

Scrutiny comments of Modification of Review of Mining Plan along with Progressive Mine Closure Plan in respect of Khandabandh Iron Ore Mine, over an area of 366.311 Hectares in Barbil Tahsil, Keonjhar District of Odisha State of M/s OMC Ltd.

General

1. In the cover page of document the date of execution, total lease period, Review period and modification proposal period, is to be furnished. The mine code written in cover page and mining plan at a glance is not correct, the same to be corrected. The cover page to be furnished as per format attached.
2. In introduction a comparative brief note to be given including following table:

Year	Existing proposal	Modification proposed	Reason of modification
2018-19		Not applicable/Period passed	
2019-20			
2020-21			
2021-22			
2022-23			

3. Other reason for modification to be elaborated as per the above tabular format at SI no-02.
4. The final soft copy of the document should be digitally signed by QP and consent letter by Nominated Owner.
5. Drone survey of the lease area and upto hundred metres outside the lease boundary shall carry out as per Rule 34(A)(3) of MCDR (amendment) Rule, 2021 and shall submit processed output [digital elevation model (DEM) and Orthomosaic] images obtained from such survey.

PART-A

CHAPTER-1: GENERAL INFORMATION

1. The information furnished under para 1.1.1; Initial/subsequent Lease grant details: The information on subsequent extension and execution of supplementary lease deed to be given along with documentary evidences as annexure. The lease deed execution date and registration date is not correct. The information furnished to be checked and corrected.
2. The information furnished under para 1.1.2: Mining Plan submission Criteria details: the reason for modification need to be furnished with proper justification as discussed during field visit. The proposal of the approved RoMP viz-a-viz proposed modification of RoMP need to be furnished i.e. exploration, annual production, location of production quarries, location of waste dump etc. Justification regarding additional degradation of area to be furnished.

3. The information furnished under para 1.2; Land ownership details: The nature of land should be furnished as Private Agriculture/non-Agriculture/Government Waste/Government Grazing Land etc. To be corrected accordingly.
4. The information furnished under para 1.3.1; Approval of earlier Mining Plan needs to be reviewed and reproduced properly. The details of Mining Plan approved on 10.10.1991 to be furnished.

CHAPTER-2: GEOLOGY AND EXPLORATION:

5. Para 2.1.2: Details of Physiographic features and Infrastructures available in and around the lease/ block area:- A seasonal Nallah passes through the lease area. The information of the same is to be furnished in the second column. Further during field visit human settlements observed within lease area. The same to be reflected in the table. The distance of the nearby village from the lease area to be given.
6. Para 2.2.1: Summary of The Previous Exploration (for fresh grant) / During Last Plan Period (for existing leases): To be furnished as Nil instead of Not applicable.
7. Para 2.2.1.14: Area Covered under Exploration: The area to be explored is not furnished. The same to be given in the table.
8. Para 2.2.2.10: Chemical Analysis – The information to be furnished as per standard format in text and the analysis report from NABL accredited Lab/ Govt. Lab to be submitted in annexure. (With descending order)
9. Para 2.2.2.13: Bulk Density : The information to be furnished in text and bulk density analysis report for all rock types to be submitted in annexure.
10. Para 2.2.4: Reserve / Resource Estimation Method:- The reserve estimation method to be described in details with threshold value, cut-off grade, tonnage factor and recovery etc. Different type of bulk density considered for tonnage calculation. The same to be justified. Reserve / Resource may be estimated separately for Ore and mineral reject considering the bulk density 3 & 2.5 respectively.
11. The future exploration programme needs to be proposed as per Rule 12(3) of MCDR 2017 i.e. the entire potentially mineralised area under the mining lease should be explored under G1 level of exploration. The depth of the proposed exploration should be upto 300m /end of mineralisation, whichever is earlier. Necessary modification to be carried at all relevant places of Text and Plate.
12. Para 2.4.13 : information to be furnished as discussed during field visit.
13. Para 2.2.5.5.1 : The entire lease area should be proposed to be converted under G-1 level as per the extant provision of Rule 12(3) & 12(4) of Mineral Conservation and Development (Amendment) Rules, 2021. Proposals to comply with the rules shall accordingly be given with the document. Exploration proposal to be proposed for the year 2022-23 in order to complete the exploration of the entire mineralized zone under G 1 category as per statute.
14. The Pre-Feasibility Study report needs to be recast in view of the comments furnished in geology, mining and other chapters. The Pre-Feasibility Study report needs to be prepared conforming to Part V of the Schedule of MEMC Rule 2015.

CHAPTER-3: MINERAL PROCESSING

15. The information furnished under para 3.2 are not matching with given relevant references, needs to be reviewed and rectified properly.
16. The information furnished under para 3.5.3: Product Quality: The product generated in dry crushing/screening should be furnished.
17. The information furnished under para 3.9: Overall water requirement of mining and mineral processing: The information on overall water requirement source and disposal details to be furnished in text.
18. The information furnished under para 3.10; regarding material balance chart/ flow diagram of mineral processing plants has not been annexed with the document.

CHAPTER-4: MINING OPERATIONS

19. The information under para 4.1.1 & 4.1.2 i.e. existing method/proposed method of mining needs to be furnished as per the prescribed format of the template.
20. The information under para 4.2.1.1 regarding pits furnished with the document is not matching with the existing field ground condition. Hence the same needs to be furnished correctly. Further, pit dimension and area covered by pit in ha is not matching.
21. The information under para 4.2.2.2: Year wise opencast Development: The information to be furnished as per the standard table. The Recovery percentage of ROM to be furnished. The bulk density of Ore and MR to be given in the table. The recovery percentage of Ore and Reject to be furnished. The year wise, section wise calculation of Ore and OB to be submitted in annexure.
22. Under para 4.3.1, the blast vibration study report, bulk density study report and recovery study report and also any other related study reports should be proposed.

CHAPTER-5: SUSTAINABLE MINING:

23. Para-5.2: In year wise CSR initiatives, Year wise proposal to be given in all aspects for development of community around the lease area. Ground water recharging system to be proposed. In efforts for green energy, 100% percentage of green energy proposed, check the same.

CHAPTER-6: PROGRESSIVE MINE CLOSURE PLAN

24. Para 6.2.2.2.1, Adequate fencing proposal has not been furnished. The year wise fencing proposal in view of proposed pit, etc are to be proposed. The protective measures proposed i.e. retaining wall and garland drain to be revised as per the discussion during the field inspection.
25. Para-6.2.11, Land use of lease area at the expiry of lease period (CONCEPTUAL STAGE) should be furnished in pursuant to the order dated 14.01.2020 passed by MOM, GOI, consequent up on the order dated 08.01.2020 of the Hon'ble Apex Court passed in W.P.(C) No. 114/2014, the lessee shall carryout "*re-grassing in mining area after closure of mines*".

CHAPTER-8: REVIEW OF PREVIOUS PROPOSAL

26. The reason for deviation of the earlier proposal needs to be furnished with proper supporting documents i.e. date of discontinuance of mining operation.

CHAPTER-9: IMPACT ASSESSMENT

27. Although this chapter is for fresh grant as per the prescribed format; all the para-wise information needs to be furnished in the text along with supporting document if any.

PART-B

ANNEXURES

28. Copy of lease grant order and subsequent extension order from state govt.
29. Copy of lease deed and supplementary lease deed executed.
30. Copy of surface right order.
31. The copies of Form-I & J of all bore holes drilled to be submitted.
32. All the lithologs with chemical analysis of the all the exploration work carried out till date should be submitted.
33. Copy of financial assurance in the form of Bank guarantee under Rule 27 of Mineral Conservation and Development (Amendment) Rules, 2021.
34. Detailed Calculation sheet of in-situ tentative excavation, year wise considering the cross-sections, Bench RL etc. should be furnished.
35. Copy of scale relaxation.

PART-C

PLANS AND SECTIONS

36. All plans and sections should be signed with date by Qualified Person. All the plans should be submitted as hard copies and also soft copies in KML/KMZ/SHP/.DWG as prescribed in the templates. All the plans and sections are needs to be prepared on UTM grid.
37. Geological Plan & Section: (i) Geological plan not prepared as per Rule 32 of MCDR, 2017. (ii) Geological section needs to be drawn from ML boundary to boundary. (iii) UNFC codes needs to be furnished in geological sections and level of exploration boundary needs to be shown in geological plan. The G1 & G2 area is not marked correctly. (iv) The Geological Plan should be prepared as per the extant provision as laid down rule 32 (1) (b), (c) and (d) of MCDR'2017.
38. Development plans& Section: (i) Development plan and sections needs to be submitted on a same scale(ii) Development plan and section needs to be prepared in line to the scrutiny regarding bench parameters above and also prepared on the revised geological sections drawn from ML boundary to boundary.(iii) The top and bottom RL of the dump are to be furnished in development plan.(iv) The proposed haul road along with ramps needs to be shown in all year-wise development plans and sections (v) The proposed RL of the benches and haul road should be clearly mentioned .
39. Progressive Mine Closure plan and sections: Progressive Mine Closure plan and sections submitted with the draft document need to be prepared on the revised proposal and as per comments in PMCP chapter.
40. Environmental monitoring stations to be shown in Environmental Management Plan.
41. Conceptual plan and sections: The plan and sections should be prepared taking into consideration of the production from in-situ excavations, available reserves and resources describing the excavation, Disposal of waste, backfilling of voids, reclamation and rehabilitation measures etc. at the end of lease period.

Format for preparation of Mining Plan/Modified Mining Plan/Review of Mining Plan (Open Cast)

COVER PAGE

Mining Plan /Review of Mining Plan / Modifications in Approved Mining Plan of -----
Mine / Deposit over an area of ----- ha submitted under Rule 16(1)*/17(2)*/17(3)* of Minerals (Other
than Atomic and Hydro-Carbons Energy Minerals) Concession Rules, 2016.

Mine/ Deposit Name-	
Mining Lease no-	
MineCode-	
In Villages-	
Tehsil-	
District-	
State-	
Total-Lease area-	
Forest Area-	
Non Forest area-	
Lease period-	
Mineral-	
Proposed category of Mine-	
Mining plan period-	
Working proposal period-	
Applicant/lessee-	
IBM Registration no-	
Address -	
Phone-	
Email-	
Prepared by-	
Qualified Person Name-	
Address-	
Phone-	
Email-	