



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 Speed Post/E-Mail
Phone: 0674-2352463;
Tele Fax: 0674-2352490;
eMail:
ro.bhubaneswar@ibm.gov.in
Plot No.149, Pokhariput
BHUBANESWAR-751020

No. MS/OTFM/54-ORI/BHU/2018-19

दिनांक / Date: 18.03.2019

To

Shri Basanta Kumar Mohanty,
Managing Partner & Nominted Owner,
M/s Kushaleswar Minerals,
GKV-1, Braheswarpatna,
Tankapani Road, Bhubaneswar-751018.

Sub: Review of Mining Plan of Raika-Kalaparbat Iron & Manganese Mine over an area of 9.8136 ha in Keonjhar district of Odisha of M/s Kushaleswar Minerals submitted under Rule-17 (1) of MCR, 2016.

Ref: - i) Your letter no. nil dated 19.02.2019 received on 25.02.2019.
ii) This office letter of even no. dated 25.02.2019.
iii) This office letter of even no. dated 25.02.2019 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 Review of Mining Plan along with Progressive Mine Closure Plan has been examined in this office based on site inspection carried out on 13.03.2019 by Shri Dilip Jain, Junior 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 **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 Review 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 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 / yours faithfully,

8/331
18/03/19

(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 COMMENTS ON REVIEW OF MINING PLAN ALONG WITH PROGRESSIVE MINE CLOSURE PLAN OF RAIKA_KALAPARBAT IRON and Mn OF M/S KUSHALESWAR MINERALS.

1. As reported during the site inspection, the lease has been declared as lapsed by the State Government and revival application has been submitted by the lessee. In this regard current status of the lease to be submitted.
2. Sequence of paragraph and its numbering as per IBM Manual Appraisal MP 2014 (hereinafter referred as format) has not been covered in text. All the headings as mentioned in the IBM Manual Appraisal MP 2014 should be furnished in all chapters. Information on broken up area to be submitted in introduction.
3. Page 9: Latter number and date of approval of MP & SOM to be mention. The documentary evidence of same to be enclosed.
4. Para 3.5: The reason for Suspension of Mining operation in lease area to be detail along with the documentary evidence.
5. **Geology and Exploration:** The length and width of the quarries mentioned on the page number 18 is not matching with the plan. Further, the extent of the quarries to be referred by grid value in same table.
6. As discussed during the filed visit recovery test and bulk density test to be carried. As the chemical report submitted in instant document is of stacks and are very old, a fresh chemical analysis to be submitted. The recovery, bulk density and chemical analysis to be carried out either form Government lab of NABL lab. The scope of accreditation of NABL lab to be enclosed if analysis carried out form NABL lab.
7. The proposed BH should be in the grid pattern and to be fall on the geo section line for better co-relation. All the proposed BH to be depicted on the geological sections. Accordingly plan and section to be revised.
8. The area mentioned for different level of exploration has not been calculated as per MEMC Rule 2015. Same to be revised as per MEMC rule 2015. Check and rectify. Accordingly estimation of Geological Resource and Reserve to be revised.
9. The term "subgrade and low grade" analyzing between 45% to 58% Fe as per the cutoff declared at 58% Fe should be replaced with the term "Mineral Reject" at all relevant places in the document (text and plates).
10. The details of exploration carried out to be submitted as per following format.

Area (in Ha) Explored under G1 and G2 as per UNFC				Remaining area (in Ha) to be explored under G2 as per UNFC		Required number of boreholes for exploration of balance lease area under G1/ G2 level	
Forest		Non-Forest		Forest	Non-Forest	Forest	Non-Forest
G1	G2	G1	G2				

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	2018-19	PBH 01									
2	2018-19	PBH02									
Total						Total BH	Total mts				

12. Justification for UNFC categories is inadequate. Proper justification of all UNFC codes should be furnished as per the provision of UNFC guidelines.

13. **Mining:** The production details as furnished on the page 40 to be given separately for Iron and Mn ore. Tonnage factor considered to be mentioned.
14. Production of the Manganese Ore has been enhanced from 950 tonnes to the 2000 tonnes. Proper justification to be given and abrupt enhancement of production is not acceptable.
15. Mine design parameters have not been discussed properly like bench slope, overall quarry slope and gradient of the haul road, bench height and width. The proposed height of the benches to be justified. The layout of the benches should be smooth. RL of the closing benches to be indicates firmly on plan and sections.
16. Proposal of excavation to be given in such a manner that one part to be excavated completely and can be utilized for backfilling in the interest of scientific mining and protection of environment. The proposed and existing working to be referred by grid value.
17. In Conceptual Mine plan to be revised in view of above comments and following to be discussed in detail: The quantum total excavation, Total waste generation and its disposal, total quantity Sub-grade generation and its beneficiation/utilization, ultimate extent of the pits, waste dumps and its dimensions, availability of waste material for back filling, the depth/level of backfilling, environment protective measures required, area (pit, waste dump, waste land etc.) available of reclamation & rehabilitation, method of reclamation and rehabilitation, manpower and equipment requirement, Proposal of any expansion, etc. during conceptual period. Post mining land use to be given as per standards.
18. **Mine Drainage:** Minimum and maximum depth of water table in the form of mRL based on observations from nearby wells and water bodies to be given in tabulated form indicating quarry name, UPL mRL, Proposed minimum and maximum working mRL during plan period, minimum and maximum water table mRL.
19. Source water required for day to day mining operation to be mentioned. The details of water to be drawn from external source and arrangement of its recycling may be given for domestic and industrial purpose separately. Water balance chart to be submitted.
20. **Stacking of Mineral Reject/Sub-grade and Disposal of Waste:** Briefly describe the nature and quantity of top soil, overburden / waste and Mineral Reject to be disposed off. The details of existing waste dump and MR dumps to be submitted in tabulated form along with its extent. Proposal of Ore stacking to be given. All the proposed dumps, mineral stacks to be refereed by grid value.
21. It is observed that a fresh area has been proposed for waste dumping. Before bring in the utilization of such area to be proved non-mineralised. The details of the proposed and drilled BH to prove such area as a non-mineralised to be indicate. And the proposed dumping area to be utilized only after competition of exploration programme. Accordingly proposal may be given. The year wise grid reference of prosed waste dumping to be given.
22. **Use of mineral and mineral reject:** (a) Describe briefly the requirement of end-use industry specifically in terms of physical and chemical composition. Para (e): Give details of processes adopted to upgrade the ROM to suit the user requirements.
23. **PMCP:** The details in tabulated form comprising location (core and buffer zone), grid reference, parameters of monitoring, frequency of monitoring, proposed frequency of monitoring etc. to be submitted in relevant para for environment monitoring stations.
24. **Feasibility study report:** The economic viability of the deposit to be described considering proposed production and market trend. Detailed break-up of capital cost, borrow capital, operating cost, details of working capital, Cash flow forecast, inflation effects, sensitivity studies, Statutory provisions relating to labour, land, mining, taxation etc. needs to be furnished.

25. **PLATES (General):** The relevant information of the plan to be highlighted i.e. geological information to be highlighted in geological plan. Accordingly all the plans to be revised. UPL to be shown in relevant plans with red colour. Show a scale of the plan at least twenty-five centimeters long and suitably sub-divided.
 26. Show the true north or the magnetic meridian and the date of the later in all the plans. All plans and sections should comply with the provisions of Rule 32 of MCDR 2017. All plans and sections should be signed with date by Qualified Person. Direction of the wind to be shown with rose diagramme in relevant plan.
 27. **Key Plan:** The key plan should incorporate all features as mentioned Rule 32 5 (a) of MCDR 2017 like village boundary, tree density and all features should be shown in index. Approach road to lease area should be shown in key plan. The Latitude/longitude of the extreme ML pillar coordinates should be marked in key plan.
 28. **Surface plan:** It is observed during the filed inspection that surface plan submitted with the instant document is not updated. As discussed extent of all the benches, dumps, position of stack yard, location of trial pits, location of roads etc to be revised. The coordinates of all the boundary pillars as per DGPS plan to be submitted. Spot mRL to be revised.
 29. Broken up area boundary map to be enclosed for ready reference. The broken up boundary along with pillar numbers to be depicted on the relevant plan.
 30. **Geological Plan & Section:** The index of Geological features should be same in both Geological Plan and all the Geological sections. Geological plan to be updated as discussed during field visit. All proposed and drilled BH to be shown on the geological plan and sections.
 31. The litho contact of the different litho units to be revised as discussed in the field. Geo structural information has not been furnished on the plan.
 32. Area explored under G1/G2 level of exploration to be depicted on the plan as per MEMC rule 2015.
 33. Existing bench mRL to be furnished. Core drilling and non-core drilling to be shown with different color code. Direction of sections to be mentioned along which the sections have been generated.
 34. **Reclamation Plan:** Reclamation plan to be revised in view of comments in PMCP and other chapter. Final discharge point of surface water to be marked. Existing protective measures and proposed measured to be shown with different colour code.
 35. **FA plan:** Financial assurance plan to be revised as discussed during the field. The area degraded due to mining and allied activity to be incorporated in the calculation. Accordingly, FA to be submitted.
 36. **Annexures:** All the annexure to be properly numbered/paged and indexed. Relevant annexure to be signed by Geologist/surveyor/RQP etc. It is observed that many of the annexure are not legible. A legible copy of same to be enclosed.
 37. Wherever necessary relevant annexure numbers to be mentioned in the text. The relevant annexure number may be mentioned in the table presented on page 2 and 3.
 38. The copies of id proof and signature proof submitted in respect of the signatory authority is not legible. A legible or coloured copy of same to be submitted.
 39. The copy of lapsed order and revival application to be enclosed for ready reference. The details of same to be reflected in the text.
 40. Address proof mentioned on the page 7 to be enclosed.
 41. Few photograph of boundary pillars, pits, nature of ore (float insitu mixed etc), roads, etc. to be submitted for ready reference.
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