

PRABODH MOHANTY

MINES OWNER

HEAD OFFICE : Weigh-Bridge Road, Post Box No.: 21, P. O.: Barbil - 758035,
Dist-Keonjhar (Odisha), Tel.: 06767-275362

Ref. : PM/BBL/190/2023-2024

Date 28/06/2023

To
The Member Secretary
SEIAA, Bhubaneswar
Odisha

Sub:- Compliance of condition imposed in EC granted by SEIAA in favour of Nuagaon Iron & Manganese Mine of Sri Prabodh Mohanty over an area of 29.257 hec in the district of Sundergarh, Odisha.

Ref. No.:- SEIA/596, Dated-16.12.2010 & Renewal Environmental Clearance Ref. No-2828/SEIAA Dated-21.01.2015.

Sir,

In inviting a reference to the subject cited above, we are enclosing herewith details Compliance report to the environmental Compliance (EC) issued to us by SEIAA, Odisha as on 1st June'2023. The same is also sent by E-mail through your ID No. -seiaaorissa@gmail.com.

This is for your kind information.

Thanking you.

Yours faithfully



Kirtan Barik
General Manager
Forest & Environment

Cc to The Research Officer, Ministry of Environment, Forests & Climate Change, Eastern Regional Office, A/3, Chandrasekharpur, Bhubaneswar-751023.

**COMPLIANCE REPORT ON STIPULATED
CONDITION IMPOSED ON ENVIRONMENT
CLEARANCE
OF
NUAGAON IRON & MANGANESE MINE.**

**Ref. No:- SEIAA/596, Dated-16.12.2010
& Renewal Environmental Clearance
Ref. No.:-2828/SEIAA Dated-21.01.2015**

**Lessee - Sri Prabodh Mohanty
At - Weigh bridge Road,
Po- Barbil, Dist - Keonjhar, Odisha
Pin-758035**

Compliance Report as on 1ST June'2023

LEASE HOLD AREA - 29.257 HECTS.

**Compliance report on stipulated condition imposed on Environment
Clearance of Nuagaon Iron & Mn. Ore Mine.
Half yearly Progress report as on 1st June-2023.**

Specific Condition

- i. The applicant (Project proponent) will take necessary measures for prevention, control and mitigation of Air Pollution, Water Pollution, Noise Pollution and Land Pollution including solid waste management as mentioned by him in Form-1, Final Reports and Environment Management Plan (EMP) in compliance with the prescribed statutory norms and standards.

Regularly we are monitoring Ambient Air Quality, Water Quality and Noise level from a reputed agency and submitting the reports to SPCB on quarterly basis. All necessary steps are under taken to minimize all types of pollution in the Mine.

- ii. The applicant will take necessary steps for socio-economic development of the people of the area on need based assessment for providing employment, education, health care, drinking water and sanitation road and communication facilities etc., after a detailed primary socio-economic survey.

More than 80% of the total employment is from local people. For improvement of standard of education, we have deployed qualified persons, who are directly reporting to the school for teaching. Once in a week one doctor with his paramedical staff is visiting to the Mine and giving necessary medical aid to the workers as well as villagers free of cost. One water tanker is engaged for drinking water supply. Regularly we are maintaining the village road. A detail Socio-economic study was undertaken by the mine management engaging a reputed NGO.



- iii. The applicant will comply to the points, concerns and issues raised by the people during Public hearing on 6th May'2010 in accordance with the commitments made by him thereon.

During public hearing on dt-6th may 2010 and all the issue raised by the public, demands have been fulfilled.

- iv. The applicant will take statutory clearance/approval/permissions from the concerned authorities in respect of his project as and when required.

We have obtained all the required statutory clearance/permission to work in the mine from competent authority.

- v. For post environmental clearance monitoring the applicant will submit half-yearly compliance report in respect of the stipulated terms and conditions of Environmental Clearance to the State Environmental Impact Assessment Authority (SEIAA) Orissa on 1st June and 1st December of each calendar year.

We are submitting half yearly compliance report to SEIAA on 1st June and 1st December of each calendar year.

- vi. The core zone should be monitored intensively with no. of stations as prescribed by CPCB, New Delhi and unit of pollutant level should be expressed as NAAQ of CPCB, New Delhi. The detailed methodology adopted for analysis of samples shall be clearly indicated.

We are monitoring the core zone as prescribed by CPCB, New Delhi from a reputed agency. For this purpose three stations are established within core zone and three stations in buffer zone are monitored by the public Analyst and result submitted to SPCB in every quarter.

- vii. The proponent shall submit baseline data on flora & fauna and CSR activities already carried out within three months to the SEIAA.

Base line data on flora & fauna and CSR activities already carried out by us are being submitted to SEIAA separately.

- viii. Adequate buffer zone shall be maintained between two consecutive mineral bearing deposits.

We are maintaining adequate buffer zone between two mineral bearing deposits.

- ix. Zero waste mining concept shall be implemented either by putting up pelletisation plant or dispose of low grade ores/fines to prospective buyers.

Our concept is to do zero waste mining. Whatever the rejects i.e, unsalable Ore generated stacked in earmarked place for future Marketing.

- x. The following shall be implemented viz.

(a) Dump run-off should be diverted into setting ponds.

All the dump run-off is being diverted into settling pond through garland drain.

Exhibit- Retaining wall, Garland Drain & Settling pond.





(b) Adequate rain water harvesting and ground water recharging facilities should be developed in the core zone.

During monsoon all the mine water is being channelized to accumulate in the harvesting pond. Recharge trench & Recharge pond made for ground water recharging purpose.

Exhibit- Water harvesting pond.





(c) Attempt should be made to achieve zero water balance.

We are trying to maintain the zero water balance.

- xi. Maintenance of roads through which transportation of ores are undertaken shall be carried out by the project proponent regularly at its own cost.*

We are maintaining regularly the transportation road at our own cost.

- xii. Fugitive dust generation shall be controlled. Fugitive dust emission shall be regularly monitored at locations of be nearest human habitation (including schools and other public amenities located nearest to sources of dust generation as applicable) and records shall be submitted to the SEIAA, Orissa.*

As our Mine is a semi-mechanized, where strength of machineries for mining purpose is very low. So, generation of fugitive dust is very less. However we are taking it most care to control fugitive dust emission by monitoring it on a regular basis.

- xiii. Transportation of ore shall be done by covering the trucks with tarpaulin or other suitable mechanism so that no spillage of ore/dust takes place.*

The transporting vehicle is taking load covering with tarpaulin to prevent spillage of ore and it has been strictly monitored.

Exhibit- Photographs of Transporting Vehicle covering with tarpaulin



xiv. Rain water harvesting shall be undertaken to recharge the ground water source.

Special care has been taken to recharge the rain water into ground water source. Recharge pond has already been constructed at low lying area of the lease hold.

Exhibit- Rain water harvesting pond



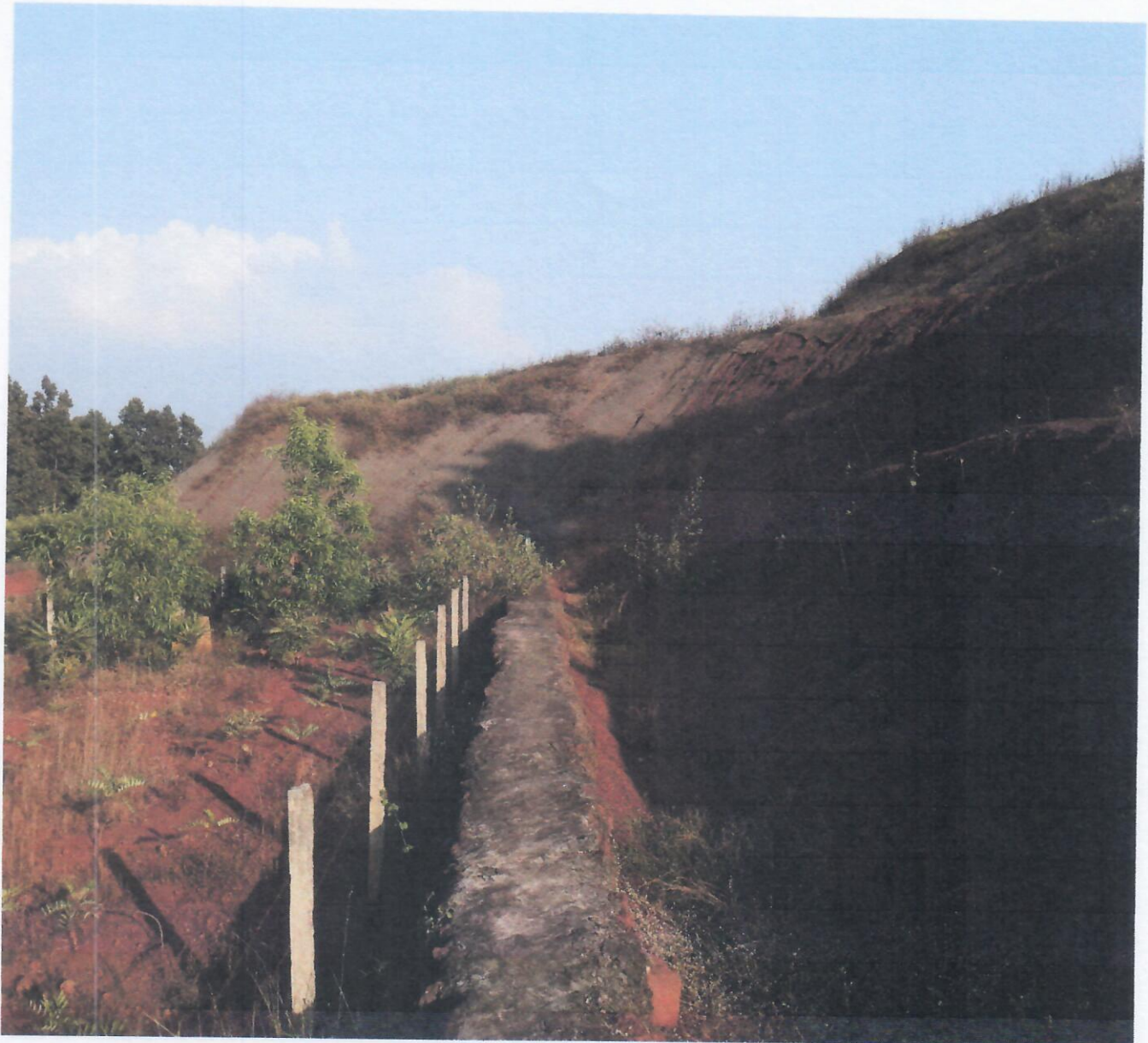
xv. Monitoring of ground and surface water quality shall be regularly conducted and records should be maintained and data shall be submitted regularly to the SEIAA, Orissa.

We are regularly monitoring the ground and surface water quality and reporting it to SEIAA. Water quality monitoring data is being submitted to SPCB regularly.

xvi. The proponent shall ensure that no silt originating due to mining activity is transported in the surface water course measures for prevention and control of soil erosion and management of silt shall be undertaken. Protection of dumps against erosion shall be carried out with geo textile matting or other suitable material and thick plantations of native trees and shrubs shall be carried out at the dump slopes. Dumps shall be protected by retaining walls.

We have taken adequate precaution to prevent silts passing into the surface water course. Retaining wall along with garland drain has been made for the above purpose Dump slope plantation proper terracing of dump has been made for stabilization of the dump. Geo textile matting work has already been completed over the dump and plantation raised over there.

Exhibit- Coir matting or Geo textile matting & Plantation on dump slope.





xvii. Trenches/garland drains shall be constructed at foot of dumps to arrest silt from being carried to water bodies. Adequate number of Check Dams shall be constructed across seasonal/perennial nallahs (if any) flowing through the ML area and silts be arrested. De-silting at regular intervals shall be carried out.

Garland drains, settling pond and Retaining wall has been constructed at foot of dumps to arrest silts from being carried to water bodies. Check dams are also constructed across the Nalla (seasonal) flowing through the ML area and de-silting of the pond at regular interval is being done after monsoon. The details of Retaining wall, Garland drain and settling ponds are given below:-

1. Retaining wall - 731m x 1.5m x 1.5m (at toe of dump)
2. Garland drain - 735m x 1.2m x 1.2m
3. Rain Water harvesting pond – 123m x 57m x 4m
4. Check Dam cum Water harvesting Pond-
 - (i) 9.5m x 2.0m x 2.5m
 - (ii) 98m x 32m x 1.5m
5. Settling pond
 - (i) 7.3m x 7.0m x 1.7m
 - (ii) 5.8m x 6.4m x 1.8m
 - (iii) 7.1m x 4.4m x 1.0m
 - (iv) 7.4m x 7.0m x 2.0
 - (v) 7.4m x 7.0m x 1.05m
 - (vi) 9.0m x 7.4m x 2.2m
 - (vii) 9.5m x 6.4m x 2.4m

An additional retaining wall 425m in length has been constructed at the toe of dump along with garland drain in the year 2020-21 and 2021-22.

Exhibit- Retaining wall all along the dump slope and garland drain & settling pond.



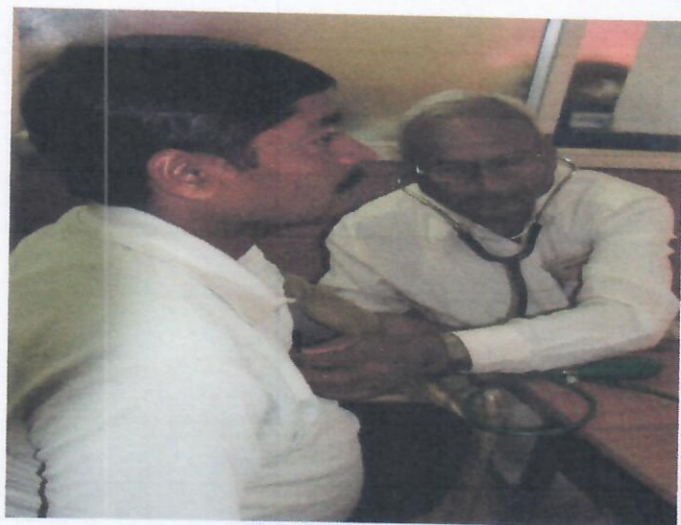


- xviii. Provision shall be made for the housing of the labourers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

There is no labour colony within the mine area as all the workers are drawn from nearby villages. One first aid station has been attached with rest shelter which serve as immediate medical aid in case of emergency. Free coal briquette supply to workers. One deep boring has been made for drinking water supply purpose.

- xix. Occupational health and safety measures for the workers including identification of work related health hazards, training of malaria eradication, HIV and health effects on exposure to mineral dust etc. shall be carried out. The proponent shall engage a full time qualified doctor who is trained in occupational health. Periodic monitoring for exposure to respirable mineral dust on the workers shall be conducted and records maintained including health records of the workers. Awareness programme for workers on impact of mining on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures undertaken (at interval of five years or less) shall be conducted followed by follow up action wherever required. Occupational Health Centre shall be established near the mine site itself.

Periodical Medical examination of all mine workers are mandatorily undertaken by an occupational health expert (Dr.B.N.Mohapatra) approved by DGMS, GOI. A qualified Doctor along with paramedical staff visiting once in a week to screen and treat the workers. An ambulance van is kept in the Nuagaon Village. Pit safety Committee meets is done every month to take stock of problems related to workers health & safety. Tripartite Committee meeting has already where health and safety of person is Discussed broadly.



xx. Shelter belt i.e. Wind Break of 15 m width and consisting of at least 5 tires around lease facing the human habitation, school/agricultural fields etc. (if any in the vicinity), in the safety zone/back-filled & reclaimed areas. Around voids & roads shall be raised. Green belt development and selection of plant species shall be as per CPCB guidelines. Density of the trees has to be around 2500 plants per hectare. Herbs and Shrubs shall also form a part of afforestation programme besides tree plantation. Helps and guidance of local DFO may be sought in the matter. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the SEIAA, Orissa within six months.

Thick avenue plantation has been taken by us with consultation with local forest official. Green belt is raised in the dump area and density of seedling planted is around 2500 plants per hectare. Details of plantation are being submitted to SPCB & SEIAA separately. We have planted 36100 nos. of seedling till 2016-17 including Safety Zone plantation and 6000nos of saplings has been planted within the gap area of safety zone and dump site for thick vegetation in the year of 2017-18. In the year 2019-20 we have planted 5000 Nos. of Saplings within the ML area and Safety Zone area. We have planted of 3000 Nos. of samplings in the year 2020-2021 and we have planted 1000 Nos. of saplings in the year 2022-2023.

Exhibit- Plantation of safety zone, avenue plantation, etc.



xxi. The Environmental Clearance is submitted to Forest Clearance under the Forest (Conservation) Act'1980.

As Nuagaon Mine does not have forest area forest clearance is not required for the mining project. Total lease area coming within non-forest land

xxii. The mining operations shall be restricted to above ground water table and it should not intersect the ground water table.

Utmost care has been taken to prevent Mining operation not to intersect with ground water table and also we have no proposal for working below the ground water table.

xxiii. The top soil shall temporarily be stored at earmarked site (s) only and it should not be kept unutilized for long (not more than 3 years). The top soil shall be used for land reclamation and plantation.

The recovery of top soil is very negligible and whatever the recovery, we are utilizing it for plantation during rainy season every year.

xxiv. The Over Burden (OB) generated during the mining operation shall be stacked at earmarked dump sites (s) only and should not be kept active for a long period of time and its phase-wise stabilization shall be carried out. Proper terracing of OB dump shall be carried out so that the overall slope shall not exceed 28°. Back-filling shall be done as per approved mining plan. Back-filling to start from 3rd year onwards of the mining operation & the entire quantity of waste generated shall be backfilled & liquidated within five years. There shall be no external overburden dumps after the 6th year of the mining operation. The backfilled area shall be afforested. Back-filling has to be done in a manner that it is restored to the normal ground level. Monitoring & Management of rehabilitated area should continue till the vegetation is established & becomes self-generating. Compliance status to be reported to the appropriate authorities.

The overburden generated during mining is being stacked in at earmarked dump site. Proper terracing has been made to prevent land slide. We have already started the backfilling work as per the approved Scheme of Mining. One environmental cell is formed to look after the general health of the plant species. In regular interval Mannuring of trees is being done for better survivality. Stabilized portion of the overburden dump has already been covered by plantation. Coir matting work has already completed for better stability of the dump. Vegetation is already generated over the Coir matting portion.

Exhibit- Dump plantation



xxv. The funds earmarked for the environment protection measures shall be judiciously utilized. Under no circumstances this funds shall be diverted for other purposes. Year-wise expenditure for this fund should be reported to the SEIAA, Orissa.

One environment cell has been established where one Senior Executive along with his subordinate staff posted for regular monitoring and special fund has been allocated to them. Year wise expenditure on this account shall be reported to SEIAA.

xxvi. The critical parameters such as SPM, RSPM, NOX in the ambient air within the impact zone, peak particle velocity at 300 m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the company in public domain. The Circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.

Critical parameter such as SPM, RSPM and NOX in the ambient air within the impact zone is being monitored. We are in the process of designing our website and these details will be up loaded therein as soon as it is available.

xxvii. A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the SEIAA 5 years in advance of final mine closure for approval.

We will submit the Final Mine Closure Plan along with details of corpus fund to SEIAA, 5 years in advance of final Mine Closure.

xxviii. The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water) required for the project.

We have already obtained prior permission from irrigation department, Govt. of odisha for use of Surface water and maximum water we consumed for water sprinkling at mine site in draft from water harvesting pond constructed within the mining lease hold area.

xxix. The project proponent shall prepare wild life conservation plan in consultation with DFO and adequate safety and mitigation measures should be incorporated to protect the wild life, flora, fauna to mitigate adverse impact.

A Regional wild life management Plan for Keonjhar & Sundergarh Dist. has been prepared by State Forest Deptt. And we have made proportionate contribution @ Rs.43,000 per hect. for the same.

xxx. The above mentioned stipulated conditions shall be complied in time bound manner. Failure to comply with any of the conditions mentioned above may result in withdrawal of this environmental clearance and attract action under the provisions of Environment (Protection) Act'1986.

We will follow.

Yours faithfully



**Kirtan Barik
General Manager
Forest & Environment**