



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. MPM/A/27-ORI/BHU/2021-22

Date: 11.02.2022

To

Shri Ghanshyam Sharma, Nominated Owner & Managing Director,  
M/s Kanakdhar Mining & Minerals Pvt Ltd  
At/Po- Barbil, Dist- Keonjhar,  
Odisha-758035

Sub: Approval of Review of Mining Plan of Bandhal Manganese Mine along with Progressive Mine Closure Plan (PMCP), over an area of 28.0207 ha in Sundargarh district of Odisha State, submitted by M/s Kanakdhar Mining & Minerals Pvt Ltd under Rule 17 of MCR, 2016.

Ref: - i) Your letter No. KMM/IBM/MS/2021-22/2 dated 28.01.2022 received on 03.01.2022.  
ii) This office letter of even no. dated 03.01.2022.

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 23.09.2021 by Shri Sanjay Kumar Mohapatra, Assistant Mining Engineer. 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 and .dwg format. 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,~~

(बाबुलाल गुर्जर)  
क्षेत्रीय खान नियंत्रक

Copy for kind information and further necessary action to Shri Saroj Kumar Dash, M/s Kanakdhar Mining & Minerals Pvt Ltd, At/Po- Barbil, Dist- Keonjhar, Odisha-758035.

(बाबुलाल गुर्जर)  
क्षेत्रीय खान नियंत्रक

N.O.O:

Copy for kind information to the Controller of Mines (EZ), Indian Bureau of Mines, CP-13, Sector V, Salt Lake City, Kolkatta- 700 091.

(बाबुलाल गुर्जर)  
क्षेत्रीय खान नियंत्रक

**Scrutiny comments of ~~Modification~~ of Review of Mining Plan with Progressive Mine Closure Plan of Bandhal Manganese Mine of M/s Kanakdhar Mining & Minerals Pvt. Ltd submitted under Rule 17(2) of MCR, 2016**

**GENERAL**

1. The existing lease period of the mining lease under reference will be expired 13.03.2022. Therefore, the instant document is to be submitted as Review of Mining Plan with PMCP under Rule 17(2) of MCR, 2016 & 23 of MCDR, 2017. Accordingly, at every places of the document, the modification of Mining Plan to be replaced as Review of Mining Plan.
2. As the lease is valid till 13.03.2022, the current status of extension of mining lease from the Concerned Authority is to be submitted.
3. The proposal should be given 14.03.2022 to 31.03.2022 separately with five year proposal from 2022-23 to 2026-27.
4. The mine code/IBM Regn Number/proposal period are to be furnished in cover page.
5. Before general information an introduction to be furnished incorporating the history of lease details.
6. Before introduction, Mining plan at a glance to be inserted as per format enclosed as Annexure-I.

**CHAPTER-1: GENERAL INFORMATION**

7. Para 1.1: Lease details:- In type it should be furnished as Existing Lease. In nature of use it should be Captive/Non-captive. Name of Associated mineral should be mentioned as Nil if there is no associated mineral.
8. Para 1.2: Land ownership details: The taluka name wrongly furnished. The type of land should be forest land/non-forest land/govt. land/ private land. The same to be rectified.
9. Para 1.3.6: Nominated Owner Details:- The minute of board resolution of nominated owner not submitted in annexure.
10. Para 1.3.1 : the mining lease was executed on 14.03.2002 and the first five year period was mentioned from 2003-04 to 2007-08. This may be clarified.
11. As per Rule 34(A) of MCDR amendment Rule 2021; Every lessee shall carry out a drone survey of his leased area and upto hundred metres outside the lease boundary within six months before submission of any mining plan document or modification thereto to the Indian Bureau of Mines for approval and shall submit processed output [digital elevation model (DEM) and Orthomosaic] images obtained from such survey or any other format as may be specified by the Indian Bureau of Mines in this regard to the concerned Regional Controller of Mines and the Controller General along with the application for approval or modification of mining plan.

## **CHAPTER-2: GEOLOGY AND EXPLORATION:**

12. Para 2.1.1: Relief : The level from MSL may be checked and rectified.
13. Para 2.2.1.10: Chemical Analysis : The details of chemical analysis as prescribed in the format with Bore Hole Id should be provided in the table.
14. Para 2.2.1.11 : Petrology & Mineralogical Studied are mentioned as 'Not Done'.
15. Para 2.2.1.12 : Beneficiation studies are also not undertaken. Please clarify.
16. Para 2.2.1.13 : Method adopted for calculation of bulk density of waste & Ore should be clearly described as per latest study report from a NABL laboratory and the report therein should also be annexed.
17. Para 2.2.1.14 : Area covered under exploration in different head as shown in the table should be reconciled the potential area should be clarified in the text relevant annexure as well as in the Geological plans & sections.
18. Para 2.2.4.2 : Resource calculation : 15% recovery has been considered while calculating the resource of the mineral. The same needs to be clarified.
19. Para 2.2.4.4: Name of mineral is mentioned as Iron, Needs to be corrected.
20. Para 2.2.5.5 : Exploratory Drilling : The complete lease area should be proposed to cover under exploration under G1 level upto end of mineralization as per provision of rule 12(4) of MCDR 2017. Further where the bore holes end in mineralized zone should be proposed to prove the end of mineralization.
21. Para-2.2.4.7, in Cost & Revenue Factors it mentioned that part of the excavated ore will be consumed in the captive plant of the lessee and the balance will be dispatched to the buyers. However under Para 2.2.4.8 (Market Assessment) it is mentioned that no separate market assessment is required due to wide spread of Mn. Ore, which is contradictory. It may be clarified as per rule.
22. Para 2.2.5.7, Number of Samples proposed meter wise has not been furnished. Total number of sample proposed to be analyzed are to be furnished.
23. Para 2.2.4.13: Reserve of Manganese above cutoff grade >25 needs to be estimated and given along with average grade.
24. The reserve/resources should be estimated as per methodology of earlier approved document.

### **Chapter-3: Mineral Beneficiation:**

25. Para 3.9: Overall water requirement of mining and mineral processing: The permission from state govt. regarding water withdrawal is not submitted in annexure. The same to be submitted.

#### **Chapter-4: Mining Operation:**

26. Para 4.2.1.1: Pits: The area covered by pit in ha and pit dimension not matched with plate. The same is to be corrected.
27. Para 4.2.1.2.1: DUMPS Details: The waste dump location is to be furnished correctly.
28. Para 4.2.2.1: Bench Parameter: The depth of water table is not correct. The same should be corrected.
29. Para 4.2.2.2: Year wise Opencast Development: The OB to Ore ratio is not calculated properly and the actual ratio is to be furnished. In page no. 40 the total quantity generated from the pit during five year to be furnished in single row.
30. Para 4.4: Machine Calculation: The machinery calculation to be checked and properly calculated considering total maximum excavation.
31. Para 4.7.1: Existing Dump: The existing waste dump details to be furnished.
32. Para 4.7.2: New Dump: The year wise proposed dump details to be furnished.
33. Para 4.7.3: Existing Stack: The existing stack details to be furnished.
34. Para 4.7.4: New Stack: The year wise proposed stack details to be furnished.

#### **Chapter 5: SUSTAINABLE MINING:**

35. Year wise proposal to be given in all aspects for development of community around the lease area. The cumulative work done / measures taken to be furnished.

#### **Chapter 6: PROGRESSIVE MINE CLOSURE PLAN**

36. Para 6.1: Area under mining as furnished under Land status is not matched with FA table given in chapter 7 and in FA Plan. It should be reconciled.
37. Para 6.2.2.2.1: Fencing proposal for plantation should be given year wise.
38. Para 6.2.3.2: The Proposed location of plantation should be matched with respective plates.
39. The proposal of Retaining wall and Garland Drain are to be modified.
40. Para 6.2.11: Land use of lease area at the expiry of lease period (conceptual stage): Reclamation/rehabilitation to be proposed for total degraded area. The degraded and degraded area should be reconciled and rectified.

#### **Chapter 7: FINANCIAL ASSURANCE/ PERFORMANCE SURETY**

41. The financial assurance in form of bank guarantee as per MCDR (Amendment), 2021 co-terminus to the plan period should be submitted and annexed in the final copy.

#### **CHAPTER-8: REVIEW OF PREVIOUS PROPOSALS**

42. The review of proposal for the previous 5 year plan period to be furnished.

#### **Chapter 9: IMPACT ASSESSMENT**

35. This chapter is applicable for fresh grant cases and to be deleted.

#### **Annexure**

1. Financial assurance in the form of Bank guarantee under Rule 27 of Mineral Conservation and Development (Amendment) Rules, 2021.
2. Revised Bench wise/ RL wise calculation of proposed production during the next five years should be enclosed in annexure as per discussion during field visit.

3. Revised Feasibility report should be enclosed & it should be prepared as per MEMC Rules 2015.
4. Singed copy of form-I & J to be submitted.
5. All the lithologs with chemical analysis of all the exploration work carried out till date should be submitted. The bulk density test report, recovery report etc. are to be enclosed.

#### **Plates**

1. All plans and sections should be prepared on UTM grid. The plans and sections submitted bear the certificate that the plans and sections are prepared based on the lease map authenticated by the state government. All plans and sections shall show a scale of the plan at least twenty five centimetres long and suitably subdivided.
2. 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. Same color code should be used in KML file of each plan as per submitted hard copy. No index has been marked for subgrade in surface plan.
3. Key Plan: The key plan should incorporate all features as mentioned Rule 32 5 (a) of MCDR 2017. The approach road to the lease area should be shown with Co-ordinates of extremity of lease area.
4. Geological Plan & Section: All the geological information to be furnished on geological plan and section strictly based on plans and sections of the geological report. The Geological Plan should be prepared as per the extant provision as laid down rule 32 (1) (b), (c) and (d) of MCDR'2017. A sky blue line shown along through the mines in KML format of surface geological plan which is not available in hard copy as well as in DWG File. Need to clarify. Location of bore hole not projected properly in .KML file of geological plan it should be project as per proper location (Co-Ordinate) given in submitted hard copy of the same.
5. Development plans& Section: The top and bottom RL of the dump are to be furnished. In development plan. The proposed RL of the benches and haul road should be clearly mentioned. Year-wise insitu tentative excavation as furnished in text are not matched with the development plan and sections.
6. Progressive Mine Closure plan and sections: All revised year wise proposals are to be depicted on the plan and sections. Year wise fencing along the proposed plantation should also be marked on plan.
7. Conceptual plan and sections: Conceptual plan may be prepared considering mineralization as revealed from the borehole logs considering the life of mine as guidelines.
8. Environment plan: The Environment Plan to prepared as per the provision as laid down rule 32 (5) (b) of MCDR'2017. All the proposed features need to be removed from the environment plan.
9. Financial Assurance Area Plan : The area degraded due to mining and allied activity to be considered in FA table should be matched with the plan.

AT A GLANCE INFORMATION	
1	Name of the Applicant /lessee
2	IBM Registration no
3	Address of Applicant
4	Name of Mine
5	Minecode
6	Lease area in hecets.
7	Forest area
8	Name of Mineral
9	Lease period from to
10	Plan proposal period-
11	Mineral Reserve (111& 112) in tonnes
12	Mineral Resources (211, 221,222, 331, 332, 333&334) in tonnes
13	Production proposal ( 1 <sup>st</sup> yr) in tonnes 2022-23 (Mineral Name)
14	Production proposal (2 <sup>nd</sup> yr) in tonnes 2023-24
15	Production proposal (3 <sup>rd</sup> yr) in tonnes 2024-25
16	Production proposal (4 <sup>th</sup> yr) in tonnes 2025-26
17	Production proposal ( 5 <sup>th</sup> yr) in tonnes 2026-27 (include only saleble/ usable & sub grade mineral)
18	OB/Waste handling proposal 1 <sup>st</sup> yr CUM
19	OB/Waste handling proposal 2nd yr CUM
20	OB/Waste handling proposal 3rd yr CUM
21	OB/Waste handling proposal 4th yr CUM
22	OB/Waste handling proposal 5th yr CUM
23	Present EC permission in tonnes(Mineral or ROM)
24	Plantation proposal in five years in numbers
25	Plantation area proposal in five year(ha).
26	Back filling proposal in hecets in five years
27	Check Dams numbers in five year
28	Garland drain in meters five years
29	Settling ponds (Numbers)
30	Area put to use at end of five year in ha
31	Bank Guarantee Amount Rs
32	Validity of BG upto
33	Any other important information
34	Percentage of revenue sharing bid in case of auction grant of block
35	Amount of performance security and details if any