

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. MRMP/A/07-ORI/BHU/2021-22

दिनांक / Date: 30.06.2021

То

Shri Balwant Singh, IAS, Managing Director & Nominated Owner, M/s OMC Limited, OMC House, Bhubaneswar, Odisha – 751001.

Sub: Modification of Review of Mining Plan of Kurmitar Iron & Manganese Ore Mine over an area of 651 ha in Sundargarh district of Odisha of M/s Odisha Mining Corporation Limited submitted under Rule-17 (3) of MCR, 2016.

Ref: - i) Your letter no. 8439/OMC/PMC/2021 dated 09.06.2021 received on 16.06.2021.

- ii) This office letter of even no. dated 16.06.2021.
- iii) This office letter of even no. dated 16.06.2021 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 27.06.2021 by Shri Ramkishan R, 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 Modification of Review of Mining Plan in the light of the contents vide <u>Annexure-I</u> and submit <u>three (3) firm bound and two (2) soft copies of the document text in CD in a single MS Word file (the <u>drawing/plates should be submitted in Auto CAD compatible format and JPG format in resolution of 100x100 pixels on same USB Pendrive/Flashdrive) 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 Review of Mining Plan document. The plates are also to be submitted in separate volume.</u></u>

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. It may be noted that no extension of time in this regard will be entertained and the Modification of 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/ yours faithfully,

(HARKESH MEENA)

क्षेत्रीय खान नियंत्रक / Regional Controller of Mines

Copy for kind information and necessary action to:

1. Shri Pradip Kumar Sahoo and Shri Subrat Kumar Behera, Qualified Person, M/s Odisha Mining Corporation Limited, OMC House, Bhubaneswar-751001,Odisha.

(HARKESH MEENA) क्षेत्रीय खान नियंत्रक / Regional Controller of Mines Scrutiny comments on examination of Modification of Mining plan with PMCP of Kurmitar Iron & Mn Mine of M/s OMC Ltd. over an area of 651 Ha in Sundergarh District of Odisha State.

GENERAL POINTS:

- 1. IBM registration number and mine code if allotted should be mentioned on cover page. Sequence of paragraph and its numbering as per IBM Manual Appraisal MP 2014 has not been covered in text. All the headings as mentioned in the IBM Manual Appraisal MP 2014 should be furnished in all chapters in the text. All the text, tables and annexures to be properly indexed/ numbered/ paged and signed by qualified persons. Correct table reference number to be mentioned at all relevant places. All the certificates/annexures should bear dated signature. Need to do necessary corrections at all relevant places in the document.
- The copy of the qualification & experience certificate in respect of the Qualified Persons to be enclosed as per Rule 15 of MCR, 2016. The Identity proof may also be submitted.
- 3. The review of previous mining plan should cover all proposals right from exploration to PMCP measures.

Geology and Exploration

- All the parameters considered for like recovery factors, bulk densities, UPL etc., for estimation of reserves/resources should be properly justified with reports from NABL laboratory.
- 5. The information of drilled BH to be submitted as per following format and enclosed as annexure:

S.No.	Year	BH Id	Easting	Northing	Collar RL	Inclination	BH Depth	Type BH	of	No. of samples collected and analyzed.
1			UTM	UTM	mRL					,

- 6. It is observed that G1 level of exploration over entire area has not been proposed. Further, within the G1 explored areas, proposal should be furnished to intersect ore body at depth, if any considering the continuity of boreholes in adjacent sections. The depth of the boreholes proposed should be considered considering the lateral and depth wise continuity of ore body in geological cross-sections and till the end of mineralization intersecting the ore body at depth. The exploration proposal should be complete by 2021-22. The grid spacing for G1 level of exploration for iron ore should be as per the exploration norms defined in Part III of MEMC Rules 2015. Need to do necessary corrections at all relevant places and modify exploration proposal accordingly.
- 7. The year wise exploration proposal should be modified as per above scrutiny point and the year should be mentioned in financial year. The exploration proposal has not been submitted as per the format specified in IBM Appraisal of MP 2014. Further, the details of individual proposed boreholes should be furnished in following tabulated format. Need to do necessary corrections.

Year of drilling	Secti on No	Propos ed BH no	Core/ RC/ DTH	Northi ng	Eastin g	Collar RL	Borehole Inclinatio n	Propos ed Depth	Forest area/ Non forest area/ diverted forest area	Area havir surface rigl non-surfac right area
unining	INO	BH NO	DIH		9	112	n	Depth		

- 8. Justification of UNFC codes as per UNFC guidelines has not been furnished. Need to do necessary corrections.
- 9. The final presentation of reserve and resources as on dated....for iron ore under various UNFC codes separately for ore and mineral reject with grade have not been furnished. The information should be furnished in the format specified in IBM appraisal of mining Plan 2014. The date of estimation should be the date of survey. Accordingly, life of mine to be recalculated. Need to do necessary correction and furnish required information.

MINING

- 10. Justification for site selection for mining during the proposed plan period has not been furnished. Proposed method of mining has not been furnished in light of development proposal i.e. annual production capacity, nos. of pits proposed for production, site of waste dump and other mine design parameters.
- 11. The details of the proposed area regarding the proposed road for movement of vehicle and also storage of mineral should be furnished like whether it is a mineralized area non-mineralized area. If it is mineralized area then sit should be properly justified with lateral development of the area for mineral excavation.

- 12. Conceptual Mine planning should be modified taking into consideration of the revised production from in-situ excavations, available reserves and resources describing the excavation, recovery of ROM, Disposal of waste, backfilling of voids, reclamation and rehabilitation showing on a plan with few relevant sections.
- 13. 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 "regrassing in mining area after closure of mines". Accordingly proposal has not been submitted in conceptual planning, conceptual plan and sections.

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

 In Para 4a, the nature and quantity of top soil, overburden / waste and Mineral Reject to be disposed of have not been furnished in the following format.

	(cum)	Waste (cum)				Mineral Rejects (tones)				
Reuse/ spreading	storage	Total generation	Backf illing	Storage (dumpi ng)	Utiliza tion	Total generati on	Blending	Storage	Benefici ation	
		storage	storage	storage	Reuse/ storage generation illing (dumpi	Reuse/ storage reperation storage generation liling (dumpi tion	Reuse/ storage generation illing (dumpi tion generation)	Reuse/ storage storage generation illing dumpi tion generati Blending	Reuse/ storage storage generation illing Utiliza generati Blending Storage	

15. The information about stacking of mineral rejects should also be furnished in above similar table as furnished for waste dumps.

PROCESSING OF ROM AND MINERAL REJECTS

16. The material balance chart has not been furnished. The ROM feed grade and tonnage with recovery%, grade and tonnage of product at each stage of processing may be shown in the flow sheet along with block diagram processing plant. The summary of the physical and chemical composition of feed material, grade and quantity along with different output products with physical and chemical composition (with nomenclature of product) should be furnished with recovery percentages.

PROGRESSIVE MINE CLOSURE PLAN

- 17. All the paragraphs have not been 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.
- 18. 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. Need to do necessary corrections at all relevant places. Year wise mining plan proposals and land use pattern should be submitted in softy copy in the format of .kml or .shp file along with document. Need to do necessary corrections.

PLATES (General):

- 19. The conventions provided under the Metalliferous Mines Regulations, 1961, shall be used in preparing all plans and sections. All plans and sections should comply with the provisions of Rule 32 of MCDR 2017. 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. All plans and sections should be signed with date by Qualified Person. Date of observation of Magnetic meridian should be shown in all plans. The Northing (N) and Easting (E) have not been mentioned along the grid coordinate values of plans and sections. Need to do necessary corrections.
- 20. With reference to CCOM Circular No 2/2010 and its addendum, the geo-referenced mining leases map superimposed on latest high-resolution satellite data has not been submitted.
- 21. The existing and proposed bench positions clearly with mRL to be mentioned in the all plans and sections. Date of survey has not been given on every plan and sections and the same should be signed by with date. Grid Lines have not been be shown in all plans and sections. All plans and sections should be signed with date by certified Surveyor, Qualified Person, Mine Manager, Mining Engineer and Mining Geologist
- 22. All plans and sections should be signed with date by certified Surveyor, Qualified Person, Mine Manager, Mining Engineer and Mining Geologist.

Key Plan:

23. The key plan has not been prepared as per the provision of rule 32 (5) (a) of MCDR 2017 particularly the boundaries of all villages and towns with their population, forests with tree density, approach road to lease area, Latitude/longitude of the extreme ML pillar coordinates etc. have not been marked in key plan.

Surface Plan:

24. The features shown in the index is not distinguishably shown in the plan. Diverted forest area to be shown in the plan as well as marked in the index of the map. The UPL should be shown over the plan and in index. Necessary corrections to be done.

- 25. The features shown in the index is not distinguishably shown in the plan. Diverted forest area to be shown in the plan as well as marked in the index of the map. The UPL should be shown over the plan and in index. Necessary corrections to be done. Surface right area and forest, non -forest area, diverted forest area have not been shown. Few boundary pillars should be correlated with some permanent ground features giving distance and bearing/direction. Nomenclature of the existing waste and mineral reject dumps along with fines stack should be mentioned.
- 26. All the boundary pillars coordinates should be furnished in a tabular format. The Surface Plan should be prepared to satisfy the provision as laid down rule 32 (1) (a) of MCDR'2017.

Geological Plan & Section:

- 27. The Geological Plan should be prepared complying the provision as laid down rule 32 (1) (b), (c) and (d) of MCDR'2017. Need to do necessary corrections.
- 28. The revised exploration proposal as mentioned in the scrutiny point should be incorporated in geological plan. The proposed boreholes to be shown in dotted lines in Geological sections along with proposed borehole number, RL and proposed closing depth at the bottom of the borehole. The year wise proposal for drilling to be shown in different contrasting color in both Geological Plan and Geological sections. The year wise color of the boreholes proposed in Geological plan should match with the plotted proposed boreholes in Geological sections. Need to do necessary corrections.
- 29. The UPL has not been shown in geological sections. The UNFC codes have not been shown in sections. The blank portions of the sections above the UPL should be filled with relevant lithologies. The ore and mineral reject part considered in sectional method of calculation of reserves and resources should be demarcated in geological sections. Need to do necessary corrections.

Development plan & Section:

- The development plans and sections should be prepared on updated geological plan and sections. Need to do necessary corrections.
- 31. Year wise mining plan proposals should be submitted in softy copy in the format of .kml or .shp file along with document. Need to do necessary corrections.
- 32. Year wise development plan and sections have not been submitted. Further, a composite development plan and section should also be submitted. UPL has not been shown in development plans and sections. The development boundaries shave not been shown in the plan and section and also in index. Need to do needful.
- 33. Quarry name, existing and proposed year wise bench profiles, waste dumps, mineral reject dumps etc. to be shown in the development plans and sections including legend. The lithology of the area should be clearly shown in year wise development plan and sections in the area proposed for development. In development plan, proposed benches RL should be clearly depicted. Proposed infrastructure and waste dumping should be furnished year to year basis in different color codes. The nomenclature of existing and proposed dumps should be clearly marked. In development section progress of dumping and others protective measures should be clearly depicted. Need to do necessary corrections. The UNFC codes should be rechecked and corrected after complying the above scrutiny points.

Environment plan:

34. The Environment Plan as prepared should be satisfy the provision as laid down rule 32 (5) (b) of MCDR'2017. The proposed environment protective measures to be shown in environment plan. The drainage pattern of the lease area also to be shown on the plan. Air, water and noise monitoring stations to be shown in the plan. Wind rose diagram should be shown with predominate wind direction.

Reclamation plan along with sections.

35. Reclamation plan should be submitted as per IBM appraisal of mining plan describing the proposals to be implemented for reclamation and rehabilitation of mined-out land including the manner in which the actual site of the pit will be restored for future use. The proposals may be supported with yearly plans and sections depicting yearly progress in the activities for land restoration/ reclamation/rehabilitation, afforestation, protective measures etc.

FA Plan

36. The area under different heads of FA table should be properly shown in different hatching with present area and additional area in FA plan. The FA table should be furnished.

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