



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

By E.Mail / Regd. Post
E- Mail: ro.bhubaneswar@ibm.gov.in

No. MSM/OTFM/05-ORI/BHU/2017-18

Plot No.149, Pokhariput,
Bhubaneswar,
Odisha-751 020.
दिनांक / Date: 04.07.2017

To

**Shri M. D. Rustagi,
Director & Nominated Owner,
M/s Rungta Mines Limited,
At/Post- Barbil, Dist-Keonjhar,
Odisha – 758035.**

Sub: Approval of Modification of Mining Plan along with Progressive Mine Closure Plan of Kanther Koira Manganese Mine over an area of 73.653 ha in Keonjhar district of Odisha of M/s Rungta Mines Limited submitted under Rule-17 of MCR'2016.

Ref: - i) Your letter no. RML/ED/GEO/2017-18/448 dated 20.06.2017.
ii) This office letter of even no. dated 21.06.2017.
iii) This office letter of even no. dated 21.06.2017 addressed to the Director of Mines, Govt. of Odisha, copy endorsed to you.

Sir,

This has reference to the letters cited above on the subject. The draft Modification of Mining Plan along with Progressive Mine Closure Plan has been examined in this office based on site inspection carried out on 29.06.2017 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 Mining 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 should be submitted in Auto CAD compatible format and JPG format in resolution of 100x100 pixels on same CD)** with financial assurance under Rule 27 of MCDR' 2017 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 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 Mining Plan. It may be noted that no extension of time in this regard will be entertained and the Modification of Mining 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,


(HARKESH MEENA)

क्षेत्रीय खान नियंत्रक / Regional Controller of Mines

-2-

Copy for kind information and further necessary action to Sanjay Samal, Dr. Saroj Kumar Dash and Shri Soujatya Sarangi, Qualified Person, M/s Rungta Mines Limited, Rungta Office, Main Road, Barbil, Keonjhar, Odisha-758035.

(HARKESH MEENA)

क्षेत्रीय खान नियंत्रक / Regional Controller of Mines

Scrutiny comment on Modification of Approved Mining Plan including PMCP in respect of Kanther-Koira Manganese Ore Mine of M/s Rungta Mines Limited over an area of 73.653 Hectare in Keonjhar district of Odisha State.

1.0 GENERAL:

- i) On cover page “Modification of Approved Mining plan” may be mentioned. The e-mail, phone & fax no. of lessee may furnish on cover page.
- ii) Para-2, page-2, the period of approved scheme of mining may be corrected.
- iii) Page-4, para-2.0, date of grant of lease may describe in chronicle order.
- iv) Page-5, para-2.0, toposheet no. may furnished with latitude & longitude of all corner pillars.
- v) Page-6, para-3.3.1, review of exploration program may modified as discussed during field in reference to location of bore holes.
- vi) The extent and nature of surface right being held by the Lessee to carry out various mining activities be indicated with documentary evidence.
- vii) All the annexure to be properly indexed/ numbered/ paged and signed by qualified person. All the certificates should bear dated signature.
- viii) “Mineral Conservation and Development Rules 1988” may replace with “Mineral Conservation and Development Rules 2017” in the content of different parts of the text.
- ix) Consent letter/ Undertaking/Certificate as furnished by the Lessee may be included the para as “I do hereby undertake to complete exploration in time bound manner in accordance with Ministry of Mines letter no.-10/75/2008-MV, dated 23.12.2010”.
- x) A brief review of status of Mining lease at present with documentary evidences may be given. The extension of the mining lease up to 31/03/2020 and date of execution of lease deed & supplementary lease deed may be marked with annexure.

2.0 GEOLOGY & RESERVES:

- i) Detailed description of geology of the lease area such as shape and size of the mineral/ore deposit, disposition various litho-units indicating structural features etc. to be given.
- ii) As the lease is going to expire in 2020 the exploration proposal may be revised at least G-2 level of exploration of entire lease area and all proposed drilling restricted to the year 2017-18 only.
- iii) The details bore holes drilled in 2015-16 & 2016-17 may described with Form-J submitted to this office under rule 47 of MCDR’88.
- iv) A comparative statement of reserves and resources estimated in existing modified mining plan may be depicted with depletion of reserves and estimated balance reserve as on date of proposed period
- v) Under UNFC the area explored under G1, G2 to be delineated/marked properly on the basis of drilled bore holes data.
- vi) Justification of different UNFC category to be given as per the guideline given in the Minerals Evidence of Mineral Contents Rules 2015.
- vii) Page-13, litho units as mentioned in para 4.0(b) needs to be described in detail.
- viii) Page-15, table no.4.3, total area covered under exploration as depicted in tabular form may furnished with remarks about unexplored area with justification.
- ix) Page-16, para-e, the nos. of samples analysed from NABL accredited laboratory or Government laboratory have not furnished with documentary evidence.
- x) Page-17, para-i, exploration proposals should be furnished with grid interval, location, total area covered & level of exploration G1/G2.

xi) As per guideline of “IBM manual on appraisal of Mining Plan 2014” at least 10% of total samples to be analyzed in accordance to BIS and reports from NABL accredited/Government Laboratory. Accordingly, BH wise sample details to be given and 10% of total samples to be analyzed from NABL accredited/Government Laboratory.

3.0 MINING:

- i) Page-27, para5.0, existing method of mining has not been described properly. The nos. of benches in ore & OB, top & bottom mRL, stripping ratio may be described.
- ii) The ore zone considered in development section is not matched with the ore zone considered in geological section. It may be clarified.
- iii) Page-29, table-5.3, mineral reject furnished 910T per year while in table-5.4 low grade ore furnished 2002T/year. Mineral reject/low grade ore may compile together.
- iv) Page 31-35, in yearwise development proposal recovery considered 8% of area of cross-section of ore zone. It should be cross checked with geological section and may rectified/justified accordingly.
- v) Yearwise volume of waste generated as furnished in table-5.3, 5.8 & 5.9 is not matched with table no. 5.10, 7.1 & 7.2.
- vi) Page-36, 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.
- vii) The quantity of Sub-grade to be generated during conceptual period and its utilization and future planning for beneficiation may be given.
- viii) Conceptual mining plan, cumulative waste generation and top soil generation and protective measures have not been described properly.
- ix) Specific proposal for stabilization of existing dumps, by plantation, coir matting etc. should be given.
- x) 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.
- xi) Ultimate pit limit should be depicted on all relevant plans & sections.

4.0 STACKING OF MINERAL REJECT/SUB GRADE AND DISPOSAL OF WASTE:

- i) Page-56, para-7.3.2, the quantity of low grade/sub grade ore generation as proposed has not been furnished with their dumping proposal.
- ii) All existing Sub-grade dumps and waste dumps may describe with its location alongwith mRL in text. The top mRL of all above to be depicted clearly on plans.
- iii) Further, Build-up of dumps from year to year to be mentioned in text w.r.t. designed capacity of dumps, bottom and top mRL of individual terrace, dump slop, individual terrace height and slope with description of method & manner of disposal of waste should be mentioned.
- iv) Details Existing and proposed retaining wall, garland drain, settling tank etc. to be given with their location.
- v) The proposal for construction of retaining wall, garland drain may furnish yearwise in different colour codes in terms of their length width and height.

5.0 Chapter- “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.

6.0 PROGRESSIVE MINE CLOSURE PLAN

- i) Page-74, table-11.8, the proposed no. of saplings have not been furnished with location and area covered in ha.
- ii) It is observed that in 2017-18 plantation proposed towards active dump side. It may be rectified.
- iii) Proposal of Gap plantation on waste dump-1 and wherever necessary to be given in the interest of protection of environment.
- iv) Amount of financial assurance should be calculated as per rule 27(1) of MCDR-2017 and submitted accordingly.
- v) Under impact on land, cumulative land degradation at present, at the end of proposal period and at the end of conceptual period may be given referring to conceptual mining plan given in scheme of mining.
- vi) Mitigation measures of impacts associated with mining i.e. mainly related to air, water, noise, vibration, land, aesthetics etc. are not given properly. The same to be elaborated.
- vii) Updated air, water, noise, ground vibration and soil data with analysis from laboratory done at specified periodicity for last one year to be enclosed.

7.0 FEASIBILITY STUDY REPORT:

The details of all infrastructures available in lease area to be given with present cost. Proposed and actual capital expenditure to be given. Detail calculation of cost of production/operating cost to be given.

8.0 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 sign 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.

9.0 Key Plan:

Approach road to the ML not shown. Noth direction has not been marked.

10.0 Surface Plan:

- i) Information of boundary pillars in UTM coordinates as well as in Latitude and longitude of all ML boundary points should be depicted in tabulated form on surface plan.
- ii) Contour value near pillar M, N, Q and in north-eastern side not shown. Old quarry not clearly shown.
- iii) Few pillars may be correlated with some permanent ground features giving distance and direction. Different land use may be shown with colour codes.
- iv) Forest & Non forest area, Surface right acquired area etc. should be marked clearly.

11.0 Geological Plan & Section:

- i) Dip and strike as shown in plan is not matching with the field exposure of ore body.
- ii) The exploration proposal may be revised at least G-2 level of exploration of entire lease area and all proposed drilling restricted to the year 2017-18 only.

- iii) G-2/G-2 line as shown in geological plan is not as per guidelines of UNFC. Area marked under G1/G2 under different level of exploration should be rechecked on the basis of exploration data.
- iv) Stratigraphy as depicted in plan is not matched with bore hole data at some places.
- v) Further, the geology as depicted on section and plan are not matches with each other at places. Needs to be verified and rectified.

12.0 Development plan & Section:

- i) The proposed bench mRL and existing bench mRL have not shown clearly. The benches marked under UPL are not depicted with correct mRL.
- ii) Profile of section E-500 is not matching with plan. Section-450, dump terraces and existing benches are not shown.
- iii) Location of subgrade dump as proposed is not marked in development plan.
- iv) As discussed during the filed visit, the profiles of development/geological sections are not matching with the plans at places. Verify and rectify.

13.0 Environment plan:

- i) As observed during field the existing mines lying in buffer zone has not been shown in Env. Plan.
- ii) The Environment Plan as prepared should be satisfied the provision as laid down rule 32(5)(b) of MCDR2017.
- iii) Surface features of adjacent mine has not been shown in buffer zone.
- iv) 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.

14.0 Financial Assurance Area 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.

15.0 Reclamation Plan:

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

16.0 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.