BY EMAIL



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



Phone: 0674-2352463 Tele Fax: 0674-2352490 ro.bhubaneshwar@ibm.gov.in Plot No.149, Pokhariput BHUBANESWAR-751020

No. RMP/A/21-ORI/BHU/2021-22

Date: 11.10.2021

To

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

Sub: Approval of Review of Mining Plan of Kodingamali Bauxite Mine along with Progressive Mine Closure Plan (PMCP), over an area of 428.075 ha in Rayagada & Koraput district of Odisha State, submitted by M/s Odisha Mining Corporation Ltd under Rule 17 of MCR, 2016.

- i) Your letter No. 14806/OMC/PMC/2021 dated 30.09.2021 received on 01.10.2021. Ref:
 - ii) This office letter of even no. dated 01.10.2021.
 - iii) This office letter of even no. dated 01.10.2021 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 carried out on 04.09.2021 by Shri Ramkishan R, Senior Assistant Controller of Mines & Shri Sanjib Kumar Mohapatra, 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 I and submit:-

- (i) Three (3) firm bound copies of text in A4 size printable paper and plate/plan in hard copy. The consents and certificates by the Lease holders/Qualified Person and copy of bank Guarantee shall be attached in hard copy of document.
- (ii) Two (2) soft copies of the document in USB Pendrive. The soft copies of the document shall be digitally signed by the Qualified Person and Nominated owner. The text of document should be in excel(.xls) and word format. The plates/plans are to be submitted in .kml/.kmz/.shp format. A few sections may be submitted in .pdf format as indicated in the CCOM Circular 1/2021. All the annexures shall be submitted in soft
- (iii) Financial assurance under Rule 27 of MCDR 2017.

The aforesaid final copies of document will be submitted within 15 (Fifteen) days from the date of issue of this letter, for further necessary action.

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.

(हरकेशी मीना)

क्षेत्रीय खान नियंत्रक

Copy for kind information and further necessary action to Shri P.K.Sahoo (through email).

(हरकेश भीमी)

क्षेत्रीय खान नियंत्रक

N.O.O:

Copy for kind information to the Controller of Mines (EZ), Indian Bureau of Mines, Kolkatta.

(हरकेशा सीना)

क्षेत्रीय खान नियंत्रक

Scrutiny comments on Review of Mining Plan including PMCP in respect of Kodingamali Bauxite Mine of M/s OMC Ltd.

PART-A

CHAPTER-1: GENERAL INFORMATION

- The document should be prepared as per the mining plan template format provided in CCOM circular No.01/2021 dated 07.06.2021. No alteration/deletion/change in format of the mining plan template is allowed. Any additional information may be submitted as annexure only if required.
- 2. The final soft copy of the document should be digitally signed by QPs and Nominated Owner.
- 3. Under para 1.2-land ownership details, details regarding the nature of land should be furnished. The details should be in accordance with the land schedule in lease deed.
- 4. Under para 1.3.1 details regarding the date of sl..no.2 in the table should be rechecked.

CHAPTER-2: GEOLOGY AND EXPLORATION:

- Under para 2.1.4.7 the details regarding the deposit type like amount of dip ore body and direction needs to be rectified properly. The dip of the orebody wherever mentioned in the text needs to be reviewed and rectified properly.
- 6. Under para 2.2.1.1 regarding the details furnished in geological mapping is not clear, needs to be rechecked and rectified properly. Under para 2.2.1.7 the details regarding the exploratory drilling carried out needs to be rechecked and all the exploration work carried out in respect of the lease needs to be furnished.
- 7. Under para 2.2.1.9 the details regarding the sampling needs to be rectified in line with the scrutiny point no.7. Under para 2.2.1.10 the details regarding the chemical analysis of the samples needs to be furnished properly as per the template format.
- 8. Under para 2.2.1.13 the details regarding the no of samples, bulk density established, etc., needs to be furnished as per the prescribed format in the template. Under para 2.2.2.9 and 2.2.2.10 the details regarding the sampling and chemical analysis should be furnished as per the prescribed format of the template. Under para 2.2.2.13 the details regarding the no of samples, bulk density established, etc., needs to be furnished as per the prescribed format in the template. Under para 2.2.3 the details regarding the minimum T.SiO2 furnished needs to be rechecked and rectified.
- 9. Under para 2.2.4.2 the details furnished regarding level of exploration and the method used for resource estimation for quantity and quality should be rechecked and rectified. Under para 2.2.4.13 in UNFC table the quantity and quality of aluminous laterite type bauxite should be furnished as separately under resources as a separate row. Also the mineral rejects +30-40% Al2O3 quantity should also needs to be furnished under reserves and resources in separate rows. Rectify the table accordingly. Under para. 2.2.4.4 the mineral rejects grade range considered in terms of both Al2O3 and T.SiO2 should be furnished.

CHAPTER-3: MINERAL PROCESSING

- 10. In support of information furnished under para 3.2 the analysis report carried out in NABL accredited laboratory should be enclosed as annexure.
- 11. Under para 3.3.1 the manufacture name should be furnished under column Make.
- 12. Under para 3.1 the details regarding the valuable mineral name and mineral percentage furnished needs to be rechecked and rectified, the analysis report carried out in NABL accredited laboratory should be enclosed as annexure.

CHAPTER-4: MINING OPERATIONS

- 13. Under para 4.1.1 & 4.1.2 the sub category details under mechanized viz., HEMM with deep hole drilling, combination of loaders and tippers, etc., should be furnished.
- 14. Under para 4.2.2.1 the details regarding the topsoil bench height proposed should be rechecked. The slope angle of haul roads, slope of the bench and overall slope of the pit should be in accordance with the relevant statue. Table format should be furnished as per the template. The details of pit dimensions furnished needs to be rechecked and rectified.

15. Under para 4.2.2.2 the details furnished regarding Recovery should be rechecked in accordance with salable ore and mineral reject and accordingly it should be rectified.

16. Under para 4.2.2.3 the details regarding the transportation and hauling equipment with manufacturer details should be furnished. Under para 4.3 relevant recovery study report should be enclosed as

annexure after attending the scrutiny point under 4.2.2.2.

17. Under para.4.3.1. the details regarding the grade range of material proposed to be produced during the years should be furnished. Para sequence nos furnished from 4.3.1 to 4.3.2 should be rechecked. Under para 4.4.4 the type of drill machine should be furnished viz., Electrical, Mechanical etc., Under para 4.4.5.1 to 4.4.5.4 the details regarding the capacity, manufacturer details should be furnished.

18. Under para 4.5.1, 4.5.2 the details furnished under powder factor should be rechecked. Under para 4.6.7 the details furnished should be rechecked as per statutory guidelines. Under para 4.7.3 the

details regarding the existing stacks only should be furnished.

- 19. The aluminous laterite type OB removed from the mine should be systematically and scientifically stacked/backfilled/dumped in the mined out areas/dumping areas along with proper documentation. the records of grade and quantity of the stored material viz., aluminous laterite should be systematically maintained for future reference. It should not be mixed with other type OB/waste material. It should also be proposed to update the plan and sections depicting the stacked/stored area for future reference. This proposal should be annexed.
- 20. Details furnished under para 4.10 may not be required.

CHAPTER-5: SUSTAINABLE MINING:

21. SDF at mine level should be descriptive under para 5.1. accordingly details should be furnished.

22. Under para 5.2 all the cumulative work done details till date should be furnished. Also the year wise proposals from para 5.2.1.1 to 5.3 should be furnished. It is submitted as Nil which is not acceptable.

CHAPTER-6: PROGRESSIVE MINE CLOSURE PLAN

23. The mined out area details furnished under para 6.1 should be rechecked and rectified.

24. Under para 6.2.1 the details furnished regarding the waste quantities and top soil quantities should be rechecked and rectified with the proposed generation quantities. The estimated expenditure if any needs to be furnished.

25. Under para 6.2.6 the proposals regarding the recreational facility needs to be furnished.

26. Estimated expenditure wherever asked in the proposed PMCP measures should be furnished. It should not be kept as Nil. Under para 6.2.9.2 the details furnished regarding the top soil management year wise should be rechecked and rectified.

CHAPTER-7: FINANCIAL ASSURANCE/PERFORMANCE SECURITY

- 27. Under para 7.1 the details furnished in the table should be rechecked and rectified. The area degraded due to mining and allied activity to be considered in FA calculation, Relevant rules of MCDR, 2017 should be quoted under FA amount calculation. FA should be submitted.
- 28. Year-wise table should be furnished separately with a consolidated view.

CHAPTER-8: REVIEW OF PREVIOUS PROPOSALS

29. The details furnished under para 8.2.2.1 the reasons for deviation is not furnished. Recheck and rectify.

30. Wherever the deviations is observed regarding the proposals vs actual achievements the reasons for deviation should be furnished. The details furnished under para 8.2.6.2 should be rechecked and rectified.

PART-B

ANNEXURES

31. Environmental monitoring reports should be submitted.

32. Qualification and experience of QPs as per rule 15 of MCR, 2016.

PART-C

PLANS AND SECTIONS

33. 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 and sections should be signed with date by certified Surveyor, Qualified Person, Mine Manager, Mining Engineer and Mining Geologist as per provisions of MCDR, 2017 and MMR, 1961. 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.

34. All plans and sections should be prepared on UTM grid.

35. All the plans should be submitted as hard copies and also soft copy of all plans in KML/KMZ/SHP should also be submitted which were geo-referenced. Development plans and sections should be submitted on a scale of 1:1000

36. Progressive Mine closure plan and sections should be submitted.

- 37. Key Plan: The key plan should incorporate all features as mentioned Rule 32(5) (a) of MCDR 2017. The prominent wind direction to be shown by rose diagram in key plan and other relevant plans. The approach road to the lease area should be shown with Co-ordinates of extremity of lease area.
- 38. Surface Plan: All the boundary pillar coordinates to be given UTM too. All the updated boundaries of Fines stack, Waste dump, Mineral reject dumps to be shown on the plan. Surface right area to be shown on the plan with different type of land schedules. All the features have not been shown in the index. Common boundary with other lessees if any should be shown on the plan. The Surface Plan should be prepared to satisfy the provision as laid down rule 32 (1) (a) of MCDR'2017.
- 39. Geological Plan & Section: (i) Geological information to be highlighted in geological plan and section. All drilled BH, quarries and trial pits to be shown with red color and BH nomenclature with black color. (ii) Geo structural information has not been furnished adequately. (iii) Limit of estimation should be as per MEMC rule 2015. (iv) The redefined UNFC boundaries and UPL to be shown in Geological Plan and sections. (v) All the geological information to be furnished on geological plan and section based on drilled BH, exposed pit, trial pits etc with their configuration profile (dimensions) like depth. Section lines with nomenclature should be highlighted on the plan. The litho sequence should be shown as per the borehole logs data in the sections. The sections should be prepared on the same scale as prepared for plan. Proposed boreholes should be shown in dotted line. bauxite mineralization area should be clearly demarcated on the Geological plan. Plan and section should be drawn on same scale. The Geological Plan should be prepared to satisfy the provision as laid down rule 32 (1) (b), (c) and (d) of MCDR'2017.
- 40. Development plan & Section: (i) present pit profile configuration with UPL to be shown with red color and proposed development of each year with some other color. All development section to be submitted for which development is proposed. (ii) The layout of the haul road for present and future excavation proposal should be properly addressed in line with safe movement of fleet of the machinery. The proposed and existing haul road to be depicted on the development plan. (iii) The proposed and existing bench mRL to be shown clearly over year wise development plan and sections. (iv)Geological information to be furnished on development plan and sections like litho units. v) 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.

41. Progressive Mine Closure plan and sections: All revised year wise proposals as per comments in PMCP chapter to be depicted on the plan and sections.

42. 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, end of lease period etc.

43. Environment plan: The Environment Plan as prepared should be satisfy the provision as laid down rule 32 (5) (b) of MCDR'2017. Wind rose diagram should be depicted.

44. Financial Assurance Area Plan: The area degraded due to mining and allied activity to be considered in FA calculation. It should be re-calculated and submitted accordingly. The FA table should be furnished.

(Sanjib Kumar Mohapara)

(Ramkishan R)

(Sanjib Kumar Mohapatra) Senior Mining Geologist

Senior Asst. Controller of Mines