

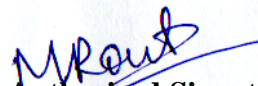
# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

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/Oct-A-01/19**  
 Name of Company : **Ardent Steel Ltd.**  
 Sample Description : **Ambient Air**  
 Date of Monitoring : **09.10.2019**  
 Date of Receiving : **10.10.2019**  
 Date of Analysis : **11.10.2019**  
 Sample Collected by : **Mr. B Samantaray**

## 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)	60.6	31.6	12.2	16.4	0.5	<20
2	At the Boundary near ESP (South Direction)	58.4	28.2	11.8	15.9	0.4	<20
3	At the Boundary near Coal Fines Stock yard (North Direction)	63.5	34.1	12.6	16.8	0.5	<20
4	Near Ball mill, Iron ore fines stock yard	69.8	37.2	12.5	16.4	0.5	<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**  
 Notes:

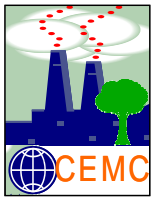


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**E-mail- cemc\_consultancy@yahoo.co.in, cemc122@gmail.com, website: www.cemc.in, Landline: 0674-2360344.**

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101,  
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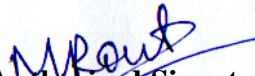
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Reference No : CEMC/ASL/Oct-F-01/19  
Name of Company : Ardent Steel Ltd.  
Sample Description : Fugitive Air  
Date of Monitoring : 09.10.2019  
Date of Receiving : 10.10.2019  
Date of Analysis : 11.10.2019  
Sample Collected by : Mr. B Samantaray

## 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)	178	948
2	Raw Material Transfer point of Mixture (Mixture Building)	130	844
3	Ball Mill (Cool Grinding)	156	902
4	Ball Mill (Flux & Coke Grinding)	152	894
5	Finished Product Transfer points and plant de-dusting system	148	886
6	Travelling Grate & Rotary Kiln	140	872
<b>MoEF Standard</b>		<b>--</b>	<b>2000*</b>

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

  
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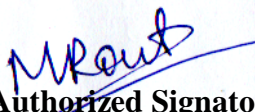
Reference No : CEMC/ASL/Oct -N-01/19  
Name of Company : Ardent Steel Ltd.  
Sample Description : Noise Monitoring Report  
Date of Monitoring : 09.10.2019  
Sample Collected by : Mr. B Samantaray

## 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)	73.8	69.4
02	Raw Material Transfer point of Mixture (Mixture Building)	71.8	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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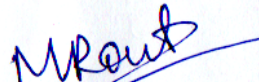
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Reference No : CEMC/ASL/Oct -ST-01/19  
Name of Company : Ardent Steel Ltd.  
Sample Description : Stack Monitoring  
Date of Monitoring : 09.10.2019  
Date of Receiving : 10.10.2019  
Date of Analysis : 11.10.2019  
Sample Collected by : Mr. B Samantaray  
Stack Height : 30m

## STACK EMISSION REPORT

Sl. No.	Location of Sampling	Flue Gas Temp. in K	Concentration of Particulate Matter (PM) in mg/Nm <sup>3</sup>
			Result
01	ESP	412	50.7

  
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Notes:

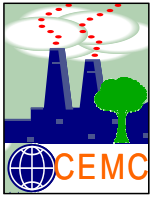


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Reference No : CEMC/ASL/Oct -GW-01/19  
 Name of Company : Ardent Steel Ltd.  
 Sample Description : Ground Water  
 Date of Monitoring : 09.10.2019  
 Date of Receiving : 10.10.2019  
 Date of Analysis : 10.10.2019  
 Sample Collected by : Mr. B Samantaray  
 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	6.75
6	Total Dissolved Solid	mg/l	500	2000	93.0
7	Alkalinity as CaCO <sub>3</sub>	mg/l	200	600	48.0
8	Total Hardness as CaCO <sub>3</sub>	mg/l	200	600	54.0
9	Iron as Fe	mg/l	0.3	No Relaxation	0.09
10	Nitrate as NO <sub>3</sub> <sup>-</sup> -N	mg/l	45	No Relaxation	0.28
11	Sulphate as SO <sub>4</sub>	mg/l	200	400	1.9
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 <sup>-</sup>	mg/l	250	1000	5.2

N.B: AL – Agreeable

  
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Reference No : CEMC/ASL/Oct -SW-01/19  
Name of Company : Ardent Steel Ltd.  
Sample Description : Surface Water  
Date of Sampling : 09.10.2019  
Date of Receiving : 10.10.2019  
Date of Analysis : 10.10.2019  
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	7.38
4	Total Dissolved Solid	mg/l	2100	214
5	Iron as Fe	mg/l	3.0	0.34
6	Sulphate as SO <sub>4</sub>	mg/l	1000	7.1
7	Nitrate as NO <sub>3</sub> <sup>-</sup> -N	mg/l	50	4.8
8	Boron as B	mg/l	2.0	0.16
9	BOD for 3 days @ 27°C	mg/l	30	2.4
10	COD	mg/l	250	14

N.B: U/O- Un-objectionable

  
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