



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. RMP/A/22-ORI/BHU/2019-20

Date: 24.10.2019

सेवामे

The Managing Director & Nominated Owner,
M/s Odisha Mining Corporation Ltd.
OMC House, Bhubaneswar- 751001

विषय: Approval of Review of Mining Plan of Daitari Iron Ore Mine along with Progressive Mine Closure Plan (PMCP), over an area of 1018.3085 ha in Keonjhar & Jajpur districts of Odisha State, submitted by M/s Odisha Mining Corporation Ltd under Rule 17 of MCR, 2016.

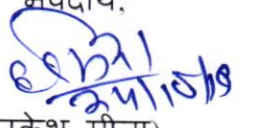
- संदर्भ: - i) Your letter No. 15503/OMC/PMC/19 dated 30.09.2019.
ii) This office letter of even no. dated 01.10.2019.
iii) This office letter of even no. dated 01.10.2019 addressed to Director of Mines, Government of Odisha copy endorsed to you.

महोदय,

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 site inspection carried out on 23.10.2019 by Shri S R Mazumdar, Senior Mining Geologist. 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.

भवदीय,

(हरकेश मीना)
क्षेत्रीय खान नियंत्रक

Copy for kind information and further necessary action to Shri Saroj Kumar Prusty, Shri Subrat Behera, M/s Odisha Mining Corporation Ltd, OMC House, Bhubaneswar- 751001.

(हरकेश मीना)

क्षेत्रीय खान नियंत्रक

1/1/2023
8/01/2023

Scrutiny comment on Review of Mining Plan including PMCP of Daitari Iron Ore Mine of M/s OMC Limited over an area of 1018.3085 Ha in Jajpur and Keonjhar district of Odisha

GENERAL:

1. Sequence of paragraph, formats and its numbering as per IBM Manual Appraisal MP 2014 has not been covered in text. All the headings, formats as mentioned in the IBM Manual Appraisal MP 2014 should be furnished in all chapters in the text.
2. In the cover page, the mine code should be rechecked and corrected.
3. The status of all statutory clearances should be furnished in tabulated format. All the tables should be numbered and index of tables should be furnished.
4. All the categories/grade of Ore above cutoff grade should be termed as "Ore" and between threshold value and cutoff grade as "Mineral Reject". The threshold and cut off grade should be specified. Necessary corrections to be done at all places in text, table and plates.
5. In Para 2 (a), the DGPS surveyed coordinates should be mentioned. Need to specify and do necessary correction.
6. In Para 3.1, the date of approved mining plan/review of mining plan till date should be given in tabulated format.

Sl. No	Mining Plan / Review of Mining Plan etc.	Submitted Under (Rule Reference)	Approval Letter No. & Date	Period	Valid up to

7. In Para 3.3, review of earlier approved proposal in respect of exploration, excavation, reclamation etc. should be furnished. ROM production should include mineral reject part of ROM. Reason for deviation should be justified. The proposal of ROM production and achievement should be rechecked and corrected.

PART-A: (1). GEOLOGY AND EXPLORATION:

8. In Para 1(b), the reference of established regional stratigraphy should be furnished and the younging direction of the lithounits should be shown in arrow mark. The Regional Geology, Geological Setup , structure should be described in detail. In Para 1(c), the younging direction of the local stratigraphy has not been shown. In Para 1.e (iii), the summary of total samples collected and analyzed along with justification for 10% of total samples analyzed in accordance to BIS and reports from NABL accredited/other government laboratory have not been furnished.
9. As discussed during inspection, the ratio of different ore types and its tones in deposit with their average grade (Fe%, SiO₂%, Al₂O₃%, P %) and range of grade (Fe%) should be furnished in tabulated format. The reference in local coordinates should be in UTM coordinate.
10. The details of already drilled boreholes may be furnished in the following format.

Year of drilling	Exploration Agency	Borehole No	UTM Coordinate		Collar mRL	Bottom mRL	Borehole Depth	Angle of drilling	Type of drill hole(Core/RC/DTH)	No of samples collected	No of samples analyzed
			Northing	Easting							

11. As discussed during field inspection, the lease area explored under different category of UNFC norms is incorrect and should be recalculated as per the provision of Part II point no.4 and part III of Minerals (Evidence of Mineral Contents) Rules, 2015 (MEMC Rules, 2015). Necessary corrections to be done in table in page 17 and at all relevant places of the document (text and plates) and resource estimation.

25. Existing as well as proposed protective measures like retaining wall, garland drain, check dams etc., should be furnished in tabular format with details of location, length, dimensions etc., a separate table should be given showing the year wise construction of retaining wall, garland drain and settling tank having specific proposal. Details of year wise proposal for construction of retaining wall, garland drain, settling tank etc. to be given with their location. Proposal for protective measures have not been submitted around mineral reject dumps and waste dumps.

PROCESSING OF ROM AND MINERAL REJECTS:

26. A material balance chart with a flow sheet or schematic diagram of the processing procedure indicating feed, product, recovery, and its grade at each stage of processing has not been furnished. The arrived percentage of recovery of saleable ore and mineral reject should be justified properly with documentary evidence.

OTHERS:

27. Information in respect to the existing and proposed manpower right from management level to unskilled labor both on role and contractual has to be mentioned separately in the text.

PROGRESSIVE MINE CLOSURE PLAN:

28. The air, water and noise monitoring stations and their frequency of monitoring have not been furnished in tabulated format. All water discharge points from lease area to external should be monitored. Accordingly, monitoring proposal to be submitted. Further, Gap plantation along the safety zone should be furnished.
29. All the paragraphs should be addressed in detail under PMCP chapter as per IBM Manual Appraisal MP 2014. The present land use pattern should be furnished as per the format of FA table of different heads.
30. In FA table the different heads should be kept as per the format specified in IBM manual appraisal 2014. The area under different heads of FA table should be properly shown in different hatching with present area and additional area in FA plan.

PLATES (GENERAL):

1. Magnetic Meridian and date of observation should be given on all relevant plans. Date of survey should be given on all plans and sections and signature should bear date of signature. All plans & sections prepared should follow the conventions mentioned under MMR 1961. All plans and sections shall show a scale a scale of the plan at least twenty five centimeters long and suitably subdivided. The plans and sections submitted should bear the certificate that - the plans and sections are prepared based on the lease map authenticated by the state government. The index should be kept same in all the plans and sections.
2. All plans and sections to be submitted in UTM grid.
3. **KEY PLAN:** The key plan should incorporate all features as mentioned Rule 32 5 (a) of MCDR 2017. The approach road to the lease area, 5 Km boundary and wind rose diagram etc. has not been shown.
4. **SURFACE PLAN:** The index of surface right area shown should be distinct from index of safety zone. The Surface Plan should be prepared to satisfy the provision as laid down rule 32 (1) (a) of MCDR'2017. The DGPS surveyed latitude-longitude and UTM coordinates of all the boundary pillars have not been furnished in tabulated format. The plan should be updated based on the recent survey.
5. **GEOLOGICAL PLAN & SECTION:**
 - (i) The redefined UNFC boundaries to be shown in Geological Plan and sections. The UNFC codes shown in plans and sections are incorrect and should be corrected as per scrutiny point no 9.
 - (ii) Cross section lines with nomenclature have not been shown on the geological plan.
 - (iii) The Geological Plan should be prepared to satisfy the provision as laid down rule 32 (1) (b), (c) and (d) of MCDR'2017
 - (iv) Index of different grade of limestone do not corroborate with the index shown in plan and sections. Need to recheck and correct at relevant places.

- (v) Proposed boreholes should be shown in plan and sections. The proposed borehole should be shown in dotted lines in geological sections.
- (vi) The borehole log do not corroborate with geological sections. The lithology shown in geological plan do not corroborate with lithology shown in section.
- (vii) Scientific correlation of geological section has not been done as per the provision of MEMC, Rules 2015.
- (viii) In Geological plan, some of the areas have been shown as blank. In those areas, geology of the area should be shown.
- (ix) UNFC codes, UPL should be shown in Geological sections.

6. DEVELOPMENT PLAN & SECTION:

- (i) Development plan and sections should be revised based on updated geological map and sections.
- (ii) Index of the UPL shown in plan and section and those shown in index is different.
- (iii) The proposed and existing bench mRL to be shown clearly over year wise development plan and sections.
- (iv) Geological information (lithology) has not been furnished on the area proposed for development in year wise development plan and sections. Plan and section should be drawn on same scale on 1: 1000.
- (v) Existing and proposed protective measures and plantation should be shown in different colors around all waste dumps and mineral reject dumps. Index of safety zone boundary and surface right area should have distinct color.
- (vi) Year-wise development plan and section should be separately submitted on same scale.

7. ENVIRONMENT PLAN:

The environment plan has not been prepared as per the provision laid down in rule 32 (5) (b) of MCDR'2017. The adjacent lease should be shown in environment plan. Contour should be at 5 m interval and legible.

8. RECLAMATION PLAN:

Existing and proposed protective measures and plantation should be shown in different colors along all waste dumps and mineral reject dumps. Index of safety zone boundary and surface right area should have distinct color. Existing and proposed plantation should be furnished in reclamation plan.

9. FINANCIAL ASSURANCE AREA PLAN:

The area degraded due to mining and allied activity and waste dump sites to be considered in FA calculation. The existing area and additional area under different heads should be shown properly under different colored hatching.

ANNEXURES:

1. Few photographs showing Land use of the lease area, environmental status of the area have not been furnished.
2. Identity and address proof of lessee should be furnished. Details of Qualified person like experience and qualification as per provision of rule 15 of MCR 2016 should be furnished.
3. Copy of quality of air, water, soil, noise and other environmental a parameters monitoring report of the last year should be enclosed.
4. All the annexure to be properly numbered/paged and relevant annexure to be signed by qualified person etc. It is observed that many of the annexures are not legible. A legible copy of same to be enclosed.
5. The details of all the BH to be annexed year wise BH wise. The lithology of the borehole logs should match with the lithology shown in Geological sections.
6. Copy of bank guarantee has not been enclosed.
7. Few photographs showing Land use of the lease area, environmental status of the area have not been enclosed.
8. Copies of Form J and Form K of all drilled boreholes have not been submitted.
9. The chemical analysis results of borehole samples from NABL accredited laboratory have not been submitted. NABL accreditation certificate of the laboratory has not been furnished.
10. Indexing of borehole logs with page numbers have not been done in sequence

(Sudip Ranjan Mazumdar)
Senior Mining Geologist