



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. RMP/A/23-ORI/BHU/2021-22

Date: 26.10.2021

To

Shri Jitendra Nath Patnaik, Mine Owner,  
At-Bonaikela, P.O.- Joda,  
Dist- Keonjhar, Odisha- 758038.

Sub: Approval of Review of Mining Plan of Bhanjapali Iron Ore Mine along with Progressive Mine Closure Plan (PMCP), over an area of 18 ha in Sundargarh district of Odisha State, submitted by Shri Jitendra Nath Patnaik under Rule 17 of MCR, 2016.

Ref: - i) Your letter No. JNP/185/2021-22 dated 11.10.2021 received on 12.10.2021.  
ii) This office letter of even no. dated 12.10.2021.  
iii) This office letter of even no. dated 12.10.2021 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 site inspection carried out on 19.10.2021 by Shri Jitendriya Pradhan, Assistant Mining Engineer. The deficiencies observed are enclosed herewith as Annexure I.

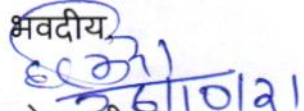
You are advised to carry out the necessary modifications in the draft Review of Mining Plan in the light of the contents vide Annexure I and submit:-

- (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 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 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.

भवदीय  
  
(हरकेश मीना)

क्षेत्रीय खान नियंत्रक

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

  
(हरकेश मीना)

क्षेत्रीय खान नियंत्रक

## **Scrutiny comments of Review of Mining Plan in respect of Bhanjapalli Iron Ore Mine of Shri J.N.Patnaik submitted under Rule 17 of MCR, 2016**

### **General**

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. If not applicable, it was written as not applicable.
3. The final soft copies of the document shall be digitally signed by the Qualified Person and Nominated owner.
4. The document should preferably be submitted in excel(.xls)/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.
5. The final copies of the text document to be submitted in 3 (three) hard bound copies in A4 size printable paper. The consents and certificates by the Lease holders/Qualified Person and copy of bank Guarantee shall be attached in hard copy of document. Three hard bound copies of plates/plans were also submitted. The plates/plans are to be output of AutoCAD software.
6. List of plates and annexures should be properly indexed with page nos. and in case of plates the scale should also be mentioned.

### **CHAPTER-1: GENERAL INFORMATION**

1. Para 1.3.4.2: The validity of consent to operate expired from 31.03.2011. Fresh valid CTO details to be filled.

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

2. The proposed Bore Holes should be in light of provision of Rule 12(4) of MCDR, 2017 to prove the lease area in G1 level.
3. All the proposed Bore Holes should be marked in section. Year wise proposed Bore Holes should be shown in different colour.
4. The depth of ore-body estimated as shown in Geological section is not supported by BoreHoles. The profiles of ore body should be revised based on Borehole data and accordingly reserve/resource should be re-estimated.
5. All the UNFC codes furnished in Geological Plan/sections as per MEMC Rule,2015.
6. Para 2.1.4.1: The details of the ore band present in the lease area with geological features to be furnished.

7. Para 2.1.4.2: The information regarding strike length, width, dipping of ore body and extent of depth present to be furnished.
8. Para 2.1.4.7: The grade of ore occurred with percentage of lump and fines generated to be furnished.
9. Para 2.2.1.4: Geochemical Survey: The analysis report to be submitted as annexure and area covered also filled.
10. Para 2.2.1.7: Exploratory Drilling: The Log sheet of each bore holes to be submitted in csv/excel files as annexure.
11. Para 2.2.1.10: Chemical Analysis: The chemical analysis of samples to be submitted in CSV files which include collar file, survey file, geology log file and RQD file as annexure.
12. Para 2.2.2.7: Exploratory Drilling: The Log sheet of each bore holes to be submitted in csv/excel files as annexure.
13. Para 2.2.6.5: Exploratory Drilling: The exploration proposal should be modified and give an exploration proposal to explore the entire lease area into G1 category as per MEMC Rule, 2015.

**Chapter-3: Mineral Beneficiation:**

14. The water balance chart as mentioned not submitted in annexure. The flow sheet of beneficiation plant is not legible.

**Chapter-4: Mining Operation:**

15. The profile of benches in development plan not proposed correctly in view of scientific development. Direction of advance may be marked clearly.
16. Benches proposed in development plan are not matching with development sections. In the view of above, yearwise tentative excavation also not matched. It may be rechecked and corrected.
17. Para 4.2.1.2.1 & 4.7.3: Stack Details: The mineral reject and ore stack details not matched with the earlier document.
18. Para 4.2.2.1: Bench Parameter: The bench design should be justified and as per MMR, 1961. The copy of approval from DGMS for mining operation under regulation 106 of MMR should be submitted.
19. Detail calculation table for production like section wise calculation details should be enclosed as annexure.

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

20. The details of BG should be furnished.

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

21. Para 8.2.1: Exploration: The achievement meterage not matched with earlier approved document.
22. The proposals and achievement furnished under para 8.1.2 regarding SDF and CSR expenditure needs to be reviewed and rectified properly.

## **Annexure**

1. Singed copy of form-I & J to be submitted.
2. Environmental monitoring reports should be submitted.
3. Surveyor certificate should be enclosed.
4. All the litho logs with chemical analysis of the all the exploration work carried out till date should be submitted.
5. Any other annexures as referred in the text should be submitted.
6. Bank guarantee as per MCDR, 2017
7. Copy of surface right granted letter.
8. Mining plan at a glance as per format attached.
9. Certificate from qualified person regarding authenticity of information submitted is to be attached.
10. The Geotechnical study report should be submitted in a single pdf file.

## **Plates**

11. 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.
12. All plans and sections should be prepared on UTM grid.
13. 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.
14. Progressive Mine closure plan and sections should be submitted.
15. 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. The adjoining mining leases, roads, villages , reserve forest boundary, predominant wind direction, within 5km should be prominently shown.
16. The lease plan submitted is not legible, a legible copy of the same to be submitted.
17. Surface Plan: All the boundary pillar coordinates to be given UTM . All the updated boundaries of 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 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.
18. Geological Plan & Section: (i) part geological plan and sections should be prepared on same scale i.e. 1:2000 (ii) Geo structural information has not been furnished adequately. (iii) Limit of estimation should be as per MEMC rule 2015. (iv) 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 yearwise in different colour. Proposed boreholes should be shown in dotted line. The sections are to be in regular interval. The Geological Plan should be prepared to satisfy the provision as laid down rule 32 (1) (b), (c) and (d) of MCDR'2017.

19. Development plan & Section: (i) present pit profile configuration of benches with UPL to be shown with red color and proposed development benches of each year with some other color. All development section to be submitted for which development is proposed. The proposed yearwise 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 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. vi) It was proposed to develop the quarry-2 during the year the year 2023-24 the same not shown in development plan..
20. 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.
21. 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.
22. 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.
23. Financial Assurance Area Plan: The existing and additional area requirement should be separately hatched on the plan with FA table.

A. y. 26/10/21  
26.10.21

### MINING PLAN/REVIEW OF MINING PLAN AT GLANCE

1	<b>Name of the lessee</b>	
2	<b>IBM Registration no</b>	
3	<b>Address of lessee</b>	
4	<b>Name of Mine</b>	
5	<b>Mine code</b>	
6	<b>Lease area in hect.</b>	
7	<b>Forest area</b>	
8	<b>Name of Mineral</b>	
9	<b>Lease period from        to</b>	
10	<b>Plan proposal period-</b>	
11	<b>Mineral Reserve (111 ,121 &amp;122) in tonnes</b>	111-
		121
		122
		122
		Total
12	<b>Mineral Resources (211, 221,222, 331, 332, 333&amp;334) in tonnes</b>	211
		221
		222
		331
		332
		333
		334
		Total
13	<b>Total (reserve +resource) in tonne</b>	

14	<b>Reserve estimation as on</b>	Date	
15	<b>Explored area in ha</b>	G1	
		G2	
		G3	
		Explored and found Non-mineralised area	
		Un-explored area	
		Total	
16	<b>Exploration proposal Year wise No. of Bore Holes</b>	1 <sup>st</sup> year	
		2 <sup>nd</sup> year	
		3 <sup>rd</sup> year	
		4 <sup>th</sup> year	
		5 <sup>th</sup> year	
17	<b>Production proposal ROM in tonnes</b>	1 <sup>st</sup> year	
		2 <sup>nd</sup> year	
		3 <sup>rd</sup> year	
		4 <sup>th</sup> year	
		5 <sup>th</sup> year	
18	<b>OB/Waste handling proposal CUM</b>	1 <sup>st</sup> year	
		2 <sup>nd</sup> year	
		3 <sup>rd</sup> year	
		4 <sup>th</sup> year	
		5 <sup>th</sup> year	
19	<b>Present EC permission in tonnes</b>		
20	<b>Present Forest clearance area in ha</b>		
21	<b>Plantation proposal in five years in numbers</b>	1 <sup>st</sup> Year:	
		2 <sup>nd</sup> Year:	
		3 <sup>rd</sup> Year:	
		4 <sup>th</sup> Year:	
		5 <sup>th</sup> Year:	
		<b>Total Plantation -</b>	
22	<b>Plantation area proposal in five years (ha)</b>	1 <sup>st</sup> Year:	
		2 <sup>nd</sup> Year:	
		3 <sup>rd</sup> Year:	
		4 <sup>th</sup> Year:	
		5 <sup>th</sup> Year:	
		<b>Total Plantation -</b>	
23	<b>Back filling proposal in hectares in five years (year wise)</b>	1 <sup>st</sup> Year:	
		2 <sup>nd</sup> Year:	
		3 <sup>rd</sup> Year:	
		4 <sup>th</sup> Year:	
		5 <sup>th</sup> Year:	



24	<b>Check Dams numbers in five years (year wise)</b>	1 <sup>st</sup> Year:	
		2 <sup>nd</sup> Year:	
		3 <sup>rd</sup> Year:	
		4 <sup>th</sup> Year:	
		5 <sup>th</sup> Year:	
25	<b>Garland drain in meters five years (year wise)</b>	1 <sup>st</sup> Year:	
		2 <sup>nd</sup> Year:	
		3 <sup>rd</sup> Year:	
		4 <sup>th</sup> Year:	
		5 <sup>th</sup> Year:	
26	<b>Settling ponds (Numbers) (year wise)</b>	1 <sup>st</sup> Year:	
		2 <sup>nd</sup> Year:	
		3 <sup>rd</sup> Year:	
		4 <sup>th</sup> Year:	
		5 <sup>th</sup> Year:	
27	<b>Total Area put to use in mining and allied activity at end of five year in ha.</b>		
28	<b>Bank Guarantee Amount Rs</b>		
29	<b>Validity of BG up to</b>		