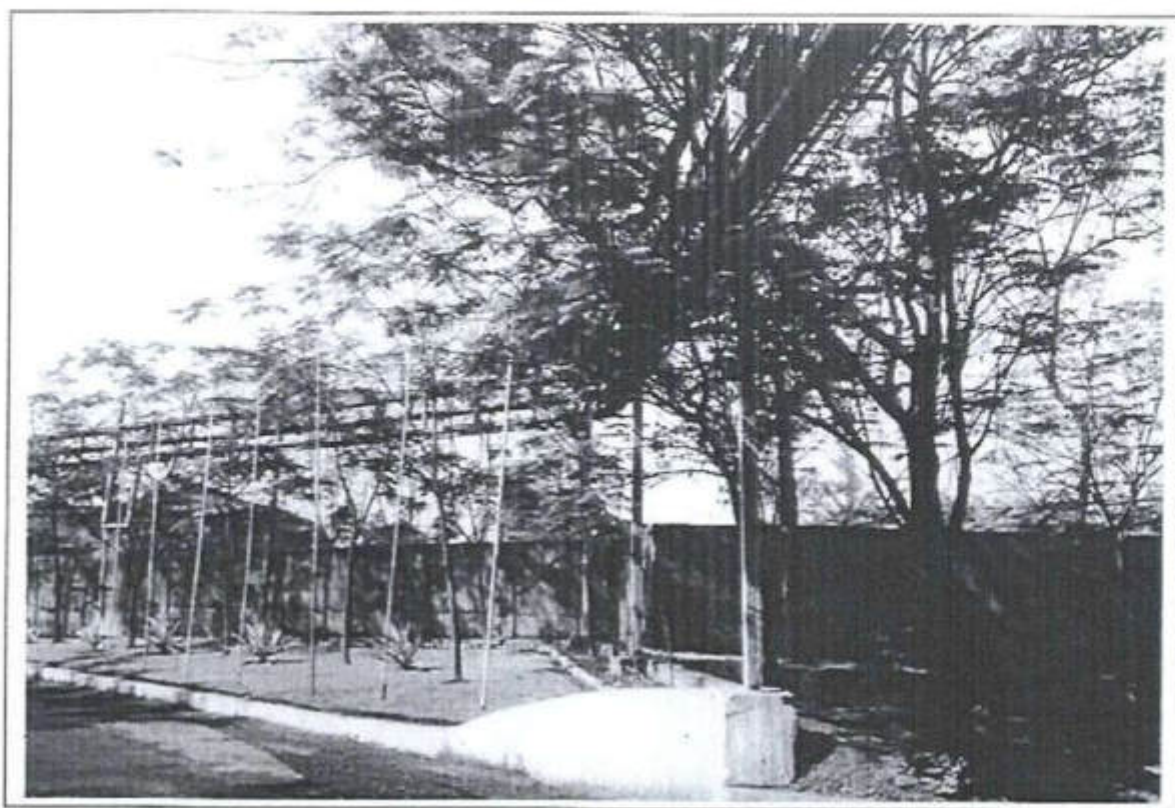
PLANTED SPECIES AND PLANTS NUMBERS				
S. N.	PLANTED SPECIES	PLANTED SPECIES NO.	SURVIVAL PLANTED	SURVIVAL PERCENTAGE
M/s HIRAPOWER&STEEL Ltd.				
1.	Unit -II (Including Admin Building)			
	Peltophorum, Alastonia, Parkia, Kesiasemia, Sirsa, Badam, Coconut, Karanj, Washingtonia, Spethodia, Nilgiri, Shisham, Gulmohar, Conocarpes, Neem, Karanj, Alastonia, Champa, Sitafal, Kaner, Kachnar, Areca Pam, Bottle Brush, Kadmba, Acacia, Shoobabul	16578	14428	87%
3.	Road Side			
	Neem, Alastonia, Khamar, Kesiyas amia, Siras, Kadamba, Gulmohar, Kaner, Sisoo, Arjun, Karanj etc.	2600	1434	55%
4.	Air port Garden			
	Spathodea, Champa, Cycus, Tikoma, Akash neem, Kaner, Bottle palm, Arjun, Peltophorum, Nilgiri, Alastonia, Gulmohar, Karanj, Kachnar, Coconut, Bottlebrush, Bottle Palm etc.	2500	1874	75%
	Grand Total=	21678	17736	

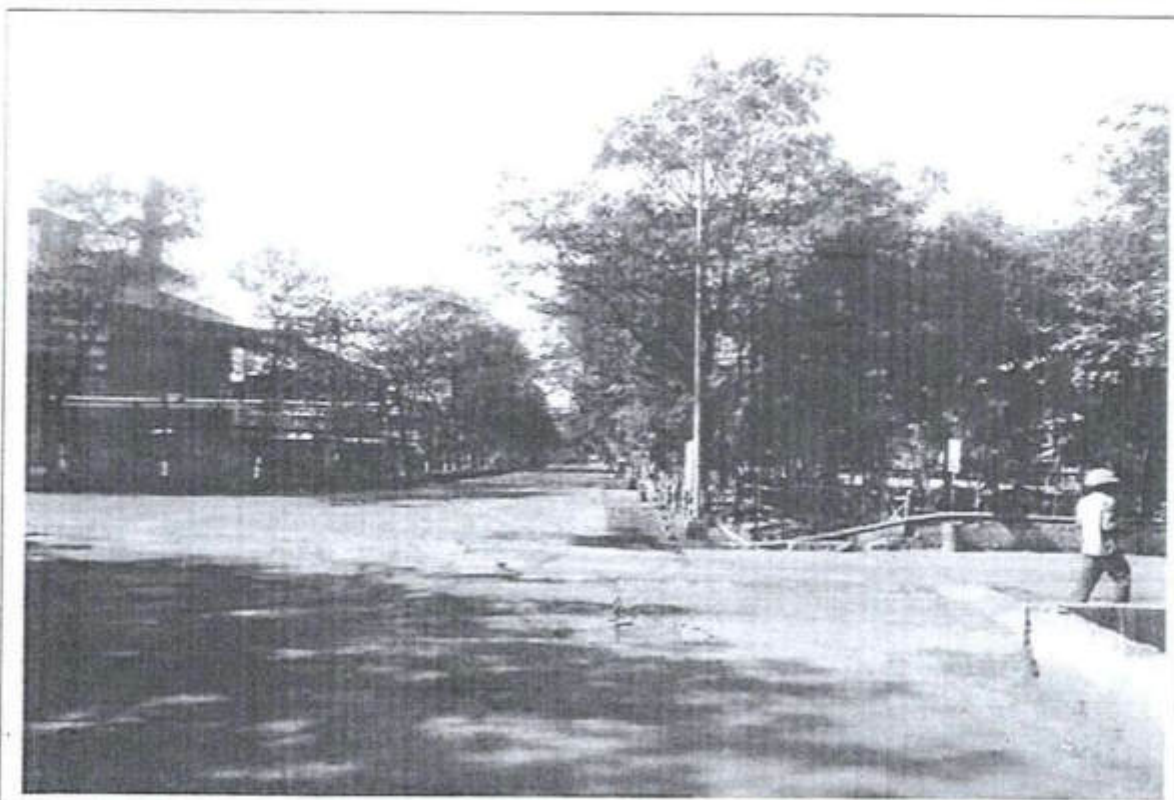
Note : - Coal yard, Crusher yard, Kirtiman van, Near Pond, Near Power store Diesel tank. In the above area mentioned places or area shoobabul are very dense.



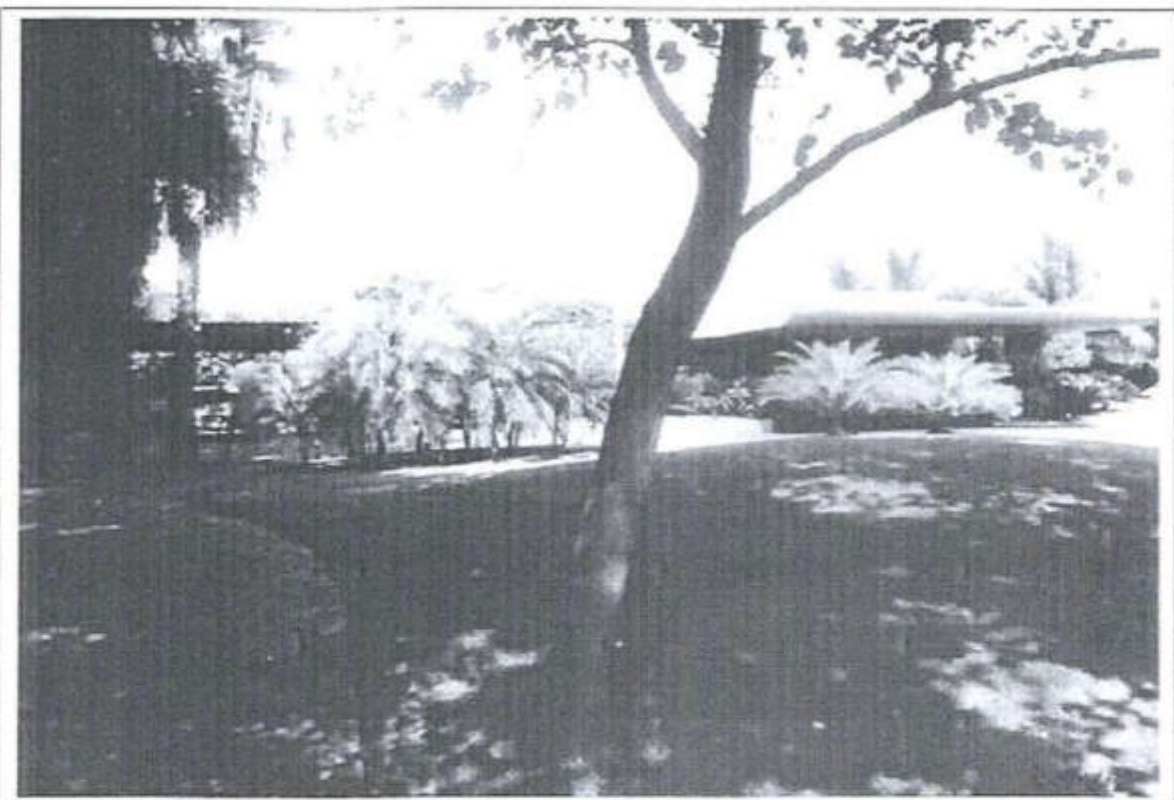
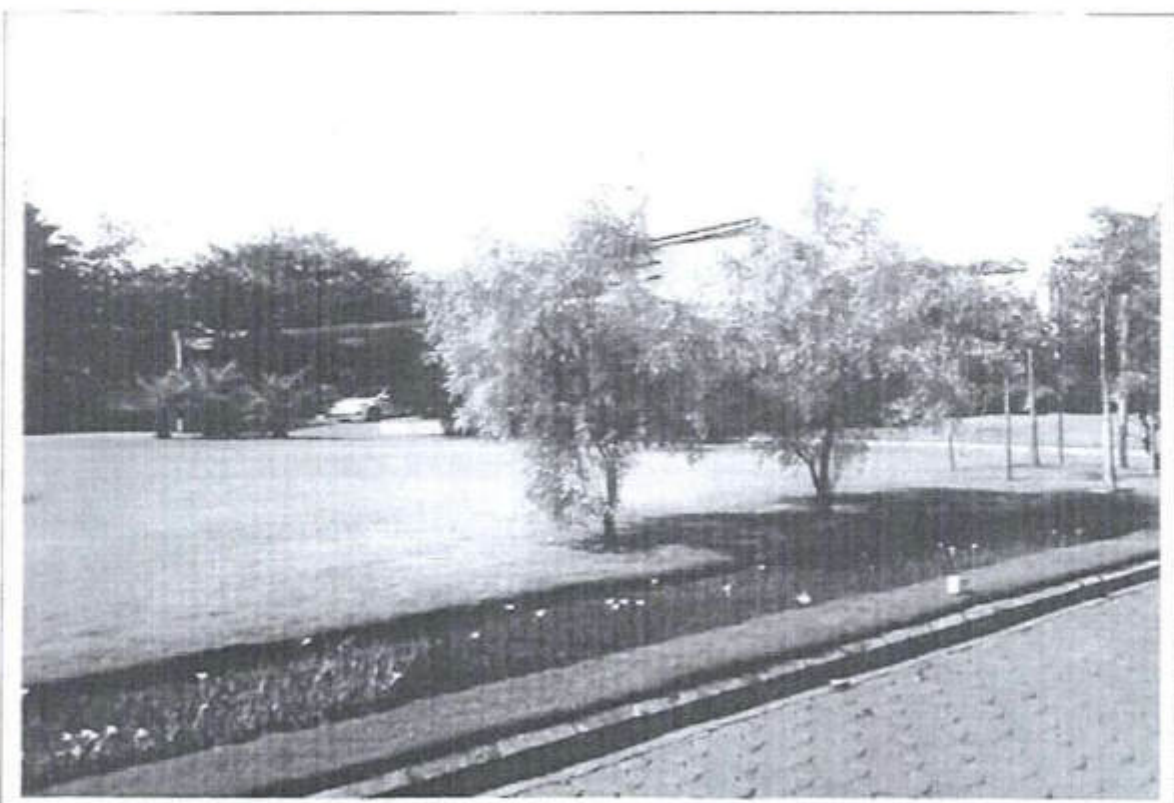


M/s HIRA POWER & STEEL LIMITED.

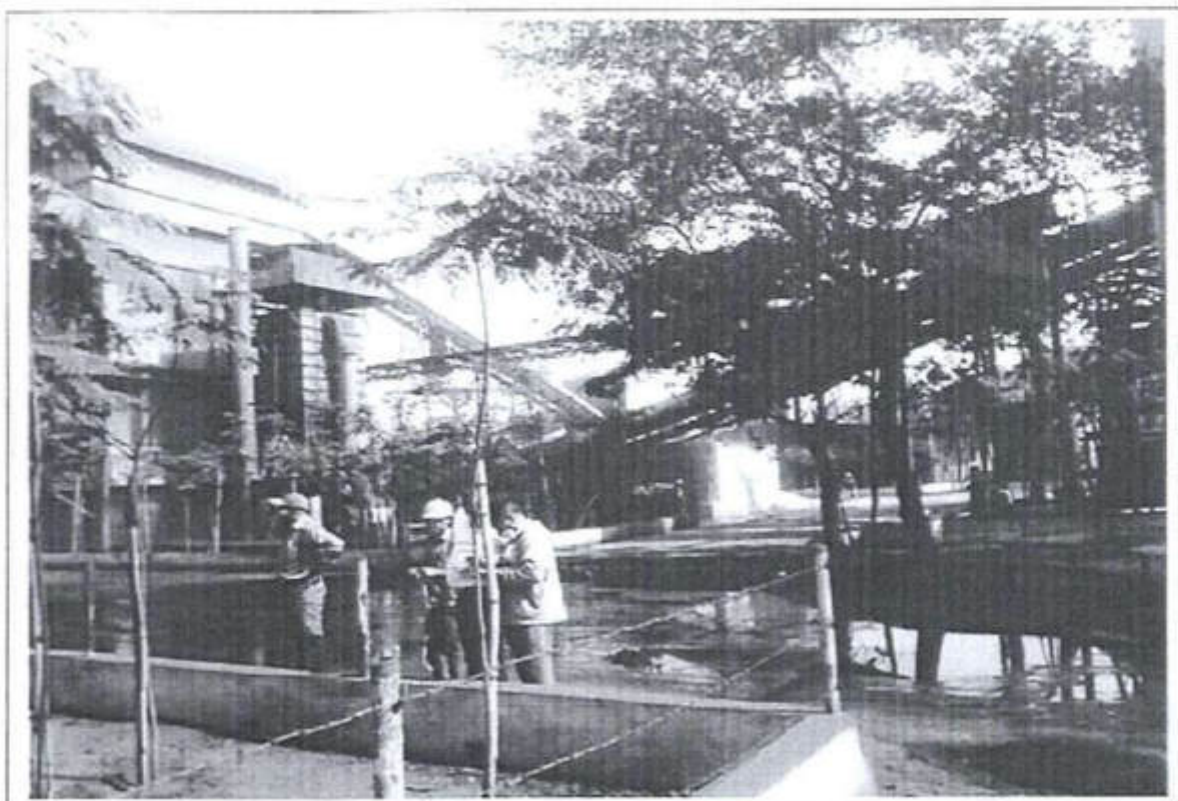


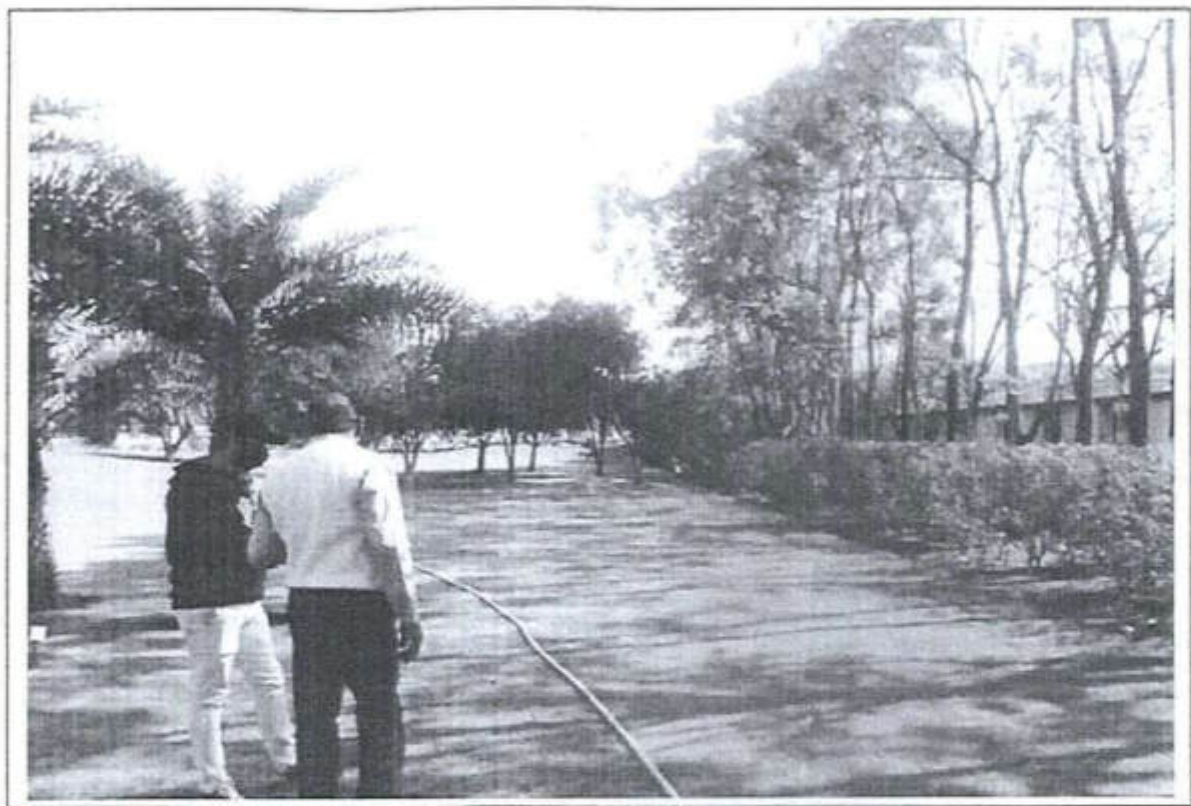


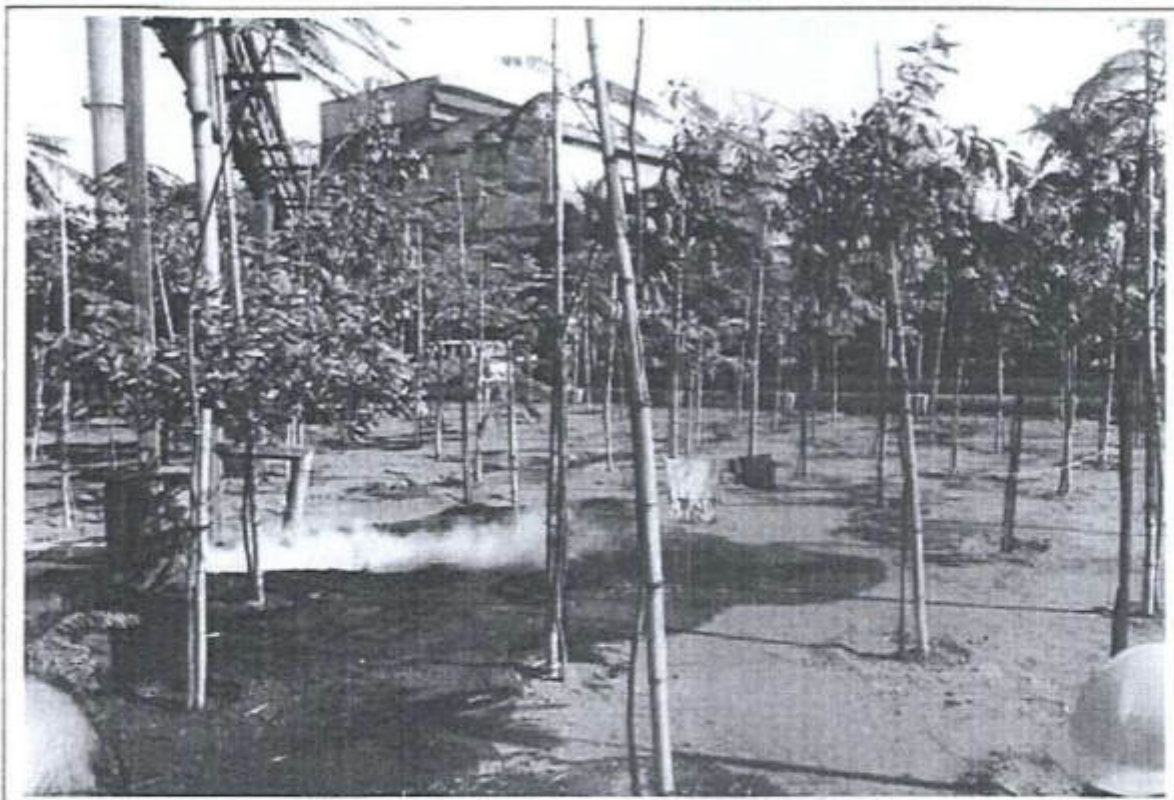
M/s HIRA POWER & STEEL LIMITED.











9. GRADING OF PLANTATION

M/s HIRAPOWER&STEEL LTD. - Unit - II

Grading of Plantation on scale of 1 to 10

Qualitative Aspects	Survival	8.50
	Health of Plantation	8.00
	Maintenance	8.00
	Sustainability	8.00

Grading of project plantation on scale 1 to 10

Overall Grading of Plantation	Outstanding (excellent) (8 - 10)	Very Good (5 < 8)	Good (3 < 5)	Poor (> 3)
	8.12			

E. GRADE CARD-

M/s HIRAPOWER&STEEL LTD. - Road Side

Grading of Plantation on scale of 1 to 10

Qualitative Aspects	Survival	6.00
	Health of Plantation	7.00
	Maintenance	6.00
	Sustainability	6.00

Grading of project plantation on scale 1 to 10

Overall Grading of Plantation	Outstanding (excellent) (8 - 10)	Very Good (5 < 8)	Good (3 < 5)	Poor (> 3)
		6.25		

F. GRADE CARD-

M/s HIRAPOWER&STEEL LTD. - Aerodrome Garden

Grading of Plantation on scale of 1 to 10

Qualitative Aspects	Survival	9.00
	Health of Plantation	9.00
	Maintenance	9.00
	Sustainability	9.00

Grading of project plantation on scale 1 to 10

Overall Grading of Plantation	Outstanding (excellent) (8 - 10)	Very Good (5 < 8)	Good (3 < 5)	Poor (> 3)
	9.00			

CERTIFICATE

CERTIFIED THAT OUR SURVEY AND EVALUATION EXPERT TEAM COUNTED ALL TREE, PLANTS, SAPLING OF M/S HIRA POWER AND STEEL LTD. UNIT -2, RAIPUR, AND FOUND 14428 OF TOTAL 16578 PLANTED PLANTS AND COVERED AS GREEN BELT 14.26 ACRES (APP.) AREAS.

DATE :12/01/2021

"SEIDR"



"SOCIETY FOR ENVIRONMENT & INTEGRATED
DEVELOPMENT RAIPUR"

10. DISCUSSION HELD WITH OFFICER AND MANEGMENT OF M/s HIRA POWER&STEEL LTD.AS UNDER -

1. Mr. Rahul Agarwal (President)
2. Mr. Aviral Tiwari (Senior Engineer Environment)
3. Mr. Mahesh Kumar Verma (Senior Officer Horticulture)

11. SUGGESTIONS FOR THE IMPROVEMENT

1. Species - Fast growing species should be planted.
2. Plant should be planted after one year age. Minimum length - 1 meter or above.
3. Irrigation facility should be provided to planted plants.
4. Space should be 2×2, 3×3 and maximum 4×4 according to maximum girth of trees after maturity.
5. Germination lime - Humic Oxide should be used for better results.
6. Manure - Compost, Vermi compost for good age Urea, Dap, Zhaim should be used.
7. Priority to broader leaves plants should be planted.
8. Following species may be chosen for plantation - Khamar, Shisham, Teak, Kadamba, Acacia, Pelt form, Arjun, Neem, Semal, Jamun, Karanj, Sissu, Mahuwa, Ashok, Nilgiri, Pipal, Amaltas, Bottlepam, KesiaSamia, etc.
9. Termite& Other pests control should be done by Cholorocyper, Imida combine.
10. Plants should be planted regularly every year.
11. Soil of Pits should be change with manure before plantation.
12. In water locked area Kahua should be planted.
13. Hard and dry area Teak should be planted.
14. For maintain of survival percentage casually replacement should be done every year.

A WORD OF APPRECIATION

We appreciate all management officers and staff of HIRA POWER&STEEL I.TD. Who has taken step to develop the green belt & greeneryness of area. We found that sapling has taken care well after plantaion.

We apperciate the commitment and care taken by the management for developing the green belt & greenery within & outside of plant permises.



"Society for Environment & Integrated Development Raipur"

THE TEAM INVOLVED IN SURVEY & EVALUATION

S.n.	Name	Job	Experience
1	Shri D K Tiwari	Team Leader	Self Employ 15years experience of monitoring & evaluation & micro planning
2	Shri Kamlesh Dubey	Coordinator	6 years experience of monitoring & evaluation Industrial Plantation
3	Shri Jasvir Singh Virdi	Investigator	7years experience of monitoring & evaluation Industrial Plantation

EXECUTIVE BODY OF "SEIDR"

NO.	Post	Name	Experience
1	President	Shri S. K. Roy	Retd. A.C.F. C.G. Govt.
2	Vice President	Smt. Shobh Mishra	Professional
3	Secretary	Smt. Asha Tiwari	Teacher (Private)
4	Treasurer	Shri D. K. Tiwari	Professional



ABOUT THE EVALUATION AGENCY

Organization profile

Name of Organization *Society for Environment & Integrated Development Raipur, Non Government Organization (NGO) And working as Development and welfare.*

No. & Date of registration *C. G. State - 3270. Date - 01/03/2011*

Registration *Under Society Registration Act, - 1973.*

Address *J-9/A, ShriRam Nagar, Phase -I, Street - II, Post Office Shankar Nagar Raipur, (C.G.) Pin Code - 492007.*

Phone *+91- 771-3557342*

Chief Functionary *Mr. S. K. Roy (Retd. Forest S.D.O.)
Mob. No. 094255 - 02223*

Contact Person *Mr. D K Triwari (Retd. Forest Range Officer)
Mob. No. 96695 - 77114, 98261 - 86818*

Mail at *seidraipur@gmail.com*

Bank with *State Bank of India, Vip Estate, Vip colony Raipur (C.G)
Account No. - 35731546052
IFS Code - SBI N0013004, SWIFT*

SEIDR MISSION

Is to release the creative energies resources and aspirations of the poor. Especially tribes, equality and women to seek and obtain opportunities for full effective sustainable participation in social, economic, political and cultural life of society and nation.

SEIDR VISION

SEIDR is society based on the values of genuine democracy, equality and peace for all its citizens, where people and government play their respective roles effectively with transparency and accountability.

Area of Operation

Intensively in all districts of Chhattisgarh state, with trained technical and professional staff.

OTHER MEMBER OF EXECUTIVE BODY

No.	Name	Experience
1	Kamlesh Dubey	Professional
2	Prabhat Panday	Electrical Engineer
3	Jasveer Singh Virdi	Professional
4	Varun Tiwari	Labor Court Lawyer
5	Smt. Nirmala	Labor Court Lawyer
6	Prdeep Sahu	Professional
7	Akhil Shrivastava	Professional



THANK YOU.



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO. UES/TR/21-22/08679
		LAB REF NO. UES/21-22/ST/014442
		DATE OF SAMPLING 25/10/2021 to 26/10/2021
		DATE OF RECEIPT 26/10/2021
		DATE OF REPORT 29/10/2021
		DATE OF ANALYSIS Start:26/10/2021 End:29/10/2021
SAMPLE DETAILS		
Monitoring For	Stack Emission Monitoring	
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021	
Sampling Location	3.0 & 3.6 MVA Submerged Arc Furnace 'A & B' (Combine Stack)	
Sample Collected By	Laboratory Chemist	
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003	
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,	

TEST REPORT

Stack details

Stack Identity	3.0 & 3.6 MVA SUBMERGED ARC FURNACE 'A & B' (COMBINE STACK)			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	30.0 MTR			
Stack Diameter	1.4 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	3.0 MVA & 3.6 MVA			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	98.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	8.9
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	39607.13
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	40	38.5

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
- > This is for information as the party has asked for above test(s) only

REVIEWED BY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/08680	
	LAB REF NO.	UES/21-22/ST/014443	
	DATE OF SAMPLING	25/10/2021 to 26/10/2021	
	DATE OF RECEIPT	26/10/2021	
	DATE OF REPORT	29/10/2021	
	DATE OF ANALYSIS	Start:26/10/2021	End:29/10/2021
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	5.5 MVA Submerged Arc Furnace 'C'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity	5.5 MVA SUBMERGED ARC FURNACE 'C'			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	35.0 MTR			
Stack Diameter	1.4 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	5.5 MVA			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	104
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	9.6
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	42042.37
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	35.9

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 29/10/21 REVIEWED BY	 For ULTIMATE ENVIROLYTICAL SOLUTIONS	 29/10/21 AUTHORIZED SIGNATORY
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-----End of the test report-----

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/08681
LAB REF NO.	UES/21-22/ST/014444
DATE OF SAMPLING	25/10/2021 to 26/10/2021
DATE OF RECEIPT	26/10/2021
DATE OF REPORT	29/10/2021
DATE OF ANALYSIS	Start:26/10/2021 End:29/10/2021

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	5.5 MVA Submerged Arc Furnace 'D'
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity				5.5 MVA SUBMERGED ARC FURNACE 'D'
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				35.0 MTR
Stack Diameter				1.4 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				5.5 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	102
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	10.6
Total Gas Quantity	Nm³/h	IS :11255: (Part -3):2008	-	46669.37
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 :(Part -1):1985, RA 2003	50	38.6

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REVIEWED BY



For ULTIMATE ENVIROLYTICAL SOLUTIONS

[Signature]
29/10/21

AUTHORIZED SIGNATORY

-----End of the test report-----

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/08682	
	LAB REF NO.	UES/21-22/ST/014445	
	DATE OF SAMPLING	25/10/2021 to 26/10/2021	
	DATE OF RECEIPT	26/10/2021	
	DATE OF REPORT	29/10/2021	
	DATE OF ANALYSIS	Start:26/10/2021	End:29/10/2021
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	6 MVA Submerged Arc Furnace 'E'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity			6 MVA SUBMERGED ARC FURNACE 'E'	
Stack Attached To			BAG FILTER	
Material of Construction			MILD STEEL PLATE	
Height of the stack from ground level (Meter)			40.0 MTR	
Stack Diameter			2.0 MTR	
Stack Shape At Top			CIRCULAR	
Type of Fuel			ELECTRICITY	
Total Electrical Load (KW)			6.0 MVA	
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	114
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	10.2
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	88841.14
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	38.6

REMARKS: RESULTS ARE AS ABOVE

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- This is for information as the party has asked for above test(s) only

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address of Client

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/08683
LAB REF NO.	UES/21-22/ST/014446
DATE OF SAMPLING	25/10/2021 to 26/10/2021
DATE OF RECEIPT	26/10/2021
DATE OF REPORT	29/10/2021
DATE OF ANALYSIS	Start:26/10/2021 End:29/10/2021

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	CLU Converter & Thermite (Combine Stack)
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity				CLU CONVERTER & THERMITE (COMBINE STACK)
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				35.0 MTR
Stack Diameter				2.295 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				650 KW
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	75
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	6.2
Total Gas Quantity	Nm³/h	IS :11255: (Part -3):2008	-	79070.9
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 :(Part -1):1985, RA 2003	40	29.5

REMARKS: RESULTS ARE AS ABOVE

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REVIEWED BY



For ULTIMATE ENVIROLYTICAL SOLUTIONS

[Signature]
29/10/21

AUTHORIZED SIGNATORY

-----End of the test report-----

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To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/08684
LAB REF NO.	UES/21-22/ST/014447
DATE OF SAMPLING	25/10/2021 to 26/10/2021
DATE OF RECEIPT	26/10/2021
DATE OF REPORT	29/10/2021
DATE OF ANALYSIS	Start:26/10/2021 End:29/10/2021

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	20 MW AFBC
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity	
Stack Attached To	20 MW AFBC
Material of Construction	ESP
Height of the stack from ground level (Meter)	RCC
Stack Diameter	73.0 MTR
Stack Shape At Top	2.83 MTR
Type of Fuel	CIRCULAR
Total Electrical Load (KW)	COAL
	20 KW

Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	124
Flue Gas Velocity	M/s	IS :11255 : (Part -3):2008	-	18.6
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	316149.02
Sulphur Dioxide (SO ₂)	mg/Nm ³	IS 11255 (Part 2):1985, RA 2003	600	298.6
Oxides of Nitrogen (NO _x)	mg/Nm ³	IS 11255 (Part 7):2005, RA 2012	300	128.4
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 : (Part -1):1985, RA 2003	50	42.8
Carbon Monoxide (CO)	mg/ Nm ³	IS 13270	-	4.3
Hg	mg/ Nm ³	USEPA Method No. 29	0.03	N.D.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- > This is for information as the party has asked for above test(s) only

REVIEWED BY



For ULTIMATE ENVIROLYTICAL SOLUTIONS

[Signature]
29/10/21

AUTHORIZED SIGNATORY

-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09208	
	LAB REF NO.	UES/21-22/ST/015075	
	DATE OF SAMPLING	25/11/2021 to 26/11/2021	
	DATE OF RECEIPT	26/11/2021	
	DATE OF REPORT	29/11/2021	
	DATE OF ANALYSIS	Start:26/11/2021	End:29/11/2021
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	3.0 & 3.6 MVA Submerged Arc Furnace 'A & B' (Combine Stack)		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity	3.0 & 3.6 MVA SUBMERGED ARC FURNACE 'A & B' (COMBINE STACK)			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	30.0 MTR			
Stack Diameter	1.4 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	3.0 MVA & 3.6 MVA			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	105
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	7.6
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	33195.49
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	38.9

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-----End of the test report-----

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09209	
	LAB REF NO.	UES/21-22/ST/015076	
	DATE OF SAMPLING	25/11/2021 to 26/11/2021	
	DATE OF RECEIPT	26/11/2021	
	DATE OF REPORT	29/11/2021	
	DATE OF ANALYSIS	Start:26/11/2021	End:29/11/2021
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	5.5 MVA Submerged Arc Furnace 'C'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity				5.5 MVA SUBMERGED ARC FURNACE 'C'
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				35.0 MTR
Stack Diameter				1.4 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				5.5 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	98
Flue Gas Velocity	M/s	IS :11255 : (Part -3):2008	-	8.2
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	36491.97
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 : (Part -1):1985, RA 2003	50	39.5

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-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09210	
	LAB REF NO.	UES/21-22/ST/015077	
	DATE OF SAMPLING	25/11/2021 to 26/11/2021	
	DATE OF RECEIPT	26/11/2021	
	DATE OF REPORT	29/11/2021	
	DATE OF ANALYSIS	Start:26/11/2021	End:29/11/2021
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	5.5 MVA Submerged Arc Furnace 'D'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity			5.5 MVA SUBMERGED ARC FURNACE 'D'	
Stack Attached To			BAG FILTER	
Material of Construction			MILD STEEL PLATE	
Height of the stack from ground level (Meter)			35.0 MTR	
Stack Diameter			1.4 MTR	
Stack Shape At Top			CIRCULAR	
Type of Fuel			ELECTRICITY	
Total Electrical Load (KW)			5.5 MVA	
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	116
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	9.4
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	39896.57
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	37.8

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09211	
	LAB REF NO.	UES/21-22/ST/015078	
	DATE OF SAMPLING	25/11/2021 to 26/11/2021	
	DATE OF RECEIPT	26/11/2021	
	DATE OF REPORT	29/11/2021	
	DATE OF ANALYSIS	Start:26/11/2021	End:29/11/2021
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	6 MVA Submerged Arc Furnace 'E'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10):2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity				6 MVA SUBMERGED ARC FURNACE 'E'
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				40.0 MTR
Stack Diameter				2.0 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				6.0 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	108
Flue Gas Velocity	M/s	IS :11255 : (Part -3):2008	-	9.6
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	84931.97
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 : (Part -1):1985, RA 2003	50	39.4

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09212	
	LAB REF NO.	UES/21-22/ST/015079	
	DATE OF SAMPLING	25/11/2021 to 26/11/2021	
	DATE OF RECEIPT	26/11/2021	
	DATE OF REPORT	29/11/2021	
	DATE OF ANALYSIS	Start:26/11/2021	End:29/11/2021
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	CLU Converter & Thermite (Combine Stack)		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity			CLU CONVERTER & THERMITE (COMBINE STACK)	
Stack Attached To			BAG FILTER	
Material of Construction			MILD STEEL PLATE	
Height of the stack from ground level (Meter)			35.0 MTR	
Stack Diameter			2.295 MTR	
Stack Shape At Top			CIRCULAR	
Type of Fuel			ELECTRICITY	
Total Electrical Load (KW)			650 KW	
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	78
Flue Gas Velocity	M/s	IS :11255 : (Part -3):2008	-	8.4
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	106212.70
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 : (Part -1):1985, RA 2003	40	28.5

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-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09213	
	LAB REF NO.	UES/21-22/ST/015080	
	DATE OF SAMPLING	25/11/2021 to 26/11/2021	
	DATE OF RECEIPT	26/11/2021	
	DATE OF REPORT	29/11/2021	
	DATE OF ANALYSIS	Start:26/11/2021	End:29/11/2021
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	20 MW AFBC		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity		20 MW AFBC		
Stack Attached To		ESP		
Material of Construction		RCC		
Height of the stack from ground level (Meter)		73.0 MTR		
Stack Diameter		2.83 MTR		
Stack Shape At Top		CIRCULAR		
Type of Fuel		COAL		
Total Electrical Load (KW)		20 KW		
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	120
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	19.4
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	333103.03
Sulphur Dioxide (SO ₂)	mg/Nm ³	IS 11255 (Part 2):1985, RA 2003	600	282.4
Oxides of Nitrogen (NO _x)	mg/Nm ³	IS 11255 (Part 7):2005, RA 2012	300	110.6
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	38.6
Carbon Monoxide (CO)	mg/ Nm ³	IS 13270	-	4.5
Hg	mg/ Nm ³	USEPA Method No. 29	0.03	N.D.

REMARKS: RESULTS ARE AS ABOVE

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-----End of the test report-----

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To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09302
LAB REF NO.	UES/21-22/ST/015169
DATE OF SAMPLING	25/12/2021 to 26/12/2021
DATE OF RECEIPT	26/12/2021
DATE OF REPORT	29/12/2021
DATE OF ANALYSIS	Start:26/12/2021 End:29/12/2021

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	3.0 & 3.6 MVA Submerged Arc Furnace 'A & B' (Combine Stack)
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity				3.0 & 3.6 MVA SUBMERGED ARC FURNACE 'A & B' (COMBINE STACK)
Stack Attached To				
Material of Construction				
Height of the stack from ground level (Meter)				
Stack Diameter				
Stack Shape At Top				
Type of Fuel				
Total Electrical Load (KW)				
				3.0 MVA & 3.6 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	92
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	8.2
Total Gas Quantity	Nm³/h	IS :11255: (Part -3):2008	-	37091.83
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 :(Part -1):1985, RA 2003	50	42.2

REMARKS: RESULTS ARE AS ABOVE

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Phanish
23/12/21

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

Phanish
23/12/21

AUTHORIZED SIGNATORY

-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09303	
	LAB REF NO.	UES/21-22/ST/015170	
	DATE OF SAMPLING	25/12/2021 to 26/12/2021	
	DATE OF RECEIPT	26/12/2021	
	DATE OF REPORT	29/12/2021	
	DATE OF ANALYSIS	Start:26/12/2021	End:29/12/2021
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	5.5 MVA Submerged Arc Furnace 'C'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity			5.5 MVA SUBMERGED ARC FURNACE 'C'	
Stack Attached To			BAG FILTER	
Material of Construction			MILD STEEL PLATE	
Height of the stack from ground level (Meter)			35.0 MTR	
Stack Diameter			1.4 MTR	
Stack Shape At Top			CIRCULAR	
Type of Fuel			ELECTRICITY	
Total Electrical Load (KW)			5.5 MVA	
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	102
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	9.4
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	41386.04
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	38.7

REMARKS: RESULTS ARE AS ABOVE

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-----End of the test report-----

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09304
LAB REF NO.	UES/21-22/ST/015171
DATE OF SAMPLING	25/12/2021 to 26/12/2021
DATE OF RECEIPT	26/12/2021
DATE OF REPORT	29/12/2021
DATE OF ANALYSIS	Start:26/12/2021 End:29/12/2021

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	5.5 MVA Submerged Arc Furnace 'D'
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10):2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity				5.5 MVA SUBMERGED ARC
Stack Attached To				FURNACE 'D'
Material of Construction				BAG FILTER
Height of the stack from ground level (Meter)				MILD STEEL PLATE
Stack Diameter				35.0 MTR
Stack Shape At Top				1.4 MTR
Type of Fuel				CIRCULAR
Total Electrical Load (KW)				ELECTRICITY
				5.5 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	108
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	10.2
Total Gas Quantity	Nm³/h	IS :11255: (Part -3):2008	-	44201.04
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 :(Part -1):1985, RA 2003	50	36.5

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09305	
	LAB REF NO.	UES/21-22/ST/015172	
	DATE OF SAMPLING	25/12/2021 to 26/12/2021	
	DATE OF RECEIPT	26/12/2021	
	DATE OF REPORT	29/12/2021	
	DATE OF ANALYSIS	Start:26/12/2021	End:29/12/2021
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	6 MVA Submerged Arc Furnace 'E'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity			6 MVA SUBMERGED ARC FURNACE 'E'	
Stack Attached To			BAG FILTER	
Material of Construction			MILD STEEL PLATE	
Height of the stack from ground level (Meter)			40.0 MTR	
Stack Diameter			2.0 MTR	
Stack Shape At Top			CIRCULAR	
Type of Fuel			ELECTRICITY	
Total Electrical Load (KW)			6.0 MVA	
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	110
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	10.8
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	95049.51
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	38.8

REMARKS: RESULTS ARE AS ABOVE

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-----End of the test report-----

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09306
LAB REF NO.	UES/21-22/ST/015173
DATE OF SAMPLING	25/12/2021 to 26/12/2021
DATE OF RECEIPT	26/12/2021
DATE OF REPORT	29/12/2021
DATE OF ANALYSIS	Start:26/12/2021 End:29/12/2021

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	CLU Converter & Thermite (Combine Stack)
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity				CLU CONVERTER & THERMITE
Stack Attached To				(COMBINE STACK)
Material of Construction				BAG FILTER
Height of the stack from ground level (Meter)				MILD STEEL PLATE
Stack Diameter				35.0 MTR
Stack Shape At Top				2.295 MTR
Type of Fuel				CIRCULAR
Total Electrical Load (KW)				ELECTRICITY
				650 KW
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	82
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	7.6
Total Gas Quantity	Nm³/h	IS :11255: (Part -3):2008	-	93694.77
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 :(Part -1):1985, RA 2003	40	29.9

REMARKS: RESULTS ARE AS ABOVE

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End of the test report

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09307	
	LAB REF NO.	UES/21-22/ST/015174	
	DATE OF SAMPLING	25/12/2021 to 26/12/2021	
	DATE OF RECEIPT	26/12/2021	
	DATE OF REPORT	29/12/2021	
	DATE OF ANALYSIS	Start:26/12/2021	End:29/12/2021
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	20 MW AFBC		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity	20 MW AFBC			
Stack Attached To	ESP			
Material of Construction	RCC			
Height of the stack from ground level (Meter)	73.0 MTR			
Stack Diameter	2.83 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	COAL			
Total Electrical Load (KW)	20 KW			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	118
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	20.8
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	358968.20
Sulphur Dioxide (SO ₂)	mg/Nm ³	IS 11255 (Part 2):1985, RA 2003	600	288.8
Oxides of Nitrogen (NO _x)	mg/Nm ³	IS 11255 (Part 7):2005, RA 2012	300	124.2
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	46.4
Carbon Monoxide (CO)	mg/ Nm ³	IS 13270	-	4.1
Hg	mg/ Nm ³	USEPA Method No. 29	0.03	N.D.

REMARKS: RESULTS ARE AS ABOVE

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To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09400
LAB REF NO.	UES/21-22/ST/015270
DATE OF SAMPLING	24/01/2022 to 25/01/2022
DATE OF RECEIPT	25/01/2022
DATE OF REPORT	29/01/2022
DATE OF ANALYSIS	Start: 25/01/2022 End: 29/01/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	3.0 & 3.6 MVA Submerged Arc Furnace 'A & B' (Combine Stack)
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10):2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity				3.0 & 3.6 MVA SUBMERGED ARC FURNACE 'A & B' (COMBINE STACK) BAG FILTER MILD STEEL PLATE 30.0 MTR 1.4 MTR CIRCULAR ELECTRICITY 3.0 MVA & 3.6 MVA
Stack Attached To				
Material of Construction				
Height of the stack from ground level (Meter)				
Stack Diameter				
Stack Shape At Top				
Type of Fuel				
Total Electrical Load (KW)				
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	96
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	9.4
Total Gas Quantity	Nm³/h	IS :11255: (Part -3):2008	-	42058.99
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 :(Part -1):1985, RA 2003	50	37.1

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09401	
	LAB REF NO.	UES/21-22/ST/015271	
	DATE OF SAMPLING	24/01/2022 to 25/01/2022	
	DATE OF RECEIPT	25/01/2022	
	DATE OF REPORT	29/01/2022	
	DATE OF ANALYSIS	Start: 25/01/2022	End: 29/01/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	5.5 MVA Submerged Arc Furnace 'C'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity				5.5 MVA SUBMERGED ARC FURNACE 'C'
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				35.0 MTR
Stack Diameter				1.4 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				5.5 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	103
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	9.6
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	42154.19
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	36.9

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To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09402
LAB REF NO.	UES/21-22/ST/015272
DATE OF SAMPLING	24/01/2022 to 25/01/2022
DATE OF RECEIPT	25/01/2022
DATE OF REPORT	29/01/2022
DATE OF ANALYSIS	Start: 25/01/2022 End: 29/01/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	5.5 MVA Submerged Arc Furnace 'D'
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity				5.5 MVA SUBMERGED ARC
Stack Attached To				FURNACE 'D'
Material of Construction				BAG FILTER
Height of the stack from ground level (Meter)				MILD STEEL PLATE
Stack Diameter				35.0 MTR
Stack Shape At Top				1.4 MTR
Type of Fuel				CIRCULAR
Total Electrical Load (KW)				ELECTRICITY
				5.5 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	112
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	10.9
Total Gas Quantity	Nm³/h	IS :11255: (Part -3):2008	-	46743.70
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 :(Part -1):1985, RA 2003	50	38.9

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To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09403
LAB REF NO.	UES/21-22/ST/015273
DATE OF SAMPLING	24/01/2022 to 25/01/2022
DATE OF RECEIPT	25/01/2022
DATE OF REPORT	29/01/2022
DATE OF ANALYSIS	Start: 25/01/2022 End: 29/01/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	6 MVA Submerged Arc Furnace 'E'
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity				6 MVA SUBMERGED ARC
Stack Attached To				FURNACE 'E'
Material of Construction				BAG FILTER
Height of the stack from ground level (Meter)				MILD STEEL PLATE
Stack Diameter				40.0 MTR
Stack Shape At Top				2.0 MTR
Type of Fuel				CIRCULAR
Total Electrical Load (KW)				ELECTRICITY
				6.0 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	108
Flue Gas Velocity	M/s	IS :11255 : (Part -3):2008	-	10.6
Total Gas Quantity	Nm³/h	IS :11255 : (Part -3):2008	-	93779.05
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 : (Part -1):1985, RA 2003	50	39.5

REMARKS: RESULTS ARE AS ABOVE

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09404	
	LAB REF NO.	UES/21-22/ST/015274	
	DATE OF SAMPLING	24/01/2022 to 25/01/2022	
	DATE OF RECEIPT	25/01/2022	
	DATE OF REPORT	29/01/2022	
	DATE OF ANALYSIS	Start: 25/01/2022	End: 29/01/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	CLU Converter & Thermite (Combine Stack)		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details			
Stack Identity			CLU CONVERTER & THERMITE (COMBINE STACK)
Stack Attached To			BAG FILTER
Material of Construction			MILD STEEL PLATE
Height of the stack from ground level (Meter)			35.0 MTR
Stack Diameter			2.295 MTR
Stack Shape At Top			CIRCULAR
Type of Fuel			ELECTRICITY
Total Electrical Load (KW)			650 KW
Parameter	Unit	Method Reference	Limit
Flue Gas Temperature	°C	IS:11255:(Part -3):2008	-
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-
Total Gas Quantity	Nm ³ /h	IS :11255 :(Part -3):2008	-
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	40
			Result
			86
			8.2
			101373.32
			28.5

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29/01/22

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To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09405
LAB REF NO.	UES/21-22/ST/015275
DATE OF SAMPLING	24/01/2022 to 25/01/2022
DATE OF RECEIPT	25/01/2022
DATE OF REPORT	29/01/2022
DATE OF ANALYSIS	Start: 25/01/2022 End: 29/01/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	20 MW AFBC
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity	
Stack Attached To	20 MW AFBC
Material of Construction	ESP
Height of the stack from ground level (Meter)	RCC
Stack Diameter	73.0 MTR
Stack Shape At Top	2.83 MTR
Type of Fuel	CIRCULAR
Total Electrical Load (KW)	COAL
	20 KW

Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	122
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	19.5
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	333124.76
Sulphur Dioxide (SO ₂)	mg/Nm ³	IS 11255 (Part 2):1985, RA 2003	600	277.9
Oxides of Nitrogen (NO _x)	mg/Nm ³	IS 11255 (Part 7):2005, RA 2012	300	128.8
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	45.8
Carbon Monoxide (CO)	mg/ Nm ³	IS 13270	-	4.8
Hg	mg/ Nm ³	USEPA Method No. 29	0.03	N.D.

REMARKS: RESULTS ARE AS ABOVE

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End of the test report

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09478
LAB REF NO.	UES/21-22/ST/015354
DATE OF SAMPLING	24/02/2022 to 25/02/2022
DATE OF RECEIPT	25/02/2022
DATE OF REPORT	28/02/2022
DATE OF ANALYSIS	Start: 25/02/2022 End: 28/02/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	3.0 & 3.6 MVA Submerged Arc Furnace 'A & B' (Combine Stack)
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity	3.0 & 3.6 MVA SUBMERGED ARC FURNACE 'A & B' (COMBINE STACK)			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	30.0 MTR			
Stack Diameter	1.4 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	3.0 MVA & 3.6 MVA			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	94
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	9.1
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	40938.57
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	38.5

REMARKS: RESULTS ARE AS ABOVE

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End of the test report

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09479
LAB REF NO.	UES/21-22/ST/015355
DATE OF SAMPLING	24/02/2022 to 25/02/2022
DATE OF RECEIPT	25/02/2022
DATE OF REPORT	28/02/2022
DATE OF ANALYSIS	Start: 25/02/2022 End: 28/02/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	5.5 MVA Submerged Arc Furnace 'C'
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity	5.5 MVA SUBMERGED ARC FURNACE 'C'		
Stack Attached To	BAG FILTER		
Material of Construction	MILD STEEL PLATE		
Height of the stack from ground level (Meter)	35.0 MTR		
Stack Diameter	1.4 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	ELECTRICITY		
Total Electrical Load (KW)	5.5 MVA		
Parameter	Unit	Method Reference	Limit
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50
			Result
			102
			9.8
			43147.15
			37.4

REMARKS: RESULTS ARE AS ABOVE

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To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09480
LAB REF NO.	UES/21-22/ST/015356
DATE OF SAMPLING	24/02/2022 to 25/02/2022
DATE OF RECEIPT	25/02/2022
DATE OF REPORT	28/02/2022
DATE OF ANALYSIS	Start: 25/02/2022 End: 28/02/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	5.5 MVA Submerged Arc Furnace 'D'
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity				5.5 MVA SUBMERGED ARC
Stack Attached To				FURNACE 'D'
Material of Construction				BAG FILTER
Height of the stack from ground level (Meter)				MILD STEEL PLATE
Stack Diameter				35.0 MTR
Stack Shape At Top				1.4 MTR
Type of Fuel				CIRCULAR
Total Electrical Load (KW)				ELECTRICITY
				5.5 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	114
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	11.0
Total Gas Quantity	Nm³/h	IS :11255: (Part -3):2008	-	46928.76
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 :(Part -1):1985, RA 2003	50	36.5

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
- > This is for information as the party has asked for above test(s) only

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For: ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09481	
	LAB REF NO.	UES/21-22/ST/015357	
	DATE OF SAMPLING	24/02/2022 to 25/02/2022	
	DATE OF RECEIPT	25/02/2022	
	DATE OF REPORT	28/02/2022	
	DATE OF ANALYSIS	Start: 25/02/2022	End: 28/02/2022

SAMPLE DETAILS	
Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	6 MVA Submerged Arc Furnace 'E'
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity	6 MVA SUBMERGED ARC FURNACE 'E'			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	40.0 MTR			
Stack Diameter	2.0 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	6.0 MVA			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	110
Flue Gas Velocity	M/s	IS :11255 : (Part -3):2008	-	10.4
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	91529.16
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 : (Part -1):1985, RA 2003	50	38.5

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 28/02/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  28/02/22 AUTHORIZED SIGNATORY
--	---	---

-----End of the test report-----

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09480
LAB REF NO.	UES/21-22/ST/015356
DATE OF SAMPLING	24/02/2022 to 25/02/2022
DATE OF RECEIPT	25/02/2022
DATE OF REPORT	28/02/2022
DATE OF ANALYSIS	Start: 25/02/2022 End: 28/02/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/SE, DATED: 24.10.2021
Sampling Location	5.5 MVA Submerged Arc Furnace 'D'
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity				5.5 MVA SUBMERGED ARC
Stack Attached To				FURNACE 'D'
Material of Construction				BAG FILTER
Height of the stack from ground level (Meter)				MILD STEEL PLATE
Stack Diameter				35.0 MTR
Stack Shape At Top				1.4 MTR
Type of Fuel				CIRCULAR
Total Electrical Load (KW)				ELECTRICITY
				5.5 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	114
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	11.0
Total Gas Quantity	Nm³/h	IS :11255: (Part -3):2008	-	46928.76
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 :(Part -1):1985, RA 2003	50	36.5

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

End of the test report

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09481
LAB REF NO.	UES/21-22/ST/015357
DATE OF SAMPLING	24/02/2022 to 25/02/2022
DATE OF RECEIPT	25/02/2022
DATE OF REPORT	28/02/2022
DATE OF ANALYSIS	Start: 25/02/2022 End: 28/02/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	6 MVA Submerged Arc Furnace 'E'
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity				6 MVA SUBMERGED ARC
Stack Attached To				FURNACE 'E'
Material of Construction				BAG FILTER
Height of the stack from ground level (Meter)				MILD STEEL PLATE
Stack Diameter				40.0 MTR
Stack Shape At Top				2.0 MTR
Type of Fuel				CIRCULAR
Total Electrical Load (KW)				ELECTRICITY
				6.0 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	110
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	10.4
Total Gas Quantity	Nm³/h	IS :11255: (Part -3):2008	-	91529.16
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 :(Part -1):1985, RA 2003	50	38.5

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

End of the test report

HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09482
LAB REF NO.	UES/21-22/ST/015358
DATE OF SAMPLING	24/02/2022 to 25/02/2022
DATE OF RECEIPT	25/02/2022
DATE OF REPORT	28/02/2022
DATE OF ANALYSIS	Start: 25/02/2022 End: 28/02/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	CLU Converter & Thermite (Combine Stack)
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity				CLU CONVERTER & THERMITE
Stack Attached To				(COMBINE STACK)
Material of Construction				BAG FILTER
Height of the stack from ground level (Meter)				MILD STEEL PLATE
Stack Diameter				35.0 MTR
Stack Shape At Top				2.295 MTR
Type of Fuel				CIRCULAR
Total Electrical Load (KW)				ELECTRICITY
				650 KW
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	88
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	7.9
Total Gas Quantity	Nm³/h	IS :11255: (Part -3):2008	-	97123.46
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 :(Part -1):1985, RA 2003	40	28.4

REMARKS: RESULTS ARE AS ABOVE

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

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To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09483
LAB REF NO.	UES/21-22/ST/015359
DATE OF SAMPLING	24/02/2022 to 25/02/2022
DATE OF RECEIPT	25/02/2022
DATE OF REPORT	28/02/2022
DATE OF ANALYSIS	Start: 25/02/2022 End: 28/02/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	20 MW AFBC
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity	20 MW AFBC
Stack Attached To	ESP
Material of Construction	RCC
Height of the stack from ground level (Meter)	73.0 MTR
Stack Diameter	2.83 MTR
Stack Shape At Top	CIRCULAR
Type of Fuel	COAL
Total Electrical Load (KW)	20 KW

Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	119
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	19.2
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	330509.97
Sulphur Dioxide (SO ₂)	mg/Nm ³	IS 11255 (Part 2):1985, RA 2003	600	255.6
Oxides of Nitrogen (NO _x)	mg/Nm ³	IS 11255 (Part 7):2005, RA 2012	300	138.5
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	45.5
Carbon Monoxide (CO)	mg/ Nm ³	IS 13270	-	4.9
Hg	mg/ Nm ³	USEPA Method No. 29	0.03	N.D.

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AUTHORIZED SIGNATORY

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09561	
	LAB REF NO.	UES/21-22/ST/015443	
	DATE OF SAMPLING	24/03/2022 to 25/03/2022	
	DATE OF RECEIPT	25/03/2022	
	DATE OF REPORT	28/03/2022	
	DATE OF ANALYSIS	Start: 25/03/2022	End: 28/03/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	3.0 & 3.6 MVA Submerged Arc Furnace 'B' (Combine Stack)		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

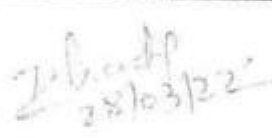
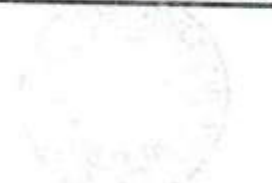
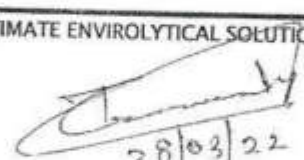
TEST REPORT

Stack details				
Stack Identity		3.0 & 3.6 MVA SUBMERGED ARC FURNACE 'B' (COMBINE STACK)		
Stack Attached To		BAG FILTER		
Material of Construction		MILD STEEL PLATE		
Height of the stack from ground level (Meter)		30.0 MTR		
Stack Diameter		1.4 MTR		
Stack Shape At Top		CIRCULAR		
Type of Fuel		ELECTRICITY		
Total Electrical Load (KW)		3.0 MVA & 3.6 MVA		
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	91
Flue Gas Velocity	M/s	IS :11255 : (Part -3):2008	-	9.2
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	41729.56
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 : (Part -1):1985, RA 2003	50	42.2

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 28/03/22		For ULTIMATE ENVIROLYTICAL SOLUTIONS  28/03/22
REVIEWED BY		AUTHORIZED SIGNATORY

-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09562	
	LAB REF NO.	UES/21-22/ST/015444	
	DATE OF SAMPLING	24/03/2022 to 25/03/2022	
	DATE OF RECEIPT	25/03/2022	
	DATE OF REPORT	28/03/2022	
	DATE OF ANALYSIS	Start: 25/03/2022	End: 28/03/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	5.5 MVA Submerged Arc Furnace 'C'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

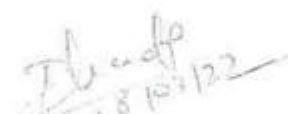


TEST REPORT

Stack details				
Stack Identity				5.5 MVA SUBMERGED ARC FURNACE 'C'
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				35.0 MTR
Stack Diameter				1.4 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				5.5 MVA
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	105
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	10.1
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	44115.06
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	43.5

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 28/03/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  28/03/22 AUTHORIZED SIGNATORY
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-----End of the test report-----

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09563
LAB REF NO.	UES/21-22/ST/015445
DATE OF SAMPLING	24/03/2022 to 25/03/2022
DATE OF RECEIPT	25/03/2022
DATE OF REPORT	28/03/2022
DATE OF ANALYSIS	Start: 25/03/2022 End: 28/03/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	5.5 MVA Submerged Arc Furnace 'D'
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO: 30 ml X 1 No. PVC Bottle, NO: 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity	5.5 MVA SUBMERGED ARC FURNACE 'D'		
Stack Attached To	BAG FILTER		
Material of Construction	MILD STEEL PLATE		
Height of the stack from ground level (Meter)	35.0 MTR		
Stack Diameter	1.4 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	ELECTRICITY		
Total Electrical Load (KW)	5.5 MVA		
Parameter	Unit	Method Reference	Limit
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-
Total Gas Quantity	Nm³/h	IS :11255: (Part -3):2008	-
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 :(Part -1):1985, RA 2003	50
			Result
			113
			10.8
			46194.87
			41.8

REMARKS: RESULTS ARE AS ABOVE

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

End of the test report

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09564	
	LAB REF NO.	UES/21-22/ST/015446	
	DATE OF SAMPLING	24/03/2022 to 25/03/2022	
	DATE OF RECEIPT	25/03/2022	
	DATE OF REPORT	28/03/2022	
	DATE OF ANALYSIS	Start: 25/03/2022	End: 28/03/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	5.5 MVA Submerged Arc Furnace 'E'		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity	5.5 MVA SUBMERGED ARC FURNACE 'E'			
Stack Attached To	BAG FILTER			
Material of Construction	MILD STEEL PLATE			
Height of the stack from ground level (Meter)	40.0 MTR			
Stack Diameter	2.0 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
Total Electrical Load (KW)	6.0 MVA			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	107
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	10.1
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	92251.76
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	46.8

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 28/03/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  28/03/22 AUTHORIZED SIGNATORY
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-----End of the test report-----

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

REPORT NO.	UES/TR/21-22/09565
LAB REF NO.	UES/21-22/ST/015447
DATE OF SAMPLING	24/03/2022 to 25/03/2022
DATE OF RECEIPT	25/03/2022
DATE OF REPORT	28/03/2022
DATE OF ANALYSIS	Start: 25/03/2022 End: 28/03/2022

SAMPLE DETAILS

Monitoring For	Stack Emission Monitoring
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Sampling Location	Process (Combine Stack)
Sample Collected By	Laboratory Chemist
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,

TEST REPORT

Stack details

Stack Identity				PROCESS (COMBINE STACK)
Stack Attached To				BAG FILTER
Material of Construction				MILD STEEL PLATE
Height of the stack from ground level (Meter)				35.0 MTR
Stack Diameter				2.295 MTR
Stack Shape At Top				CIRCULAR
Type of Fuel				ELECTRICITY
Total Electrical Load (KW)				650 KW
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	86
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	8.3
Total Gas Quantity	Nm³/h	IS :11255: (Part -3):2008	-	102609.58
Total Particulate Matter (TPM)	mg/Nm³	IS :11255 :(Part -1):1985, RA 2003	50	43.8

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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- > This is for information as the party has asked for above test(s) only.

REVIEWED BY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09566	
	LAB REF NO.	UES/21-22/ST/015448	
	DATE OF SAMPLING	24/03/2022 to 25/03/2022	
	DATE OF RECEIPT	25/03/2022	
	DATE OF REPORT	28/03/2022	
	DATE OF ANALYSIS	Start: 25/03/2022	End: 28/03/2022
SAMPLE DETAILS			
Monitoring For	Stack Emission Monitoring		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Sampling Location	20 MW AFBC		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO ₂ : 30 ml X 1 No. PVC Bottle, NO _x : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.,		

TEST REPORT

Stack details				
Stack Identity	20 MW AFBC			
Stack Attached To	ESP			
Material of Construction	RCC			
Height of the stack from ground level (Meter)	73.0 MTR			
Stack Diameter	2.83 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	COAL			
Total Electrical Load (KW)	20 KW			
Parameter	Unit	Method Reference	Limit	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	-	122
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	-	22.8
Total Gas Quantity	Nm ³ /h	IS :11255: (Part -3):2008	-	389499.73
Sulphur Dioxide (SO ₂)	mg/Nm ³	IS 11255 (Part 2):1985, RA 2003	600	245.2
Oxides of Nitrogen (NO _x)	mg/Nm ³	IS 11255 (Part 7):2005, RA 2012	300	139
Total Particulate Matter (TPM)	mg/Nm ³	IS :11255 :(Part -1):1985, RA 2003	50	45.9
Carbon Monoxide (CO)	mg/ Nm ³	IS 13270	-	4.6
Hg	mg/ Nm ³	USEPA Method No. 29	0.03	N.D.

REMARKS: RESULTS ARE AS ABOVE

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Report No. UES/TR/21-22/08678 Lab Ref No. UES/21-22/AAQM/014438 - 014441 Date of Sampling 25/10/2021 to 26/10/2021 Date of Receipt 26/10/2021 Date of Report 29/10/2021 Date of Analysis Start: 26/10/2021 End: 29/10/2021
SAMPLE DETAILS		
Monitoring For	Ambient Air Quality Monitoring	
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate	
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021	
Duration Of Sampling	As per CPCB norms	
Sample Collected By	Laboratory Chemist	
Sampling Procedure	As Per Method Reference	
Sample Quantity/Packing	Filter Paper (PM ₁₀): 1X1 No., Filter Paper (PM _{2.5}): 1X1 No. SO ₂ : 30mlX1 No. PVC Bottle, NO ₂ : 30mlX1 NO. PVC Bottle.	

Test Method for Ambient Air Quality Monitoring

Parameter	Method Reference
Particulate Matter size less than 10 microns (PM ₁₀)	IS:5182: (Part-23):2006 & CPCB Guidelines Vol.-I
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS:5182: (Part-24):2019 & CPCB Guidelines Vol.-I
Sulphur Dioxide (SO ₂)	IS:5182: (Part-2):2001, RA 2006 & CPCB Guidelines Vol.-I
Nitrogen Dioxide (NO ₂)	IS:5182: (Part-6):2006 & CPCB Guidelines Vol.-I

TEST REPORT

Parameter	Unit	NAAQM Standard	Results			
			Near CHP Area	Beside Silo	Solar Panel Area	Near Main Gate
PM ₁₀	µg/m ³	100	78.4	80.5	85.25	79.86
PM _{2.5}	µg/m ³	60	33.5	39.8	44.90	39.87
SO ₂	µg/m ³	80	17.44	12.6	17.45	14.56
NO ₂	µg/m ³	80	29.80	26.8	28.96	28.25
CO	mg/m ³	4.0	0.66	0.53	0.51	0.59

REMARKS: RESULTS ARE AS ABOVE

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- This is for information as the party has asked for above test(s) only.

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-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	Report No.	UES/TR/21-22/09222	
	Lab Ref No.	UES/21-22/AAQM/015092- 015095	
	Date of Sampling	25/11/2021 to 26/11/2021	
	Date of Receipt	26/11/2021	
	Date of Report	29/11/2021	
	Date of Analysis	Start:26/11/2021	End:29/11/2021

SAMPLE DETAILS

Monitoring For	Ambient Air Quality Monitoring
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PQ/21-22/88, DATED: 24.10.2021
Duration Of Sampling	As per CPCB norms
Sample Collected By	Laboratory Chemist
Sampling Procedure	As Per Method Reference
Sample Quantity/Packing	Filter Paper (PM ₁₀): 1X1 No., Filter Paper (PM _{2.5}): 1X1 No. SO ₂ : 30mlX1 No. PVC Bottle, NO ₂ : 30mlX1 NO. PVC Bottle,

Test Method for Ambient Air Quality Monitoring

Parameter	Method Reference
Particulate Matter size less than 10 microns (PM ₁₀)	IS:5182: (Part-23):2006 &CPCB Guidelines Vol.-I
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS:5182: (Part-24):2019 &CPCB Guidelines Vol.-I
Sulphur Dioxide (SO ₂)	IS:5182: (Part-2):2001, RA 2006 &CPCB Guidelines Vol.-I
Nitrogen Dioxide (NO ₂)	IS:5182: (Part-6):2006 & CPCB Guidelines Vol.-I

TEST REPORT

Parameter	Unit	NAAQM Standard	Results			
			Near CHP Area	Beside Silo	Solar Panel Area	Near Main Gate
PM ₁₀	µg/m ³	100	86.8	75.2	79.5	70.4
PM _{2.5}	µg/m ³	60	45.5	41.1	43.5	39.8
SO ₂	µg/m ³	80	19.7	12.5	17.9	13.8
NO ₂	µg/m ³	80	29.5	30.8	23.6	24.8
CO	mg/m ³	4.0	0.55	0.57	0.61	0.48

REMARKS: RESULTS ARE AS ABOVE

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-----End of the test report-----



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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	Report No.	UES/TR/21-22/09310	
	Lab Ref No.	UES/21-22/AAQM/015180 - 015183	
	Date of Sampling	25/12/2021 to 26/12/2021	
	Date of Receipt	26/12/2021	
	Date of Report	29/12/2021	
	Date of Analysis	Start:26/12/2021	End:29/12/2021
SAMPLE DETAILS			
Monitoring For	Ambient Air Quality Monitoring		
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Duration Of Sampling	As per CPCB norms		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	As Per Method Reference		
Sample Quantity/Packing	Filter Paper (PM ₁₀): 1X1 No., Filter Paper (PM _{2.5}): 1X1 No. SO ₂ : 30mlX1 No. PVC Bottle, NO ₂ : 30mlX1 NO. PVC Bottle,		

Test Method for Ambient Air Quality Monitoring

Parameter	Method Reference
Particulate Matter size less than 10 microns (PM ₁₀)	IS:5182:(Part-23):2006 & CPCB Guidelines Vol.-I
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS:5182:(Part-24):2019 & CPCB Guidelines Vol.-I
Sulphur Dioxide (SO ₂)	IS:5182:(Part-2):2001, RA 2006 &CPCB Guidelines Vol.-I
Nitrogen Dioxide (NO ₂)	IS:5182:(Part-6):2006 & CPCB Guidelines Vol.-I

TEST REPORT

Parameter	Unit	NAAQM Standard	Results			
			Near CHP Area	Beside Silo	Solar Panel Area	Near Main Gate
PM ₁₀	µg/m ³	100	79.5	75.2	70.5	68.5
PM _{2.5}	µg/m ³	60	33.5	39.5	34.4	32.5
SO ₂	µg/m ³	80	17.4	14.5	15.3	14.8
NO ₂	µg/m ³	80	29.2	26.5	23.8	25.8
CO	mg/m ³	4.0	0.48	0.52	0.58	0.52

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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 25/12/21 REVIEWED BY	 For ULTIMATE ENVIROLYTICAL SOLUTIONS 29/12/21 AUTHORIZED SIGNATORY
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-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Report No.	UES/TR/21-22/09399	
		Lab Ref No.	UES/21-22/AAQM/015266-015269	
		Date of Sampling	24/01/2022 to 25/01/2022	
		Date of Receipt	25/01/2022	
		Date of Report	29/01/2022	
		Date of Analysis	Start: 25/01/2022	End: 29/01/2022
SAMPLE DETAILS				
Monitoring For	Ambient Air Quality Monitoring			
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate			
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021			
Duration Of Sampling	As per CPCB norms			
Sample Collected By	Laboratory Chemist			
Sampling Procedure	As Per Method Reference			
Sample Quantity/Packing	Filter Paper (PM ₁₀): 1X1 No., Filter Paper (PM _{2.5}): 1X1 No. SO ₂ : 30mlX1 No. PVC Bottle, NO ₂ : 30mlX1 NO. PVC Bottle,			

Test Method for Ambient Air Quality Monitoring

Parameter	Method Reference
Particulate Matter size less than 10 microns (PM ₁₀)	IS:5182:(Part-23):2006 & CPCB Guidelines Vol.-I
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS:5182:(Part-24):2019 & CPCB Guidelines Vol.-I
Sulphur Dioxide (SO ₂)	IS:5182:(Part-2):2001, RA 2006 & CPCB Guidelines Vol.-I
Nitrogen Dioxide (NO ₂)	IS:5182:(Part-6):2006 & CPCB Guidelines Vol.-I

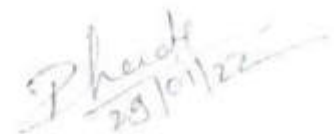
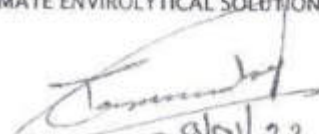
TEST REPORT

Parameter	Unit	NAAQM Standard	Results			
			Near CHP Area	Beside Silo	Solar Panel Area	Near Main Gate
PM ₁₀	µg/m ³	100	82.2	80.5	76.6	70.1
PM _{2.5}	µg/m ³	60	44.2	41.5	39.5	37.4
SO ₂	µg/m ³	80	17.8	16.9	15.8	16.5
NO ₂	µg/m ³	80	27.9	26.8	25.5	26.6
CO	mg/m ³	4.0	0.58	0.55	0.47	0.51

REMARKS: RESULTS ARE AS ABOVE

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 29/01/22 REVIEWED BY	 29/01/22 AUTHORIZED SIGNATORY
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-----End of the test report-----

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

Report No.	UES/TR/21-22/09477	
Lab Ref No.	UES/21-22/AAQM/015350 - 15353	
Date of Sampling	24/02/2022 to 25/02/2022	
Date of Receipt	25/02/2022	
Date of Report	28/02/2022	
Date of Analysis	Start: 25/02/2022	End: 28/02/2022

SAMPLE DETAILS

Monitoring For	Ambient Air Quality Monitoring
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021
Duration Of Sampling	As per CPCB norms
Sample Collected By	Laboratory Chemist
Sampling Procedure	As Per Method Reference
Sample Quantity/Packing	Filter Paper (PM ₁₀): 1X1 No., Filter Paper (PM _{2.5}): 1X1 No. SO ₂ : 30mlX1 No. PVC Bottle, NO ₂ : 30mlX1 NO. PVC Bottle,

Test Method for Ambient Air Quality Monitoring

Parameter	Method Reference
Particulate Matter size less than 10 microns (PM ₁₀)	IS:5182: (Part-23):2006 & CPCB Guidelines Vol.-I
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS:5182: (Part-24):2019 & CPCB Guidelines Vol.-I
Sulphur Dioxide (SO ₂)	IS:5182: (Part-2):2001, RA 2006 & CPCB Guidelines Vol.-I
Nitrogen Dioxide (NO ₂)	IS:5182: (Part-6):2006 & CPCB Guidelines Vol.-I

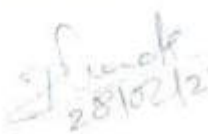
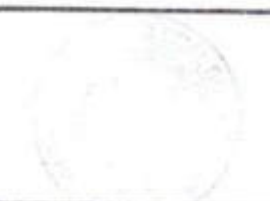

TEST REPORT

Parameter	Unit	NAAQM Standard	Results			
			Near CHP Area	Beside Silo	Solar Panel Area	Near Main Gate
PM ₁₀	µg/m ³	100	78.5	80.1	75.2	68.7
PM _{2.5}	µg/m ³	60	35.5	39.8	40.4	32.5
SO ₂	µg/m ³	80	14.4	15.8	14.2	15.5
NO ₂	µg/m ³	80	26.6	27.6	28.0	27.1
CO	mg/m ³	4.0	0.59	0.60	0.54	0.48

REMARKS: RESULTS ARE AS ABOVE

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 28/02/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  28/02/22 AUTHORIZED SIGNATORY
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-----End of the test report-----



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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	Report No.	UES/TR/21-22/09560	
	Lab Ref No.	UES/21-22/AAQM/015439-15442	
	Date of Sampling	24/03/2022 to 25/03/2022	
	Date of Receipt	25/03/2022	
	Date of Report	28/03/2022	
	Date of Analysis	Start: 25/03/2022	End: 28/03/2022
SAMPLE DETAILS			
Monitoring For	Ambient Air Quality Monitoring		
Sampling Location	1. Near CHP Area 2. Beside Power Store 20 MW 3. Solar Panel Area 4. Near Main Gate		
Customer Ref. No. & Date	P.O. NO. 11/HPSL U102/PO/21-22/88, DATED: 24.10.2021		
Duration Of Sampling	As per CPCB norms		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	As Per Method Reference		
Sample Quantity/Packing	Filter Paper (PM ₁₀): 1X1 No., Filter Paper (PM _{2.5}): 1X1 No. SO ₂ : 30mlX1 No. PVC Bottle, NO ₂ : 30mlX1 NO. PVC Bottle,		

Test Method for Ambient Air Quality Monitoring

Parameter	Method Reference
Particulate Matter size less than 10 microns (PM ₁₀)	IS:5182: (Part-23):2006 & CPCB Guidelines Vol.-I
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS:5182: (Part-24):2019 & CPCB Guidelines Vol.-I
Sulphur Dioxide (SO ₂)	IS:5182: (Part-2):2001, RA 2006 & CPCB Guidelines Vol.-I
Nitrogen Dioxide (NO ₂)	IS:5182: (Part-6):2006 & CPCB Guidelines Vol.-I

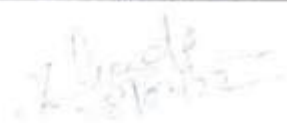

TEST REPORT

Parameter	Unit	NAAQM Standard	Results			
			Near CHP Area	Beside Power Store 20 MW	Solar Panel Area	Near Main Gate
PM ₁₀	µg/m ³	100	77.5	80.5	74.4	70.1
PM _{2.5}	µg/m ³	60	40.1	42.2	39.0	36.8
SO ₂	µg/m ³	80	15.7	16.2	14.9	15.8
NO ₂	µg/m ³	80	25.6	26.9	25.4	26.8
CO	mg/m ³	4.0	0.58	0.62	0.54	0.47

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

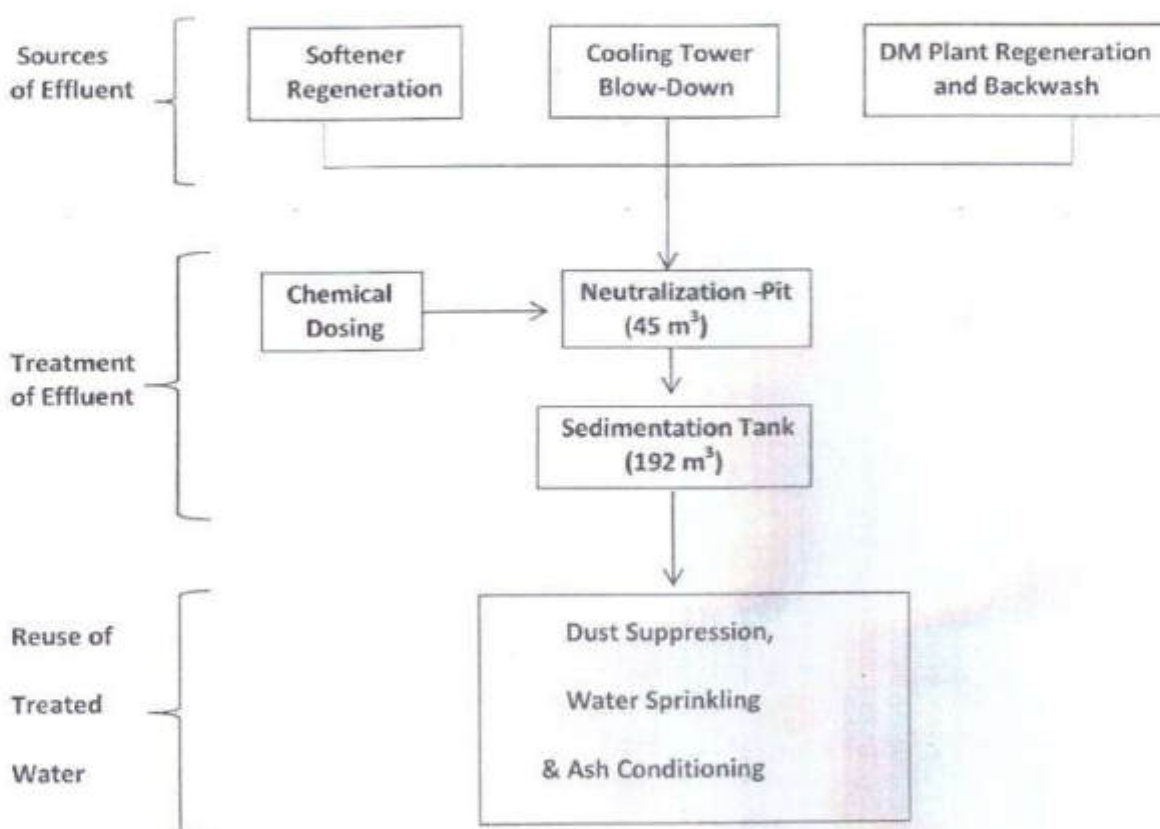
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 REVIEWED BY	 For ULTIMATE ENVIROLYTICAL SOLUTIONS AUTHORIZED SIGNATORY

-----End of the test report-----

EFFLUENT TREATMENT SCHEME

No waste water is discharged outside factory premises. Waste water generated from Cooling Tower Blow-down, Softener Regeneration and Backwash & DM Water Regeneration and Backwash is taken to Neutralization-Pit (45 m³) where sample is taken and after Analysis chemical dosing is done along with air scouring and then after chemical dosing the water is sent to Sedimentation tank (192 m³) for settling of suspended particles. After sedimentation the treated water is used for Dust suppression, Water sprinkling on the road and Ash conditioning. Hence, Zero liquid discharge condition is maintained.





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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Report No	UES/TR/21-22/08685	
		Lab. Ref. No.	UES/21-22/014448 - 014449	
		Date of Sampling	25/10/2021	
		Date of Receipt	26/10/2021	
		Date of Report	29/10/2021	
		Date of Analysis	Start:26/10/2021	End:29/10/2021
SAMPLE DETAILS				
Customer Sample ID	Siltation Tank Water	Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021	
Sample Type	1. Inlet Water 2. Outlet Water	Sample Condition At Receipt	Ok	
Packing of Sample	Jerry Cane (3 ltr. *2) Glass bottle (1 ltr. *2)	Sample Collected By	Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx. 4Ltr. Each	

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER CONSENT	Inlet Water	Outlet Water
1	pH Value at 25.2°C	-	IS:3025: (Part-11): 1983, RA 2012	5.5 To 9.0	7.25	7.75
2	Total Suspended Solid	mg/L	IS:3025: (Part-17): 1984, RA 2012	100	145	23.0
3	Chemical Oxygen Demand	mg/L	IS:3025: (Part-58): 2006, RA 2012	250	138.0	32.0
4	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025: (Part-44): 1993 RA 2014	30	28.1	8.6
5	Oil & Grease	mg/L	IS:3025: (Part-39): 1986	10	1.7	N.D.

Note:mg/lit.: milligram per liter. N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

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 REVIEWED BY		 For ULTIMATE ENVIROLYTICAL SOLUTIONS AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Report No	UES/TR/21-22/09214	
		Lab. Ref. No.	UES/21-22//0150810	
		Date of Sampling	25/11/2021	
		Date of Receipt	26/11/2021	
		Date of Report	29/11/2021	
		Date of Analysis	Start: 26/11/2021	End: 29/11/2021
SAMPLE DETAILS				
Customer Sample ID	Siltration Tank Water	Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021	
Sample Type	1. Inlet Water 2. Outlet Water	Sample Condition At Receipt	Ok	
Packing of Sample	Jerry Cane (3 ltr. *2) Glass bottle (1 ltr. *2)	Sample Collected By	Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx. 4 Ltr. each	

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER CONSENT	Inlet Water	Outlet Water
1	pH Value at 25.2°C	-	IS:3025:(Part-11): 1983, RA 2012	5.5 To 9.0	7.10	7.78
2	Total Suspended Solid	mg/L	IS:3025:(Part-17): 1984, RA 2012	100	162	22.0
3	Chemical Oxygen Demand	mg/L	IS:3025:(Part-58):2006, RA 2012	250	153.0	34.0
4	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025:(Part-44):1993 RA 2014	30	27.8	7.4
5	Oil & Grease	mg/L	IS:3025:(Part-39):1986	10	1.9	N.D.

Note: mg/lit.: milligram per liter. N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- The use of the report for publication, arbitration or as legal dispute is forbidden.
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- This is for information as the party has asked for above test(s) only.

 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  AUTHORIZED SIGNATORY
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-----End of the test report-----

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

Report No	UES/TR/21-22/09308
Lab. Ref. No.	UES/21-22//015175
Date of Sampling	25/12/2021
Date of Receipt	26/12/2021
Date of Report	29/12/2021
Date of Analysis	Start: 26/12/2021 End: 29/12/2021

SAMPLE DETAILS

Customer Sample ID	Siltation Tank Water	Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021
Sample Type	1. Inlet Water 2. Outlet Water	Sample Condition At Receipt	Ok
Packing of Sample	Jerry Cane (3 ltr. *2) Glass bottle (1 ltr. *2)	Sample Collected By	Laboratory Chemist
Other Details	Sealed	Quantity Received	Approx. 4 Ltr. Each

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER CONSENT	Inlet Water	Outlet Water
1	pH Value at 25.2°C	-	IS:3025:(Part-11): 1983, RA 2012	5.5 To 9.0	7.19	7.85
2	Total Suspended Solid	mg/L	IS:3025:(Part-17): 1984, RA 2012	100	165	25.5
3	Chemical Oxygen Demand	mg/L	IS:3025:(Part-58):2006, RA 2012	250	168.0	29.8
4	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025:(Part-44):1993 RA 2014	30	29.4	8.4
5	Oil & Grease	mg/L	IS:3025:(Part-39):1986	10	1.5	N.D.

Note : mg/lit.: milligram per liter. N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

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-----End of the test report-----

To,
HIRA POWER AND STEEL LTD.
KHASRA NO.: 511/1, 512/2,
URLA INDUSTRIAL AREA
RAIPUR (C. G.) 492003

Report No	UES/TR/21-22/09406
Lab. Ref. No.	UES/21-22//015276
Date of Sampling	24/01/2022
Date of Receipt	25/01/2022
Date of Report	29/01/2022
Date of Analysis	Start: 25/01/2022 End: 29/01/2022

SAMPLE DETAILS

Customer Sample ID	Siltation Tank Water	Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021
Sample Type	1. Inlet Water 2. Outlet Water	Sample Condition At Receipt	Ok
Packing of Sample	Jerry Cane (3 ltr. *2) Glass bottle (1 ltr. *2)	Sample Collected By	Laboratory Chemist
Other Details	Sealed	Quantity Received	Approx. 4 Ltr. Each

TEST REPORT

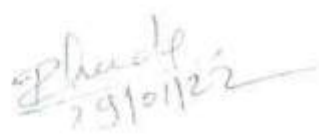
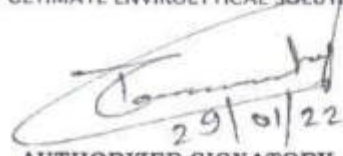
SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER CONSENT	Inlet Water	Outlet Water
1	pH Value at 25.2°C	-	IS:3025: (Part-11): 1983, RA 2012	5.5 To 9.0	7.05	7.95
2	Total Suspended Solid	mg/L	IS:3025: (Part-17): 1984, RA 2012	100	165	28.0
3	Chemical Oxygen Demand	mg/L	IS:3025: (Part-58): 2006, RA 2012	250	132.0	36.0
4	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025: (Part-44): 1993 RA 2014	30	26.6	7.1
5	Oil & Grease	mg/L	IS:3025: (Part-39): 1986	10	2.0	N.D.

Note : mg/lit.: milligram per liter. N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

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 REVIEWED BY	 AUTHORIZED SIGNATORY
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-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Report No	UES/TR/21-22/09484	
		Lab. Ref. No.	UES/21-22//015360	
		Date of Sampling	24/02/2022	
		Date of Receipt	25/02/2022	
		Date of Report	28/02/2022	
		Date of Analysis	Start: 25/02/2022	End: 28/02/2022
SAMPLE DETAILS				
Customer Sample ID	Siltation Tank Water	Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021	
Sample Type	1. Inlet Water 2. Outlet Water	Sample Condition At Receipt	Ok	
Packing of Sample	Jerry Cane (3 ltr. *2) Glass bottle (1 ltr. *2)	Sample Collected By	Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx. 4 Ltr. Each	

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER CONSENT	Inlet Water	Outlet Water
1	pH Value at 25.2°C	-	IS:3025: (Part-11): 1983, RA 2012	5.5 To 9.0	7.09	7.80
2	Total Suspended Solid	mg/L	IS:3025: (Part-17): 1984, RA 2012	100	160	18.0
3	Chemical Oxygen Demand	mg/L	IS:3025: (Part-58): 2006, RA 2012	250	152.0	26.0
4	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025: (Part-44): 1993 RA 2014	30	26.2	6.3
5	Oil & Grease	mg/L	IS:3025: (Part-39): 1986	10	1.5	N.D.

Note : mg/lit.: milligram per liter. N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

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 28/02/22 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  28/02/22 AUTHORIZED SIGNATORY
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-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		Report No	UES/TR/21-22/09567	
		Lab. Ref. No.	UES/21-22//015449	
		Date of Sampling	24/03/2022 to 25/03/2022	
		Date of Receipt	25/03/2022	
		Date of Report	28/03/2022	
		Date of Analysis	Start: 25/03/2022	End: 28/03/2022
SAMPLE DETAILS				
Customer Sample ID	Siltation Tank Water	Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021	
Sample Type	1. Inlet Water 2. Outlet Water	Sample Condition At Receipt	Ok	
Packing of Sample	Jerry Cane (3 ltr. *2) Glass bottle (1 ltr. *2)	Sample Collected By	Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx. 4 Ltr. Each	

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER CONSENT	Inlet Water	Outlet Water
1	pH Value at 25.2°C	-	IS:3025: (Part-11): 1983, RA 2012	5.5 To 9.0	7.10	7.88
2	Total Suspended Solid	mg/L	IS:3025: (Part-17): 1964, RA 2012	100	163	21.0
3	Chemical Oxygen Demand	mg/L	IS:3025: (Part-58): 2006, RA 2012	250	138.0	25.0
4	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025: (Part-44): 1993 RA 2014	30	27.0	8.3
5	Oil & Grease	mg/L	IS:3025: (Part-39): 1986	10	1.6	N.D.

Note : mg/lit.: milligram per liter. N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

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 REVIEWED BY		 For ULTIMATE ENVIROLYTICAL SOLUTIONS  AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/08686
	LAB REF NO.	UES/21-22/N/014450 - 014453
	DATE OF REPORT	29/10/2021
	DATE OF SAMPLING	25/10/2021
SAMPLE DETAILS		
Monitoring For	Noise Level Monitoring	
Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021	
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate	
Sample Collected By	Laboratory Chemist	
Sampling Procedure	Manufacturer's Instruction	

TEST REPORT					
LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY	NIGHT	DAY	NIGHT
Near CHP Area	dB(A)	71.5	67.8	75 dB(A)	70 dB(A)
Beside Silo	dB(A)	70.4	62.5		
Solar Panel Area	dB(A)	69.8	58.5		
Near Main Gate	dB(A)	65.1	56.5		

REMARKS: RESULTS ARE AS ABOVE

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 29/10/21 REVIEWED BY	 For ULTIMATE ENVIROLYTICAL SOLUTIONS	 29/10/21 AUTHORIZED SIGNATORY
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabil Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO.	UES/TR/21-22/09220
		LAB REF NO.	UES/21-22/N/015087 - 015090
		DATE OF REPORT	29/11/2021
		DATE OF SAMPLING	25/11/2021
SAMPLE DETAILS			
Monitoring For	Noise Level Monitoring		
Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021		
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	Manufacturer's Instruction		

TEST REPORT

LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY	NIGHT	DAY	NIGHT
Near CHP Area	dB(A)	72.2	68.5	75 dB(A)	70 dB(A)
Beside Silo	dB(A)	70.4	64.1		
Solar Panel Area	dB(A)	68.5	63.2		
Near Main Gate	dB(A)	62.5	55.5		

REMARKS: RESULTS ARE AS ABOVE

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 29/11/21 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  29/11/21 AUTHORIZED SIGNATORY
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-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO.	UES/TR/21-22/09309
		LAB REF NO.	UES/21-22/N/015176 - 015179
		DATE OF REPORT	29/12/2021
		DATE OF SAMPLING	25/12/2021
SAMPLE DETAILS			
Monitoring For	Noise Level Monitoring		
Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021		
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	Manufacturer's instruction		

TEST REPORT

LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY	NIGHT	DAY	NIGHT
Near CHP Area	dB(A)	72.2	65.5	75 dB(A)	70 dB(A)
Beside Silo	dB(A)	70.2	63.4		
Solar Panel Area	dB(A)	69.8	61.2		
Near Main Gate	dB(A)	62.5	54.8		

REMARKS: RESULTS ARE AS ABOVE

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 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  AUTHORIZED SIGNATORY
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-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003	REPORT NO.	UES/TR/21-22/09407
	LAB REF NO.	UES/21-22/N/015277-015280
	DATE OF REPORT	29/01/2022
	DATE OF SAMPLING	24/01/2022
SAMPLE DETAILS		
Monitoring For	Noise Level Monitoring	
Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021	
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate	
Sample Collected By	Laboratory Chemist	
Sampling Procedure	Manufacturer's Instruction	

TEST REPORT					
LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY	NIGHT	DAY	NIGHT
Near CHP Area	dB(A)	72.9	65.5	75 dB(A)	70 dB(A)
Beside Silo	dB(A)	71.2	62.2		
Solar Panel Area	dB(A)	69.2	60.8		
Near Main Gate	dB(A)	65.5	52.2		

REMARKS: RESULTS ARE AS ABOVE

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 29/01/22 REVIEWED BY	For ULTIMATE ENVIROLYTICAL SOLUTIONS  29/01/22 AUTHORIZED SIGNATORY
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-----End of the test report-----

To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C. G.) 492003		REPORT NO.	UES/TR/21-22/09485
		LAB REF NO.	UES/21-22/N/015361-15364
		DATE OF REPORT	28/02/2022
		DATE OF SAMPLING	24/02/2022
SAMPLE DETAILS			
Monitoring For	Noise Level Monitoring		
Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021		
Sampling Location	1. Near CHP Area 2. Beside Silo 3. Solar Panel Area 4. Near Main Gate		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	Manufacturer's Instruction		


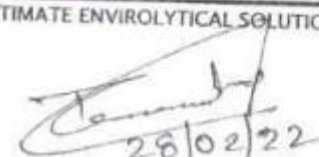
TEST REPORT

LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY	NIGHT	DAY	NIGHT
Near CHP Area	dB(A)	71.5	65.5	75 dB(A)	70 dB(A)
Beside Silo	dB(A)	70.0	61.2		
Solar Panel Area	dB(A)	68.8	59.8		
Near Main Gate	dB(A)	63.3	52.3		

REMARKS: RESULTS ARE AS ABOVE

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 28/02/22 REVIEWED BY	 28/02/22 AUTHORIZED SIGNATORY	For ULTIMATE ENVIROLYTICAL SOLUTIONS
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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

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To, HIRA POWER AND STEEL LTD. KHASRA NO.: 511/1, 512/2, URLA INDUSTRIAL AREA RAIPUR (C.G.) 492003	REPORT NO.	UE5/TR/21-22/09568
	LAB REF NO.	UES/21-22/N/015450-15453
	DATE OF REPORT	28/03/2022
	DATE OF SAMPLING	24/03/2022
SAMPLE DETAILS		
Monitoring For	Noise Level Monitoring	
Customer Ref. No. & Date	P.O. No. 11/HPSL U102/PO/21-22/88, Dated: 24.10.2021	
Sampling Location	1. Near CHP Area 2. Beside Power Store 20 MW 3. Solar Panel Area 4. Near Main Gate	
Sample Collected By	Laboratory Chemist	
Sampling Procedure	Manufacturer's Instruction	


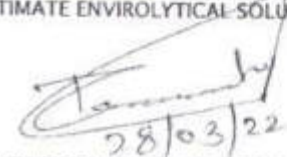
TEST REPORT

LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY	NIGHT	DAY	NIGHT
Near CHP Area	dB(A)	70.5	65.9	75 dB(A)	70 dB(A)
Beside Power Store 20 MW	dB(A)	71.2	64.3		
Solar Panel Area	dB(A)	68.9	61.1		
Near Main Gate	dB(A)	61.2	57.7		

REMARKS: RESULTS ARE AS ABOVE

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- This is for information as the party has asked for above test(s) only.

 REVIEWED BY	 28/03/22 AUTHORIZED SIGNATORY
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-----End of the test report-----



छत्तीसगढ़ शासन श्रम विभाग

Web: www. Date: 06/05/2022



Record For Year

2022

If You have already entered the below form then click on add Worker Button given in List

Factory Name	Medical Officer's Name	Entry Date	Entry No.	Form Type	Form No.	Form Date	Form Status
HIRA POWER & STEEL LTD, UNIT-II (FERRO ALLOYS DIVISION)	Dr.Pavan Kumar Gautam	14/03/2022	11402928270352	FORM-21	0	05/05/2022	Details

View Workers Details

Factory Name	Medical Officer's Name	Qualification	License No.	Entry Date	Entry No.	Worker Count	Unemployed Workers	Form Type	Form No.	Form Date
HIRA POWER & STEEL LTD, UNIT-II (FERRO ALLOYS DIVISION)				19/04/2017	11402928270352	250	384	FORM-21	2017	2017
HIRA POWER & STEEL LTD, UNIT-II (FERRO ALLOYS DIVISION)	Dr.Pavan Kumar Gautam	M.B.B.S., MD (MEDICINE)	9685691056	14/03/2022	11402928270352	550	605	FORM-21	2022	2022
HIRA POWER & STEEL LTD, UNIT-II (FERRO ALLOYS DIVISION)	Dr.Pavan Kumar Gautam	MBBS MD Medicine	0771408252	13/07/2018	11402928270352	500	376	FORM-21	2018	2018
HIRA POWER & STEEL LTD, UNIT-II (FERRO ALLOYS DIVISION)	Dr.Pawan S.Gautam	MBBS MD Medicine	07714082525	17/05/2019	11402928270352	500	415	FORM-21	2019	2019
HIRA POWER & STEEL LTD, UNIT-II (FERRO ALLOYS DIVISION)	Mr. Pavan Kumar Gautam	MBBS, MD (MEDICINE)	9685691056	04/06/2020	11402928270352	500	390	FORM-21	2020	2020
HIRA POWER & STEEL LTD, UNIT-II (FERRO ALLOYS DIVISION)	Dr.Pavan Kumar Gautam	MBBS, MD (MEDICINE)	9685691056	14/06/2021	11402928270352	550	606	FORM-21	2021	2021

Remarks :

Entry Year	Form Type	Checked By	Status	Remark	Remark Date
2019	FORM-21	Dr.PRATEEK KHARE	VIOLATION OF FACTORY ACT	1)AS PER THE ENTRIES MADE IN THE PORTAL , IN TYPE OF EXAMINATION,IN DATE OF EMPLOYMENT AND DATE OF EXAMINATION IT IS CLEAR THAT false entries has been done or PRE EMPLOYMENT AND PERIODIC MEDICAL EXAMINATION IS NOT DONE IN TIME WHICH IS VIOLATION OF RULE 41C AND 131 OF FACTORIES ACT. (2)all the test reports not uploaded like usg etc.(3)TEST AS PER RULE 107 SCHEDULE 20 NOT DONE.(4)GIVE A COPY OF MEDICAL REPORTS TO ALL THE WORKERS.WORKERS HAVING POSITIVE FINDINGS SHOULD BE REGULARLY FOLLOW UP BY THE FACTORY MEDICAL OFFICER AND CARE SHOULD BE TAKEN THAT THEY SHOULD NOT BE EMPLOYED IN THOSE AREA WHERE THERE DISEASE GET AGGRAVATED.	29/07/2019
2017	FORM-21	Dr.PRATEEK KHARE	REPEAT AUDIOMETRY TEST AND DO TEST OF MANGANESE ACCORDING TO SCHEDULE 20 OF RULE 107	REPEAT AUDIOMETRY TEST BECAUSE ACCORDING TO FACTORIES ACT AUDIOMETRY HAS TO BE DONE FROM 125 TO 8000 FREQUENCY BUT THE TEST HAS BEEN DONE FROM 500 TO 6000 FREQUENCY HENCE IT CANNOT BE ACCEPTED.ALSO FACTORIES COME UNDER rule 107 of C.G. factories rules 1962 IT IS A FERRO ALLOYS PLANT WHICH USES MANGANESE. HENCE TEST OF MANGANESE ACCORDING TO SCHEDULE 20 OF RULE 107 HAS NOT BEEN DONE TEST BECAUSE ACCORDING TO FACTORIES ACT AUDIOMETRY HAS TO BE DONE FROM 125 TO 8000 FREQUENCY BUT THE TEST HAS BEEN DONE FROM 500 TO 6000 FREQUENCY HENCE IT CANNOT BE ACCEPTED. ALSO FACTORIES COME UNDER rule 107 of C.G. factories rules 1962 IT IS A FERRO ALLOY PLANT WHICH USES MANGANESE. HENCE TEST OF MANGANESE	15/11/2017

2020	FORM-21	Dr.PRATEEK KHARE		<p>ACCORDING TO SCHEDULE 20 OF RULE 107 HAS NOT BEEN DONE ONLY BLOOD MANGANESE LEVEL OF 86 WORKERS DONE REST OF TEST OF SCHEDULE NOT DONE AND MENTIONED.</p> <p>1) COVID-19- SCREENING OF WORKERS SHOULD BE DONE AS PER GOVERNMENT GUIDELINE FOR COVID 19 BEFORE APPOINTING WORK AND REGULAR FOLLOW UP SHOULD ALSO BE DONE. PLEASE TAKE ALL PERSONAL PROTECTION PRECAUTION IN FACTORY LIKE HAND WASHING, SOCIAL DISTANCING, FACE MASK AND WORK RELATED PPEs. People with COVID-19 have had a wide range of symptoms reported - ranging from mild symptoms to severe illness. Symptoms may appear 2-14 days after exposure to the virus. People with these symptoms or combinations of symptoms may have COVID-19: • Cough • Shortness of breath or difficulty breathing OR at least two of these symptoms: • Fever • Chills • Repeated shaking with chills • Muscle pain • Headache • Sore throat • New loss of taste or smell, COUNSEL AND AWARE WORKERS ABOUT COVID 19, IF ANY SUSPECTED CASE COME TO YOUR NOTICE IMMEDIATELY INFORM TO AUTHORITY (2) GIVE A COPY OF MEDICAL REPORTS TO ALL THE WORKERS. WORKERS HAVING POSITIVE FINDINGS SHOULD BE REGULARLY FOLLOW UP BY THE FACTORY MEDICAL OFFICER AND CARE SHOULD BE TAKEN THAT THEY SHOULD NOT BE EMPLOYED IN THOSE AREA WHERE THERE DISEASE GET AGGRAVATED, (3) AS PER FORM 4* Number of workers to be ordinarily employed in the factory : 500* BUT MEDICAL REPORTS OF ONLY 139 WORKERS UPLOADED HENCE INCOMPLETE. (4) test are not done as per cg factories rule 1962 rule 107 prescribed under section 87 of factories act 1948</p>	04/12/2020
2018	FORM-21	Dr.PRATEEK KHARE	VIOLATION OF RULE 41C AND 131 OF FACTORIES ACT	<p>AS PER THE ENTRIES MADE IN THE PORTAL , IN TYPE OF EXAMINATION, IN DATE OF EMPLOYMENT AND DATE OF EXAMINATION IT IS CLEAR THAT PRE EMPLOYMENT AND PERIODIC MEDICAL EXAMINATION IS NOT DONE IN TIME WHICH IS VIOLATION OF RULE 41C AND 131 OF FACTORIES ACT . AS PER THE SECTION 41C OF FACTORIES ACT 1948 IT IS THE RESPONSIBILITY OF FACTORY OCCUPIER TO MAINTAIN ACCURATE AND UP TO DATE HEALTH RECORDS & PROVIDE FOR MEDICAL EXAMINATION OF EVERY WORKER BEFORE EMPLOYMENT AND IN PERIODIC INTERVAL NOT EXCEEDING TWELVE MONTH.</p>	27/12/2018



Ref: 1039/HPSL/U2/CPP/21-22/1039

Dated-16.11.2021

To,
The Scientist,
Ministry of Environment, Forest & Climate Change,
Integrated Regional Office, Aranya Bhawan,
North Block, Sector-19, Naya Raipur,
Atal Nagar, Chhattisgarh - 492002

Sub: Submission of Half Yearly Environment Clearance Compliance Report of the conditions stipulated in Environmental clearance for the period of April 2021 to September 2021

Ref: Environmental Clearance F.No. J-11011/836/2008/IA.II(I) Dated 11.02.2009

Respected Sir,

With reference to above subject, we are enclosing herewith Half Yearly Environment Clearance Compliance Report of the conditions stipulated in Environmental clearance accorded by MOEF vide F.No.J-11011/836/2008/IA.II(I) Dated 11.02.2009 for the period of April 2021 to September 2021 in respect of Hira Power and Steels Ltd. Unit-II (Ferro Division), Urla Industrial Complex, Raipur (C.G.)

We hope you will find the above Half Yearly Environment Clearance Compliance Report upto your satisfaction. Your valuable guidance further in this regard shall be highly appreciated.

Kindly acknowledge the receipt of the same.

Yours faithfully,

For, HIRA POWER AND STEELS LIMITED, UNIT- II
(Ferro Division)

Aired Authorized Signatory

Encl: As Above

Hira Power & Steels Limited
An ISO 9001:2015 Certified Company
CIN : U24117CT1984PLC002512

Registered Office & Works : Khasra No. 511/1, 512/2, Urla Industrial Complex, Raipur - 492003, Chhattisgarh, India
P : +91 771 4082500, 4082600, F : +91 771 4082501, E : admin@hpslindia.com
www.hpslindia.com, www.hiragroup.com



Copy to:

1. The Director, Zonal Office, Central Pollution Control Board, 4th Floor, Sahkar Bhawan, North TT Nagar, Bhopal-462003.
2. The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhawan, North Block, Sector-19, Atal Nagar, Raipur (CG) – 492 002.
3. The Regional Officer, Regional Office, Chhattisgarh Environment Conservation Board Commercial Complex Chhattisgarh Housing Board Colony, Kabir Nagar, Raipur (CG) – 492 001.

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