NMDC/ENV/IOBP/SMPR/2019/385

Dated: 10.06.2019

Addl. PCCF,
Ministry of Environment, Forest and
Climate Change,
Regional Office (WCZ),
Ground Floor, East Wing,
New Secretariat Buildings,
Civil Lines, Nagpur – 440 001


Sir,

With reference to the above, we are sending Six Monthly Progress Report for the period from October’ 2018 to March’ 2019 on Environmental Compliance in respect of 4 MTPA Iron Ore Beneficiation Plant of NMDC Ltd, at Bacheli South Bastar, Dantewada District, Chhattisgarh through e-mail at ecompliance-cg@gov.in The report is also placed in NMDC website at www.nmdc.co.in and also uploaded in MoEFCC Portal.

Thanking you,

Encl: As above.

Yours faithfully,

(M. Jayapal Reddy)
General Manager (Env)

Copy for kind information to:
ED, BIOM, Bacheli Complex / G.M, Slurry Pipeline Project, Jagdalpur.
## SIX MONTHLY COMPLIANCE REPORT
FOR
4.0 BENEFICIATION PLANT
OF
M/s NMDC Ltd. AT BACHELI

(Oct’ 2018 to March’ 2019)


<table>
<thead>
<tr>
<th>Sl. No</th>
<th>SPECIFIC CONDITION of MoEFCC</th>
<th>COMPLIANCE STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td>M/S NMDC Limited shall obtain separate environmental clearance for the slurry pipeline under the project activity I(a) (ii) of Schedule of the EIA Notification, 2006 if applicable.</td>
<td>Agreed</td>
</tr>
<tr>
<td>ii.</td>
<td>The project proponent shall install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.</td>
<td>NMDC has initiated the process for purchasing of 24x7 air monitoring devices which shall be ready before plant operation.</td>
</tr>
<tr>
<td>iii.</td>
<td>The environmental clearance is subject to the grant of forestry clearance.</td>
<td>Final stage Forest Clearance for the diversion of 33ha Forest land for Iron Ore Beneficiation Plant has been granted vide MoEFCC, Nagpur letter No. F.No FC-II/CH-17/2015-NGP/2623 dated 27/09/2017. The Forest land is yet to be handed over to NMDC Ltd. by C.G Forest department.</td>
</tr>
<tr>
<td>iv</td>
<td>The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be adhered to.</td>
<td>Project will ensure that the National Ambient Air Quality Emission Standard issued by Ministry dtd. 16 November,2009 is followed. Air monitoring data around Beneficiation plant is enclosed as Annexure-1.</td>
</tr>
<tr>
<td>v</td>
<td>Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.</td>
<td>Project will ensure that the National Ambient Air Quality Emission Standard issued by Ministry dtd. 16 November,2009 is followed.</td>
</tr>
<tr>
<td>vi</td>
<td>Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.</td>
<td>All efforts shall be made by the project to control the vehicular pollution &amp; dust pollution against the specified norms.</td>
</tr>
<tr>
<td>vii</td>
<td>'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.</td>
<td>The project will ensure the same.</td>
</tr>
<tr>
<td>viii</td>
<td>Small seasonal nallas flowing in the beneficiation plant area shall be systematically diverted.</td>
<td>Nalla: flowing in the beneficiation plant area has been systematically diverted. Clippings enclosed as Annexure-2.</td>
</tr>
<tr>
<td>ix</td>
<td>Lean tailings generated in the process shall be impounded in existing tailing dams. Intermediate dykes shall be constructed within tailing dam for storage of lean Tailings so as to avoid direct contact with slimes already present in tailing dams. Clear water shall be allowed to discharge into downstream nallas through decanting system provided in tailing dams.</td>
<td>Agreed. The project will ensure the same.</td>
</tr>
<tr>
<td>x</td>
<td>At the terminus of the pipeline at Nagarnar, the ore slurry shall be filtered. The recovered filtered water shall be used for industrial purposes in the plants. For transportation of 4 MTPA iron ore concentrate, shut down-restart mode shall be adopted for reduction in water &amp; power requirement as compared to normal operation in batch mode.</td>
<td>Agreed. The project will ensure the same.</td>
</tr>
<tr>
<td>xi</td>
<td>Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act whichever are more stringent.</td>
<td>The project will ensure that Environment monitoring is carried out systematically and all the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act shall be followed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>xii</td>
<td>Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and quarterly reports regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office, SPCB and CPCB.</td>
<td>Agreed. The project shall ensure the same.</td>
</tr>
<tr>
<td>xiii</td>
<td>Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For this purpose, the schedule of health examination of the workers should be drawn and followed scrupulously.</td>
<td>Agreed. The project shall ensure the same.</td>
</tr>
<tr>
<td>xiv</td>
<td>A time bound action plan shall be submitted to reduce solid waste generation due to the project related activity, its proper utilization and disposal.</td>
<td>The project shall ensure the same.</td>
</tr>
<tr>
<td>xv</td>
<td>A Risk and Disaster Management Plan shall be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.</td>
<td>Risk Assessment &amp; Disaster Management Plan has been incorporated in Chapter 7 of the EIA-EMP Report &amp; submitted to MOEFCC along with EIA report. A copy of the Risk Assessment &amp; Disaster Management Plan is again enclosed as Annexure-3.</td>
</tr>
<tr>
<td>xvi</td>
<td>Green belt shall be developed by planting native and broad-leaved tree species in consultation with local DFO, local community and as per CPCB guidelines.</td>
<td>The project is committed for Green belt development. Plantation of native and broad-leaved tree species in consultation with local DFO, local community and as per CPCB guidelines will be undertaken. Payment of Rs. 27 lakhs (as per EIA report) for Green belt development has been deposited to DFO, Dantewada vide DD No.871700 dtd. 27.03.2018, copy of which is enclosed as Annexure-4.</td>
</tr>
<tr>
<td>xvii</td>
<td>The Company shall submit, within three months, their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/violation of</td>
<td>The Corporate Environment Responsibility is enclosed as Annexure-5.</td>
</tr>
<tr>
<td>Environmental norms/conditions, Hierarchical system of Administrative order of the Company to deal with</td>
<td>The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.</td>
<td>Solar light system for common areas around the project area shall be provided.</td>
</tr>
<tr>
<td>deal with environmental issues and ensuring compliance to the environmental clearance conditions and</td>
<td>LED lights in office premises and residential areas shall be provided.</td>
<td></td>
</tr>
<tr>
<td>System of reporting of noncompliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.</td>
<td>Under Process.</td>
<td></td>
</tr>
<tr>
<td>The project proponent shall provide for LED lights in their offices and residential areas.</td>
<td>The project shall ensure the same. The project has already taken CSR works through District administration in the surrounding villages in consultation with the local communities and administration. Details enclosed as Annexure-6.</td>
<td></td>
</tr>
<tr>
<td>At least 2.5% of the total cost of the project shall be earmarked for the Enterprise Social Commitment (ESC) based on issues raised during public consultation, local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to the Regional Office of the Ministry. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.

| xxii | Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical and health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project. | Construction is yet to be started. |

| GENERAL CONDITIONS |

| i | The project authorities must strictly adhere to the stipulations made by the Chhattisgarh Pollution Control Board and the State Government. | Project is committed for strict adherence of the stipulations made by the Chhattisgarh Pollution Control Board and the State Government. |

| ii | No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC). | Agreed. |

| iii | At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM$_{10}$, PM$_{2.5}$, SO$_2$ and NO$_x$ are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Nagpur and the SPCB/CPCB once in six months. | Agreed. The project shall ensure the same. |

<p>| iv | Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. | Agreed: The project shall ensure the same. |</p>
<table>
<thead>
<tr>
<th></th>
<th>The treated wastewater shall be utilized for plantation purpose.</th>
<th>The project shall ensure the same. Ambient noise level readings around the project area is enclosed as Annexure-7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>v</td>
<td>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 should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).</td>
<td>Agreed. The project shall ensure the same.</td>
</tr>
<tr>
<td>vi</td>
<td>Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</td>
<td>Agreed. The project shall ensure the same.</td>
</tr>
<tr>
<td>vii</td>
<td>The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.</td>
<td>Agreed. The project shall ensure the same.</td>
</tr>
<tr>
<td>viii</td>
<td>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.</td>
<td>Agreed. The project shall ensure the same.</td>
</tr>
<tr>
<td>ix</td>
<td>Requisite funds 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, Forest and Climate Change (MoEFCC) 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 Nagpur. The funds so</td>
<td>Funds earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change (MoEFCC) as well as the State Government shall not be diverted for any other purpose.</td>
</tr>
<tr>
<td></td>
<td>provided shall not be diverted for any other purpose.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>x</td>
<td>A copy of clearance letter shall be sent by the proponent to concerned Panchayat, 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.</td>
<td></td>
</tr>
<tr>
<td>xi</td>
<td>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 MOEFCC at Nagpur. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM₁₀, SO₂, 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.</td>
<td></td>
</tr>
<tr>
<td>xii</td>
<td>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 MOEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Nagpur / CPCB / SPCB shall monitor the stipulated conditions.</td>
<td></td>
</tr>
<tr>
<td>xiii</td>
<td>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)</td>
<td></td>
</tr>
</tbody>
</table>

Copy of clearance letter has been sent to concerned panchayat, Zila parishad/ Municipal corporation, urban Local body etc. Details enclosed as Annexure-8. Clearance letter has also been put on the website of NMDC.

Agreed. Project shall ensure the same.
| Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MoEFCC at Nagpur by e-mail. |

| 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, Forests and Climate Change (MoEFCC) 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 Nagpur. |

| NMDC has informed the public regarding award of Environmental Clearance by publishing the news in two widely circulated local newspapers within seven days from the date of issue of the clearance letter, in vernacular language. A copy of the above advertisement is enclosed as Annexure-9. A copy of the same has been forwarded to Regional office at Nagpur which is enclosed as Annexure-10. |

| 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. |

| Agreed. Project shall ensure the same. |
**TEST REPORT**

**Test Report**

**Issue to:**
NMDC Ltd.  
Iron Ore Beneficiation Plant, Bacheli  
Chhattisgarh

- **Date of Monitoring:** 27 to 28th January, 2019  
- **Your Ref No.:** NMDC/ENV/URC/PLC/L(7)/2018/1908, Dated: 28.11.2018  
- **Date of Reporting:** 04th February, 2019  
- **Report No.:** PLC/L/18-19/01/A01; A02/01  
- **Sample particulars:** Ambient Air Quality, No. of samples: 02  
- **Instrument used:** PM10, PM 2.5 FDS, Make: Instrumex  
- **RDS Make:** Aero Vironment Engineers INC.  
- **Test required:** PM10, PM2.5, SO2, NO2 & CO  
- **Method of analysis:** IS: 5182  
- **Page No.:** 1 of 2

### TEST RESULTS

<table>
<thead>
<tr>
<th>Location</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NO2</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>New shopping complex, hi-tech colony</td>
<td>43</td>
<td>20</td>
<td>9.5</td>
<td>11.9</td>
<td>BDL</td>
</tr>
<tr>
<td>Bacheli</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patel Para</td>
<td>51</td>
<td>27</td>
<td>8.2</td>
<td>10.6</td>
<td>BDL</td>
</tr>
<tr>
<td>NAAQS</td>
<td>100</td>
<td>60</td>
<td>80</td>
<td>80</td>
<td>2000</td>
</tr>
</tbody>
</table>

*Note: BDL = Below Detectable Limit*

**Analyst Signatory**  
(M. Ravi Kiran)

**Authorized Signatory**
PRAGATHI LABS & CONSULTANTS PVT.LTD.

Issued to
NMDC Ltd.
Iron Ore Beneficiation Plant, Bachel
Chhattisgarh

Date of Monitoring: 21st to 22nd February, 2019
Your Ref No.: NMDC/ENV/URC/PLCL(7)/2018/1906,
Dated: 26.11.2018
Sample particulars: Ambient Air Quality, No. of samples: 02
Instrument used: PM10, PM 2.5 FDS, Make: Instrumex
RDS Make: Aero Vironment Engineers Inc.
Test required: PM10, PM2.5, SO2, NO2 & CO
Method of analysis: IS: 5182

Date of Reporting: 28th February, 2019
Report No.: PLCPL/18-19/02/A01-A02/01

TEST RESULTS

<table>
<thead>
<tr>
<th>Location</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NO2</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within the project site</td>
<td>61</td>
<td>27</td>
<td>10.3</td>
<td>15.2</td>
<td>EDL</td>
</tr>
<tr>
<td>Close to the project site (Bacheli)</td>
<td>48</td>
<td>20</td>
<td>7.9</td>
<td>9.7</td>
<td>EDL</td>
</tr>
<tr>
<td>NAAQS</td>
<td>100</td>
<td>60</td>
<td>80</td>
<td>80</td>
<td>2000</td>
</tr>
</tbody>
</table>

Note: EDL - Below Detectable Limit

Analyst Signatory

Authorized Signatory
(M. Ravi Kiran)
CHAPTER - 7
ADDITIONAL STUDIES
Chapter - 7

ADDITIONAL STUDIES

7.1 Risk Assessment, Occupational Health & Disaster Management plan:

Although Beneficiation plant & Slurry Pipeline System will not cause any
disastrous emergencies, control measures due to accidental discharge, spillages
of slurry during transportation, storage and manufacturing process needs to be
assessed.

The company has established a system for preventive maintenance to
minimize emergency events. A team headed by Safety Officer is responsible for
the above. He reports to Plant Head. Emergency events that can arise as listed
below:

i. Failure of dust collection device like, Bag house etc.
ii. Accidental spillage of iron or dust containing iron.
iii. Failure of the dust extraction network.

Company observes the following for assessment of emergency events:

i. A formal and written emergency plan related to health risks is in place.
ii. The team has been well acquainted with the major potential Hazard
    sources and locations.
iii. Visual inspection of the pollution control systems on a daily basis is car-
    ried out.
iv. The emergency plan clearly defines persons responsible in case of an in-
    cidental failure.
v. There is an annual engineering check of the equipments.
vi. A record of the maintenance activities are kept for review.
vii. The senior member of the team inspects the operation. Any anomaly found is directly reported to Plant Head and a record is maintained in this regard.

7.2 Training to Employees:

All employees are educated to take precautions and use all protective measures to control dust in working environment. They are well informed of the consequences of ignoring the precautions. Personal protective equipments as per BIS code of practices 12078: 19817 are provided to the employees. Pictorial warning signs and precautionary notices as per BIS code of practices 12078: 19817 (Part-I); 1987 (reaffirmed 1997) are displayed. All work places where accident may cause a hazard are clearly indicated as a “hazard area”, with well displayed signboard along with effects on health. The employees are educated about the safety features through written literature, pictorial signature and color coded signs.

Record of education & training activities are maintained. All employees are provided information booklet in Hindi & English language, on the risk related to project activities and recommendations to protect themselves from undue exposures.

7.3 Occupational Health:

The occupational health surveillance program is implemented to address pre employment & periodic health examination. Every employee prior to his appointment undergoes the pre employment medical examination arranged by the project proponent and issued an Appointment letter only on getting fitness certificate issued by competent authority. Scheme for health surveillance include periodical examination of workers. Occupational health surveillance is carried out by occupational, physical or chest physician, trained in occupational medicine. All the above are provided by the company free of cost.
Chapter 7  
EIA/EMP of Beneficiation Plant at Bacheli and Slurry pipeline from Bacheli to Nagapur of M/s NMDC Ltd.

The medical records are maintained & stored for a period of 15 years, following the termination of employment or for 40 years after first day of employment, whichever is later. All employees are provided with medical book. The occupational health surveillance program addresses mainly the following aspects:

i. Pre-employment medical examination
ii. Periodic medical examination
iii. Medical examination on cessation of employment
iv. Maintenance of Medical records & health education

Periodical medical examination (PME) is carried out as per DGMS guidelines at Occupational Health Centre (OHS), NMDC - Apollo Central Hospital, Bacheli for all employees once in 3 years. For above 45 years of age employees medical examination is done once in 3 years. Pre-retirement medical examination is also carried out for the employees.

NMDC is in the process of getting Integrated Management System covering Quality, Environment & Occupational Health for its existing projects at Bacheli. This certification will extend to the proposed Beneficiation plant also.

7.4 Workplace Monitoring:

Following general guidelines (as per BIS; 11451: 2006 code of practice for preparing Workplace Monitoring Schedule) are followed:

i. Once in a month, where dust concentration is likely to exceed prescribed exposure limit.

ii. Once in three months, where dust concentration is likely to be between exposure limit and action level.

Ecomen Laboratories Pvt. Ltd.
The medical records are maintained & stored for a period of 15 years, following the termination of employment or for 40 years after first day of employment, whichever is later. All employees are provided with medical book.

The occupational health surveillance program addresses mainly the following aspects:

i. Pre-employment medical examination
ii. Periodic medical examination
iii. Medical examination on cessation of employment
iv. Maintenance of Medical records & health education

Periodical medical examination (PME) is carried out as per DGMS guidelines at Occupational Health Centre (OHS), NMDC – Apollo Central Hospital, Bacheli for all employees once in 5 years. For above 45 years of age employees, medical examination is done once in 3 years. Pre-retirement medical examination is also carried out for the employees.

NMDC is in the process of getting Integrated Management System covering Quality, Environment & Occupational Health for its existing projects at Bacheli. This certification will extend to the proposed Beneficiation plant also.

7.4 Workplace Monitoring:

Following general guidelines (as per IS: 11451: 2006 code of practice for preparing Workplace Monitoring Schedule) are followed:

i. Once in a month, where dust concentration is likely to exceed prescribed exposure limit.

ii. Once in three months, where dust concentration is likely to be between exposure limit and action level.
iii. Once in every 6 to 12 months where dust concentration is below action & once in every 12 months at all work spots where there are exposures irrespective of dust concentrations.

7.4.1 Environmental Laboratory:

NMDC has a well established NABL certified Chemical Laboratory. In house monitoring for ambient air quality, work zone monitoring for total dust content, stack monitoring, noise monitoring are being done regularly to assess the pollutant concentrations. Most of the instruments required for environmental monitoring are available. Outsourcing is also done for certain environmental parameters through MoEF approved labs.

7.5 Disaster Management Plan:

An important element of mitigation is emergency planning, i.e. recognizing that accidents are possible, assessing the consequences of such accidents and deciding on emergency procedures, both onsite and offsite, that would need to be implemented in the event of an emergency.

Emergency/disaster planning is just one aspect of safety and cannot be considered in isolation. M/s NMDC Limited fully endorse this view and hence a Disaster Management Plan is prepared to ensure that the necessary standards, appropriate to the safety legislation, are in place.

The important elements of disaster planning are broadly classified as follows.

- Identification of various scenarios
- Advance planning to overcome the problem
- Actions in case of disaster phase, which includes warning, evacuation of personnel, rescue relief operations to people affected in mishaps & containment of a disaster.

Ecumen Laboratories Pvt. Ltd.
7.6 Objectives of the Plan:

The overall objectives of the emergency plan are

a) To localise the emergency and, if possible eliminate it and
b) To minimize the effects of accident on people and property

7.7 Identification and assessment of hazards:

The equipment are designed and selected with utmost care to ensure the minimization of Hazards. Care will be taken in the following areas namely:

a) Material storage and distribution
b) Dispatch of finished product

7.7.1 Hazardous areas in the plant:

Any failure of storage tanks and pipelines could be a source of hazard in the immediate surroundings.

7.7.2 Likely fire hazards:

The operation involving handling and use of flammable materials, which are prone to fire risk and hence their installation areas need special attention not only in design erection but also during operation/ maintenance to ensure fire safety.

The fire hazards may occur in the following units:

<table>
<thead>
<tr>
<th>S.No</th>
<th>Type</th>
<th>Quantity</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HSD for 2 DG sets of 1000 KVA</td>
<td>300 liters/day</td>
<td>No storage, own diesel pumps at Bacheli</td>
</tr>
<tr>
<td>2</td>
<td>Oil for 2 DG sets of 1000 KVA</td>
<td>5 liters/day</td>
<td>Drum for 30 days</td>
</tr>
</tbody>
</table>

Ecomen Laboratories Pvt. Ltd.
Chapter-7  EIA/EMP of Beneficiation Plant at Bacheli and Slurry pipeline from Bacheli to Nagarnar of M/s NMDC Ltd.

7.7.3 On-site emergency planning:

The on-site emergency plan would be related to the final assessment and it is the responsibility of the Works Management to formulate it. The plan must therefore, be specific to the site.

The plan sets out the way in which designated people at the site of the incident can initiate supplementary action either inside, or outside the works, at an appropriate time. An essential element of the plant is the provision to make safe the affected unit, for example by shutting it down. The plan also contains the full sequence of key personnel to be called in from other sections or from off site.

7.7.4 Appointment of personnel and delegation of duties:

Effective emergency plan requires that, in an event of an accident, nominated individuals are given specific responsibilities, often separate from their day-to-day activities. The two principal people are the site incident controller and the site main controller.

The site incident controller takes control of handling the incident. He will often be the person in charge of the plant at the time of the incident and should provide 24-hour cover where shift operation applies. The site incident controller will have to take decisions involving neighbouring area, perhaps to be involved in an escalating emergency, if it is not shut down.

Apart from the two site controllers, other works personnel have key roles to play in the implementation of the emergency plan. These include senior management of plants not directly involved in the emergency, first aiders, atmospheric monitoring staff, casualty reception staff and public relations staff to keep liaison with the District Authorities and Media. Every individual needs
to be aware of the emergency pre-planning and the precise nature of their roles.

7.7.5 Emergency Control Center:

The emergency control center is the place from where the operations to handle the emergency is directed and coordinated. It is manned by the site main controller, key personnel and the senior officers of the fire and police services.

The center is equipped to receive and transmit information and directions from and to the incident controller and other areas of the works, as well as outside.

Emergency control center therefore should contain the following:

a) An adequate number of external telephones.

b) An adequate number of internal telephones.

c) A plan of the works, to show:

   i) Areas where HSD & other inflammable materials are kept.

   ii) Sources of safety equipment;

   iii) The fire-fighting system and additional sources of water;

   iv) Entrances & Roadways, including latest information on road network;

   v) Assembly points,

   vi) The location of the works in relation to the surrounding community.

   vii) Lorry parking,

   viii) Roll of employee,

   ix) A list of key personnel, with addresses, telephone/mobile numbers, etc.

Ecumen Laboratories Pvt. Ltd.
7.7.6 Action on site:

The primary purpose of the on-site emergency plan is to control and contain the incident so as to prevent it from spreading to nearby area. It is not possible to cover every eventuality in the plan and the successful handling of the emergency will depend on appropriate action and decisions being taken on the spot. Other important aspects considered include the following:

a) Evacuation of non essential personnel
b) Accounting for personnel affected
c) Access to recording personnel for sending the information to the friends and relatives.
d) Public relations
e) Rehabilitation of the affected persons

7.8 Post disaster analysis and evaluation:

When the emergency is over, the team will carry out a detailed analysis of the causes of the accident, evaluate the influence of various factors and minimize them for future. At the same time the adequacy of the Disaster Preparedness Plan is also evaluated and shortcomings are ratified for subsequent improvement of the plan.

7.9 Emergency services:

The provision of following emergency services has been made available in the existing plant:

a) Fire protection system
b) Medical facilities
c) Rescue facilities
7.10 Off-site emergency plan:

7.10.1 Introduction:

The off-site emergency plan is an integral part of any major hazard control system. It is based on those accidents identified by the works management, which could affect people and the environment outside the works. Thus, the off-site plan follows logically from the analysis that took place to provide the basis for the on-site plan and the two plans therefore complement each other. The key feature of a good off-site emergency plan is flexibility in its application to emergencies other than those specifically included in the formation of the plan. The roles of the various parties that may be involved in the implementation of an off-site plan are described in this section. The responsibility for the off-site plan is likely to rest either with the works management or with the local authority.

Some of the aspects included in off-site emergency plan are as follows:

7.10.2 Organization:

Details of command structure, warning system, implementation procedures, emergency control centers, names and appointments of incident controller, site main controller, their deputies and other key personnel.

7.10.3 Communications:

Identification of personnel involved, communication center, call signs, network, list of telephone numbers.
Chapter 7  EIA/EMP of Beneficiation Plant at Bacheli and Slurry pipeline from Bacheli to Nagarnar of M/s NMDC Ltd.

7.10.4 Special emergency equipment:

Details of availability and location of heavy lifting gear, bulldozers, specified fire-fighting equipment, fireboats.

7.10.5 Voluntary Organizations:

Details of Organizations, telephone numbers, resources, etc.

7.10.6 Meteorological information:

Arrangements for obtaining details of weather conditions prevailing at the time and weather forecasts.

7.10.7 Humanitarian arrangements:

Transport, evacuation centers, emergency feeding, treatment of injured, first aid, ambulances, temporary mortuaries.

7.10.8 Public information:

Arrangements for (a) dealing with the media-press office, (b) informing relatives, etc.

7.11 Assessment:

Arrangements for (a) collecting information on the causes of the emergency (b) reviewing the efficiency and effectiveness of all aspects of the emergency plan.

7.12 Role of the emergency co-coordinating officer:

The various emergency services are coordinated by an emergency coordinating officer (ECO). The ECO liaise closely with the site main controller.
Chapter 7: EIA/EMP of Beneficiation Plant at Bacheli and Slurry pipeline from Bacheli to Nagarnar of M/s NMDC Ltd.

Again depending on local arrangements, for very severe incidents with major or prolonged off-site consequences, the external control passes to a senior authority/administrator.

7.12.1 Role of major hazard works management:

The role of works management in off-site emergency planning is to establish liaison with those preparing the plans and to provide information appropriate to such plans.

Information is provided by works management to all the outside organizations, which involve in handling the emergency off-site and which are familiarized with the technical aspects of the works activities, e.g., emergency services, medical departments etc.

7.12.2 Role of the Fire Extinction authorities:

The control of fire is normally the responsibility of the senior fire brigade officer, on arrival at the site. The senior fire brigade officer also has a similar responsibility for other events, such as explosions and toxic releases. Fire authorities get familiarized with the location on site of all stores of flammable materials, water and foam supply points and fire-fighting equipments.

7.12.3 Role of the health authorities:

Health authorities, including doctors, surgeons, hospitals, ambulances and so on, have a vital part to play, following a major accident and they form an integral part of any emergency plan.

For major fires, injuries will be the result of the effects of thermal radiation to a varying degree and the knowledge and experience to handle this in all, available nearby hospitals is essential.

Ecomen Laboratories Pvt. Ltd.
7.12.4 Role of the Government safety authority:

The factory inspectors can visit/check the off-site plan and the arrangements made for handling emergencies of all types including major emergencies. The advice of Factory inspectors is incorporated from time to time.
एनएमडीसी लिमिटेड NMDC Limited

भारत सरकार का उपक्रम (A GOVT. OF INDIA ENTERPRISES)
स्टार पायपलाइन प्रोजेक्ट SLURRY PIPELINE PROJECT
बैलाडिला भवन, नीमद रोड, जगदलपुर, बसर (छ.ग.) 494001 बालादिला भवन, ग्रीडम रोड, जागड़लपुर बसर (छ.ग.) 494001,
CIN NO. L13100AP1958GOI001674

क्रमांक / एनएमडीसी / एसपीएल / जगदलपुर / 2018/386 दिनांक : 28/03/2018
dिनांक : 28/03/2018

प्रिंटर,

वन मंडलाचिकारी,
जिला दंतेवाड़ा (छ.ग.)

विषय : एनएमडीसी, बचेली कंप्लेक्स को लौह अस्त प्रसारित प्राकृतिक संसाधन (स्लाइम नीकीर्दण) Iron Ore Processing Plant (Slime Beneficiation) की स्थापना हेतु रक्षा 33.00 हेरो कंप्लेक्स में गृह रक्षा एवं पश्चिमुपन्त वैदेहिक निवास स्थान बनाने हेतु खारे वार जमा करने वाला।

संदर्भ : 1. आपके पत्र क्रमांक / कंटेंट / 1412 दंतेवाड़ा, दिनांक : 07/03/2018

उपरोक्त विषयांकन राज्यसभा पत्र का अनुक्रम करने का कदम करता। एनएमडीसी, बचेली कंप्लेक्स को लौह अस्त प्रसारित प्राकृतिक संसाधन (स्लाइम नीकीर्दण) Iron Ore Processing Plant (Slime Beneficiation) की स्थापना हेतु रक्षा 33.00 हेरो कंप्लेक्स में गृह रक्षा हेतु 27,00,000/- एवं पश्चिमुपन्त वैदेहिक निवास स्थान बनाने हेतु 17,24,000/- राशि जमा करने हेतु आपके कार्रवाई को प्राप्त निर्देशित किया गया था। अतः 27,00,000/- (रूपये टास्कर लाख गांठ) को यहाँ हेतु जमा करते हुए कार्रवाई को प्राप्त किया गया। 17,24,000/- (रूपये एनएमडीसी सौ पारस्परिक गांठ) का एनएमडीसी में गृह रक्षा की जा रही है। 17,24,000/- (रूपये एनएमडीसी सौ पारस्परिक गांठ) का एनएमडीसी में गृह रक्षा की जा रही है।

<table>
<thead>
<tr>
<th>क्रमांक</th>
<th>दी.डी. क्रमांक / फूडूड नं.</th>
<th>दिनांक</th>
<th>राशि</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&quot;871700&quot;</td>
<td>27.03.2018</td>
<td>27,00,000/-.</td>
</tr>
<tr>
<td>2</td>
<td>&quot;SBIN018086690177&quot;</td>
<td>27.03.2018</td>
<td>17,24,000/-.</td>
</tr>
</tbody>
</table>

अतः उपरोक्त विषयांकन में गृह रक्षा एवं पश्चिमुपन्त वैदेहिक निवास स्थान बनाने हेतु राशि की आपके अनुरोध के अनुसार हेतु आपके साहकार प्रस्तुत है।

प्रमाणाद

सलाम - 1 नग खानोही की मृत्युप्रति।
1 एनएमडीसी ट्रांसफर की प्रति।

प्रतिष्ठान : 10-3-311/ए खानोही भवन, मसब टैंक, हैदराबाद - 500173
Regd Office: 10-3-311/A Khanjir Bhavan, Masab Tank Hyderabad - 500173
NMDC LIMITED

CORPORATE ENVIRONMENTAL POLICY

NMDC Limited is engaged in mineral exploration, mining, processing of ore. The core areas are in the iron ore mining and processing at Bajilanda Iron Ore Mine Kudmul complex (Deposits-DIV) Beshihi complex (Deposits-5, 10,11A) South Bhokar Dantewada Dr. Chhattisgarh and Dantewada Iron Ore Project; Danigher, Bellary Dt. Karnataka. NMDC is also operating Diamond Mining Project at Rajnagar, Fauji Dr. Madhya Pradesh and Sponge iron Unit at Falna in Khajuraho Dr. Madhya Pradesh. As a pioneer mineral development organization, NMDC is coming up with Integrated Steel Plant at Nagemar; Baster Dr. Chhattisgarh and other mechanized mining projects such as Kamarwariy Iron ore Mine; Bellary Dr. Karnataka, Limestone mining at Arki; Solan Dr. Himachal Pradesh; Magneto Mine with DBC Plant at Pantel; Bokha Dr. Jamna, JSL, Kudsiha iron Ore Project; Deposit-13, Kirandul; South Eastern Dantewada Dr. Chhattisgarh and Coal mining at Shaktiput Coal blocks; Umar and Shahid Districts, Madhya Pradesh and mineral Beneficiation cum Pelletisation Plants at Dantewada in Karnataka and at Beshihi Kirandul Jhagmar in Chhattisgarh.

We shall therefore endeavour to:

- Prevent and control environmental pollution due to mining and associated activities by adopting safe, scientific and environmental friendly methods of mining and minerals processing for applicable legal requirements like forest, environmental and other statutory clearances.
- Maintain the machinery in excellent condition to ensure minimum impact of their operation on environment.
- Conserve the natural resources by ensuring minimum wastage of our product Iron Ore and Diamond®, optimum consumption of electricity, fuel oil, lubricant oil and water.
- Monitor and ensure compliance of all applicable environmental & forest clearance conditions. It shall report to Board of Directors and concerned stakeholders.
- Promote environmental awareness amongst employees, local communities and interested parties through proactive communication and training.
- Continuous Environmental performance improvement through framing objectives.
- Management will review the suitability and effectiveness of environmental objectives and targets through its periodic management review process.

The policy shall be communicated to employees at all levels. Local communities and stakeholders for its compliance.

Place: Hyderabad
Date: 6th September, 2011

Chairman-cum-Managing Director
### उपयोगिता प्रमाण पत्र

प्रमाणित किया जाता है कि कर्म 2017-18 में एनएमडीसी स्वरी पाइप लाइन परियोजना जंगलपुर के परियोजना के तहत जिला दंतेवाड़ा के 14 प्रांतों में विकास कार्यों हेतु कुल स्वीकृत 59 कर्म के लिये स्वीकृत राशि सूची. 413.08 लाख के विस्तृत विवाह द्वारा पूर्ण कराये गये कुल 18 कार्यों हेतु स्वीकृत राशि 136.61 (कुलमें एक करोड़ छह लाख इससे हजार मात्र) के शेष राशि द्वितीय/तृतीय किष्ट के रूप में स. 78.534 लाख (कुलमें अद्वैत लाख तिरंगा तिरंगा चार मात्र) मात्र एनएमडीसी स्वरी पाइप लाइन परियोजना जंगलपुर से प्राप्त हुआ है। अतः प्राप्त राशि का उपयोग विवाह द्वारा स्वीकृत कार्यों में व्यय कर कार्य पूर्ण कर लिया गया है। जिसका विवरण निम्नानुसार हैः

<table>
<thead>
<tr>
<th>SL</th>
<th>Description</th>
<th>Approved Amount Rs. (in Lacs) as per MoU</th>
<th>Released Amount Rs. (in Lacs)</th>
<th>Actual expenditure &amp; % of completion of the work (Rs. In Lacs)</th>
<th>2nd instalment Rs. In lacs</th>
<th>3rd instalment Rs. In lacs</th>
<th>Expenditure amount a a 2/3rd Inst. Rs. (Lacs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction of Culvert from Padapur main road to Bhima/ Bhubram house Length-2 Mtr. (MoU Work sl.no. 6)</td>
<td>6.74</td>
<td>2.696</td>
<td>6.725 (100%)</td>
<td>2.696</td>
<td>1.333</td>
<td>4.029 (2nd &amp; 3rd)</td>
</tr>
<tr>
<td>2</td>
<td>Construction of CC road from Main Benpalmanyatapara main road to Ayutti/ Pandu house Length-300 mtr. (MoU Work sl.no. 7)</td>
<td>8.62</td>
<td>3.448</td>
<td>8.602 (100%)</td>
<td>3.448</td>
<td>1.706</td>
<td>5.154 (2nd &amp; 3rd)</td>
</tr>
<tr>
<td>3</td>
<td>Construction of CC road from himi Bacheli Primary School Bhavan road to Pino/Ayutti House Length-200 mtr. (MoU Work sl.no. 8)</td>
<td>7.38</td>
<td>2.952</td>
<td>7.372 (100%)</td>
<td>2.952</td>
<td>1.468</td>
<td>4.42 (2nd &amp; 3rd)</td>
</tr>
<tr>
<td>4</td>
<td>Construction of CC road from main road to Joga House Parokameti Length -150 mtr. (MoU Work sl.no. 10)</td>
<td>4.13</td>
<td>1.652</td>
<td>4.127 (100%)</td>
<td>1.652</td>
<td>0</td>
<td>1.652 (1st)</td>
</tr>
<tr>
<td>5</td>
<td>Construction of CC road from Routhrampara, Mata Mandir to Rakesh house Bhansi Length-300 mtr. (MoU Work sl.no. 13)</td>
<td>8.26</td>
<td>3.304</td>
<td>8.257 (100%)</td>
<td>3.304</td>
<td>0</td>
<td>3.304 (2nd &amp; 3rd)</td>
</tr>
<tr>
<td>6</td>
<td>Construction of CC road from main road to Kaju house Bhansi Length-100 mtr. (MoU Work sl.no. 14)</td>
<td>2.75</td>
<td>1.10</td>
<td>2.743 (100%)</td>
<td>1.10</td>
<td>0</td>
<td>1.1 (2nd &amp; 3rd)</td>
</tr>
<tr>
<td>7</td>
<td>Construction of soil murium road from BadeKameliBhante to Talmunnda BadeKameli Length-1.5 Km (MoU Work sl.no. 16)</td>
<td>12.76</td>
<td>5.104</td>
<td>12.680 (99%)</td>
<td>5.104</td>
<td>2.478</td>
<td>7.582 (2nd &amp; 3rd)</td>
</tr>
<tr>
<td>8</td>
<td>Construction of RCC Culvert at Talmunnda road RD 350 mtr. (MoU Work sl.no. 17)</td>
<td>5.18</td>
<td>2.072</td>
<td>5.18 (100%)</td>
<td>2.072</td>
<td>1.036</td>
<td>3.108 (2nd &amp; 3rd)</td>
</tr>
<tr>
<td>Village</td>
<td>Work Description</td>
<td>Length 1</td>
<td>Width 1</td>
<td>Width 2</td>
<td>Cost 1</td>
<td>Cost 2</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>------------------</td>
<td>----------</td>
<td>---------</td>
<td>---------</td>
<td>--------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Nerli</td>
<td>Construction of CC road from Somaru house to Sanoj house Nerli</td>
<td>8.65</td>
<td>3.46</td>
<td>8.642</td>
<td>3.46</td>
<td>1.722</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(MoU W sl. no. 18)</td>
<td></td>
<td></td>
<td>(100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction of CC road from Bhadu house to Raju house Nerli</td>
<td>8.92</td>
<td>3.568</td>
<td>8.908</td>
<td>3.568</td>
<td>1.772</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(MoU W sl. no. 19)</td>
<td></td>
<td></td>
<td>(100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction of CC road from main road to Bhima house Nerli</td>
<td>5.35</td>
<td>2.14</td>
<td>5.337</td>
<td>2.14</td>
<td>1.057</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(MoU W sl. no. 21)</td>
<td></td>
<td></td>
<td>(100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kumharras</td>
<td>Construction of culvert from main road to Karanje-ner Kumharras</td>
<td>5.40</td>
<td>2.16</td>
<td>5.371</td>
<td>2.16</td>
<td>1.051</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(MoU W sl. no. 24)</td>
<td></td>
<td></td>
<td>(99%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction of culvert at Pumarapara to Karanje Karumharras</td>
<td>5.40</td>
<td>2.16</td>
<td>5.383</td>
<td>2.16</td>
<td>1.063</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(MoU W sl. no. 25)</td>
<td></td>
<td></td>
<td>(100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gamawada</td>
<td>Construction of CC road from main road to Pachpada, Gamawada</td>
<td>15.61</td>
<td>6.244</td>
<td>15.606</td>
<td>6.244</td>
<td>3.118</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(MoU W sl. no. 29)</td>
<td></td>
<td></td>
<td>(100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porokameli</td>
<td>Construction of Mangol Bhawan at Budharam para, Porokameli</td>
<td>9.61</td>
<td>3.84</td>
<td>9.401</td>
<td>3.84</td>
<td>1.721</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(MoU W sl. no. 54)</td>
<td></td>
<td></td>
<td>(90%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karanjekar</td>
<td>Construction of CC road from main road to Raju house Dungungipura Kumharras</td>
<td>7.98</td>
<td>3.192</td>
<td>7.973</td>
<td>3.192</td>
<td>1.589</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(MoU W sl. no. 55)</td>
<td></td>
<td></td>
<td>(100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction of CC road from main road to Karanjkenar Kumharras</td>
<td>7.98</td>
<td>3.192</td>
<td>7.98</td>
<td>3.192</td>
<td>1.596</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(MoU W sl. no. 56)</td>
<td></td>
<td></td>
<td>(100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karanjekar</td>
<td>Construction of culvert at main road to Karanje Karumharras</td>
<td>5.90</td>
<td>2.36</td>
<td>5.90</td>
<td>2.36</td>
<td>1.18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(MoU W sl. no. 59)</td>
<td></td>
<td></td>
<td>(100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total:**

|          | 136.61 | 54.644 | 54.664 | 23.89 | 78.534 |

उपरोक्त सांख्यिकीय आधार अनुसार राशि 78,534 लाख (लाख वित्त विभाग) की मात्रा का पूर्व सीसीएम गव द्वारा प्राप्त आर्थिक सहयोग का उपयोग के रूप में किया गया है।

# नोट

1. यदि कोई भूमिका नुसार उचित नहीं होता, तो उसकी भूमिका नुसार उचित नहीं होता।

2. पूर्व सीसीएम गव द्वारा प्राप्त आर्थिक सहयोग का उपयोग के रूप में किया गया है।

# प्रमाणित सूची

- आयक निवेदन के संदर्भ में
- उपरोक्त सांख्यिकीय आधार
- पूर्व सीसीएम गव द्वारा प्राप्त आर्थिक सहयोग का उपयोग के रूप में किया गया है।

# विवरण

- यह सांख्यिकीय आधार उपरोक्त सूची में दिया गया है।
- पूर्व सीसीएम गव द्वारा प्राप्त आर्थिक सहयोग का उपयोग के रूप में किया गया है।

# आयक निवेदन

- आयक निवेदन के संदर्भ में
- पूर्व सीसीएम गव द्वारा प्राप्त आर्थिक सहयोग का उपयोग के रूप में किया गया है।

# विवरण

- यह सांख्यिकीय आधार उपरोक्त सूची में दिया गया है।
- पूर्व सीसीएम गव द्वारा प्राप्त आर्थिक सहयोग का उपयोग के रूप में किया गया है।
### TEST REPORT

**Issued to**

NMDC Ltd.
Iron Ore Beneficiation Plant, Bacheli
Chhettisgarh

<table>
<thead>
<tr>
<th>Date of Monitoring</th>
<th>27 to 28th January, 2019</th>
<th>Date of Reporting</th>
<th>04th February, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your Ref No.</td>
<td>NMDC/ENV/JURC/PLCL(7)/2018/1908, Dated: 28.11.2018</td>
<td>Report No.</td>
<td>PLCPL/18-19/01/NO1-N0202</td>
</tr>
<tr>
<td>Sample particulars</td>
<td>Noise, No. of samples: 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrument used</td>
<td>Sound Level Meter (Lutron SL-4001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test required</td>
<td>Recording Noise Levels</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TEST RESULTS

<table>
<thead>
<tr>
<th>Location</th>
<th>Noise Levels (Leq) in dB(A)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Day time</td>
</tr>
<tr>
<td>New shopping complex, hi-tech colony Bacheli</td>
<td>53.8</td>
</tr>
<tr>
<td>Patel Para</td>
<td>49.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category of Area</th>
<th>Limits in dB(A) Leq</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Day Time</td>
</tr>
<tr>
<td>A</td>
<td>75</td>
</tr>
<tr>
<td>B</td>
<td>55</td>
</tr>
</tbody>
</table>

---

**Analyst Signatory**

**Authorized Signatory**

(M. Ravi Kiran)
## TEST REPORT

**Issued to**
NMDC Ltd.
Iron Ore Beneficiation Plant, Bachelli
Chhattisgarh

<table>
<thead>
<tr>
<th>Date of Monitoring</th>
<th>21st to 22nd February, 2019</th>
<th>Date of Reporting</th>
<th>28th February, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your Ref. No.</td>
<td>NMDC/ENVI/URC/PLCL(7)/2018/1908, Dated: 23.11.2018</td>
<td>Report No.</td>
<td>PLCPL/18-19/02/N01-N02/02</td>
</tr>
<tr>
<td>Sample particulars</td>
<td>Noise, No. of samples: 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrument used</td>
<td>Sound Level Meter (Lutron SL-4001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test required</td>
<td>Recording Noise Levels</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## TEST RESULTS

<table>
<thead>
<tr>
<th>Location</th>
<th>Noise Levels (Leq) in dB(A)</th>
<th>Day time</th>
<th>Night time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within the project site</td>
<td></td>
<td>73.2</td>
<td>68.4</td>
</tr>
<tr>
<td>Close to the project site (Bada Bachelli)</td>
<td></td>
<td>47.5</td>
<td>40.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area Code</th>
<th>Category of Area</th>
<th>Limits in dB(A) Leq</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Day Time</td>
</tr>
<tr>
<td>A</td>
<td>Industrial Area</td>
<td>75</td>
</tr>
<tr>
<td>B</td>
<td>Residential Area</td>
<td>55</td>
</tr>
</tbody>
</table>

Analyst Signatory

Authorized Signatory
(M. Ravi Kiran)
नमस्कार/एनडीसी/लिमिटेड/नीली/2017/जगदलपुर/3 3 दिनांक 13/06/2017

प्रति,

1 - श्रीमान कबीरुद्दीन
दक्षिण बस्तर
देशवासा।

2 - महाप्रबंधक
जिला उद्योग केंद्र
दक्षिण बस्तर देशवासा।

3 - सी.एच.ओ.
बड़े बच्चों नगर पालिका
बच्चों, दक्षिण बस्तर

विश्वास-- 4.0 एम.टी.पी.ए. लॉक अवसर प्रसंसीकरण संचार के पर्यावरण स्वीकृति के संबंध में,

भारत सरकार, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, नई दिल्ली के प्रति कमांड F.No.J-1101545/2014-IAll(M) दिनांक 27.04.2017 द्वारा कहा किया जा रहा, जिला दक्षिण बस्तर देशवासा,
छत्तीसगढ़ लॉक अवसर संचालन (Iron Ore Beneficiation Plant (4.0 MTPA) के पर्यावरण
स्वीकृति की गई है।

पर्यावरण स्वीकृति की पर्यावरण, वन और परिवर्तन मंत्रालय, भारत सरकार की वेबसाइट http://
envfor.nic.in) पर देखा जा सकता है।

पर्यावरणीय स्वीकृति की प्रति आपके अलोकनालय सादर प्रस्तुत है।

महाप्रबंधक

(हसा, अमीत कुमार)
महाप्रबंधक

प्रांगण कार्यालय : 10-3-311/1 खनिज भवन, मसब टैंक, हैदराबाद - 500173
री.डी. ओफिस : 10-3-311/A Khanij Bhavan, Masab Tank Hyderabad - 500173
सर्वसाधारण को सूचना

पत्रदृश्य सर्वसाधारण को सूचित किया जाता है कि भारत सरकार, पर्यावरण वन और जलवायु परिवर्तन मंत्रालय, नई दिल्ली के पत्र क्रमांक F.No. J-11045/45/2014-IA II (M) दिनांक 27.04.2017 द्वारा बचेली, जिला दक्षिण बस्तर, दंतेवाड़ा, छत्तीसगढ़ में लौह अयस्क प्रसर्षकरण समर्थन (Iron Ore Beneficiation Plant (4.0 MTPA) को समर्थन स्वीकृति जारी की है। पर्यावरण स्वीकृति की प्रतिलिपि छत्तीसगढ़ राज्य पर्यावरण संस्थान मॉडल के कार्यालय में उपलब्ध है तथा इसे पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, भारत सरकार की वेबसाइट (http://enviformic.in) पर देखा जा सकता है।

का अजीत कुमार
महाप्रबंधक
NMDC/SPL/IOPP/EC/303

Dated: 19/06/2017

To,

Additional Principal Chief Conservator of Forests (C)
Ministry of Environment, Forest and Climate Change,
Regional Office (WCZ), Ground Floor, East Wing
New Secretariat Building Civil Lines,
Nagpur

Sub: Grant of Environmental Clearance w.r.t 4 MTPA Iron Ore Beneficiation Plant reg.

Sir,


The information w.r.t above EC was published in two local News Papers i.e “Bastar Impact” & “Danik Jagran”. A copy of the newspaper advertisement in the above newspapers is enclosed as Annexure-2.

End: As above (9 sheets)

Regards

V. Ajit Kumar
General Manager