



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. MRMP/A/32-ORI/BHU/2019-20

दिनांक / Date: 13.11.2019

To

Shri Gouri Shankar Choubey,  
Lessee, Nangalsila Iron Ore Mine,  
At/Post-Rairangpur, Dist-Mayurbhanj,  
Odisha-757043.

Sub: Modification of Mining Plan of Nangalsila Iron Ore Mine over an area of 45.333 ha in Mayurbhanj district of Odisha of Shri Gouri Shankar Choubey submitted under Rule-17 (3) of MCR, 2016.

Ref: - i) Your letter no. nil dated 26.09.2019 received on 21.10.2019.

ii) This office letter of even no. dated 21.10.2019.

iii) This office letter of even no. dated 21.10.2019 addressed to the Director of Mines, Govt. of Odisha, copy endorsed to you.

Sir,

This has reference to the letters cited above on the subject. The draft Modification of Mining Plan along with Progressive Mine Closure Plan has been examined in this office based on site inspection carried out on 09.11.2019 by Shri Ramkishan R, Sr. Assistant Controller of Mines. The deficiencies observed are enclosed herewith as Annexure-I.

You are advised to carry out the necessary modifications in the draft Modification of Mining Plan in the light of the contents vide Annexure-I and submit **three (3) firm bound and two (2) soft copies of the document text in CD in a single MS Word file (the drawing/plates should be submitted in Auto CAD compatible format and JPG format in resolution of 100x100 pixels on same CD)** with financial assurance under Rule 27 of MCDR' 2017 within 15 (fifteen) days from the date of issue of this letter for further necessary action. If the total page of annexures exceeds 50 (Fifty) then it should be submitted as separate volume. But reference of these annexures must appear in the Modification of Mining Plan document. The plates are also to be submitted in separate volume.

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 Mining Plan. It may be noted that no extension of time in this regard will be entertained and the Modification 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 / yours faithfully,

(HARKESH MEENA)

क्षेत्रीय खान नियंत्रक / Regional Controller of Mines

Copy for kind information and necessary action to:

1. Shri S. C. Nayak, Qualified Person, M/s Minesketch Consultants (P) Limited, Flat No-205, Bhagwan Tower, Cuttack Road, Bhubaneswar-751006.

(HARKESH MEENA)  
क्षेत्रीय खान नियंत्रक / Regional Controller of Mines

**Scrutiny comment on Modification of Mining Plan including PMCP in respect of Nangalsila Iron Mine of Shri G.S.Choubey.**

**GENERAL:**

1. On cover page Registration number allotted by IBM with Mine code should be mentioned.
2. All the certificates/annexures should bear dated signature. Name of nominated owner should be furnished under applicant name. MCDR, 1988 should be replaced with relevant rules of MCDR, 2017.
3. The surface right area granted should be furnished with documentary evidence. All boundary pillars DGPS coordinates should be furnished in tabular format. The document should be prepared as per the IBM Manual on Appraisal of Mining plan 2014, no alteration and deletion should be made in the chapters headings, paras.
4. The status of statutory clearances with documentary evidences should be furnished like EC, FC, CTO, surface right area, etc. The reasons for non-operation of the mine should be elaborated in the introduction with documentary evidence.
5. In the document it is furnished as proposal for 2020-21 (beyond plan period) which should be removed and necessary modifications should be done in the plans and sections. Proposal for 2019-20 only be given.
6. The lease was also lapsed w.e.f. 18.11.2011 by State government vide letter dated 25.06.2015. The present validity status of the ML with period of validity to be furnished with documentary evidence. The document should only be considered for the proposed period, if the subsistence of lease period confirmed by competent authority of State Govt. of Odisha.
7. The land schedule be given as per the executed lease deed document. The mining plan should be prepared over an extent of area of 45.931 ha. The area applied for surrender with FMCP approved by IBM should be mentioned in document with land types and also on cover page.

**GEOLOGY AND EXPLORATION:**

8. The lease area explored under different category of UNFC norms should be recalculated as per Part II point no.4 and part III of Minerals (Evidence of Mineral Contents) Rules, 2015 (MEMC, Rule 21015). The justification for area considered for G1/G2/G3 etc. should be given properly. Accordingly, resource estimation under different level of exploration to be revised. Necessary corrections to be done at all relevant places of the document and resource estimation.
9. The dimensions of pits, exposed quarries with depth as per the filed observations/survey should only be taken in to consideration for estimation of reserves/resources. The sample analysis reports of field samples collected during filed visit should be enclosed and marked on the geological plan about sample location.
10. Adequate proposal of exploration to be given to explore lease area under G1 level of exploration as per MEMC, rule 2015 in the proposed plan period 2019-20.
11. The details of the proposed exploration to be given as per following format:

Sl.No	Year	BH No	Northing	Easting	Collar RL	Core/RC/DTH	Metage	Inclination	Forest/Non-Forest/ diverted Forest	Surface Right/ Non-Surface	Purpose of BH
1											
2											
Total						Total BH	Total mts				

12. Recovery and bulk density considered for estimation of reserves for ore, and mineral reject/sub grade with should be properly justified with documentary evidence viz., test reports carried out in NABL Laboratory.
13. Feasibility/Pre-Feasibility assessment report should be prepared and submitted as per UNFC guideline considering all technical and economic parameters along with guideline as per CCOM circular 1/2006 and 4/2009 considering all technical, financial and economic parameters described in UNFC guideline and or as per parameter described in M(EMC) rule 2015.

**MINING:**

14. MCDR,1988 should be replaced with relevant rules of MCDR,2017. The description of the existing pits/dumps/Mineral rejects stacks/ fines or lump stocks in the following table to be furnished.
15. In page no.34 it is furnished as 8 nos samples analyzed. The analysis reports should be enclosed.
16. The Year wise stripping ratio should be furnished in t/cu.m format. The year wise excavation proposal should be given considering the depth of mineralization i.e. established reserves depth. Accordingly the pit design parameters should be modified.
17. Production proposal should be revised as per the revised estimation of reserves. The location proposed for mining should be properly justified. Total excavation quantity considered for calculation of machinery should be checked and rectified as discussed during the field visit.
18. Geological Section wise of proposed ROM excavation quantity in for every year shall be provided. Sections may be equally spaced so that the entire area proposed for excavation may cover. The total excavation, OB/IB/waste, Ore, Mineral reject should be matched with section wise calculations and recover factors considered.
19. Existing and proposed equipment/machinery with quantity and capacity should be furnished.
20. Conceptual workings should be modified according to the present established reserves only. Necessary modifications in the plans and sections should be carried out.

#### **MINE DRAINAGE**

21. Considering the topography of the lease area, it appears that the slope is towards East. Hence, a mine drainage plan to be submitted showing catchment area, flow direction of the water, location of final discharge, arrangement for arresting of solid waste etc. showing retaining wall, garland drain, settling tank, check dam etc.

#### **STACKING OF MINERAL REJECT/SUB GRADE AND DISPOSAL OF WASTE:**

22. The disposal of waste and mineral reject and soil to be furnished as per table furnished in IBM Manual appraisal MP 2014.
23. The details of all the existing dumps, Mineral reject dumps to be furnished in tabulated form .
24. The proposal for dumping may be given in tabulated format as shown below: Further, Build-up of dumps from year to year to be mentioned in text w.r.t. designed capacity of dumps, bottom and top mRL of individual terrace, dump slope, individual terrace height and slope with description of method & manner of disposal of waste should be mentioned. The method of waste dumping should be in retreating manner. The year wise buildup of dump should be described.

Year	Waste to be dumped (in m3)	Dump No	Location of dumping (coordinates)	Proposed area (m2)	Proposed dumping mRL.	No of terrace proposed.	Individual Terrace height	Slope of the terrace

25. The location of dumping/stacking of waste and mineral reject should be proposed in the non mineralized area with due justification of proven area of non mineralization.
26. Existing as well as proposed protective measures like retaining wall, garland drain, check dams etc., should be furnished in tabular format with details of location, length, dimensions etc., a separate table should be given showing the year wise construction of retaining wall, garland drain and settling tank having specific proposal. Details of year wise proposal for construction of retaining wall, garland drain, settling tank etc. to be given with their location.

#### **PROCESSING OF ROM AND MINERAL REJECTS:**

27. The material balance chart to be given with the quantity and quality of feed and recovery quantity and quality of the final product. The arrived percentage of recovery of saleable ore and sub grade ore should be justified properly with documentary evidence.

#### **OTHERS:**

28. Information in respect to the existing and proposed manpower right from management level to unskilled labour both on role and contractual has to be mentioned separately in the text.

**PROGRESSIVE MINE CLOSURE PLAN:**

29. Existing base line information to be furnished on the basis of environment monitoring parameter carried out. Further, base line information to be furnished for surrounding 500 meter form lease boundary.

**PLATES (GENERAL):**

30. 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. Plan and section should be drawn on 1:1000 scale.

31. All the plans and sections should be prepared over an area of 45.931 ha.

**32. LEASE PLAN:** The lease plan authenticated by competent authority of state government should be submitted.

**33. 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. Minimum two grid lines should be shown on plan.

**34. SURFACE PLAN:** All the surface features like hutments observed during field visit on the southwestern side lease area and also the existing village site exactly as per field in the north eastern side should be shown. All the boundary pillars DGPS coordinates should be furnished along with UTM too. All the updated boundaries of mineral stack, Waste dump, 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.

**41. DGPS PLAN:** The Geo-referenced mining lease map prepared using DGPS shall be superimposed on Geo-referenced vectorised cadastral map should be submitted.

**35. GEOLOGICAL PLAN & SECTION:** (i) Geological information to be highlighted in geological plan and section. All other information like contour, quarry etc. to be suppressed. 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 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. Proposed boreholes should be shown in dotted line. Iron ore mineralization area should be clearly demarcated on the Geological plan. The Geological Plan should be prepared to satisfy the provision as laid down rule 32 (1) (b), (c) and (d) of MCDR'2017. Plan and section should be drawn on same scale.

**36. DEVELOPMENT PLAN & SECTION:** (i) present pit profile configuration with UPL to be shown with red color and proposed development 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. Plan and section should be drawn on same scale.

37. **RECLAMATION PLAN:** All revised year wise proposals as per comments in PMCP chapter to be depicted on the plan.
38. **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.
39. **Financial Assurance Area Plan:** The area degraded due to mining and allied activity to be considered in FA calculation. The present degraded land is less than previous approved mining plan. It should be re-calculated and submitted accordingly.

**ANNEXURES:**

40. All the annexure to be properly numbered/paged and relevant annexure to be signed by Geologist/surveyor/QP etc.
41. A legible copy of photo id, address proof and signature proof of lessee to be enclosed.
42. Copy of previous approved mine plan & scheme of mining letter should be enclosed.
43. Copy of surveyor certificate should be enclosed.
44. Copy of EC, FC, CTO etc. to be enclosed. Environment monitoring data to be enclosed at least for last one year. Copy of surface right order. Certificate of surveyor. Approval letters of last MP/SOMs.
45. Recovery test, bulk density test reports carried out in NABL laboratory should be enclosed.
46. Copy of bank guarantee should be enclosed. Photographs of boundary pillars should be enclosed.

In view of above, wherever necessary correction required to be made.

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