



CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT.

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/April-A-01/19
Name of Company : Ardent Steel Ltd.
Sample Description : Ambient Air
Date of Monitoring : 02.04.2019
Date of Receiving : 03.04.2019
Date of Analysis : 03.04.2019
Sample Collected by : Santosh Kumar Mohapatra

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)	71.6	40.1	14.1	18.6	0.5	<20
2	At the Boundary near ESP (South Direction)	69.4	39.3	14.7	18.5	0.5	<20
3	At the Boundary near Coal Fines Stock yard (North Direction)	74.1	41.3	14.9	18.7	0.6	<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:



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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/April -A-02/19
 Name of Company : Ardent Steel Ltd.
 Sample Description : Fugitive Air
 Date of Monitoring : 02.04.2019
 Date of Receiving : 03.04.2019
 Date of Analysis : 03.04.2019
 Sample Collected by : Santosh Kumar Mohapatra

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)	404	1188
2	Raw Material Transfer point of Mixture (Mixture Building)	362	1082
3	Ball Mill (Cool Grinding)	398	1146
4	Ball Mill (Flux & Coke Grinding)	308	1009
5	Finished Product Transfer points and plant de-dusting system	302	1021
6	Travelling Grate & Rotary Kiln	378	1046
MoEF Standard		--	2000*

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

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Reference No : CEMC/ASL/April -N-01/19
Name of Company : Ardent Steel Ltd.
Sample Description : Noise Monitoring Report
Date of Monitoring : 02.04.2019
Date of Receiving : 03.04.2019
Date of Analysis : 03.04.2019
Sample Collected by : Santosh Kumar Mohapatra

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)	72.8	65.3

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/April -SE-01/19

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Name of Company : **Ardent Steel Ltd.**
Sample Description : **Stack Monitoring**
Date of Monitoring : **02.04.2019**
Date of Receiving : **03.04.2019**
Date of Analysis : **03.04.2019**
Sample Collected by : **Santosh Kumar Mohapatra**
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	417	59.8

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Reference No : CEMC/ASL/April -GW-01/19
 Name of Company : Ardent Steel Ltd.
 Sample Description : Ground Water
 Date of Monitoring : 02.04.2019
 Date of Receiving : 03.04.2019
 Date of Analysis : 03.04.2019
 Sample Collected by : Santosh Kumar Mohapatra
 Sample Location : RO Water

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	6.08
6	Total Dissolved Solid	mg/l	500	2000	123.5
7	Alkalinity as CaCO ₃	mg/l	200	600	70
8	Total Hardness as CaCO ₃	mg/l	200	600	67.8
9	Iron as Fe	mg/l	0.3	No Relaxation	0.07
10	Nitrate as NO ₃ ⁻ -N	mg/l	45	No Relaxation	0.32
11	Sulphate as SO ₄	mg/l	200	400	3.8
12	Fluoride as F	mg/l	1.0	1.5	<0.05
13	Calcium as Ca	mg/l	75	200	17.8
14	Chloride as Cl ⁻	mg/l	250	1000	7.9

GROUND WATER TEST REPORT

N.B: AL – Agreeable

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Reference No : CEMC/ASL/April -SW-01/19
Name of Company : Ardent Steel Ltd.
Date of Sampling : 02.04.2019
Sample Description : Surface Water
Date of Receiving : 03.04.2019
Date of Analysis : 03.04.2019
Sample Collected by : Santosh Kumar Mohapatra
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	7.26
4	Total Dissolved Solid	mg/l	2100	212.6
5	Iron as Fe	mg/l	3.0	0.39
6	Sulphate as SO ₄	mg/l	1000	7.9
7	Nitrate as NO ₃ -N	mg/l	50	10.2
8	Boron as B	mg/l	2.0	0.31
9	BOD for 3 days @ 27°C	mg/l	30	2.4
10	COD	mg/l	250	20

N.B: U/O- Un-objectionable

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