

# **MONTHLY ENVIRONMENTAL MONITORING REPORT**

**[ For the Month of January - 2017 ]**

*For*

**ARDENT STEEL LTD**

At/Po-Phuljhar, Via-Suakati, Dist-Keonjhar  
ODISHA

Prepared By

**Centre for Envotech & Management Consultancy Pvt. Ltd.**

( An ISO 9001-2008 & BS OHSAS 18001:2007 Certified Company,  
Empanelled with OCCL, Govt. of Odisha, OSPCB as Category 'A' Consultant Organization  
Accredited by NABET, Quality Council of India for EIA Studies as 'A' Category Consultant Organization.)



Regd Off: N5/305, IRC Village, Nayapalli, Bhubaneswar, Odisha,  
Tele Fax: 0674 -2360344, website: [www.cemc.in](http://www.cemc.in)  
E-mail: [cemc\\_consultancy@yahoo.co.in](mailto:cemc_consultancy@yahoo.co.in), [cemc122@gmail.com](mailto:cemc122@gmail.com)



# 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.

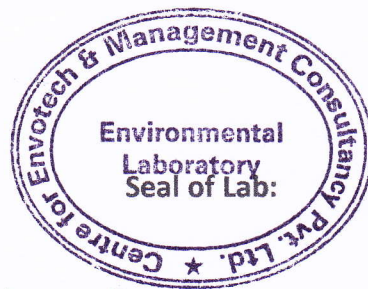
Reference No : CEMC/ASL/NOV A-01/17  
Name of Company : Ardent Steel Ltd  
Sample Description : Ambient Air  
Date of Monitoring : 24-01-2017  
Date of Receipt : 27-01-2017  
Date of Start Analysis : 27-01-2017  
Sample Collected by : B.K Samantaray  
Environmental Condition at Lab : Temp.25± 2<sup>o</sup>C Humidity 50 ± 10 %

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

Sl.No.	LOCATION	MONITORING REPORT					
		PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )	NH <sub>3</sub> (µg/m <sup>3</sup> )
1	At the boundary near the water harvesting pond (East Direction)	74.8	39.2	13.4	19.8	<1	BDL
2	At the Boundary near ESP (South Direction)	82.4	42.8	15.8	21.6	<1	BDL
3	At the Boundary near Coal Fines Stock yard (North Direction)	81.6	41.6	17.2	23.4	<1	BDL
	<b>NAAQ Standard</b>	<b>100</b> (µg/m <sup>3</sup> )	<b>60</b> (µg/m <sup>3</sup> )	<b>80</b> (µg/m <sup>3</sup> )	<b>80</b> (µg/m <sup>3</sup> )	<b>4.0</b> (mg/m <sup>3</sup> )	<b>400</b> (µg/m <sup>3</sup> )

*M.R.K*  
Authorized Signatory:

Notes:



- The results relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

*Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.*

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
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,

E-mail: [cemclab@yahoo.in](mailto:cemclab@yahoo.in), Mobile: 7752014842



# 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/SE A-02/17  
Name of Company : Ardent Steel Ltd  
Sample Description : Ambient Air  
Date of Start Monitoring : 24-01-2017  
Date of Receipt : 27-01-2017  
Date of Start Analysis : 27-01-2017  
Sample Collected by : B.K Samantaray  
Environmental Condition at Lab : Temp.25+ 2<sup>o</sup>C Humidity 50 + 10 %

## FUGITIVE EMISSION TEST REPORT (24 HOURLY AVERAGE)

Sl.No.	LOCATION	MONITORING REPORT	
		RSPM ( $\mu\text{g}/\text{m}^3$ )	SPM ( $\mu\text{g}/\text{m}^3$ )
1	Proportioning System (Ash & Coke Fines Bunker)	141	358
2	Raw Material Transfer point of Mixture (Mixture Building)	118	326
3	Ball Mill (Cool Grinding)	109	324
4	Ball Mill (Flux & Coke Grinding)	98	314
5	Finished Product Transfer points and plant de-dusting system	124	332
6	Travelling Grate & Rotary Kiln	92	299
	<b>NAAQ Standard</b>	<b>150 (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>500 (<math>\mu\text{g}/\text{m}^3</math>)</b>

*Mant*  
Authorized Signatory:

Notes:



- The results relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826

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,

E-mail: cemclab@yahoo.in, Mobile: 7752014842



# 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.

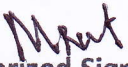
Reference No : CEMC/ASL/ N-01/17  
Name of Company : Ardent Steel Ltd  
Sample Description : Noise Monitoring Report  
Date of Monitoring : 24-01-2017  
Date of Receipt : 24-01-2017  
Sample Collected by : B.K Samantaray  
Environmental Condition at Lab : Temp.25± 2°C Humidity 50 ± 10 %

## NOISE LEVEL STUDY REPORT

Si. No.	Location	Noise Level In Day Time dB(A)	Noise Level In Night Time dB(A)
01	Ball Mill (Cool Grinding)	74.3	66.6
02	Raw Material Transfer point of Mixture (Mixture Building)	73.8	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

  
Authorized Signatory:



Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
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,

E-mail: [cemclab@yahoo.in](mailto:cemclab@yahoo.in), Mobile: 7752014842



# 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/ SE S-01/17  
Name of Company : Ardent Steel Ltd.  
Sample Description : Stack Monitoring  
Date of Monitoring : 24-01-2017  
Date of Receipt : 27-01-2017  
Date of Start Analysis : 27-01-2017  
Sample Collected by : B.K Samantaray  
Environmental Condition at Lab : Temp.25± 2<sup>o</sup>C Humidity 50 ±10 %  
Stack Height : 30m

## STACK AIR QUALITY REPORT

Sl. No.	Location of Sampling	Flue Gas Temp. in <sup>o</sup> K	Concentration of Particulate Matter (PM) in mg/Nm <sup>3</sup>
			Result
01	ESP	441	43

  
Authorized Signatory:



### Notes:

- The results relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
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,

E-mail: [cemclab@yahoo.in](mailto:cemclab@yahoo.in), Mobile: 7752014842



# 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/SE GW-01/17  
Name of Company : Ardent Steel Ltd.  
Date of Sampling : 25-01-2017  
Sample Description : Ground Water  
Date of Receipt : 27-01-2017  
Date of Start Analysis : 27-01-2017  
Sample Collected by : B.K Samantatray  
Sample Location : Office Site Bore Well

## GROUND WATER TEST REPORT

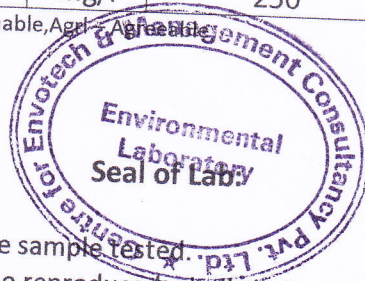
Sl.No	PARAMETER	UNIT	Desired Limit Of drinking water (BIS:10500:2012)	Permissible Limit Of drinking water (BIS:10500:2012)	Result
1	Colour	Hazen	5	15	C/L
2	Odour	-	Agreeable	Agreeable	AL
3	Taste	-	Agreeable	-	AL
4	Turbidity	NTU	1	5	<0.05
5	pH Value @ 25°C	-	6.5-8.5	No Relaxation	7.3
6	Total Dissolved Solid	mg/l	500	2000	444
7	Alkalinity as CaCO <sub>3</sub>	mg/l	200	600	120
8	Total Hardness as CaCO <sub>3</sub>	mg/l	200	600	160
9	Iron as Fe	mg/l	0.3	No Relaxation	0.16
10	Nitrate as NO <sub>3</sub> <sup>-</sup> -N	mg/l	45	No Relaxation	4.2
11	Sulphate as SO <sub>4</sub>	mg/l	200	400	<5
12	Fluoride as F	mg/l	1.0	1.5	0.2
13	Calcium as Ca	mg/l	75	200	52
14	Chloride as Cl <sup>-</sup>	mg/l	250	1000	49

N.B:C/L- Colorless, U/O- Un-objectionable, Agr- Agreeable

  
Authorized Signatory

### Notes:

- > The result relate only to the sample tested.
- > This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- > The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- > This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.



Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
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,  
E-mail: [cemclab@yahoo.in](mailto:cemclab@yahoo.in), Mobile: 7752014842



# 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/SE SW-02/17  
Name of Company : Ardent Steel Ltd.  
Date of Sampling : 25-01-2017  
Sample Description : Surface Water  
Date of Receipt : 27-01-2017  
Date of Start Analysis : 27-01-2017  
Sample Collected by : B.K Samantaray  
Sample Location : Reservoir

## SURFACE WATER TEST REPORT

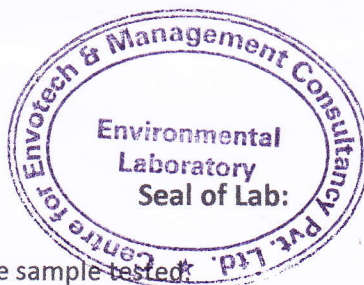
Sl.No	PARAMETER	UNIT	GSR 422E STANDARDS	Result
1	Colour	Hazen	--	C/L
2	Odour	-	--	U/O
3	pH Value @ 25°C	-	5.5-9.0	6.7
4	Total Dissolved Solid	mg/l	2100	288
5	Iron as Fe	mg/l	3.0	0.8
6	Sulphate as SO <sub>4</sub>	mg/l	1000	92
7	Nitrate as NO <sub>3</sub> <sup>-</sup> -N	mg/l	50	9.2
8	Boron as B	mg/l	2.0	<0.2
9	BOD for 3 days @ 27°C	mg/l	30	2.6
10	COD	mg/l	250	14

N.B:U/O- Un-objectionable,C/L – Colorless,

  
Authorized Signatory

### Notes:

- The result relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.



Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
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,  
E-mail: cemclab@yahoo.in, Mobile: 7752014842