

CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD. An ISO 9001-2008 & OHSAS 18001:2007 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha

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Reference No : CEMC/ASL/ Nov -A-11/20

Name of Company:Ardent Steel Ltd.Sample Description:Ambient AirDate of Monitoring:16.11.2020Date of Receiving:18.11.2020Date of Analysis:18.11.2020

Sample Collected by : Mr.B Samantaray

AMBIENT AIR QUALITY TEST REPORT (24 HOURLY AVERAGE)

Sl.		MONITORING REPORT					
No.	LOCATION	PM_{10}	$PM_{2.5}$	SO_2	$NO_{x_{2}}$	CO	NH_3
110.		$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	(mg/m^3)	$(\mu g/m^3)$
1	At the boundary near the						
	water harvesting pond	69.2	37.0	11.4	17.2	0.52	< 20
	(East Direction)						
2	At the Boundary near	65.6	35.4	11.0	16.2	0.46	<20
	ESP (South Direction)	03.0	33.4	11.0	10.2	0.40	<20
3	At the Boundary near						
	Coal Fines Stock yard		36.2	12.4	16.8	0.5	<20
	(North Direction)						
4	Near Ball mill, Iron ore	70.6	26.0	10.4	14.8	0.56	-20
	fines stock yard	70.6	36.8	10.4	14.8	0.56	<20
NAAQ Standard		$\frac{100}{(\mu g/m^3)}$	$60 \ (\mu g/m^3)$	80 (μg/m ³)	80 (µg/m ³)	4.0 (mg/m ³)	400 (μg/m ³)

Authorized Signatory

Notes:

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Reference No : CEMC/ASL/ Nov -F-11/20

Name of Company:Ardent Steel Ltd.Sample Description:Fugitive AirDate of Monitoring:16.11.2020Date of Receiving:18.11.2020Date of Analysis:18.11.2020

Sample Collected by : Mr.B Samantaray

FUGITIVE EMISSION TEST REPORT

Sl.		RESULT		
No.	LOCATION	RSPM (μg/m³)	SPM (μg/m³)	
1	Proportioning System (Ash & Coke Fines Bunker)	310	991	
2	Raw Material Transfer point of Mixture (Mixture Building)	298	982	
3	Ball Mill (Cool Grinding)	294	1062	
4	Ball Mill (Flux & Coke Grinding)	306	1008	
5	Finished Product Transfer points and plant de-dusting system	279	1022	
6	Travelling Grate & Rotary Kiln	305	976	
	MoEF Standard for SPM		2000*	

^{*} The standard is applicable at 10 m distance from the source

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Reference No : CEMC/ASL/Nov -N-11/20

Name of Company : Ardent Steel Ltd.

Sample Description : Noise Monitoring Report

Date of Monitoring : 16.11.2020

Sample Collected by : Mr.B Samantaray

NOISE LEVEL STUDY REPORT

Sl. No.	Location	Noise Level In Day Time dB(A)	Noise Level In Night Time dB(A)
01	Ball Mill (Cool Grinding)	72.6	64.8
02	Raw Material Transfer point of Mixture (Mixture Building)	69.6	66.4

NATIONAL STANDARD NOISE LEVEL

Area	Category of Area/Zone	Permissible Limit in dB (A)		
Code		Day Time	Night Time	
A	Industrial Area	75	70	
В	Commercial Area	65	55	
C	Residential Area	55	45	
D	Silence Zone	50	40	

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Reference No : CEMC/ASL/ Nov -ST-11/20

Name of Company : Ardent Steel Ltd.
Sample Description : Stack Monitoring

Date of Monitoring : 16.11.2020

Sample Collected by : Mr.B Samantaray

Stack Height : 30m

STACK EMISSION REPORT

Sl. No.	Location of Sampling	Flue Gas Temp. in K	Concentration of Particulate Matter (PM) in mg/Nm ³ Result
01	ESP	381	45.0

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Reference No : CEMC/ASL/Nov -GW-11/20

Name of Company : Ardent Steel Ltd.
Sample Description : Ground Water
Date of Monitoring : 16.11.2020
Date of Receiving : 18.11.2020
Date of Analysis : 18.11.2020

Sample Collected by : Mr.B Samantaray
Sample Location : Canteen(RO Water)

GROUND WATER TEST REPORT

Sl. No	Parameter	Unit	Desired Limit of drinking water (BIS:10500:2012)	Permissible Limit of drinking water (BIS:10500:2012)	Result
1	Colour	Hazen	5	15	<5
2	Odour	-	Agreeable	Agreeable	AL
3	Taste	-	Agreeable	-	AL
4	Turbidity	NTU	1	5	<1
5	pH Value @ 25°C	-	6.5-8.5	No Relaxation	6.6
6	Total Dissolved Solid	mg/l	500	2000	74
7	Alkalinity as CaCO ₃	mg/l	200	600	38
8	Total Hardness as CaCO ₃	mg/l	200	600	42
9	Iron as Fe	mg/l	0.3	No Relaxation	0.08
10	Nitrate as NO ₃ -N	mg/l	45	No Relaxation	0.56
11	Sulphate as SO ₄	mg/l	200	400	1.18
12	Fluoride as F	mg/l	1.0	1.5	< 0.05
13	Calcium as Ca	mg/l	75	200	10.02
14	Chloride as Cl ⁻	mg/l	250	1000	3.6

N.B: AL – Agreeable

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Reference No : CEMC/ASL/Nov -SW-11/20

Name of Company:Ardent Steel Ltd.Sample Description:Surface WaterDate of Monitoring:16.11.2020Date of Receiving:18.11.2020Date of Analysis:18.11.2020

Sample Collected by : Mr.B Samantaray

Sample Location : Reservoir

SURFACE WATER TEST REPORT

Sl. No	Parameter	Unit	GSR 422E Standards	Result
1	Colour	Hazen		5
2	Odour	-		U/O
3	pH Value @ 25°C	-	5.5-9.0	7.16
4	Total Dissolved Solid	mg/l	2100	308
5	Iron as Fe	mg/l	3.0	0.74
6	Sulphate as SO ₄	mg/l	1000	18.2
7	Nitrate as NO ₃ -N	mg/l	50	17.0
8	Boron as B	mg/l	2.0	0.34
9	BOD for 3 days @ 27 ⁰ C	mg/l	30	3.0
10	COD	mg/l	250	25

N.B: U/O- Un-objectionable

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Reference No : CEMC/ASL/Nov -WW-11/20

Name of Company:Ardent Steel Ltd.Sample Description:Waste WaterDate of Monitoring:16.11.2020Date of Receiving:18.11.2020Date of Analysis:18.11.2020

Sample Collected by : Mr.B Samantaray

Sample Location : STP Outlet

ANALYSIS RESULT

Sl. No.	Parameter	Unit	Effluent Discharge Standard	Testing Method	Result
1.	pH Value @ 25°C	1	6.5-9.0	APHA 4500 H ⁺ B	7.26
2.	Total Suspended Solids	mg/l	<20	APHA 2540 D	13.6
3.	B.O.D for 3 days @ 27°C	mg/l	<10	APHA 5210 B	9.6
4.	COD	mg/l	< 50	APHA 5220 C	42
5.	Oil & Grease	mg/l		APHA 5520 B	1.2

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