

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



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

BHUBANESWAR-751020

No. MRMP/A/35-ORI/BHU/2021-22

Date: 16.02.2022

To

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

Sub: Approval of modification of Review of Mining Plan of Banspani Iron Ore Mine along with Progressive Mine Closure Plan (PMCP), over an area of 381.417 ha in Keonjhar district of Odisha State, submitted M/s Odisha Mining Corporation Ltd under Rule 17(3) of MCR, 2016.

i) Your letter No. 1505/OMC/PMC/2022 dated 28.01.2022.

ii) This office letter of even no. dated 01.02.2022.

Sir,

This has reference to the letter cited above on the subject. The draft of modification of Review of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on site inspection carried out on 03.02.2022 by Shri Sanjib Kumar Mohapatra, Senior Mining Geologist & Shri A K Pany, Assistant Mining Engineer. 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 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 and .dwg 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 copy.
- (iii) Financial assurance under Rule 27 of Mineral Conservation and Development (Amendment) Rules, 2021.

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 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.

> (बाबुलाल गुर्जर) क्षेत्रीय खान नियंत्रक

Copy for kind information to:-

(i) The Controller of Mines (EZ), Indian Bureau of Mines, CP-13, Sector V, Salt Lake City, Kolkatta- 700 091.

(ii) Shri Saroj Kumar Prusty & Shri Rabindra Mohanty, M/s Odisha Mining Corporation Ltd, OMC House, Bhubaneswar -751001.

क्षेत्रीय खान नियंत्रक

Scrutiny comments of Modification of Review of Mining Plan along with Progressive Mine Closure Plan in respect of Banspani Iron Ore Mine, over an area of 381.471 Hectares in Barbil Tahsil, Keonjhar District of Odisha State 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.
- An introductory note with a brief history of the mining lease to be given. Mine code furnished in Mining Plan summary at glance is not correct. The same needs to be review and rectified properly.
- The final soft copy of the document should be digitally signed by QP and consent letter by Nominated Owner.
- 4. The Modification of Review of Mining Plan is submitted for the period 2021-22 to 2022-23. Whereas the year 2021-22 is expiring in very next month and the document is under process, hence the modification proposal may be decipher for 2022-23 only.
- 5. The information furnished under para 1.1 i.e. lease details; The lease code allotted by state govt. is to be furnished. The type of lease is left blank. The same to be furnished as existing lease. Below five year block the modification period should be given. The category of mine should be furnished as A-Mechanised.
- 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.
- 7. The information furnished under para 1.1.2: Mining Plan submission Criteria details: the reason for modification need to be furnished with proper justification. 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.
- The information furnished under para 1.2; Land ownership details: The land schedule furnished not matched with the lease area. The same to be rectified and complete information needs to be submitted as per lease deed.
- 9. The information furnished under para 1.3; Existing Lease: The date of execution is not correct. The same needs to be rectified.
- 10. The information furnished under para 1.3.1; Approval of earlier Mining Plan needs to be reviewed and reproduced properly.

### CHAPTER-2: GEOLOGY AND EXPLORATION:

- 11. The detailed information in para 2.1.1; under drainage pattern is incorrect, the same rectified properly.
- 12. The information furnished under para 2.1.2 i.e. details of physiographic features (Nala/river, Human settlements, public roads, nearest port) are not as per the exact location. Hence the same needs to be reproduced properly.
- 13. The information furnished under para 2.2.2.1 i.e. geological mapping of previous exploration, needs to be reviewed and furnished properly.
- 14. The detailed information under para 2.2.2.7.1 i.e. Exploratory drilling; total mtr., log sheets of bore holes are not enclosed. The same needs to be furnished properly.
- 15. The detailed information under para 2.2.2.9 & 2.2.2.10 are not furnished properly. The details of sample id of the borehole samples need to reviewed and reproduced properly.

- The information furnished under para 2.2.2.13 i.e. Analysis report from NABL i.r.o. bulk density study needs to be furnished.
- 17. The information furnished under para 2.2.2.14. i.e. area covered under exploration is not adequate. The same needs to be furnished properly as per the prescribed table of the template.
- 18. The information furnished under para 2.2.4.2 i.e. resource calculation table; in few sections the resource has been estimated below the threshold value of iron ore. Hence the resource calculation table needs to be rectified and furnished properly.
- 19. The information furnished under para 2.2.4.10 i.e classification; the UNFC codes for the reserve and remaining resources are not correct. The reserve and remaining resources needs to be codified based on the present status of UNFC.
- 20. The details furnished under para 2.2.4.11 & 2.2.4.12, calculation of blocked resources and reserve table are needs to be reproduced in line to the comments furnished for resource calculation table. Geological sections of the draft document are not drawn from boundary to boundary. All the resource and reserve calculation tables not properly done. There is an ambiguity in bulk density and grade of the mineral in the calculation table. The same needs to be rectified & reproduced properly.
- 21. 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.
- 22. The detailed information furnished under para 2.2.5.7 is not furnished as per the prescribed format of the template. The same needs to be furnished properly.
- 23. 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

- 24. The information furnished under para 3.2 are not matching with given relevant references, needs to be reviewed and rectified properly.
- 25. The information furnished under para 3.2 Crushing Section; the feed size and product size of primary and secondary crusher is same. The information needs to be corrected.
- 26. The information furnished under para 3.5.3: Product Quality: The product generated in dry crushing/screening should be furnished.
- 27. The information furnished under para 3.9: Overall water requirement of mining and mineral processing: The water balance chart should be submit as annexure.
- 28. 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

- 29. 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.
- 30. 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.
- 31. The information under para 4.2.2.1: Bench Parameter: the furnished details are seems hypothetical and not correct from systematic and scientific mining point of view and not corroborating with the respective plates. Hence the same needs to be reproduced properly.
- 32. The information under para 4.2.2.2: Year wise opencast Development: The recovery percentage, bulk density and tonnage calculation of ROM are not correct. The same to be reviewed and rectified correctly. 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.
- 33. 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.
- 34. The details furnished under para 4.4.1, 4.4.2, 4.4.3, & 4.4.4 regarding machinery calculation is not correct. The same needs to be reproduced properly.
- 35. The details furnished under para 4.5: Blasting requirement: The blasting and explosive requirement is not calculated properly. The same needs to be checked and corrected.
- 36. The details furnished under 4.7.1: Existing Dump: The area covered by existing waste dump is mentioned as nil and the total dump quantity left blank. The same needs to be corrected.
- 37. The details furnished under Para 4.9: Use of Minerals: complete details needs to be furnished as per the prescribed format.

### CHAPTER-5: SUSTAINABLE MINING:

38. 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. The cumulative work done / measures taken furnished is to be checked as the mine is not working since a long. In efforts for green energy, the percentage of green energy proposed to be furnished. The consumption of water and recycle is also to be furnished.

### CHAPTER-6: PROGRESSIVE MINE CLOSURE PLAN

- 39. Para 6.2.2.2.1, the fencing proposal has not been furnished. The year wise fencing proposal in view of proposed pit, magazine 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.
- 40. 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

41. The reason for deviation of the earlier proposal needs to be furnished with propoer supporting documents.

# CHAPTER-9: IMPACT ASSESSMENT

42. 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

- 43. Copy of lease grant order and subsequent extension order from state govt.
- 44. Copy of lease deed and supplementary lease deed executed.
- 45. Copy of surface right order.
- 46. The copies of Form-I & J of all bore holes drilled to be submitted.
- 47. All the lithologs with chemical analysis of the all the exploration work carried out till date should be submitted.
- 48. Copy of financial assurance in the form of Bank guarantee under Rule 27 of Mineral Conservation and Development (Amendment) Rules, 2021.
- Certificate from qualified person regarding authenticity of information submitted is to be attached.
- 50. Copy of board resolution for nominated owner.
- 51. List of Board of Director of the company.
- 52. Consent letter for preparation of the modification of Review of Mining Plan.
- 53. Bulk density study report.

- 54. Water balance chart.
- 55. Calculation sheet of insitu tentative excavation year wise considering the cross-sections, Bench RL etc. should be furnished.
- 56. The pre-feasibility report is to be submitted with the content of pre-feasibility report and analysis of economic viability of the project is to be described in detailed as per rule 16 and Part-V of MEMC Rule 2015 and enclosed in annexure. The economic viability of the project should be supported with NPV, IRR, Payback period by cash flow chart with total investment, operational cost, final price offer etc.

### PART-C

#### PLANS AND SECTIONS

- 57. 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.
- 58. Key Plan: The key plan should incorporate all features as mentioned Rule 32 5 (a) of MCDR 2017. A legible copy of the same to be submitted.
- 59. Surface Plan: (i) contours and existing benches are shown in similar colour codes. (ii)Excavated area shown in the index and plan needs to be removed.(iii) The safety barrier needs to be shown all along the railway line passing through the lease area as per the extant provisions rule 12(d) of Mineral (Other than Atomic and Hydro carbon of Energy minerals) Concession Rules, 2016. Accordingly respective plans and sections need to be re drawn.(iv) All features shown in the surface plan needs to be properly indexed.
- 60. Geological Plan & Section: (i) Geological plan needs to be prepared considering the scrutiny point furnished in surface plan. (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. (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.
- 61. 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.(ii) The proposed haul road along with ramps needs to be shown in all year-wise development plans and sections (iii) The proposed RL of the benches and haul road should be clearly mentioned.
- 62. 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.
- 63. 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.
- 64. Financial Assurance Area Plan: The area degraded due to mining and allied activity to be considered in FA calculation. The FA table needs to be furnished in the plan.