



ARDENT STEEL LIMITED

CIN - U27310CT2007PLC007671

Ref: ASL/Pollution /2017-18

Dt.11.05.2017

The Regional Officer,
State Pollution Control Board,
Keonjhar Region,
Keonjhar

Sub : Submission of Monthly Environmental Monitoring Report.

Dear Sir,

Enclosed please find herewith the copy of the monthly Environmental Monitoring Report of our industry for the month of **April,2017** conducted by our authorized Consultant viz. M/s Centre for Envotech and Management Consultancy Pvt. Ltd, BBSR for your reference and record.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours faithfully,
For **ARDENT STEEL LIMITED**

NARASINGH SAHOO
MANAGER (CORPORATE AFFAIRS)

Encl: As above

ENVIRONMENTAL MONITORING REPORT

Of

M/s ARDENT STEEL LTD

Keonjhar, Odisha

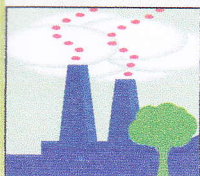
APRIL-2017

Centre For Envotech and Management Consultancy Pvt. Ltd.
Environmental Laboratory

(AN ISO: 9001: 2008 and 18001: 2007 certified company, Empanelled with SPCB, Odisha)

MoEF & CC Govt. of India Recognised Environmental Laboratory

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar – 752101, Odisha





CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

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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/APR SW-01/17
Name of Company : Ardent Steel Ltd.
Date of Sampling : 25-04-2017
Sample Description : Surface Water
Date of Receipt : 26-04-2017
Date of Start Analysis : 26-04-2017
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 | 6.5 |
| 4 | Total Dissolved Solid | mg/l | 2100 | 301 |
| 5 | Iron as Fe | mg/l | 3.0 | 0.81 |
| 6 | Sulphate as SO ₄ | mg/l | 1000 | 105 |
| 7 | Nitrate as NO ₃ ⁻ -N | mg/l | 50 | 11.1 |
| 8 | Boron as B | mg/l | 2.0 | <0.2 |
| 9 | BOD for 3 days @ 27°C | mg/l | 30 | 3.8 |
| 10 | COD | mg/l | 250 | 20 |

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

Authorized Signatory

Notes:

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Regd. Office: 1st 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,
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Reference No : CEMC/ASL/APR GW-01/17
Name of Company : Ardent Steel Ltd.
Date of Sampling : 25-04-2017
Sample Description : Ground Water
Date of Receipt : 26-04-2017
Date of Start Analysis : 26-04-2017
Sample Collected by : B.K Samantatray
Sample Location : Office Site Bore Well

GROUND WATER TEST REPORT

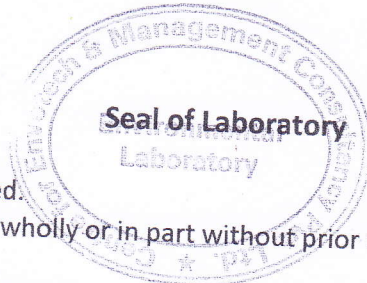
| Sl.No | PARAMETER | UNIT | Desired Limit of drinking water (BIS:10500:2012) | Permissible Limit of drinking water (BIS:10500:2012) | Result |
|-------|--|-------|--|--|--------|
| 1 | Colour | Hazen | 5 | 15 | C/L |
| 2 | Odour | - | Agreeable | Agreeable | AL |
| 3 | Taste | - | Agreeable | - | AL |
| 4 | Turbidity | NTU | 1 | 5 | <0.05 |
| 5 | pH Value @ 25°C | - | 6.5-8.5 | No Relaxation | 7.65 |
| 6 | Total Dissolved Solid | mg/l | 500 | 2000 | 420 |
| 7 | Alkalinity as CaCO ₃ | mg/l | 200 | 600 | 138 |
| 8 | Total Hardness as CaCO ₃ | mg/l | 200 | 600 | 155 |
| 9 | Iron as Fe | mg/l | 0.3 | No Relaxation | 0.17 |
| 10 | Nitrate as NO ₃ ⁻ -N | mg/l | 45 | No Relaxation | 3.9 |
| 11 | Sulphate as SO ₄ | mg/l | 200 | 400 | 2.1 |
| 12 | Fluoride as F | mg/l | 1.0 | 1.5 | 0.3 |
| 13 | Calcium as Ca | mg/l | 75 | 200 | 60 |
| 14 | Chloride as Cl ⁻ | mg/l | 250 | 1000 | 61 |

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

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Reference No : CEMC/ASL/APR SE S-01/17
Name of Company : Ardent Steel Ltd.
Sample Description : Stack Monitoring
Date of Monitoring : 25-04-2017
Date of Receipt : 26-04-2017
Date of Start Analysis : 26-04-2017
Sample Collected by : B.K Samantaray
Environmental Condition at Lab : Temp.25± 2°C Humidity 50 ±10 %
Stack Height : 30m

STACK AIR QUALITY REPORT

| Sl. No. | Location of Sampling | Flue Gas Temp. in °K | Concentration of Particulate Matter (PM) in mg/Nm ³ |
|---------|----------------------|----------------------|--|
| | | | Result |
| 01 | ESP | 446 | 33 |

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Reference No : CEMC/ASL/APR N-01/17
Name of Company : Ardent Steel Ltd
Sample Description : Noise Monitoring Report
Date of Monitoring : 24-04-2017
Date of Receipt : 26-04-2017
Sample Collected by : B.K Samantaray
Environmental Condition at Lab : Temp.25± 2°C Humidity 50 ± 10 %

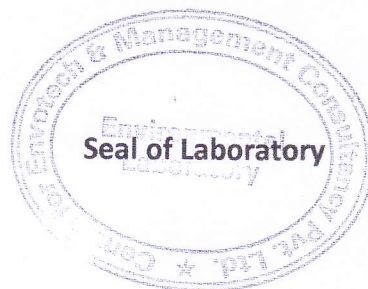
NOISE LEVEL STUDY REPORT

| Si. No. | Location | Noise Level In Day Time dB(A) | Noise Level In Night Time dB(A) |
|---------|--|-------------------------------------|---------------------------------------|
| 01 | Ball Mill (Cool Grinding) | 73.1 | 68.2 |
| 02 | Raw Material Transfer point of Mixture (Mixture Building) | 72.5 | 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/APR F-01/17
Name of Company : Ardent Steel Ltd
Sample Description : Ambient Air
Date of Start Monitoring : 24-04-2017
Date of Receipt : 26-04-2017
Date of Start Analysis : 26-04-2017
Sample Collected by : B.K Samantaray
Environmental Condition at Lab : Temp.25+ 2⁰C 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) | 159 | 378 |
| 2 | Raw Material Transfer point of Mixture (Mixture Building) | 135 | 346 |
| 3 | Ball Mill (Cool Grinding) | 125 | 339 |
| 4 | Ball Mill (Flux & Coke Grinding) | 110 | 336 |
| 5 | Finished Product Transfer points and plant de-dusting system | 131 | 360 |
| 6 | Travelling Grate & Rotary Kiln | 101 | 290 |
| | NAAQ Standard | 150 ($\mu\text{g}/\text{m}^3$) | 500 ($\mu\text{g}/\text{m}^3$) |

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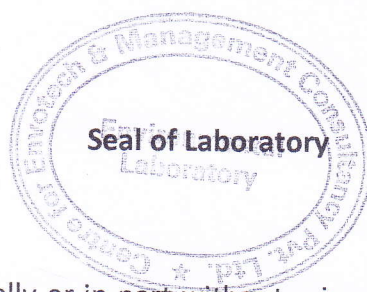
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Reference No : CEMC/ASL/APR A-01/17
Name of Company : Ardent Steel Ltd
Sample Description : Ambient Air
Date of Monitoring : 24-04-2017
Date of Receipt : 26-04-2017
Date of Start Analysis : 26-04-2017
Sample Collected by : B.K Samantaray
Environmental Condition at Lab : Temp.25+ 2⁰C Humidity 50 + 10 %

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) | 80.9 | 44.5 | 15.2 | 20.5 | <1 | BDL |
| 2 | At the Boundary near ESP (South Direction) | 88.5 | 47.5 | 18.2 | 23.5 | <1 | BDL |
| 3 | At the Boundary near Coal Fines Stock yard (North Direction) | 87.6 | 45.5 | 14.8 | 21.5 | <1 | BDL |
| | 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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ACCREDITATION AND EMPANELMENT

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Empanelled with:

- State Pollution Control Board (SPCB), Odisha as Environment Consultant under category –'A'.
- Orissa Construction Corporation Limited (OCCL) as Associated Consultant for carrying out EIA, FDP, Preparation of Wildlife Management Plan, GIS map, Socioeconomic survey, DGPS & ETS survey.
- Orissa Space Application Centre (ORSAC) for carrying out DGPS & ETS survey.
- Office of the Principal Chief Conservator of Forest (Wildlife) & Chief Wildlife Warden [PCCF (Wildlife) & CWLW], Odisha for preparation of Site Specific Wildlife Management Plans.

Accredited by:

- NABET, QCI for EIA Studies as 'A' Category Consultant Organization.
- NABL Accreditation Lab.

Enlisted in:

- Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India) for carrying out EIA, Waste Management & Audit, Turnkey solution of ETP & STP, Site Specific Wildlife Conservation Plan & Forest Diversion Proposals.

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