

एनएमडीसी लिमिटेड
(भारत सरकार का उद्यम)
NMDC Limited
(A GOVT. OF INDIA ENTERPRISE)



पंजीकृत कार्यालय : 'खनिज भवन', 10-3-311/ए,
कैसल हिल्स, मासाब टैंक, हैदराबाद - 500 173.

Regd. Office : 'Khanij Bhavan' 10-3-311/A,
Castle Hills, Masab Tank, Hyderabad-500 173.

ENV/BLD/DEP-14/11C/SMPR/2015/3419

Dated: 10.12.2015

Additional Director (Scientific)
Govt. of India
Ministry of Environment and Forest
Regional Office, Western Region,
Kendriya Paryavaran Bhavan,
Link Road No.3, Ravi Shankar Nagar,
Bhopal – 462 016.

Sub: Six Monthly Progress Report (April' 2015 to September' 2015) on Compliance to the Conditions stipulated in Environmental Clearance accorded to Augmentation of Screening Plant and Associated facilities at Bailadila Iron Ore Project, Deposit – 14/11C Kirandul of NMDC Ltd, South Bastar, Dantewada, Chhattisgarh.


Ref: Environmental Clearance letter no.J-11015/320/2012-IA.II (M) dated 05/11/2013 received from MoEF, New Delhi.

Sir,

With reference to the above, please find enclosed herewith Six Monthly Progress Report for the period April' 2015 to September' 2015 on Compliance to the conditions stipulated in Environmental Clearance accorded to Augmentation of Screening Plant and Associated facilities at Bailadila Iron Ore Project, Deposit – 14/11C Kirandul of NMDC Ltd, South Bastar, Dantewada, Chhattisgarh.

Thanking you,

Yours faithfully,


(M. Jayapal Reddy) 10/12/15
JGM (Env)

Encl: As above.

**TERMS & CONDITIONS
OF
ENVIRONMENTAL CLEARANCE OF DEPOSIT SP-III
GRANTED BY MoEF, NEW DELHI**

Letter No. J-11015/320/2012-IA.II (M)

New Delhi, Dated 05.11.2013

PERIOD: APRIL'2015 to SEPTEMBER'2015

A.SPECIFIC CONDITIONS

Sl.No.	COMPLIANCE CONDITIONS	STATUS
i	The project proponent shall obtain Consent to Establish and Consent to Operate from the State Pollution Control Board, Chhattisgarh and effectively implement all the conditions stipulated therein.	<i>Application for obtaining the Consent to Establish had been submitted to Chhattisgarh Environment Conservation Board (CECB), Raipur on 06.09.2009. Consent to Establish is awaited from CECB, Raipur.</i>
ii	No working in the forest area shall be undertaken without obtaining the requisite prior forestry clearance, as may be applicable to this project.	<i>Ministry of Environment and Forests (MoEF), New Delhi accorded 2nd stage forest clearance on 10.04.2015.</i>
iii	Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.	<i>Wild life conservation plan was approved by PCCF (Wildlife) vide letter no.Va.Pra./3445 Raipur dated 07.12.2013. Financial outlay of Rs.15.50 crores has been transferred to CAMPA account on 30.04.2014.</i>
iv	Ground water quality around the tailing dam shall be regularly monitored and data submitted to the Ministry/ CPCB/SPCB.	<i>Ground water level and quality is regularly (once in a season throughout the year) monitored through MoEF, approved laboratory (M/s Space Geo Tech, Bangalore.) at 30 different locations around BIOM Kirandul Complex. Regularly ground water report is being submitted to Regional Office, MOEF, Bhopal through head office of NMDC Limited, Hyderabad. The ground water level & quality monitoring has been carried out for Monsoon Season 2015 at BIOM Kirandul Complex.</i> <ul style="list-style-type: none"> • <i>The ground water levels varied from 1.60 to 12.95 meters.</i> • <i>pH varied between 6.0 to 7.1.</i> • <i>Total Dissolved Solids levels varied between 3 to 215 mg/l.</i>

Sl.No.	COMPLIANCE CONDITIONS	STATUS
		<ul style="list-style-type: none"> • Total Hardness levels varied between 0.5 to 136 mg/l. • Alkalinity levels varied between 0.5 to 124.00 mg/l. • Fluoride (F) levels varied between 0.05 to 0.53 mg/l. • Fe levels varied between 0.02 to 0.54 mg/l. <p>The higher levels of Fe were observed at two (10) no.s of hand pumps.</p> <p>The higher levels Fe is due to the natural lateritic formation in the area. However the project is taking steps towards the installation of iron removal plants for hand pumps located in villages around the project.</p>
v	Wildlife conservation plan shall be prepared in consultation with the office of the Chief Wildlife warden. The plan shall comprise of in-built monitoring mechanism with special emphasis to protection of Schedule I Species. The status of implementation shall be submitted to the Ministry. Further an authenticated list of flora/fauna separately for core and buffer zone indicating the schedule of fauna shall be submitted to the Ministry.	Wild life conservation plan was approved by PCCF (Wildlife) vide letter no.Va.Pra./3445 Raipur dated 07.12.2013. Financial outlay of Rs.15.50 crores has been transferred to CAMPA account on 30.04.2014.
vi	Measures shall be taken to control the dust emissions at loading unloading points of the ore.	Shall be complied.
vii	Green belt shall be raised around the Kirandul Complex and selection plants species shall be as per CPCB guidelines to control the fugitive dust emissions.	An area of 1214.96 ha. (Within and outside the lease areas) has been developed under greenbelt development. An amount of Rs. Rs. 710.3 lakhs has been spent for plantation of 13, 95, 502 no. of saplings in the above area. Also an amount of Rs. 5.49 crores has been released to Chhattisgarh Rajya Van Vikas Nigam Limited, Raipur for carrying out road side plantation over a length of 50 km under Harihar Chhattisgarh program.
viii	The rainwater harvesting shall be adopted in consultation with the Regional Director, Central Ground Water Board.	Rainwater harvesting is being carried out into the ponds (4Nos.) for recharging of ground water. In addition to the above, 11nos. of ponds have been

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		<i>constructed in different villages such as Madadi, Cholnar, Perpa, Pirnar, Penta and Lendra.</i>
ix	As part of ambient air quality monitoring during operational phase of the project, the air samples shall also be analyzed for their mineralogical composition and records maintained.	<i>Shall be complied.</i>
x	The water recovery and spill way system shall be so designed that the natural water resources are not affected and that no sill water from the plant goes into the any other water body.	<i>Shall be complied.</i>
xi	The filter cake shall be disposed at the earmarked site, which shall be above highest water table and shall be lined to prevent any leaching from the filter cake disposal site into groundwater. Efforts shall also be made to gainfully utilize th filter cake so generated in an environmentally compatible manner.	<i>Not Applicable.</i>
xii	The beneficiated ore shall be transported to railway sidings only through closed conveyor.	<i>Shall be complied.</i>
xiii	Effective safeguard measures such as conditioning areas prone to air pollution and having high levels of particulate matter such as around crushing and screening plant. Loading and unloading pint and transfer points. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	<i>Shall be complied.</i>
xiv	The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.	<i>Shall be complied.</i>
xv	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic [(at least four times in a year – pre – monsoon (April-May), monsoon (August), post-monsoon (November) and winter(January;	<i>Ground water level and quality is regularly (once in a season throughout the year) monitored through MoEF, approved laboratory (M/s Space Geo Tech, Bangalore.) at 30 different locations around BIOM Kirandul Complex. Regularly ground water report is being submitted to Regional Office,</i>

Sl.No.	COMPLIANCE CONDITIONS	STATUS
	<p>ones in each season)] shall be carried out in consultation with the State Ground Water Board/ Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Bhopal, The Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.</p>	<p>MOEF, Bhopal through head office of NMDC Limited, Hyderabad.</p> <p>The ground water level & quality monitoring has been carried out for Monsoon Season 2015 at BIOM Kirandul Complex.</p> <ul style="list-style-type: none"> • The ground water levels varied from 1.60 to 12.95 meters. • pH varied between 6.0 to 7.1. • Total Dissolved Solids levels varied between 3 to 215 mg/l. • Total Hardness levels varied between 0.5 to 136 mg/l. • Alkalinity levels varied between 0.5 to 124.00 mg/l. • Fluoride (F) levels varied between 0.05 to 0.53 mg/l. • Fe levels varied between 0.02 to 0.54 mg/l. <p>The higher levels of Fe were observed at two (10) no.s of hand pumps.</p> <p>The higher levels Fe is due to the natural lateritic formation in the area. However the project is taking steps towards the installation of iron removal plants for hand pumps located in villages around the project.</p>
xvi	<p>The water quality of Baitarni and Karo rivers, upstream and downstream of the projects shall be monitored regularly and records maintained. It shall be ensured that the quality of water in the Koyar river and Bacheli, Kirandul and Malangir nallah is not affected adversely due to this project.</p>	<p>Baitarni & Karo rivers do not flow in this region.</p> <p>However adequate measures will be taken in order to avoid the adverse effect on the quality of Koyar river, Bacheli nallah, Kirandul nallah and Malangir nallah due to this project.</p>
xvii	<p>Plantation shall be raised in 38.436 ha including 7.5 m wide green belt in the safety zone around the mining lease, over burden dump(s), backfilled and reclaimed area, mine benches, around water body, roads etc. in consultation with the local DFO / Agriculture Department. The density of the trees shall be around 2500 plants per ha. Greenbelt shall be developed all along the plant area in a phased manner and shall be completed within first five years.</p>	<p>Shall be complied.</p>

Sl.No.	COMPLIANCE CONDITIONS	STATUS
xviii	Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For The purpose, schedule of health examination of the workers should be drawn and followed accordingly.	<i>Shall be complied.</i>
xix	The proponent should evolve, if not already having a well laid down Environmental Policy approved by its Board of Directors. It should interalia prescribe for standard operating process/ procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions. Hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions should also be clearly spelt out. Details in this regard should be furnished.	<i>Corporate Environment Policy is already defined.</i>
xx	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 health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	<i>Shall be complied.</i>

B. GENERAL CONDITIONS:

Sl.No.	COMPLIANCE CONDITIONS	STATUS
i	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	<i>Shall be complied.</i>
ii	At least four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10 micron i.e., PM ₁₀) and NO _x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken	<i>Shall be complied.</i>

Sl.No.	COMPLIANCE CONDITIONS	STATUS
	in consultation with the State Pollution Control Board. The data so recorded should be regularly submitted to the Ministry including its Regional office located at Bhopal and the State Pollution Control Board / Central Pollution Control Board once in six months.	
iii	Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.	<i>Shall be complied.</i>
iv	Industrial waste water should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.	<i>Shall be complied.</i>
v	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.	<i>Shall be complied.</i>
vi	Occupational health surveillance program of the workers should be undertaken periodically to observe any contraction due to exposure to dust and take corrective measures, if needed.	<i>Shall be complied.</i>
vii	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	<i>A separate Environmental Management Dept. has been established with well qualified and experienced. personnel under the control of Jt.GM (Production) through DGM (Mining) Training & Safety/Environment. The organizational chart of environment department is enclosed as Annexure – I.</i>
viii	The funds earmarked for environmental protection measures should be kept in separate account and should be reported to the Ministry and its Regional Office located at Bhopal.	<i>Shall be complied.</i>

Sl.No.	COMPLIANCE CONDITIONS	STATUS
ix	The project authorities should inform to the Regional Office located at Bhopal regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	<i>Shall be complied.</i>
x	The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by development work.	<i>Cooperation will be extended to officers of Regional Office of the Ministry during their inspection to the project.</i>
xi	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office and the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental 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 Ministry of Environmental and Forests, Bhopal, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.	<i>Shall be complied.</i>
xii	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestion/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	<i>Submitted.</i>
xiii	The State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days.	-
xiv	The environmental statement for each financial year ending 31 st March in Form-Vas is mandated to be submitted by the project	<i>Consent to Establish is awaited from CECEB, Raipur.</i>

Sl.No.	COMPLIANCE CONDITIONS	STATUS
	<p>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 along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Office of the Ministry of Environment and Forests, Bhopal by e-mail.</p>	
xv	<p>The project authorities should advertise at least in two local newspapers of the District or State in which the project is located and widely circulated, one of which shall be in the vernacular language of the informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhopal.</p>	<p><i>Advertised in Bastar Impact, Dantewada and Dainik Bhaskar, Raipur on 17/11/2013.</i></p>

LIST OF ANNEXURES

- I. Organizational Chart of Environment Department at BIOM, Kirandul Complex.

**Organizational Chart
of
Environment Department at BIOM, Kirandul Complex**

