



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
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/August-A-01/19
Name of Company : Ardent Steel Ltd.
Sample Description : Ambient Air
Date of Monitoring : 05.08.2019
Date of Receiving : 06.08.2019
Date of Analysis : 07.08.2019
Sample Collected by : Santosh Kumar Mohanty

AMBIENT AIR QUALITY TEST REPORT (24 HOURLY AVERAGE)

Sl. No.	LOCATION	MONITORING REPORT					
		PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM _{2.5} ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)	CO (mg/m^3)	NH ₃ ($\mu\text{g}/\text{m}^3$)
1	At the boundary near the water harvesting pond (East Direction)	57.2	28.2	11.1	15.6	0.5	<20
2	At the Boundary near ESP (South Direction)	55.4	27.6	10.8	14.8	0.4	<20
3	At the Boundary near Coal Fines Stock yard (North Direction)	60.1	29.8	11.6	15.9	0.5	<20
NAAQ Standard		100 ($\mu\text{g}/\text{m}^3$)	60 ($\mu\text{g}/\text{m}^3$)	80 ($\mu\text{g}/\text{m}^3$)	80 ($\mu\text{g}/\text{m}^3$)	4.0 (mg/m^3)	400 ($\mu\text{g}/\text{m}^3$)

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Notes:



Seal of Laboratory

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E-mail- cemc_consultancy@yahoo.co.in, cemc122@gmail.com, website: www.cemc.in, Landline: 0674-2360344.**

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101,
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Reference No : CEMC/ASL/August -A-02/19
Name of Company : Ardent Steel Ltd.
Sample Description : Fugitive Air
Date of Monitoring : 05.08.2019
Date of Receiving : 06.08.2019
Date of Analysis : 07.08.2019
Sample Collected by : Santosh Kumar Mohanty

FUGITIVE EMISSION TEST REPORT

Sl. No.	LOCATION	RESULT	
		RSPM ($\mu\text{g}/\text{m}^3$)	SPM ($\mu\text{g}/\text{m}^3$)
1	Proportioning System (Ash & Coke Fines Bunker)	171	915
2	Raw Material Transfer point of Mixture (Mixture Building)	142	877
3	Ball Mill (Cool Grinding)	161	894
4	Ball Mill (Flux & Coke Grinding)	146	882
5	Finished Product Transfer points and plant de-dusting system	155	856
6	Travelling Grate & Rotary Kiln	152	864
MoEF Standard		--	2000*

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


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Reference No : CEMC/ASL/August -N-01/19
Name of Company : Ardent Steel Ltd.
Sample Description : Noise Monitoring Report
Date of Monitoring : 05.08.2019
Sample Collected by : Santosh Kumar Mohanty

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)	72.8	68.4
02	Raw Material Transfer point of Mixture (Mixture Building)	72.1	67.2

NATIONAL STANDARD NOISE LEVEL

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

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Reference No : CEMC/ASL/August -ST-01/19
Name of Company : Ardent Steel Ltd.
Sample Description : Stack Monitoring
Date of Monitoring : 05.08.2019
Date of Receiving : 06.08.2019
Date of Analysis : 07.08.2019
Sample Collected by : Santosh Kumar Mohanty
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	410	53.4

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Reference No : CEMC/ASL/August -GW-01/19
Name of Company : Ardent Steel Ltd.
Sample Description : Ground Water
Date of Monitoring : 05.08.2019
Date of Receiving : 06.08.2019
Date of Analysis : 07.08.2019
Sample Collected by : Santosh Kumar Mohanty
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	6.56
6	Total Dissolved Solid	mg/l	500	2000	94.0
7	Alkalinity as CaCO ₃	mg/l	200	600	47.0
8	Total Hardness as CaCO ₃	mg/l	200	600	52.0
9	Iron as Fe	mg/l	0.3	No Relaxation	0.07
10	Nitrate as NO ₃ ⁻ -N	mg/l	45	No Relaxation	0.28
11	Sulphate as SO ₄	mg/l	200	400	2.2
12	Fluoride as F	mg/l	1.0	1.5	<0.05
13	Calcium as Ca	mg/l	75	200	13.63
14	Chloride as Cl ⁻	mg/l	250	1000	6.2

N.B: AL – Agreeable

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Reference No : CEMC/ASL/August -SW-01/19
Name of Company : Ardent Steel Ltd.
Sample Description : Surface Water
Date of Sampling : 05.08.2019
Date of Receiving : 06.08.2019
Date of Analysis : 07.08.2019
Sample Collected by : Santosh Kumar Mohanty
Sample Location : Reservoir

SURFACE WATER TEST REPORT

Sl. No	Parameter	Unit	GSR 422E Standards	Result
1	Colour	Hazen	--	30
2	Odour	-	--	U/O
3	pH Value @ 25°C	-	5.5-9.0	7.36
4	Total Dissolved Solid	mg/l	2100	247
5	Iron as Fe	mg/l	3.0	0.36
6	Sulphate as SO ₄	mg/l	1000	8.1
7	Nitrate as NO ₃ ⁻ -N	mg/l	50	5.9
8	Boron as B	mg/l	2.0	0.18
9	BOD for 3 days @ 27°C	mg/l	30	2.2
10	COD	mg/l	250	14

N.B: U/O- Un-objectionable

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