



# 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/Feb-A-01/19  
Name of Company : Ardent Steel Ltd.  
Sample Description : Ambient Air  
Date of Monitoring : 08.02.2019  
Date of Receiving : 09.02.2019  
Date of Analysis : 09.02.2019  
Sample Collected by : Santosh Kumar Mohapatra

## AMBIENT AIR QUALITY TEST REPORT (24 HOURLY AVERAGE)

Sl. No.	LOCATION	MONITORING REPORT					
		PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>x</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )	NH <sub>3</sub> ( $\mu\text{g}/\text{m}^3$ )
1	At the boundary near the water harvesting pond (East Direction)	73.4	39.1	13.9	18.2	0.42	<20
2	At the Boundary near ESP (South Direction)	72.7	38.5	13.6	17.8	0.41	<20
3	At the Boundary near Coal Fines Stock yard (North Direction)	71.3	38.2	13.4	17.3	0.39	<20
<b>NAAQ Standard</b>		<b>100</b> ( $\mu\text{g}/\text{m}^3$ )	<b>60</b> ( $\mu\text{g}/\text{m}^3$ )	<b>80</b> ( $\mu\text{g}/\text{m}^3$ )	<b>80</b> ( $\mu\text{g}/\text{m}^3$ )	<b>4.0</b> ( $\text{mg}/\text{m}^3$ )	<b>400</b> ( $\mu\text{g}/\text{m}^3$ )

  
**Authorized Signatory**  
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Reference No : CEMC/ASL/Feb-A-02/19  
Name of Company : Ardent Steel Ltd.  
Sample Description : Fugitive Air  
Date of Monitoring : 08.02.2019  
Date of Receiving : 09.02.2019  
Date of Analysis : 09.02.2019  
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)	514	1106
2	Raw Material Transfer point of Mixture (Mixture Building)	466	1098
3	Ball Mill (Cool Grinding)	482	1102
4	Ball Mill (Flux & Coke Grinding)	521	1208
5	Finished Product Transfer points and plant de-dusting system	492	996
6	Travelling Grate & Rotary Kiln	502	1032
<b>MoEF Standard</b>		<b>--</b>	<b>2000*</b>

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

  
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Reference No : CEMC/ASL/Feb-N-01/19  
 Name of Company : Ardent Steel Ltd.  
 Sample Description : Noise Monitoring Report  
 Date of Monitoring : 08.02.2019  
 Date of Receiving : 09.02.2019  
 Date of Analysis : 09.02.2019  
 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)	72.7	68.2
02	Raw Material Transfer point of Mixture (Mixture Building)	70.4	63.8

## 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

*Handwritten Signature*

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Reference No : CEMC/ASL/Feb-SE-01/19  
Name of Company : Ardent Steel Ltd.  
Sample Description : Stack Monitoring  
Date of Monitoring : 08.02.2019  
Date of Receiving : 09.02.2019  
Date of Analysis : 09.02.2019  
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 <sup>3</sup>
			Result
01	ESP	394	59.1

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Reference No : CEMC/ASL/Feb GW-01/19  
Name of Company : Ardent Steel Ltd.  
Sample Description : Ground Water  
Date of Sampling : 08.02.2019  
Date of Receiving : 09.02.2019  
Date of Analysis : 09.02.2019  
Sample Collected by : Santosh Kumar Mohapatra  
Sample Location : Office Site Bore Well

## 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	7.05
6	Total Dissolved Solid	mg/l	500	2000	337
7	Alkalinity as CaCO <sub>3</sub>	mg/l	200	600	84
8	Total Hardness as CaCO <sub>3</sub>	mg/l	200	600	130
9	Iron as Fe	mg/l	0.3	No Relaxation	0.28
10	Nitrate as NO <sub>3</sub> <sup>-</sup> -N	mg/l	45	No Relaxation	3.6
11	Sulphate as SO <sub>4</sub>	mg/l	200	400	19.6
12	Fluoride as F	mg/l	1.0	1.5	0.21
13	Calcium as Ca	mg/l	75	200	32.06
14	Chloride as Cl <sup>-</sup>	mg/l	250	1000	41.3

N.B: AL – Agreeable

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Reference No	:	<b>CEMC/ASL/Feb SW-01/19</b>
Name of Company	:	<b>Ardent Steel Ltd.</b>
Date of Sampling	:	<b>08.02.2019</b>
Sample Description	:	<b>Surface Water</b>
Date of Receiving	:	<b>09.02.2019</b>
Date of Analysis	:	<b>09.02.2019</b>
Sample Collected by	:	<b>Santosh Kumar Mohapatra</b>
Sample Location	:	<b>Reservoir</b>

## SURFACE WATER TEST REPORT

Sl. No	Parameter	Unit	GSR 422E Standards	Result
1	Colour	Hazen	--	10
2	Odour	-	--	U/O
3	pH Value @ 25°C	-	5.5-9.0	6.99
4	Total Dissolved Solid	mg/l	2100	171
5	Iron as Fe	mg/l	3.0	0.98
6	Sulphate as SO <sub>4</sub>	mg/l	1000	39.4
7	Nitrate as NO <sub>3</sub> <sup>-</sup> -N	mg/l	50	17.3
8	Boron as B	mg/l	2.0	0.4
9	BOD for 3 days @ 27°C	mg/l	30	3.0
10	COD	mg/l	250	34

**N.B:** U/O- Un-objectionable

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