



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



BY EMAIL
Phone: 0674-2352463
Tele Fax: 0674-2352490
E-mail:
ro.bhubaneswar@ibm.gov.in
Plot No.149, Pokhariput
BHUBANESWAR-751020

No. RMP/A/28-ORI/BHU/2021-22

Date: 16.11.2021

To

Shri Balwant Singh, Nominated Owner,
M/s Industrial Development Corporation of Odisha Ltd
IDCOL House, Ashok Nagar, Unit-II,
Bhubaneswar-751009

Sub: Approval of Review of Mining Plan of Talangi Chromite Mine along with Progressive Mine Closure Plan (PMCP), over an area of 65.683 ha in Jajpur district of Odisha State, submitted by M/s Industrial Development Corporation of Odisha Ltd under Rule 17 of MCR, 2016.

Ref: - i) Your letter No. Nil dated Nil received on 02.11.2021.
ii) This office letter of even no. dated 02.11.2021.
iii) This office letter of even no. dated 02.11.2021 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 19.06.2021 by 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 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 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
(हरकेश मीना)

क्षेत्रीय खान नियंत्रक

Copy for kind information and further necessary action to Shri S.C. Nayak, M/s MINESKETCH Consultants (P) Ltd, Flat No-205, Bhagwan Tower, Cuttack Road, Bhubaneswar-751006.

भवदीय,
हरकेश मीना
(हरकेश मीना)

क्षेत्रीय खान नियंत्रक

Scrutiny comments on examination of Review of Mining Plan along with Progressive Mine Closure Plan in respect of Talangi Chromite Mine, over an area of 65.683 Ha.(RoR) in Talangi & Ostapal Villages, Sukinda Tahsil of Districts of Odisha State of M/s. Industrial Development Corporation of Orissa Ltd.

PART-A

CHAPTER-1: GENERAL INFORMATION

1. 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. All the information in the various table columns of different chapters as per the prescribed format in the template should be furnished. No column/rows should be left blank.
3. The final soft copy of the document should be digitally signed by QPs and Nominated Owner (Mandatory).
4. List of plates and annexure should be properly indexed with page nos. and in case of plates the scale should also be mentioned.
5. As per the submitted draft document, the lease was initially granted 236.74 hectares, latter on executed for 65.683.683 hectares. Further as per this office record the mine is under temporary discontinuance for operations are becoming uneconomic since 26.06.2020. However, production proposals have been envisaged from FY 2024-25 in the draft document needs proper justification. Hence an introductory note containing synopsis of all such instances with documentary evidence needs to be furnished in the review of mining plan document as annexure.
6. Under para 1.1 the details of lease area of (both RoR & DGPS) needs to be furnished, as both are not equal with each other. Further the same needs to be rectified in the entire text and plates of the submitted document wherever is applicable.
7. Under para 1.1.1 the details of grant of mining lease needs to be reviewed and rectified properly. Copy of the documentary evidence for the same needs to be furnished as annexure and annexure number needs to be furnished in the text for reference.
8. Under para 1.2 land ownership details the details; details of Khasra No. needs to be furnished. Copy of the documentary evidence for the same needs to be furnished as annexure.
9. The information under para 1.3.4.1 to 1.3.4.4 needs to be furnished with supporting documentary evidences as annexure.
10. Under para 1.3.6 & 1.3.7 complete details Owner/Nominated owner & Qualified persons, as per the prescribed format needs to be furnished.

CHAPTER-2: GEOLOGY AND EXPLORATION:

11. The detailed information under para 2.1.1, 2.1.2, 2.1.3 to 2.1.4.8 should be furnished. The furnished information in not adequate. Needs to be rectified properly.
12. The detailed information under para 2.2.2.7 has not been furnished. The information should be furnished agency wise in separate rows properly.

13. The details of information regarding sampling and analysis under para 2.2.2.9 and 2.2.2.10 has not been furnished properly. The same should be furnished as per the prescribed format of the template.
14. The information under para 2.2.2.11 needs to be furnished with copies of the test report need to be furnished as annexure.
15. The copies of the test report regarding the bulk density furnished under para 2.2.1.13 has not been furnished. The same should be furnished as annexure.
16. The information under para 2.2.2.14; i.e. area covered under exploration is not adequate. The same needs to be reviewed and furnished properly as per the prescribed format of the template.
17. The descriptive information is not adequate as furnished under para 2.2.4.1, so detailed description regarding the methodology for resources/reserve estimation like, method, threshold, cut off considered influence considered etc., needs to be furnished.
18. All the information under para 2.2.4.2 needs to be furnished as per the prescribed format of the template for resource calculation. The detailed information like, depth, type of land grade needs to be furnished propely. Further, separate sub-headings for different grade wise resources needs to be furnished by inserting additional rows with proper UNFC codes.
19. The information under para 2.2.4.10; UNFC justification under classification needs to be furnished with proper UNFC codes assigned for reserves and remaining resources.
20. The information under para 2.2.4.11 & 2.2.4.12 needs to be reviewed and rectified in line to the comments furnished for para 2.2.4.2. Further under para 2.2.4.13, details furnished regarding date of reserve/resource estimation needs to be reviewed and rectified properly.
21. The information under para 2.2.5 regarding future exploration proposal has not been furnished properly. The future exploration programme needs to be furnished strictly as per the extant provisions of Part III of Mineral (Evidence of Mineral Contents) Rules 2015. The entire potentially mineralised area under the mining lease area should be proposed to cover under exploration under G1 level. Further complete details of the proposed borehole needs to be furnished as annexure.

CHAPTER-3: MINERAL PROCESSING

22. Under para 3.1 the details regarding the valuable mineral name and mineral percentage furnished needs to be rechecked and rectified. Analysis report in support of the same carried out in NABL accredited laboratory/Government laboratory should be enclosed as annexure.
23. Under para 3.2 complete chemical analysis of ROM for all radicals should be furnished with s supportive document annexure of analysis carried out in NABL accredited laboratory.
24. The details furnished under para 3.3.1 to 3.6.7 are seems arbitrary. The same needs to be reviewed and to be furnished with adequate information. Further information under para 3.7 & 3.8 needs to be reviewed and rectified accordingly.
25. Overall water requirement water balance diagram for mining and processing should be enclosed annexure under para 3.9
26. Material balance chart of mineral processing should be enclosed annexure under para 3.10

CHAPTER-4: MINING OPERATIONS

27. 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.
28. The Pit-Id & other details furnished under para 4.2.1 should be exactly as per the surface plan and all other relevant plans.
29. Information furnished under para 4.2.1.2.2 & 4.2.1.3 should be rechecked and rectified properly. Further locations of dumps needs to be furnished with UTM co-ordinates.
30. The details furnished under para 4.2.2 regarding the bench slope angles and overall pit slope angles should be as per the relevant statutory guidelines. Needs to be rechecked and rectified accordingly.
31. The details furnished under para 4.2.2.2 regarding year wise opencast development has not been furnished properly. The same should be furnished as per the prescribed format of the template. If any necessary adequate information is required to be furnished to established the proposed production, the same needs to be furnished in annexure. Further, location of advancement and Ore to OB ratio furnished under para 4.2.2.2 should be rechecked and rectified.
32. Under para 4.3.1 the blast vibration study report, slope stability study report, bulk density study report and recovery study report and also any other related study reports should enclosed.
33. Under para.4.3.2 the details regarding Insitu mining needs to be rectified in line to the comments furnished for para 4.2.2.2 and the grade range of material proposed to be produced during the years should be furnished.
34. The details furnished under para 4.4.1 to 4.4.5.3 regarding machinery calculation needs to be reviewed and rectified properly.
35. Under para 4.5.1, 4.5.2 the details furnished under powder factor should be rechecked.
36. The information furnished under 4.6.1 to 4.6.8 should be rechecked and rectified. All the information should be furnished shift wise as prescribed in the format. Under para 4.6.2 the details furnished should be rechecked as per statutory guidelines.
37. Under para 4.7.1 & 4.7.3 the details regarding the existing dump and existing stacks needs to be review and rectified properly.
38. Chemical specification of the use of mineral under para 4.9 should be furnished.
39. Backup calculation table for year wise production i.e. section wise calculation details should be enclosed as annexure.

CHAPTER-5: SUSTAINABLE MINING:

40. SDF at mine level should be descriptive under para 5.1 accordingly details should be furnished.
41. Under para 5.2 all the cumulative work done details till date should be furnished. The information furnished should be rechecked and rectified. Also the year wise proposals from para 5.2.1.1 to 5.3 should be furnished.

CHAPTER-6: PROGRESSIVE MINE CLOSURE PLAN

42. The details furnished under para6.1 should be rechecked and rectified. Under para 6.2.1 & 6.2.1.1 the details of year-wise proposal needs to be reviewed and rectified properly.
43. All the proposals under para 6.2.2 to 6.2.8 needs to be reviewed and rectified with suitable proposals.

44. Estimated expenditure wherever asked in the proposed PMCP measures should be furnished. It should not be kept as Nil.
45. Under para 6.2.9.2 the details furnished regarding the top soil management year wise should be rechecked and rectified.
46. The details furnished under para 6.2.11 regarding the land use at the expiry of the lease period should be rechecked.

CHAPTER-7: FINANCIAL ASSURANCE/PERFORMANCE SECURITY

47. Under para 7.1 the details furnished in the Financial Assurance table is not correct. The same needs to be rechecked and rectified. The area degraded due to mining and allied activity to be considered in FA calculation. Relevant rules of MCDR, 2017 and amendments made thereafter/ as amended time to time, under which FA is being submitted needs to be quoted under FA amount calculation. The validity of the BG and details of BG should be furnished. Copy of the financial assurance in the form of bank guarantee needs to be furnished as annexure.

CHAPTER-8: REVIEW OF PREVIOUS PROPOSALS

48. The details furnished under para 8.1.1 regarding lease area utilization needs to be reviewed and rectified properly. Further reasons for deviation if any should be furnished.
49. The proposals and achievement furnished under para 8.1.2 regarding SDF and CSR expenditure needs to be reviewed and rectified properly.
50. The proposals and achievement furnished under para 8.2.2.1 to 8.2.8.4 needs to be reviewed and rectified properly. Further reasons for deviation if any should be furnished.
51. The details of information under para 8.3.2 have not been furnished. The same need to be reviewed and furnished properly.
52. All the information under para 8.3.3.1 to 8.3.3.5 have not been furnished. Need to furnish the same.

CHAPTER-9: IMPACT ASSESSMENT

53. As the lease is not a fresh grant, this chapter is not applicable for this lease; the chapter information may be omitted.

PART-B

ANNEXURES

54. Photographs of ML boundary pillars.
55. Copy of approval letter of mining plans.
56. Surveyor certificate should be enclosed.
57. All the study reports should be enclosed as per para 4.3.1 should be enclosed.
58. All the lithologs with chemical analysis of the all the exploration work carried out till date should be submitted.
59. Mineralogical analysis report should be submitted.
60. Any other annexures as referred in the text should be submitted.
61. Bank guarantee as per MCDR, 2017
62. Copy of surface right granted letter.

PART-C

PLANS AND SECTIONS

63. 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 of the plan at least twenty five centimetres long and suitably subdivided.
64. All plans and sections should be prepared on UTM grid.
65. All the plans should be submitted as hard copies and also soft copy of all plans and sections in KML/KMZ/SHP should also be submitted which were geo-referenced.
66. Key Plan: the key plan has not been submitted so the same should be submitted. 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.
67. Surface Plan: The surface plan submitted with the draft document is not matching with the existing ground position. All the existing features viz-a-viz updated boundaries of quarries, mineral stacks, waste dumps, mineral reject dumps etc. needs to be shown on the plan and respective plans and sections. 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. Pit Id names should be clearly demarcated on the plan with distinctive boundary. The Surface Plan should be prepared as per the provision as laid down rule 32 (1) (a) of MCDR'2017.
68. Geological Plan & Section: (i) The geological plan needs to be prepared inline to the comments furnished under surface plan. (ii) Litho units, litho contacts and Geo structural information has not been furnished properly. (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 existing bench profile and UPL needs to be shown in different color codes. (vi) The future exploration programme needs to be depicted in the geological plan and sections. (vii) The Geological Plan should be prepared as per the extant provision as laid down rule 32 (1) (b), (c) and (d) of MCDR'2017.
69. Development plans& Section: (i) Present pit profile configuration of benches with UPL and proposed development benches of each year needs to be to be shown with distinguishable color codes. All development section to be prepared from boundary to boundary and submitted for which development is proposed. The proposed year-wise development area boundaries should be clearly depicted. (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 (iii) The proposed and existing bench mRL to be shown clearly over year wise development plan and sections. (iv) Geological

