

भारत सरकार
खान मंत्रालय
भारतीय खान ब्यूरो
क्षेत्रीय खान नियंत्रक का कार्यालय

No. MSM/FM/01-ORI/BHU/2017-18

Plot No. 149, Pokhariput
Bhubaneswar – 751 020
Date: 17.05.2017

To

✓ Shri S K Patnaik, Director,
M/s Patnaik Minerals Pvt Ltd,
P.O- Bonaikela, Joda,
Dist- Keonjhar, Odisha-758035

Sub: Approval of Modification of Review of Mining Plan of Jaribahal Iron Ore Mine along with Progressive Mine Closure Plan (PMCP), over an area of 106.533 ha in Keonjhar district of Odisha State, submitted by M/s Patnaik Minerals Pvt Ltd under Rule 17 of MCR, 2016.

Ref: - i) Your letter No.PMPL/IBM/2017-18 dated 03.05.2017.
ii) This office letter of even no. dated 03.05.2017.

Sir,

This has reference to the letter cited above on the subject. The draft of Modification of Review of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on site inspection carried out on 12.05.2017 by Shri Dayanand Upadhyay, Assistant Controller of Mines. The deficiencies observed are enclosed herewith as Annexure I.

You are advised to carry out the necessary modifications in the draft Modification of Review of Mining Plan along with Progressive Mine Closure Plan in the light of the contents vide Annexure I and submit **three (3) firm bound and two (2) soft copies of the document text in CD in a single MS Word file (the drawing/plates in Auto CAD compatible format or JPG format in resolution of 100x100 pixels on same CD)** with financial assurance under Rule 27 of MCDR 2017 of the Modification of Review of Mining Plan within **15 (fifteen)** days from the date of issue of this letter, for further necessary action. If the total page of annexures exceeds 50 (Fifty) then it should be submitted as separate volume. But reference of these annexures must appear in the Modification of Review of Mining Plan document. The plates are also to be submitted in separate volume.

The para-wise clarifications and the manner in which the deficiencies are attended should invariably be given while forwarding the modified copies of the Modification of Review of Mining Plan along with Progressive Mine Closure Plan. It may be noted that no extension of time in this regard will be entertained and the Modification of Review of Mining Plan along with Progressive Mine Closure Plan will be considered for rejection if not submitted within above due date . It may also be noted that if the deficiencies are not attended completely, the submission would be liable for rejection without further correspondence.

भवदीय yours faithfully,

6022
17/05/17
(HARKESH MEENA)

क्षेत्रीय खान नियंत्रक / Regional controller of Mines

Scrutiny comments on examination of Modification of Review of Mining Plan of Jaribahal Iron ore Mine, over an area of 106.533 Ha of M/s Patnaik Minerals Pvt Ltd in district Keonjhar of Odisha State.

Text:

1. GENERAL

- i) On cover page “Modification of Approved Scheme of Mining” may replace with “Modification of Review of the mining plan” and other parts of the text accordingly. Period of lease may be furnished as per deemed extension of lease under section 8 of MM(D&R) Amendment Act 2015..
- ii) Complete details of lessee like residential and correspondence address, email address, contact number etc. to be furnished.
- iii) In text signature of Director Shri S.K. Patnaik not matched with affidavit as enclosed in annexure-IV.
- iv) All the annexure to be properly indexed/ numbered/ paged and signed by qualified person. All the certificates should bear dated signature.
- v) “Mineral Conservation and Development Rules 1988” may replace with “Mineral Conservation and Development Rules 2017” in the content of certificate furnished by qualified person and other parts of the text accordingly.
- vi) Chapter “Introduction”: A brief review of status of Mining lease at present with documentary evidences may be given.

2. GEOLOGY AND RESERVE:

- i) Page-18, Total area covered under exploration as depicted in tabular form may be re-checked. The area covered under G3 level has not been shown in geological plan. A note furnished below the table may be modified.
- ii) Page-20, exploration proposals have not been furnished with grid interval. An undertaking may be furnished to complete the backlog exploration.
- iii) Page-24, Reserves & resources estimated in tabular form is not matched with reserves & resources furnished at page no. 21 and 22.
- iv) Page-22, It is mentioned pre-feasibility report while in annexure feasibility report has been enclosed.
- v) Page 21-24, calculation of reserves & resources has not been furnished with cross-section wise with different UNFC codes as per Minerals (Evidence of Mineral Contents) Rules, 2015. Blocked mineral resources have not been described properly.
- vi) Chemical Analysis Report of BHs samples should be enclosed from NABL Accredited laboratory or Govt. lab. as per guideline of “IBM manual on appraisal of Mining Plan-2014”.

3. MINING:

- i) Page-28, Proposed method for excavation has not been described properly. The nos. of benches in ore & OB, top & bottom mRL, nos. of quarries proposed may be described.
- ii) The excavation proposal may be revised to concentrate the working in adjoining quarries 1 & 5 in place of working together with other quarry in light of conservation and scientific development.
- iii) It has been observed during inspection that proposed site of dump is equipped with vegetation and fines and there is not suitable place for dumping. Therefore the site of waste dumping may be revised accordingly.
- iv) Page 31, development proposal as mentioned has not matched with cross-sections.
- v) In the development and production tables bench wise, year wise area of excavation and average thickness of the excavation or average area of cross section of bench and its average advance is to be given along with RL of bench with direction of advance at the end of the year.
- vi) Conceptual mining plan, cumulative waste generation and top soil generation and protective measures have not been furnished.

4. Mine drainage:

RL of present and proposed workings and summer and post monsoon water table in the area supported with ground water monitoring study done in the area may be given.

5. "Stacking of mineral reject/ sub grade material and disposal of waste"

- i) Storage/Stacking of Sub-grade material/Mineral reject in earmarked area to be described with mRL.
- ii) Details of Stocks/Dumps of Waste, Sub-grade/mineral rejects etc. is to be given. Retaining wall & garland drain all along the dump.
- iii) Specific proposal for stabilization of existing dumps, by plantation, coir matting etc. should be given.

6. Use of Mineral and Mineral Reject:

Requirement of end-use industry to be given in terms of physical & chemical composition matching with proposed production of mine. Production of Lumps & fines to be specified with quantity and grade along with its proposed sell to end-use industries.

7. "Other":

- i) Existing manpower both direct and contractual has to be mentioned in the text.
- ii) An organizational chart has to be provided for risk assessment study to whom communication to be made in case of any ~~accident~~ *emergency*.

8. "Progressive Mine Closure Plan":

- i) Page-83, Amount of financial assurance calculated is not as per rule 27(1) of MCDR-2017. It may be re-calculated and submitted along with final copy of modification of review of the mining plan.
- ii) Page-64 & 69. Para8.1 & 8.2 respectively, total sum of existing land use pattern as furnished in table is not matched with financial assurance table.
- iii) Proposed location of plantation to be mentioned in tabulated form in text part of the document and same to be depicted in reclamation plan.
- iv) Updated air, water, noise, ground vibration and soil data with analysis from laboratory done at specified periodicity for last one year to be enclosed.
- v) There is nos. of stacks of Mineral reject/low grade ore/fines/screened fines lies in the mine. To dispose them, manner of disposal of Mineral reject/low grade ore/fines/screened fines etc. to be specified in terms of blending, beneficiation or selling to intermediate industries involved in up-gradation of mineral.

9. Plates(General):

- i) The plans and sections submitted do not bear the certificate that --the plans and sections are prepared based on the lease map authenticated by the state government.
- ii) All plans and sections shall show a scale of the plan at least twenty five centimeters long and suitably subdivided. All plans & sections prepared shall follow the conventions mentioned under MMR 1961.
- iii) Wind direction may show through wind rose diagram in key plan and environmental plan.
- iv) All plans and sections should be signed with date by certified Surveyor, Qualified Person, Mine Manager and Mining Geologist.
- v) Magnetic Meridian and date of observation of should be given on all relevant plans.

10. Key Plan/Lease plan:

11. The approach road upto the Mining lease may be shown.

12. Surface Plan:

- i) mRL of waste and sub grade dumps have not been shown.
- ii) Safety barrier has not been marked.
- iii) Latitude, longitude of all corner pillars may be indicated on the plan.
- iv) Few pillars may be correlated with some permanent ground features giving distance and direction. Different land use may be shown with colour codes.
- v) Forest & Non forest area, Surface right acquired area etc. should be marked clearly over a separate Lease Plan & Surface plan.

13. Geological Plan & Section:

- i) Geological features like strike, dip, dip direction etc to be marked clearly. Symbol as shown in plan not clearly marked in legends.

- ii) The UNFC has not been depicted in geological plan. The reserve under G1 & G2 category and limits of reserves/resources under different codes may be marked on geological plan and sections in different colour codes.
- iii) mRL of bore holes have not been marked in plan and section.
- iv) The direction along which geological section has been prepared to be depicted on geological section.

14. Year wise development plan:

- i) Development section X2-Y2 and X4-Y4 not matched with development plan. All the section should be re-checked.
- v) Profile of cross section not with bench mRL.
- vi) Existing position of dump and proposed dump height has not been marked with mRL.
- ii) Specific year may be marked in the plan. Excavation in ore and OB is not clear. Spot levels at sufficient no of places on original surface, in the pit, and at the toe of benches may be shown so as to ascertain the average depth of excavation in a particular bench.

15. Environment plan:

- i) The Environment Plan as prepared should be satisfied the provision as laid down rule 32(5)(b) of MCDR2017.
- ii) Surface features of adjacent mine has not been shown in buffer zone.
- iii) The proposed and existing environment protective measures to be shown in environment plan. The drainage pattern of the lease area also to be shown on the plan.

16. Financial Assurance Area Plan:

Area as depicted in text for FA not matched with area given in plan. In the Financial Assurance plan area of each individual land i.e land degradation due to mining activity and processing unit etc at the end of plan period may be shown separately on this plan with highlighted boundaries and different colour codes for FA calculation.

17. Reclamation Plan:

Year wise progress of dumping, stacks, afforestation using different colour codes for easy understanding may be shown.

18. Conceptual plan:

Conceptual plan may be prepared considering mineralization as revealed from the borehole logs. One longitudinal section may also be submitted. Direction of run off from the area based on surface contours may be shown on the plan and the sections.