

Manufacturer of Ferro Alloys

30th June, 2018

The Regional Officer (ECZ), Ministry of Environment, Forest & Climate Change, Regional Office (ECZ), Bunglow No. A-2, Shyamali Colony, Ranchi - 834 002

Subject: Regarding Compliance of Environmental Clearance conditions.

Reference: Environmental Clearance from Ministry of Environment & Forest, New Delhi vide F.No. J-11011/76/2011-IA-II-II(I) dated. 27.11.2012

Sir,

We have obtained environment clearance and NOC from the concerned authorities prior to starting the work at site. All mandatory clearances, authorizations and permission obtained prior to commissioning and operation of the plant. At present, our unit is under operation with Consent to Operate under Ref: PC/JSR/AIR/J-76/14/39564/B-195 dated. 19.01.2016 and valid up to 30.09.2020 received from Jharkhand State Pollution Control Board, Ranchi.

As per requirements of Environmental (Protection) Act 1986 and various conditions of the above mentioned Environmental Clearance, we are submitting the six monthly compliance reports with status for the period from 1st October to 31st March 2018 to the specified authorities. The same is enclosed for your information.

Thanks and Regards,

Sincerely yours

For Jamshedpur Minerals & Chemicals

(Shiv Kumar Agarwal)

Managing Partner

Encl: Compliance Report

Ambient Air and Noise Test Report - Annexure 1 Details of Social Welfare Activity -- Annexure 2

Environmental Statement for the period ending 31st March 2018.-- Annexure 3.

E14846149391N 1VR16974484614939 SP JAMSHEDPUR H.O (831601) Counter No:7,30/06/2018:13:31 TO: THE REG OFFIC, SHYAMLI COLONY PIN:834002, Doranda H.O. From: JSR MINERAL, SAMHARIA JSR Wt:70ons Amt:41.30(Cash)Tax;6.30 (Track on www.indiacost.cov. (Dial 1800 266 6868)



Manufacturer of Ferro Alloys

30th June, 2018

The Director, IA- Division (Industry - 1), Indira Paryavaran Bhawan, Ministry of Environment, Forest & CC, Jorbagh Road, Lodhi Road, New Delhi - 110003

Subject : Regarding Compliance of Environmental Clearance conditions.

Reference: Environmental Clearance from Ministry of Environment & Forest, New Delhi vide F.No. J-11011/76/2011-IA-II-II(I) dated. 27.11.2012

Sir,

We have obtained environment clearance and NOC from the concerned authorities prior to starting the work at site. All mandatory clearances, authorizations and permission obtained prior to commissioning and operation of the plant. At present, our unit is under operation with Consent to Operate under Ref: PC/JSR/AIR/J-76/14/39564/B-195 dated. 19.01.2016 and valid up to 30.09.2020 received from Jharkhand State Pollution Control Board, Ranchi.

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Ambient Air and Noise Test Report - Annexure 1
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Environmental Statement for the period ending 31st March 2018. - Annexure 3

ung 31st March 2018. - Annepure 3

EJ484624812IN IVR:6974484624812

SP JAMSHEDPUR H.O (831061) Counter No:7,36/06/2018,13:31 To:THE DIRECTOR LADIVIN,LODHI RD

PIN:110003, Lodi Road HO

Amt:70.80(Cash)Tax:10.80 <Track on www.indiapost.gov.in

(Dial 1800 266 6868)

#t:70gms

From: JSR MINERAL, SAMHARIA JSR



Manufacturer of Ferro Alloys

30th June, 2018

The Member Secretary,
Jharkhand State Pollution Control Board,
T.A.Division Building, Dhurwa,
Ranchi - 834004, Jharkhand

Subject: Regarding Compliance of Environmental Clearance conditions.

Reférence : Environmental Clearance from Ministry of Environment & Forest, New Delhi vide F.No. J-11011/76/2011-IA-II-II(I) dated. 27.11.2012

Sir,

We have obtained environment clearance and NOC from the concerned authorities prior to starting the work at site. All mandatory clearances, authorizations and permission obtained prior to commissioning and operation of the plant. At present, our unit is under operation with Consent to Operate under Ref: PC/JSR/AIR/J-76/14/39564/B-195 dated. 19.01.2016 and valid up to 30.09.2020 received from Jharkhand State Pollution Control Board, Ranchi.

As per requirements of Environmental (Protection) Act 1986 and various conditions of the above mentioned Environmental Clearance, we are submitting the six monthly compliance reports with status for the period from 1st October to 31st March 2018 to the specified authorities. The same is enclosed for your information.

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For Jamshedpur Minerals & Chemicals

(Shiv Kumar Agarwal)

Managing Partner

Encl : Compliance Report

Ambient Air and Noise Test Report - Annexure 1
Details of Social Welfare Activity -- Annexure 2

Environmental Statement for the period ending 31st March 2018.-- Annexure 3.

EJ484614911IN IVR:6974484614911

SP JAMSHEDPUR H.O (831861)
Counter No:7,30/86/2018;13:31
To:THE MEMBER SECRETARY, DHURVA
PIN:834881; Ranchi S.P.O.
From:JSR MINERAL, GAMHARIA JSR
Wt:65gms
Amt:41.38(Cash)Tax:6.38
(Track on www.indiagost.gov.in)
(Dial 1888 266.6868)
India Post



Manufacturer of Ferro Alloys

30th June, 2018

The Regional Officer,
Jharkhand State Pollution Control Board,
Adityapur, Jamshedpur, Jharkhand

Subject: Regarding Compliance of Environmental Clearance conditions.

Reference: Environmental Clearance from Ministry of Environment & Forest, New Delhi vide F.No. J-11011/76/2011-IA-II-II(I) dated. 27.11.2012

Sir,

We have obtained environment clearance and NOC from the concerned authorities prior to starting the work at site. All mandatory clearances, authorizations and permission obtained prior to commissioning and operation of the plant. At present, our unit is under operation with Consent to Operate under Ref: PC/JSR/AIR/J-76/14/39564/B-195 dated. 19.01.2016 and valid up to 30.09.2020 received from Jharkhand State Pollution Control Board, Ranchi.

As per requirements of Environmental (Protection) Act 1986 and various conditions of the above mentioned Environmental Clearance , we are submitting the six monthly compliance reports with status for the period from 1st October to 31st March 2018 to the specified authorities. The same is enclosed for your information.

Thanks and Regards,

Sincerely yours

For Jamshedpur Minerals & Chemicals

(Shiv Kumar Agarwal)

Managing Partner

Encl: Compliance Report

Ambient Air and Noise Test Report - Annexure 1
Details of Social Welfare Activity -- Annexure 2

Environmental Statement for the period ending 31st March 2018.-- Annexure 3.

EJ484614925IN IVR:6974484614925

SP JAMSHEDPUR H.D (831001)

Counter No:7,30/06/2018;13:31

To:THE REG OFFICER;ADP

PIN:831001; Jamshedpur H.O

From:ISR MINERAL;GAMHARIA JSR

wt:70gms

Amt:29.50(Cash)Tax:4,50

(Track on www.indiapost.gov.1n)

(Dial 1800 266 6868)

India Port



Manufacturer of Ferro Alloys

30th June, 2018

The Regional Officer, Jharkhand State Pollution Control Board, Adityapur, Jamshedpur, Jharkhand

Subject: Regarding Compliance of Environmental Clearance conditions.

Reference: Environmental Clearance from Ministry of Environment & Forest, New Delhi vide F.No. J-11011/76/2011-IA-II-II(I) dated. 27.11.2012

Sir,

We have obtained environment clearance and NOC from the concerned authorities prior to starting the work at site. All mandatory clearances, authorizations and permission obtained prior to commissioning and operation of the plant. At present, our unit is under operation with Consent to Operate under Ref: PC/JSR/AIR/J-76/14/39564/B-195 dated. 19.01.2016 and valid up to 30.09.2020 received from Jharkhand State Pollution Control Board, Ranchi.

As per requirements of Environmental (Protection) Act 1986 and various conditions of the above mentioned Environmental Clearance , we are submitting the six monthly compliance reports with status for the period from 1st October to 31st March 2018 to the specified authorities. The same is enclosed for your information.

Thanks and Regards,

Sincerely yours

For Jamshedpur Minerals & Chemicals

(Shiv Kumar Agarwal)

Managing Partner

Encl: Compliance Report

Ambient Air and Noise Test Report - Annexure 1
Details of Social Welfare Activity --Annexure 2

Environmental Statement for the period ending 31st March 2018.-- Annexure 3.

EJAB4614925IN IVR:6974484614925

SP JAMSHEDPUR H.O (831001)

Counter No:7,30/06/2018,13:31

To:THE REG OFFICER,ADP

PIN:831001, Jamshedpur H.O

From:JSR MINERAL,GAMHARIA JSR

Wt:70gms

Amt:29,30(Cash)Tax:4.50

(Track on www.indiapost.gov.in)
(Dial 1800 266 6868)

ENVIRONMENT CLEARANCE COMPLIANCE REPORT

| Environmental Clearance F.No.J-11011/76/2011-IA-II(I) dt.27.11.2012 | | | |
|---|--|--|--|
| CONDITION | COMPLIANCE/ STATUS (01.10.2017 - 31.03.2018) | | |
| SPECIFIC CONDITIONS | | | |
| i. No charcoal shall be used as fuel Pet coke shall be used as fuel instead of charcoal from unknown sources. | No fuel, charcoal or coke used in the production process. | | |
| ii. Continuous monitoring facilities for all the stacks and sufficient air pollution control equipments viz. fume extraction system with bag filters, ID fan and stack of adequate height to submerged arc furnace shall be provided to control emissions below 50 mg/Nm3 | The fume extraction system with had filters and cyclor | | |
| iii. The National Ambient Air Quality Standards issued by the Ministry vide G S.R. No. 826(E) dated 16th November, 2009 shall be followed. | Ambient Air Quality maintained within the permissible limits of National Standards. Monitoring reports attached as Annexure - 1 | | |
| iv. Secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed. | Secondary fugitive emissions well within the prescribed limit of CPCB. Guidelines / Code of Practice issued by the CPCB will be followed. Working under shed, water sprinklers and bag filters installed to control the secondary emissions if any. | | |

JAMSHEDPUR MINERALS & CHEMICALS

| 4 | vii. Efforts shall be made to make use of rain water harvested If needed; capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement should be met from other sources. | Rain water tank-cum-pit constructed for collection and use of water harvested for plant purposes or recharge to ground water. |
|---|---|--|
| | viii. Slag produced in Ferro Manganese (Fe-Mn) production shall be used in manufacture of Silica Manganese (Si-Mn). All the other ferro alloy slag shall be used in the preparation of building materials. | Slag produced used in the lining of vessel for manufacturing of Ferro Manganese. |
| | ix. No Ferro Chrome shall be manufactured without prior approval from the Ministry of Environment & Forests. | No Ferro Chrome manufacturing. We hereby confirm that we will not manufacture Ferro Chrome without the prior approval of MoEF. |
| | x. Risk and Disaster Management Plan along with the mitigation measures should be prepared and a copy submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB within 3 months of issue of environment clearance letter. | Risk and Disaster Management Plan submitted as per direction |

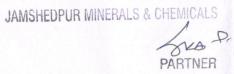
JAMSHEDPUR MINERALS & CHEMICALS

PARTNER

| xi. As proposed. Green belt should be developed in at least 33 % of the project area Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO. | The green belt developed around the proposed area. Plantation under progress and will be completed in the open area as per the guidelines in 1-2 years. |
|--|---|
| xii. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on locals need and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhubaneswar Implementation of such program shall be ensured accordingly in a time bound manner. | We will adhere to the plan and the guidelines of CPCB and MoEF. Local needs will be identified and social work taken up accordingly |
| xiii. The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking. mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project. | The unit has been installed and is in operation since 26.02.2015. No construction at present. |

GENERAL CONDITIONS:

| i.) The project authorities must strictly adhere to the stipulations made by the Jharkhand State Pollution Control Board and the State Government. | We adhere to the stipulations of JSPCB. Consent to operate obtained prior to commissioning of the plant and renewed regularly thereafter with compliance of conditions. |
|--|---|
| ii.) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment & Forests. | We confirm that no expansion or modification in the plant shall be carried out without prior approval of MoEF |
| iii.) The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19 th May, 1993 and standards prescribed from time to time. The State Pollution Control Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. | It will be strictly complied with |



| | 그리다 그 그 나는 사이를 하는 것이 되었다. 그리고 하는 사람들이 되었다면 하는 것이 되었다면 하는 것이 없는 것이 없는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하 |
|--|--|
| iv.) At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO2 and NOx are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be reaularly submitted to this Ministry including its Regional Office at Bhubaneswar and the SPCB/CPCB once in six months. | AAQ monitoring carried out. Reports enclosed as Annexure - 1 |
| v.) The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime). | It will be strictly complied with. Noise monitoring carried out and report attached as Annexure - 1 |
| vi.) Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act. | Occupational health surveillance of the workers done as per statue and records maintained. |
| vii.) The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table. | Rain water tank and RWH pits for entire premises constructed |
| viii.) The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc. | Being complied. Socio-economic development activities in the surrounding villages will be taken up after identification. |

JAMSHEDPUR MINERALS & CHEMICALS

STAR 2.

PARTNER

| ix.) Requisite amount shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose. | Capital cost of Rs. 29.50 lakhs and recurring cost of Rs. 2.50 lakhs earmarked towards cost of environment control measures. Environment protection measures implemented as per EIA/EMP and schedule. Recurring cost for Environmental Control measure is Rs. 6.89 Lacs in F-Y 2017-18 |
|--|---|
| x.) A copy of clearance letter shall be sent by the proponent to concernedPanchayat. Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent. | Letter sent to concerned offices/bodies. |
| xi.) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Bhubaneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely: PM10, SO, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain. | Complied. Status uploaded on the company website. Information also displayed on the board at the company main gate. |
| xii.) The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhubaneswar / CPCB / SPCB shall monitor the stipulated conditions. | Six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data regularly submitted to concerned authorities in June & December every year. Latest compliance report attached along with. |

xiii.) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Bhubaneswar by e-mail.

Being complied as directed. Environment Statement for the period ending March 2018 already submitted on 27.06.2018. Environmental Statement attached as Annexue 3.

xiv.) The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bhubaneswar.

Information to the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry has been published in Hindustan (Hindi) and Hindustan Times dated 03.12.2012 and copies submitted to concerned authorities. Copies submitted with earlier reports.

xv.) Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

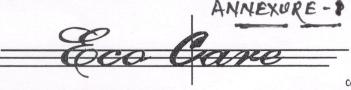
Finance for the project has been approved by :

1. Bank of Baroda, Main Branch, Jamshedpur on 6th April 2013.

The unit has been installed and under operation with Consent to Operate under Ref : PC/JSR/AIR/J-76/14/39564/B-195, dtd. 19.01.2016 and valid upto 30.09.2020.

JAMSHEDPUR MINERALS & CHEMICALS







Phone : (0341) 2252011 Fax : (0341) 2252011

rax . (0341) 2232

Specialised House on Environmental Monitoring, Analysis, Assessment & Management

ISO 9001: 2015 Certified, OHSAS 18001:2007 Certfied

E-mail : ecocareasansol@rediffmail.com Manoj Talkies Basement, Kumarpur ASANSOL-713304 (W.B.)

Format No.: EC/TRT/42/FM/04

TEST REPORT

| Report Release Date | : 03.04.2018 | Sample Ref. No.(ARF) | : EC/ARF/29/180347 |
|--|---------------------------------|----------------------|------------------------|
| Test Report No | : EC/TR/42/03137 | Source of Sample | : Ferro Alloys Plant |
| Type of Sample | : Suspended Dust & Gases | Sampling Date | : 29.03.18 to 30.03.18 |
| Sample Collected by | : Mr. Manoj Pandey & Team | Period of Analysis | : 31.03.18 to 02.04.18 |
| Sample Details | : Ambient Air | Sample Condition | : Sealed & Preserved |
| Name & Address : Jamshedpur Minerals & Chemicals | | Remarks | : |
| | B-29(P), VI th Phase | Sample Drawn By | : ECO CARE |
| | A.I.A,Gamharia | Sampling Plan & | |
| • | Dist Saraikela Kharsawan | Procedure | : EC/SOP/03/01 |
| | Jharkhand | Deviation if any | : None |

METEOROLOGICAL INFORMATION

| 1 | Average Temperature | 29.5 C | 2 | Barometric Pressure | 750 mm of Hg |
|---|---------------------------|--------|---|---------------------|--------------|
| 3 | Average Relative Humidity | 47.0 % | 4 | Weather Condition | Clear Day |

| AMBIENT AIR QUALITY ANAL | YSIS REPOR | T | \ | |
|----------------------------------|----------------------|------------------------|------------------------------|---------------------------------|
| TEST METHOD | IS: 5182 (Part-2) | IS: 5182 (Part - 6) | IS: 5182 (Part - 23) | EPA CFR40(50), Appendix 1 |
| PARAMETERS | $SO_2 (\mu g/M^3)$ | $NO_x(\mu g/M^3)$ | PM < 10 micron $(\mu g/M^3)$ | PM-2.5 (μg/M ³) |
| Method Detection Limit | 4 | 6 | 20 | 10 |
| 1. Sampling Location: Near Main | Gate | | | |
| Shift - A (09:10 AM To 05:10 PM) | 34.30 | 40.84 | 87.77 | |
| Shift - B (05:20 PM To 01:20 AM) | 25.58 | 31.49 | 79.43 | 42.00 |
| Shift - C (01:30 AM To 09:30 AM) | 31.40 | 36.53 | 63.57 | 43.09 |
| Average (Shift - A To Shift - C) | 30.43 | 36.29 | 76.92 | |
| 2. Sampling Location: Near Adm | inistrative Buil | ding | | |
| Shift - A (09:30 AM To 05:30 PM) | 31.40 | 38.68 | 82.73 | |
| Shift - B (05:40 PM To 01:40 AM) | 22.67 | 29.34 | 68.76 | |
| Shift - C (01:50 AM To 09:50 AM) | 28.49 | 33.65 | 75.19 | 24.78 |
| Average (Shift - A To Shift - C) | 27.52 | 33.89 | 75.56 | |

- 1. Test values are reported based on the samples received.
- 2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
- 3. The Test report shall not be reproduced, without the written approval of laboratory.

Authorised Signatory

Nupur Chatterjee B. Sc. M. Sc. (Env. Sc.) Dy Technical Manager





Phone: (0341) 2252011 : (0341) 2252011

Specialised House on Environmental Monitoring, Analysis, Assessment & Management

ISO 9001: 2015 Certified, OHSAS 18001:2007 Certfied

E-mail: ecocareasansol@rediffmail.com Manoj Talkies Basement, Kumarpur ASANSOL-713304 (W.B.)

Format No.: EC/TRT/42/FM/04

TEST REPORT

| Report Release Date | : 03.04.2018 | Sample Ref. No.(ARF) | : EC/ARF/29/180347 |
|---------------------|-----------------------------------|----------------------|------------------------|
| Test Report No | : EC/TR/42/03138 | Source of Sample | : Ferro Alloys Plant |
| Type of Sample | : Suspended Dust & Gases | Sampling Date | : 29.03.18 to 30.03.18 |
| Sample Collected by | : Mr. Manoj Pandey & Team | Period of Analysis | : 31.03.18 to 02.04.18 |
| Sample Details | : Ambient Air | Sample Condition | : Sealed & Preserved |
| Name & Address | : Jamshedpur Minerals & Chemicals | Remarks | : |
| | B-29(P), VI th Phase | Sample Drawn By | : ECO CARE |
| | A.I.A,Gamharia | Sampling Plan & | |
| | Dist Saraikela Kharsawan | Procedure | : EC/SOP/03/01 |
| | Jharkhand | Deviation if any | : None |

METEOROLOGICAL INFORMATION

| 1 | Average Temperature | 29.5 °C | 2 | Barometric Pressure | 750 mm of Hg |
|---|---------------------------|---------|---|---------------------|--------------|
| 3 | Average Relative Humidity | 47.0 % | 4 | Weather Condition | Clear Day |

| AMBIENT AIR QUALITY ANAL | YSIS REPOR | T | | |
|----------------------------------|--------------------------------------|------------------------|------------------------------|---------------------------------|
| TEST METHOD | IS: 5182 (Part-2) | IS: 5182 (Part - 6) | IS: 5182 (Part - 23) | EPA CFR40(50), Appendix 1 |
| PARAMETERS | SO ₂ (μg/M ³) | $NO_x(\mu g/M^3)$ | PM < 10 micron $(\mu g/M^3)$ | PM-2.5 (μg/M ³) |
| Method Detection Limit | 4 | 6 | 20 | 10 |
| 3. Sampling Location: Back Side | of the Plant (E | ast Side) | | |
| Shift - A (10:00 AM To 06:00 PM) | 28.49 | 37.25 | 74.57 | |
| Shift - B (06:10 PM To 02:10 AM) | 19.77 | 30.78 | 62.52 | 25.00 |
| Shift - C (02:20 AM To 10:20 AM) | 22.67 | 34.37 | 69.11 | 35.99 |
| Average (Shift - A To Shift - C) | 23.64 | 34.13 | 68.73 | |
| 4. Sampling Location: Back Side | of the Plant (N | orth Side) | | |
| Shift - A (10:20 AM To 06:20 PM) | 25.58 | 35.81 | 70.24 | |
| Shift - B (06:30 PM To 02:30 AM) | 16.86 | 27.90 | 58.28 | 22.25 |
| Shift - C (02:40 AM To 10:40 AM) | 19.77 | 32.21 | 65.34 | 32.27 |
| Average (Shift - A To Shift - C) | 20.74 | 31.97 | 64.62 | |

- 1. Test values are reported based on the samples received.
- 2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.

3. The Test report shall not be reproduced, without the written approval of laboratory.

Authorised Signatory

Nupur Chatterjee B. Sc. M. Sc. (Env. Sc.) Dy Technical Manager







Phone : (0341) 2252011 Fax : (0341) 2252011

NABL ACCREDITED
Certificate No. TC-5109

Specialised House on Environmental Monitoring, Analysis, Assessment & Management ISO 9001: 2015 Certified, OHSAS 18001:2007 Certfied

E-mail : ecocareasansol@rediffmail.com Manoj Talkies Basement, Kumarpur ASANSOL-713304 (W.B.)

Format No.: EC/TRT/42/FM/07

TEST REPORT

| Report Release Date | : 03.04.2018 | Sample Ref. No.(ARF) | : EC/ARF/29/180347 |
|---------------------|-----------------------------------|----------------------|------------------------|
| Test Report No | : EC/TR/42/03039 | Source of Sample | : Ferro Alloys Plant |
| Type of Sample | : Noise | Sampling Date | : 29.03.18 to 30.03.18 |
| Sample Collected by | : Mr. Manoj Pandey & Team | Period of Analysis | : |
| Sample Details | : Ambient Noise | Sample Condition | |
| Name & Address | : Jamshedpur Minerals & Chemicals | Remarks | |
| | B-29(P), VI th Phase | Sample Drawn By | : ECO CARE |
| | A.I.A,Gamharia | Sampling Plan & | . LCO CARE |
| | Dist Saraikela Kharsawan | Procedure | : EC/SOP/03/01 |
| | Jharkhand | Deviation if any | : None |

METEOROLOGICAL INFORMATION

| 1 | Average Temperature (°C) | 29.5 |
|---|--------------------------------|-----------|
| 2 | Average Relative Humidity (%) | 47.0 |
| 3 | Barometric Pressure (mm of Hg) | 750 |
| 4 | Weather Condition | Clear Day |

AMBIENT NOISE QUALITY REPORT

| Sampling Location | | NOISE LEVEL | | | |
|-----------------------------------|-------|-------------|-------------|-------------|--|
| 18 | | Minimum | Leq – Mean | Maximum | |
| Near Main Gate | Day | 62.60 dB(A) | 68.38 dB(A) | 71.80 dB(A) | |
| | Night | 57.40 dB(A) | 64.94 dB(A) | 69.40 dB(A) | |
| 2. Near Administrative Building | Day | 59.20 dB(A) | 66.22 dB(A) | 68.90 dB(A) | |
| 2. Trous Frankinstrative Building | Night | 54.90 dB(A) | 62.24 dB(A) | 66.90 dB(A) | |
| 3. Back Side of the Plant | Day | 65.70 dB(A) | 71.32 dB(A) | 74.90 dB(A) | |
| | Night | 52.50 dB(A) | 65.42 dB(A) | 70.10 dB(A) | |

1. Test values are reported based on the samples received.

2. The Test report shall not be reproduced, without the written approval of laboratory

Authorised Signatory

Nupur Chatterjee B. Sc. M. Sc. (Env. Sc.) Dy Technical Manager

ANNEXURE - 2

DETAILS OF SOCIAL WELFARE ACTIVITY TILL DATE

1) DONATED STEEL ALMIRAH, BOOKSELF, OFFICE TABLE, CHAIR, STEEL UTENSILS

RS. 94000.00

2) DOANTED THE AMOUNT TO FRIENDLS OF TRIBAL SOCIETY ON 14.05.2018

Rs. 100000.00

Rs. 194000.00

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PART -E SOLID WASTES

| | Total Quality (t/year) | | |
|--------------------------------------|---|--|--|
| Solid waste | During the previous Financial year 2016-17 | During the Current Financial year 2017-18 | |
| a)From process Slag (FN+LC) | 780.472 M.T | 329.95 M.T | |
| (b) From pollution Control facility | RECYCLED | RECYCLED | |
| Quantities recycled Or reutilized | 758.743 M.T | 183.514 M.T | |
| . Sold | NIL | 149.155 M.T | |
| . Disposed | NIL | NIL | |

PART-F

Characteristics of wastes and Indicative Disposal practice adopted

The slag generated from Low Carbon Ferro Manganese is used in lining of vessel for production of Low Carbon Ferro manganese.

PART- G

Impact of pollution control measures on conservation of natural resources and consequently on the cost of production.

Fume extraction system with cyclone and bag filter has been installed and slag is stored/reused properly. PPE provided to worker, thus work zone environment is maintained, resulting in improved efficiency.

PART-H

Additional investment proposal for environment protection including abatement of pollution

Plantation, RWH, Regular maintenance of APCD & water sprinkling is being continued for abatement of Pollution. Estimated annual expenditure Rs. 5.00 lakhs

PART-I

Any other particulars for improving in respect of environmental protection and abetment of pollution.

PPEs provided and its use made regular. Directions of regulatory authorities complied with

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PARIME

Signature of Applicant

(B) Raw Material Consumption:

| | Consumption of raw material per unit of output: | | |
|----------------------|--|---|--|
| Name of Raw Material | During the previous financial year 2016-17 Total Production: 993.96 Tons | During the current financial year 2017-18 Total Production: 1169.50 Tons | |
| ALUMINIUM SCRAP | 287.90 M.T | 341.853 M.T | |
| ALUMINIUM POWDER | 8.470 M.T | 2.550 M.T | |
| FERRO SILICON POWDER | 0.210 M.T | 18.162 M.T | |
| SILICO MANGANESE | 385.765 M.T | 584.530 M.T | |
| MANGANESE ORE | 1104.47 M.T | 1284.105 M.T | |
| M.S SCRAP | 56.669 M.T | 117.108 M.T | |
| LIME | 98.044 M.T | 438.831 M.T | |

PART- C

POLLUTION DISCHARGED TO ENVIRONMENT /UNIT OF OUTPUT (PARAMETER AS SPECIFIED IN THE CONSENT ISSUED)

| (B) Air | Within norms as per the monit | norms as per the monitoring reports attached. | |
|------------|---|---|--|
| (A) Water | No discharge of effluent. | | |
| Pollutants | Quantity of pollutants Discharged (mass/day) | Concentrations of Pollutants Discharged (mass/volume) | Percentage of variation From prescribed Standards with reasons |

PART- D

HAZARDOUS WASTES

| (AS SPECIFIED UNDER HAZARDOUS WASTES) | <u>US WASTES</u> / MANAGEMENT AND HANDLING RULES, 1989) | |
|---------------------------------------|--|--|
| Hazardous Waste | Total Quantity (kg/years | |
| | During the current financial year | |
| (a) From process | Nil | |
| (b) From Pollution Control | Nil | |

JAMSHEDPUR MINERALS & CHEMICALS

ANNEXURE -3

FORM-V

ENVIRONMENTAL STATEMENT REPORT FOR THE YEAR ENDING 31st MARCH 2018

PART-A

(i) Name and address of the occupier of the industry / operation or

process.

: Jamshedpur Minerals & Chemicals

B-29(P), VIth Phase, Adityapur Industrial

Area, P.O - Gamharia- 832108

Industry Category

: SSI Unit

Primary (SIC code)

Secondary (SIC Code)

:

(ii) Production Category (Units)

a) Ferro Manganese

b) Ferro Molybdenum c) Ferro Titanium : 4800 TPA

600 TPA 600 TPA

(iii) Year of establishment

: 01.12.2014

(iv) Date of last Environmental Statement submitted

: 12June 2017

PART- B WATER AND RAW MATERIAL CONSUMPTION

(A) Water Consumption

Process

Cooling

Domestic

0.80 KLD

| Name of the product | Process water consumption per unit of product output. | |
|---------------------|---|-----------------------------------|
| | During the previous financial year | During the current financial year |
| FERRO MANGANESE | Nil | Nil |
| FERRO MOLYBDENUM | Nil | Nil |
| FERRO TITANIUM | Nil | Nil |

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