



भारत सरकार GOVERNMENT OF INDIA  
खान मंत्रालय MINISTRY OF MINES  
भारतीय खान ब्यूरो INDIAN BUREAU OF MINES  
क्षेत्रीय खान नियंत्रक के कार्यालय  
OFFICE OF THE REGIONAL CONTROLLER OF MINES



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No. MS/FM/08-ORI/BHU/2018-19

Date: 23.04.2018

To

Shri Prahlad Roy Goneka,  
Managing Director,  
M/s Korp Resources Pvt Ltd,  
161, Rabindra Saranai,  
Burra Bazar, Kolkata-700007

Sub: Approval of Review of Mining Plan of Tantra Iron Ore Mine along with Progressive Mine Closure Plan (PMCP), over an area of 72.56 ha in Sundargarh district of Odisha State, submitted by M/s Korp Resources Pvt Ltd under Rule 17 of MCR, 2016.

- Ref: - i) Your letter No. MP/Tantra/2017-18/003 dated 09.04.2018.  
ii) This office letter of even no. dated 10.04.2018.  
iii) This office letter of even no. dated 10.04.2018 addressed to Director of Mines, Government of Odisha copy endorsed to you.

Sir,

This has reference to the letter cited above on the subject. The draft Review of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on earlier site inspection dated 30.11.2017 by Shri Dayanand Upadhyay, Sr. 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 Review of Mining Plan in the light of the contents vide Annexure 1 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 or JPG format in resolution of 100x100 pixels on same CD )** with financial assurance under Rule 27 of MCDR 2017 of the 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 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 final copies of the Review of Mining Plan. It may be noted that no extension of time in this regard will be entertained and the Review 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.

Yours faithfully,

23/04/18

(HARKESH MEENA)

Regional controller of Mines

**Scrutiny comments on examination of Review of Mining Plan of Tantra Iron ore Mine, over an area of 72.56 ha of M/s Korp Resources Pvt. Ltd. in district Sundargarh of Odisha State.**

**1. GENERAL**

- i) On cover page lease period has not been furnished in reference to section 8A(6) of the MMDR Amendment Act 2015.
- ii) A latest list of board of directors duly certified by competent authority along with address/contact nos. to be enclosed. Latest resolution w.r.t. nominated owner to be submitted.
- iii) Page 6 & 8, in review of approved proposal of mining plan/scheme, the drilled bore holes have not been furnished yearwise alongwith form-J submitted to this office. Plantation carried out has not been been furnished yearwise against the approved proposal.
- iv) All the annexure to be properly indexed/ numbered/ paged and signed by qualified person. All the certificates should bear dated signature.

**2.GEOLOGY:**

- i) Page-16, Exploration carried out so far in the lease area should be summarized as per table below:

| <b>Total Lease area:</b>         |   |          |          |  |                       |  |
|----------------------------------|---|----------|----------|--|-----------------------|--|
| Item of information              | Lease area explored as per UNFC norms (in Ha) as on dt. |          |          |  |                       | Remarks/Comments including reasons for not carrying out the exploration as per UNFC norms. |
|                                  | <b>Total Lease area = A+B+C+D+E</b>                     |          |          |  |                       |  |
|                                  | G1 Level  | G2 Level | G3 Level | Explored and found non-mineralized with level of exploration (Remarks) | Unexplored lease area |  |
|                                  | A   | B        | C        | D  | E                     |  |
| Area as per level of exploration |   |          |          |  |                       |  |
| No. of BH Drilled                |   |          |          |  |                       |  |
| No. of BH considered for         |   |          |          |  |                       |  |

|  |  |  |  |  |  |
|--|--|--|--|--|--|
| Resource Estimation.   |  |  |  |  |  |
| Meterage Drilled   |  |  |  |  |  |
| Grid Interval  |  |  |  |  |  |
| Scale of Mapping   |  |  |  |  |  |
| <b>Reserve estimated after above exploration as on dated :</b>     |  |  |  |  |  |
| <b>Remaining Resource after above exploration as on dated:</b>     |  |  |  |  |  |
| <b>Total Reserve/Resource after above exploration as on dated:</b> |  |  |  |  |  |
|  |  |  |  |  |  |

- ii) Volume of ore zone in cross-sections recovery of saleable iron ore and sub Grade /mineral reject are considered 50% and 40% respectively. Recovery float ore is considered 30%. It should be justified with time series data.
- iii) It is observed that some of the bore holes terminated in the ore zone therefore bore holes proposal may be revised in such a way the it should explored upto the end of mineralisation.
- iv) Further detail Exploration (G1 level) proposal should be given for entire potentially mineralized area under the mining Lease. Additional bore holes should be proposed in G2/G3 area with proper grid interval.
- v) The proposed borehole locations along with Borehole Id, Bore hole Collar RL and estimated closing depth to be shown in the Geological Sections.
- vi) Page-27, table 1.6, measured mineral resources of float ore shown in 331 category while in column it is shown under 333 category. It is to be re-checked and corrected.
- vii) Page-33, table-1.10, estimation of reserve under 111 category of float ore zone has not been referred with cross sections.
- viii) The existing forest, non-forest and mineralized zone boundary should be shown over the Geological plan in contrasting colours.
- ix) 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".
- x) Reporting of Mineral Resources in the format prescribed in Part IV-A of Minerals (Evidence of Mineral Contents) Rules, 2015 to be submitted.

### **3. MINING:**

- i) The final copy of environment clearance accorded by MOEF for 0.24MTPA of iron ore production and beneficiation plant of 1.0 MTPA capacity has not been enclosed and its status has not been mentioned in text.
- ii) Page-39, Para (b), Insitu tentative excavation has not been furnished in prescribed format as per guidelines of IBM Manual Appraisal MP-2014. A bullet notes should also be furnished below the table.
- iii) Page-40&41, The recovery of saleable ore and sub-grade ore are furnished 54% and 40% respectively of total excavation. It may be justified with corss-section and time series data. The term sub grade may replace with mineral reject.
- iv) Page-43, the old sub grade dump and sub grade generated during mining is proposed for beneficiation but its final grade after beneficiation has not been furnished.
- v) Drilling and blasting may be described properly considering the parameters spacing, burden, depth of hole with explosive used and delay pattern.
- vi) Ultimate pit limit should be depicted on all relevant plans & sections
- 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 furnished .

### **4. "Stacking of mineral reject/ sub grade material and disposal of waste"**

- i) The proposal given for construction of retaining wall, garland drain to be furnished with specific year in view of proposed spread of the waste dump/mineral reject and mineral stacks. Hence, revised proposal may be given.
- ii) Waste dump management has not been described with Specific proposal for stabilization of dumps, by plantation, coir matting etc.
- 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 slope, individual terrace height and slope with description of method & manner of disposal of waste should be mentioned.

### **5. "Progressive Mine Closure Plan":**

- i) Page-93 the land use pattern furnished at the scheme is not matched with financial assurance table.
- ii) Amount of financial assurance should be calculated as per rule 27(1) of MCDR-2017 and submitted accordingly.

- iii) Proposed plantation should be furnished with area in hect within lease and outside the lease area yearwise with no. of saplings proposed.
- iv) Proposed location of plantation to be mentioned in tabulated form in text part of the document and same to be depicted in reclamation plan.
- v) Updated air, water, noise, ground vibration and soil data with analysis from laboratory done at specified periodicity for last one year to be enclosed.

**6. Plates( General):**

- i) 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.
- ii) Wind direction may show through wind rose diagram in key plan and environmental plan.
- iii) An authenticated lease plan has not been submitted.
- iv) An authenticated DGPS plan has not been submitted.
- v) Key Plan has not been submitted alongwith document.

**7. Surface Plan:** The co-ordinates of boundary pillar should be depicted in surface plan. RL of waste and sub grade dumps and fine stacks should be shown clearly. Forest & Non forest area, Surface right acquired area etc. should be marked clearly over a separate Lease Plan & Surface plan.

**8. Geological Plan & Section:** Geological features like strike, dip, dip direction etc to be marked clearly. Symbol as shown in plan not clearly marked in legends. The index of Geological features should be same in both Geological Plan and Geological sections. The UPL should be shown in red colour in every section.

**9. Year wise development plan:** Profile of development sections should be re-checked with mRL as depicted in vertical column. Existing position of sub grade dumps and proposed dumps height are to be marked with mRL.

**10. Environment plan:** The Environment Plan as prepared should be satisfied the provision as laid down rule 32(5)(b) of MCDR2017. Contours in 60m periphery of lease boundary may be shown. The proposed and existing environment protective measures to be shown in environment plan.

**11. 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.