

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/ Jul -A-06/20
Name of Company	:	Ardent Steel Ltd.
Sample Description	:	Ambient Air
Date of Monitoring	:	13.07.2020
Date of Receiving	:	14.07.2020
Date of Analysis	:	14.07.2020
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	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	70.2	37.6	11.2	17.0	0.5	<20	
	(East Direction)							
2	At the Boundary near	66.0	35.2	11.5	15.8	0.5	<20	
	ESP (South Direction)	00.0	55.2	11.5	13.0	0.5	<20	
3	At the Boundary near							
	Coal Fines Stock yard	70.2	36.7	12.2	16.9	0.5	<20	
	(North Direction)							
4	Near Ball mill, Iron ore	70.4	36.4	10.6	14.2	0.5	<20	
	fines stock yard	70.4	30.4	10.0	14.2	0.5	<20	
NAA	Q Standard	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (μg/m ³)	4.0 (mg/m ³)	400 (µg/m ³)	

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Notes:



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Reference No	:	CEMC/ASL/ Jul -F-06/20
Name of Company	:	Ardent Steel Ltd.
Sample Description	:	Fugitive Air
Date of Monitoring	:	13.07.2020
Date of Receiving	:	14.07.2020
Date of Analysis	:	14.07.2020
Sample Collected by	:	Mr.B Samantaray

FUGITIVE EMISSION TEST REPORT

Sl.		RESULT				
No.	LOCATION	RSPM (µg/m ³)	SPM (µg/m ³)			
1	Proportioning System (Ash & Coke Fines Bunker)	318	1010			
2	Raw Material Transfer point of Mixture (Mixture Building)	296	990			
3	Ball Mill (Cool Grinding)	300	1065			
4	Ball Mill (Flux & Coke Grinding)	305	1088			
5	Finished Product Transfer points and plant de-dusting system	280	1032			
6	Travelling Grate & Rotary Kiln	310	985			
	MoEF Standard for SPM 2000*					

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

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Reference No Name of Company Sample Description Date of Monitoring Sample Collected by

CEMC/ASL/Jul-N-06/20 Ardent Steel Ltd. Noise Monitoring Report 13.07.2020 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)	73.2	64.6
02	Raw Material Transfer point of Mixture (Mixture Building)	70.0	66.8

NATIONAL STANDARD NOISE LEVEL

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

Mpout

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Reference No Name of Company Sample Description Date of Monitoring Sample Collected by Stack Height CEMC/ASL/ Jul -ST-06/20 Ardent Steel Ltd. Stack Monitoring 13.07.2020 Mr.B Samantaray 30m

STACK EMISSION REPORT

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Sl. No.	Location of Sampling	Flue Gas Temp. in K	Concentration of Particulate Matter (PM) in mg/Nm ³ Result
01	ESP	390	46.8

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Reference No Name of Company Sample Description Date of Monitoring Date of Receiving Date of Analysis Sample Collected by Sample Location CEMC/ASL/Jul -GW-06/20 Ardent Steel Ltd. Ground Water 13.07.2020 14.07.2020 14.07.2020 Mr.B Samantaray Canteen(RO Water)

GROUND WATER TEST REPORT

	UNUCLE WATER TEST REFORT						
SI. 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	6.50		
6	Total Dissolved Solid	mg/l	500	2000	78		
7	Alkalinity as CaCO ₃	mg/l	200	600	30		
8	Total Hardness as CaCO ₃	mg/l	200	600	36		
9	Iron as Fe	mg/l	0.3	No Relaxation	0.08		
10	Nitrate as NO ₃ ⁻ -N	mg/l	45	No Relaxation	0.42		
11	Sulphate as SO ₄	mg/l	200	400	1.22		
12	Fluoride as F	mg/l	1.0	1.5	< 0.05		
13	Calcium as Ca	mg/l	75	200	10.2		
14	Chloride as Cl ⁻	mg/l	250	1000	3.9		

N.B: AL – Agreeable

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Reference No Name of Company Sample Description Date of Monitoring Date of Receiving Date of Analysis Sample Collected by Sample Location CEMC/ASL/Jul -SW-06/20 Ardent Steel Ltd. Surface Water 13.07.2020 14.07.2020 14.07.2020 Mr.B Samantaray 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	7.35
4	Total Dissolved Solid	mg/l	2100	318.4
5	Iron as Fe	mg/l	3.0	0.45
6	Sulphate as SO ₄	mg/l	1000	17.4
7	Nitrate as NO ₃ ⁻ -N	mg/l	50	15.2
8	Boron as B	mg/l	2.0	0.22
9	BOD for 3 days @ 27 ⁰ C	mg/l	30	2.4
10	COD	mg/l	250	22.0

N.B: U/O- Un-objectionable

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Reference No Name of Company Sample Description Date of Monitoring Date of Receiving Date of Analysis Sample Collected by Sample Location

CEMC/ASL/Jul -WW-06/20 Ardent Steel Ltd. Waste Water 13.07.2020 14.07.2020 14.07.2020 **Mr.B** Samantaray **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	7.10
2.	Total Suspended Solids	mg/l	<20	APHA 2540 D	13.8
3.	B.O.D for 3 days @ 27°C	mg/l	<10	APHA 5210 B	8.0
4.	COD	mg/l	<50	APHA 5220 C	40
5.	Oil & Grease	mg/l		APHA 5520 B	1.8

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