

An ISO 9001-2008 & OHSAS 18001:2007 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization. Empanelled with PCCF(Wildlife) &CWLW,Odisha Enlisted in Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India) MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Reference No : CEMC/ASL/Nov-A-01/19

Name of Company : Ardent Steel Ltd.
Sample Description : Ambient Air
Date of Monitoring : 06.11.2019
Date of Receiving : 07.11.2019
Date of Analysis : 07.11.2019

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	CO	NH_3
140.		$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	(mg/m^3)	$(\mu g/m^3)$
1	At the boundary near the						
	water harvesting pond	58.9	30.1	11.4	15.2	0.4	<20
	(East Direction)						
2	At the Boundary near	62.7	32.5	12.1	16.4	0.5	<20
	ESP (South Direction)	02.7	32.3	12.1	10.4	0.5	<20
3	At the Boundary near						
	Coal Fines Stock yard	61.2	31.8	11.9	15.7	0.4	<20
	(North Direction)						
4	Near Ball mill, Iron ore	62.6	34.3	11.7	15.4	0.4	<20
	fines stock yard	02.0	34.3	11./	13.4	0.4	<20
NAAQ Standard		$100 (\mu g/m^3)$	$60 (\mu g/m^3)$	$80 (\mu g/m^3)$	$80 (\mu g/m^3)$	4.0 (mg/m ³)	$\frac{400}{(\mu g/m^3)}$

Authorized Signatory

Notes:

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Reference No : CEMC/ASL/Nov-F-01/19

Name of Company : Ardent Steel Ltd.
Sample Description : Fugitive Air
Date of Monitoring : 06.11.2019
Date of Receiving : 07.11.2019
Date of Analysis : 07.11.2019

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)	196	891	
2	Raw Material Transfer point of Mixture (Mixture Building)	158	902	
3	Ball Mill (Cool Grinding)	184	879	
4	Ball Mill (Flux & Coke Grinding)	179	911	
5	Finished Product Transfer points and plant de-dusting system	151	834	
6	Travelling Grate & Rotary Kiln	117	819	
	MoEF Standard		2000*	

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

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Reference No : CEMC/ASL/Nov -N-01/19

Name of Company : Ardent Steel Ltd.

Sample Description : Noise Monitoring Report

Date of Monitoring : **06.11.2019**

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)	74.2	68.1
02	Raw Material Transfer point of Mixture (Mixture Building)	72.5	67.9

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	
С	Residential Area	55	45	
D	Silence Zone	50	40	

Authorized Signatory Notes:



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Reference No : CEMC/ASL/Nov -ST-01/19

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

Date of Monitoring : 06.11.2019
Date of Receiving : 07.11.2019
Date of Analysis : 07.11.2019

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	401	48.3	

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Reference No CEMC/ASL/Nov-GW-01/19

Ardent Steel Ltd. Name of Company Sample Description **Ground Water** Date of Monitoring 06.11.2019 Date of Receiving 07.11.2019 Date of Analysis 07.11.2019

Sample Collected by Mr. B Samantaray

Sample Location **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	6.88
6	Total Dissolved Solid	mg/l	500	2000	81
7	Alkalinity as CaCO ₃	mg/l	200	600	40
8	Total Hardness as CaCO ₃	mg/l	200	600	42
9	Iron as Fe	mg/l	0.3	No Relaxation	0.07
10	Nitrate as NO ₃ -N	mg/l	45	No Relaxation	0.21
11	Sulphate as SO ₄	mg/l	200	400	1.4
12	Fluoride as F	mg/l	1.0	1.5	< 0.05
13	Calcium as Ca	mg/l	75	200	11.22
14	Chloride as Cl ⁻	mg/l	250	1000	3.4

N.B: AL – Agreeable

Notes:

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Reference No : CEMC/ASL/Nov -SW-01/19

Name of Company:Ardent Steel Ltd.Sample Description:Surface WaterDate of Sampling:06.11.2019Date of Receiving:07.11.2019Date of Analysis:07.11.2019

Sample Collected by : Mr. B Samantaray

Sample Location : Reservoir

SURFACE WATER TEST REPORT

Sl. No	Parameter	Unit	GSR 422E Standards	Result
1	Colour	Hazen		20
2	Odour	-		U/O
3	pH Value @ 25°C	-	5.5-9.0	6.85
4	Total Dissolved Solid	mg/l	2100	354.8
5	Iron as Fe	mg/l	3.0	0.43
6	Sulphate as SO ₄	mg/l	1000	16.2
7	Nitrate as NO ₃ -N	mg/l	50	9.8
8	Boron as B	mg/l	2.0	0.21
9	BOD for 3 days @ 27 ⁰ C	mg/l	30	2.8
10	COD	mg/l	250	25

N.B: U/O- Un-objectionable

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Reference No : CEMC/ASL/Nov-WW-01/19

Name of Company : Ardent Steel Ltd.
Sample Description : Waste Water
Date of Sampling : 06.11.2019
Date of Receiving : 07.11.2019
Date of Analysis : 07.11.2019

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		6.5-9.0	APHA 4500 H ⁺ B	7.11
2.	Total Suspended Solids	mg/l	<20	APHA 2540 D	16.8
3.	B.O.D for 3 days @ 27°C	mg/l	<10	APHA 5210 B	9.4
4.	COD	mg/l	< 50	APHA 5220 C	40
5.	Oil & Grease	mg/l		APHA 5520 B	2.6

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