

9 MAR 2018



Lloyds Metals and Energy Limited

Regd. Office & Works: Plot A-1 and A-2, MIDC Area, Ghugus, Chandrapur 442 505 (Maharashtra) Tel. 07172 398500/285099/103/398 Fax: 07172 285003
Corp. Off: Trade World, C-Wing, 16th Floor, Kamala City, Senapati Bapat Marg, Lower Parel, Mumbai-400 013, Tel : 91-22-3041 8111 Fax 022- 3041 8260
CIN: L40300MH1977PLC019594. Website: www.lloyds.in



MIN/MoEF/DEC/2017

9th Feb, 2018

184
Set-D
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To-(F)
Asst.....

To,
The Regional Office, (WCZ),
Monitoring cell,
Ministry of Environment, Forest and Climate Change,
Ground Floor, East Wing,
New Secretariat Building, Civil Line
Nagpur-440001

Subject: -Six Monthly Compliance Report for the condition of Environmental Clearance of Surjagarh Iron Ore Mine at Etapalli Taluka in Gadchiroli District of Maharashtra.

Dear Sir,
Please find enclosed herewith Six Monthly Compliance Report for the condition of Environmental Clearance of Surjagarh (Worria Hills) iron ore mining lease at Etapalli Taluka in Gadchiroli District of Maharashtra for the period from **01/07/2017 to 31/12/2017**.

This is for your kind information and doing the needful please.

Thanking you,

Yours faithfully,
For Lloyds Metals & Energy Ltd.

Dr. Manoj Sahu
AGM-Geology & Mining



Encl: As above

1. Six Monthly Compliance Report for the period of 01/07/2017 to 31/12/2017
2. Copy of Environmental Clearance
3. Digital processing (Map) of the entire lease area using remote sensing.

Copy. to :

- 1) The Regional Officer, MPCB " 1st floor, Udhog Bhavan, Chandrapur

11258

Six Monthly
Compliance
Report

**Compliance Report for the condition in the
Environmental Clearance No. J-11015/348/2005.IA.II (M)
dated 29.05.2006**

**issued by Ministry of Environment and Forest, New Delhi
for Surjagarh (Worria Hill) Iron Ore Mine of
Lloyds Metals & Energy Ltd,
Etapalli Taluka, Gadchiroli District of Maharashtra
Period July-December, 2017**

Specific conditions

Sr. No.	Conditions	Compliance Status
(i)	The mining operations shall not intersect groundwater table. Prior approval of the ministry of Environmental & Forest and Central Ground Water Authority shall be obtained for mining below water table.	complied
(ii)	A wildlife management plan clearly showing safeguards and management interventions for the area shall be prepared and got vetted by Wildlife Institute of India and duly implemented in the project. The cost of preparation & implementations of wildlife management plan shall be borne by the proponent & included as project cost.	Prepared and approved on 23.10.2006
(iii)	Float ore area shall be completely backfilled concurrently and reclaimed by top soil. Backfilling shall start from 6th year onward.	To be complied after completion of First phase of mining.
iv)	Use of ripper dozer as an alternate technology to avoid blasting & ground vibrations shall be explored and adopted to the extent possible.	To be complied, as presently the stage of compilation not reached
v)	Top soil shall be stacked properly with proper slop with adequate measures & should be used for reclamation & rehabilitation of mined out area.	To be complied, as presently the stage of compilation not reached
vi)	There shall be no external overburden dumps. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the ministry of Environment & Forest on six monthly basis.	1. Complied 2. As the date of filing not reached
vii)	Catch drains & siltation ponds of appropriate size should be constructed to arrest silt and sediment flow from soil, temporary dumps and mineral dumps.	As presently the stage of compilation not reached

	<p>The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drain should be regularly desilted particularly after monsoon maintained properly.</p> <p>Garland drain shall be constructed for mine pit and temporary dumps & sump capacity should be designed keeping 50% safety margin over & above peak sudden rainfall and maximum discharge in the area adjoining the mine site.</p>	
viii)	Dimension of retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data.	As presently the stage of compilation not reached
ix)	Plantation shall be raised in an area of 342.29 ha including a green belt of 5.8 ha, around area, mineral separation plant, roads etc. by planting the native species in consultation with the local DFO/Agriculture department. The density of the trees should be around 2500 plants per ha.	As presently the stage of compilation not reached
x)	The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional director, Central Ground Water Board.	As presently the stage of compilation not reached
xi)	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing well & constructing new piezometers during the mining operations. The monitoring should be carried out four times in a year-Pre-monsoon (April-May), monsoon(August), post-monsoon(November) & winter(January) and the data thus collected may be sent regularly to MOEF, Central Ground Water Authority and Regional Director Central Ground Water Board.	As presently the stage of compilation not reached
xii)	Suitable rainwater harvesting measures on long term basis shall be planned & implemented in consultation with Regional Director, CGWB.	As presently the stage of compilation not reached
xiii)	Permission from the competent authority should be obtained for drawal of water from the river.	No River Water used
xiv)	Suitable embankment of proper	As presently the stage of compilation

	dimensions should be constructed to protect the area from flood water during rainy season.	not reached, When regular mining starts the suitable embankment dimensions will be taken.
xv)	Appropriate mitigative measures should be taken to prevent pollution of Bandia river in consultation with the State Pollution Control Board.	Stage not reached.
xvi)	Vehicular emissions should be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations & in transportation of mineral. The vehicles should be covered with a tarpaulin & shall not be overloaded.	Complied 1) Only vehicles having Valid PU certificate is deployed for transportation. 2) The trucks carrying Ore is covered with Tarpaulin
xvii)	The project authorities should undertake sample survey to generate data on pre-project community health status within a radius of 1 km from proposed mine.	No inhabitation within 1 KM radius of the lease area.
xviii)	Blasting Operation should be carried out only during the day time. Controlled blasting should be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks & boulders should be implemented.	Blasting not done
xix)	Drills should be wet operated or operated with dust extractors.	Drilling not yet started
xx)	Water sprinkling system shall be provided to check fugitive emissions from ancillary operations such as crushing, screening plant etc.	Stage not reached
xxi)	Consent to operate should be obtained from SPCB before starting production from the mine.	Obtained, Valid upto 31.03.2021, Application for renewal under process.
xii)	Sewage treatment plant should be installed for the colony. ETP should provided for workshop and mineral separation plant wastewater.	No colony within lease premises.
xxiii)	Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern & report submitted to MOEF and its regional office.	Complied (Map enclosed)
xiv)	A final mine closure plan along with details of Corpus fund should be submitted to the MOEF 5 years in advance of final mine closure plan for approval.	Will be done at the appropriate time, Stage not reached.

General conditions

Sr. No.	Conditions	Compliance Status
i)	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forest.	complied
ii)	No change in calendar plan including excavation, quantum of mineral iron ore and waste should be made.	Complied,
iii)	Conservations measures for protection of flora & fauna in the core * buffer zone should be drawn up in consultation with the local forest department.	Stage not reached.
iv)	Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RPM, SPM, SO ₂ , NO _x monitoring. Location of stations should be decided based on the meteorological data, topographical features and environmentally & ecologically sensitive targets & frequency of monitoring should be undertaken in consultation with State Pollution Control Board.	Stage not reached.
v)	Data on ambient air quality should be regularly submitted to the Ministry including its regional of office located at Bhopal and the State Pollution Control Board/Central pollution control Board once in six months.	Will be complied, once regular mining works commence.
vi)	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads loading & unloading and at transfer points should be provided and properly maintained.	Complying regularly when the mines is under working operation.
vii)	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 plug/muffs.	The stage not reached
viii)	Industrial waste should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 May, 1993 and 31st December, 1993 or as amended from time to time. Oil & grease trap should	As presently the stage of compilation not reached

	be installed before discharge of workshop effluents.	
ix)	Personnel working in dusty area should wear protective respiratory devices and they should also be provided with adequate training and information on safety & health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to coal dust and take corrective measures, if needed.	complied
x)	A separate environment 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 organization.	Will be complied, as regular mining work yet to commence.
xi)	The project authority should inform to the Regional office located at Bhopal regarding date of financial closures & final approval of the project by the concerned authorities and the date of start of land development work.	complied
xii)	The funds earmarked for environmental protection measures should be kept in the separate account & should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry & its Regional office located at Bhopal.	complied
xiii)	The Regional office of this Ministry located at Bhopal shall monitor compliances of the stipulated conditions. The project authorities should extend full cooperation to the officers of the Regional office by furnishing the requisite data/information/monitoring reports.	complied
xiv)	A copy of clearance letter will be marked to concern Panchayat/Local NGO, if any from whom and suggestion/representation has been received while processing the proposal.	complied
15)	State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre & Collector's office/Tehsildar's office for 30 days.	Complied

16)	The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter 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 may also be seen at web site of the Ministry of Environment & Forest at http://envfor.nic.in & a copy of the same should be forwarded to the Regional office of this Ministry located Bhopal.	complied
xvii)	The Ministry or any competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	NA
xviii)	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Complied
xix)	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention & Control of pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendment and rules.	Complied

Place –Chandrapur

Date: 09/02/2018

For Lloyds Metals and Energy Ltd.



M. Sahu
Dr. Manoj Kumar Sahu
AGM-Geology & Mining

No.J-11015/348/2005.IA.II (M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan,
C.G.O. Complex, Lodi Road,
New Delhi - 110 003

Dated the 29th May 2006

To,

The Director
M/s Gadchiroli Metals & Minerals,
33, Mount Road, Sadar,
Nagpur-440 001

Subject: Surjagarh Iron Ore Mining Project of M/s Gadchiroli Metals & Minerals located near village Bande, Tehsil Etapalli, District Gadchiroli, Maharashtra -environmental clearance reg.

Sir,

This has reference to your letter No. 'Nil' dated 02.09.2005 and subsequent letters dated 12.10.2005, 28.12.2005 and 28.03.2006 on the subject mentioned above. The Ministry of Environment and Forests has examined the application. It has been noted that the proposal is for opening of a new mine and Ministry has granted site clearance to the project on 21.12.2005. The total mine lease area of the project is 348.09 ha which is a forestland. The entire lease area of 348.09 ha is proposed for mining. No ecologically sensitive area, such as National park/sanctuary/biosphere reserve etc., is located in the core and buffer zone. There is no population in the core zone, therefore, no displacement of population and R&R is involved. The annual targeted production capacity of the mine is 30 lakh tonnes (3.0 million tonnes) of iron ore. Approximately 10,000 TPD of mineral will be transported by road. Working will be opencast by mechanised method involving blasting. The topography of the are is undulated and hilly. The ultimate working depth of the mine will be 125 m bgl. Ground water table is in the range of 150-200 m bgl in core zone and 8-25 m bgl in buffer zone (pre-monsoon) and 130-150 m bgl in core zone and 0.5-10 m bgl in buffer zone (Post monsoon). Working will not intersect ground water table. Peak water requirement is 70m³ /day, which will be met from river. Approximately 2050 m³/month of solid waste will be generated. It is proposed that a total of 7.3Mm³ of OB will be generated during the entire life of the mine. The entire quantity of the OB will be backfilled. Backfilling will start after 5th year of mining operations. Consent to establish issued by Maharashtra State Pollution Control Board on 09.08.2005 for production capacity of 3.0 MTPA. Indian Bureau of Mines (IBM) has approved mining plan on 03.03.2004 for lease area of 348.09 ha and subsequently the mining plan transferred in the name of M/s Gadchiroli Metals

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and Minerals on 27.03.2006. Public hearing of the project held on 12.07.2005. In principle forestry clearance for diversion of 374.90 ha forestland granted by the Ministry of Environment & Forests on 13.06.2005. Capital cost of the project is Rs.4768.0 lakhs.

2. The Ministry of Environment and Forests hereby accords environmental clearance to the above mentioned Surjagarh Iron Ore Mining project of M/s Gadchiroli Metals and Minerals for production capacity of 30 lakh TPA (3.0 million tonnes per annum) of iron ore by opencast mechanised method involving total lease area of 348.09 ha under the provisions of the EIA Notification 1994 and its subsequent amendments issued under Environment (Protection) Act, 1986 subject to implementation of the following conditions/safeguards.

A. Specific conditions

- (i) The mining operations shall not intersect groundwater table. Prior approval of the Ministry of Environment & Forests and Central Ground Water Authority shall be obtained for mining below water table.
- (ii) A wildlife management plan clearly showing safeguards and management interventions for the area shall be prepared and got vetted by Wildlife Institute of India and duly implemented in the project. The cost of preparation and implementation of wildlife management plan shall be borne by the proponent and included as project cost.
- (iii) Float ore area shall be completely backfilled concurrently and reclaimed by top soil. Backfilling shall start from 6th year onwards.
- (iv) Use of ripper dozer as an alternate technology to avoid blasting and ground vibrations shall be explored and adopted to the extent possible.
- (v) Top soil shall be stacked properly with proper slope with adequate measures and should be used for reclamation and rehabilitation of mined out areas.
- (vi) There shall be no external overburden dumps. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests on six monthly basis.
- (vii) Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, temporary dumps and mineral dumps. The water so collected should be utilized for ...3/-

watering the mine area, roads, green belt development etc. The drains should be regularly desilted particularly after monsoon and maintained properly.

Garland drain (size, gradient and length) shall be constructed for mine pit and for temporary dumps and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.

- (viii) Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation should be based on the rain fall data.
- (ix) Plantation shall be raised in an area of 342.29 ha including a green belt of 5.8 ha, around ML area, mineral separation plant, roads etc. by planting the native species in consultation with the local DFO / Agriculture Department. The density of the trees should be around 2500 plants per ha.
- (x) The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.
- (xi) Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring should be carried out four times in a year - pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to MOEF, Central Ground Water Authority and Regional Director Central Ground Water Board.
- (xii) Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with Regional Director, CGWB.
- (xiii) Permission from the competent authority should be obtained for drawal of water from the river.
- (xiv) Suitable embankment of proper dimensionis should be constructed to protect the area from flood water during rainy season.
- (xv) Appropriate mitigative measures should be taken to prevent pollution of Bandia river in consultation with the State Pollution Control Board.

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- (xvi) Vehicular emissions should be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles should be covered with a tarpaulin and shall not be overloaded.
- (xvii) The project authorities should undertake sample survey to generate data on pre-project community health status within a radius of 1 km from proposed mine.
- (xviii) Blasting operation should be carried out only during the daytime. Controlled blasting should be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
- (xix) Drills should be wet operated or operated with dust extractors.
- (xx) Water sprinkling system shall be provided to check fugitive emissions from ancillary operations such as crushing, screening plant etc.
- (xxi) Consent to operate should be obtained from SPCB before starting production from the mine.
- (xxii) Sewage treatment plant should be installed for the colony. ETP should also be provided for workshop and mineral separation plant wastewater.
- (xxiii) Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to MOEF and its regional office.
- (xxiv) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.

B. General conditions

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral iron ore and waste should be made.
- (iii) Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest department.

- (iv) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RPM, SPM, SO₂, 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 in consultation with the State Pollution Control Board.
- (v) Data on ambient air quality (RPM, SPM, SO₂, NO_x) 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.
- (vi) Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
- (vii) 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.
- (viii) Industrial waste water (workshop and waste water from the mine) should 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. Oil and grease trap should be installed before discharge of workshop effluents.
- (ix) 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.

Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to coal dust and take corrective measures, if needed.
- (x) 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.
- (xi) 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.

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- (xii) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Bhopal.
- (xiii) 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 furnishing the requisite data / information / monitoring reports.
- (xiv) A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom and suggestion / representation has been received while processing the proposal.
- (xv) State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.
- (xvi) The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter 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 may also be seen 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 Bhopal.
3. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
4. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
5. The above conditions will be enforced *inter-alia*, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.


(SATISH C. GARKOTI)
Additional Director (S)

....7/-

Copy to:

1. Secretary, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment, Government of Maharashtra, Secretariat, Mumbai.
3. Secretary, Department of Mines and Geology, Government of, Maharashtra, Secretariat, Mumbai.
4. Secretary, Department of Forests, Government of Maharashtra, Secretariat, Mumbai.
5. Chief Wildlife Warden, Government of Maharashtra, Secretariat, Mumbai.
6. Chief Conservator of Forests, Regional Office (WZ), E-3/240, Arera Colony, Bhopal-462 016
7. Chairman, Central Pollution Control Board, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
8. Chairman, Maharashtra State Pollution Control Board, Kalpataru Point, 3rd & 4th Floors, Sion Matunga Scheme, Road No. 6, Opp. Cine Planet, Sion circle, Sion (E), Mumbai - 400022
9. Member Secretary, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
10. Contoller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
11. District Collector, Gadchiroli District, Maharashtra.
12. EI Division, Ministry of Environment & Forests, EI Division, New Delhi.
13. Monitoring File.
14. Guard File.
15. Record File.