



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/01-ORI/BHU/2021-22

Date: 09.04.2021

सेवामे

Shri HIRAK Mazumder, Director & Nominated Owner,
M/s Rungta Sons Pvt. Ltd.
Rungta Office, Main Road,
Barbil, Keonjhar,
Odisha- 758035

विषय: Approval of modification of Mining Plan of Oraghat Iron Ore Mine along with Progressive Mine Closure Plan (PMCP), over an area of 82.961 ha in Sundargarh district of Odisha State, submitted by M/s Rungta Sons Pvt. Ltd under Rule 17(3) of MCR, 2016.

संदर्भ: - i) Your letter No. RSPL/BBL/GEO/2020-21/1184 dated 20.03.2021 received on 23.03.2021.
ii) This office letter of even no. dated 23.03.2021.
iii) This office letter of even no. dated 23.03.2021 addressed to the Director of Mines, Govt. of Odisha, copy endorsed to you.

महोदय,

This has reference to the letter cited above on the subject. The draft modification of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on site inspection carried out on 06.04.2021 by Shri Ramkishan R, Senior Assistant Controller of Mines & Shri S R Mazumdar, Senior Mining Geologist. 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 or JPG format in resolution of 100x100 pixels on same CD)** with financial assurance under Rule 27 of MCDR 2017 of the Modification of Mining Plan 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.

Yours faithfully,


(हरकेश कुमार)

क्षेत्रीय खान नियंत्रक

Copy for kind information and further necessary action to Shri Abhijit Sen & Shri Saroj Kumar Dash, M/s Rungta Sons Pvt. Ltd, Rungta Office, Main Road, Barbil, Keonjhar, Odisha- 758035.

(हरकेश मीना)

क्षेत्रीय खान नियंत्रक

Scrutiny comment on Modification of approved modification of Review of Mining Plan including PMCP in respect of Oraghat Iron Mines of M/s Rungta Sons (P) Ltd. over an area of 82.961 ha in Sundergarh district of Odisha State

GENERAL:

1. The document should be submitted as "modification of review of mining plan". Need to do necessary corrections at all relevant places in text, plates etc.
2. Sequence of paragraph, formats and its numbering as per IBM Manual Appraisal MP 2014 has not been covered in text. All the headings, formats as mentioned in the IBM Manual Appraisal MP 2014 should be furnished in all chapters in the text. Need to do necessary corrections.
3. In Para 3.3, the details of the review year 2020-21 has not been submitted with reason for deviations, if any. In Para 3.6 the reasons for justification of modification of mining plan has not been elaborated in detail with intended specific modifications as provision of rule 17 (3) of MCR 2016. Need to do necessary corrections.

GEOLOGY AND EXPLORATION:

4. In table 4.2, the lease area exploration status as on 01.04.2021 needs to be furnished. It should be specified the boreholes which have been drilled but not considered for resource assessment due to delay in chemical analysis. Need to do necessary corrections.
5. In Para I, the exploration proposal has not been submitted as per provision of rule 12 (4) of MCDR 2017. Area explored under G2 level of exploration should be proposed for G1 level of exploration as per provision of MEMC Rules 2015. Exploration proposal should be proposed for the year 2021-22. Need to do necessary corrections. Further, proposal for re-drilling have not been proposed where boreholes have been terminated in ore zone. Need to modify the exploration proposal accordingly.
 - a) As per CCOM Circular No.3/10 and rule 12 (6) of MCDR 2017, fresh proposal for drilling should be proposed in the locations where boreholes have been terminated in ore zone above the threshold value of iron ore (i.e. 45% Fe). Need to do necessary corrections.
 - b) The depth of the proposed boreholes should be 100m or till the end of mineralization and depth of the proposed boreholes should be furnished considering the lateral and depth ward continuity of ore body along and across the section lines. Need to do necessary corrections.
 - c) The proposal for exploration of entire lease area till the end of mineralization should be ensured. Accordingly, exploration proposal should be furnished.
6. In Geological sections, the litho correlation has not been done scientifically considering the lateral and depth ward influence of ore body should be limited to depth as per the provision of Part II point no.4 MEMC Rules 2015. The Geological section should corroborate with the lithology. UNFC codes should be shown in geological sections. The gap areas in the geological sections above the UPL have not been filled with relevant lithology. Need to do necessary correction.
7. Form- J of the boreholes drilled in year 2019-20, 2020-21 has not been submitted. Further, chemical analysis reports of these boreholes from NABL accredited laboratory have not been submitted. Need to do necessary corrections at all relevant places in the document.
8. The increase in reserve and resource has not been justified scientifically with the borehole data as the chemical analysis of all the borehole samples has not been submitted. Reserves and Resources have to be re-estimated by cross sectional method showing detail calculation of sectional wise reserves and resources; cross-sectional area, length of influence, volume, bulk density, recovery factor and tonnages separately for different categories of ore and mineral reject under different UNFC codes within the provision of MEMC Rules, 2015. The justification of change in UPL has not been furnished. In all the tables of resources estimation, the term "ROM" should be omitted. Need to do necessary corrections.
9. The parameters considered for resource estimation has not been justified. Bulk density test reports of ore and mineral reject separately from NABL accredited laboratory has not been submitted. Indexing of borehole logs with page numbers have not been done in sequence. Justification of change in recovery percentage in the resource/reserve estimation has not been submitted. Need to do necessary corrections.

MINING:

10. Justification for area proposed for mining has not been submitted with respect to exploration, mineral conservation etc. Selection of mining machinery should be considered in view of limited area constraints for safe movement of mining machineries, protection of environment, systematic and scientific development of the proposed quarries. Bench width should be proposed more than the bench height so that overall slope angle will be within the safe limits. Need to do necessary corrections.
11. Back filling proposal as furnished in development plan and section has not been explained text. Exhausted area to be backfilled by OB/Waste to be specified with RL and area on year to year basis with description of the method & manner of disposal of waste. Before backfilling of the quarry as proposed, it should be ensured the exhaustion of ore body in terms of their depth & extension in the interest of mineral conservation.
12. In the insitu excavation table, the figures furnished should be rechecked and corrected and should be supported with back up calculations. The details of insitu excavation of ore, mineral reject and waste by cross sectional method should be furnished. Need to do necessary corrections.
13. A table showing year wise ROM (Ore & Mineral Reject in tones), Waste in cum from insitu and dump workings should be furnished in tabular format along with total ROM and Waste quantity in a summarized table covering all the years.

Development plan and sections should be modified after modification of geological plan and sections. Need to do necessary corrections. Need to do necessary corrections.

14. The bulk density test report of waste from NABL accredited laboratory has not been furnished. Need to furnish the same as waste in tones has been reported. The dump recoveries considered for production of ROM from dump rehandling proposal should be properly justified with study report or time series data. Need to do necessary corrections.
15. Conceptual Mine planning should be modified taking into consideration of the revised production from in-situ excavations, available reserves and resources describing the excavation, recovery of ROM, Disposal of waste, backfilling of voids, reclamation and rehabilitation showing on a plan with few relevant sections.
16. In pursuant to the order dated 14.01.2020 passed by MoM, GoI, consequent up on the order dated 08.01.2020 of the Hon'ble Apex Court passed in W.P.(C) No. 114/2014, the lessee shall carryout "regrassing in mining area after closure of mines". Accordingly proposal has not been submitted in conceptual planning, conceptual plan and sections.

STACKING OF MINERAL REJECT /SUB GRADE MATERIAL AND DISPOSAL OF WASTE

17. Justification of proposed waste dumping sites w.r.t to status of exploration, non-mineralization and outside the UPL have not been furnished. Dump plan and sections should be modified to the extent that sub surface lithology has not been shown. The information regarding existing waste dumping sites over mineralized or non-mineralized area, within or outside UPL, temporary or permanent should be furnished in detail in tabular format. The rehandling of existing waste dumps should be proposed if their sites fall within the UPL and over mineralized areas with technical justification.
18. 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. Proposal for protective measures have not been submitted around mineral reject dumps and waste dumps.
19. The proposal for temporary stacking of mineral stacks should be modified to the extent that it will not hamper the overall systematic and scientific development of the mine. Need to modify the proposal accordingly.
20. Backfilling proposal should be justified to the extent that before commencement of backfilling the area is devoid of mineralization justified through plans and sections showing subsurface lithology, BH date etc. else proposal for backfilling should be modified accordingly. Need to modify the exploration as well as backfilling proposal accordingly.
21. The mineral rejects, if any that are going to be generated during the plan period year wise should be addressed so that how they are going to be handled like storage, temporary storage, beneficiation etc., Need to do necessary corrections in the entire text of the document wherever relevant.

PROGRESSIVE MINE CLOSURE PLAN:

22. The air, water and noise monitoring stations and their frequency of monitoring have not been furnished in tabulated format. All water discharge points from lease area to external should be monitored. Accordingly, monitoring proposal to be submitted. Further, Gap plantation along the safety zone should be furnished.
23. In the table in page 127-128, the void available and proposed for backfilling should be furnished in cum. Need to do necessary corrections.
24. Year wise plantation covering number of saplings to be planted, location and area to be covered may be furnished. The same should be reflected in reclamation/rehabilitation measures tables furnished year wise. Proposal of coir matting/geo textile and area covered etc. may be furnished.
25. The complete degraded area for mining and allied activities has not been considered for FA calculation. Financial assurance should be recalculated as per provision of rule 27 of MCDR 2017. Calculation of Financial Assurance as shown in table no. 8.22 is not in per the format specified in IBM appraisal of Mining Plan 2014. The area under different heads of FA table should be properly shown in different hatching with present area and additional area in FA plan. Need to do necessary corrections.
26. Year wise mining plan proposals and land use pattern should be submitted in soft copy in the format of .kml or .shp file along with document. Need to do necessary corrections.

PLATES (GENERAL):

27. 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 & 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 centimeters long and suitably subdivided. The plans and sections submitted should bear the certificate that - the plans and sections are prepared based on the lease map authenticated by the state government. The index should be kept same in all the plans and sections.
28. All plans and sections to be submitted in UTM grid. Need to do necessary corrections.
29. **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, 5 Km boundary and wind rose diagram etc. has not been shown.
30. With reference to CCOM Circular No 2/2010, the geo-referenced mining leases map superimposed on latest high-resolution satellite data has not been submitted.

SURFACE PLAN:

31. Forest, Non-forest and surface right area to be shown in surface plan. The Surface Plan should be prepared to satisfy the provision as laid down rule 32 (1) (a) of MCDR'2017.

GEOLOGICAL PLAN & SECTION:

32. Geological sections prepared on natural scale of geological plan at suitable interval across the lease area from boundary to boundary have not been submitted. The Geological Plan should be prepared to satisfy the provision as laid down rule 32 (1) (b), (c) and (d) of MCDR'2017. Need to do necessary corrections.
33. The revised exploration as mentioned in the scrutiny points should be incorporated in geological plan. The proposed boreholes to be plotted in dotted lines in Geological sections along with proposed borehole number, RL and proposed closing depth at the bottom of the borehole. The year wise proposal for drilling to be shown in different contrasting color in both Geological Plan and Geological sections. The year wise color of the boreholes proposed in Geological plan should match with the plotted proposed boreholes in Geological sections. Longitudinal sections have not been submitted. Need to do necessary corrections.
34. In geological sections, the grid lines along the X-axis have not been shown. The UNFC codes should be rechecked and corrected in all plans and sections. Bench RL have not been shown in the sections. Need to do necessary corrections.
35. The demarcation of ore and mineral reject has not been shown in geological sections justifying the calculations for reserve and resource estimation for the same by cross sectional method. Need to do necessary corrections.
36. The blank areas above UPL should be filled with relevant lithology. Need to do necessary corrections.

DEVELOPMENT PLAN & SECTION:

37. Development plan and sections should be revised based on updated geological map and sections. Index of the UPL should be shown in plan and sections. The proposed and existing bench mRL to be shown clearly over year wise development plan and sections. Need to do necessary corrections.
38. Geological information (lithology) has not been furnished on the area proposed for development in year wise development plan and sections. Plan and section should be drawn on same scale of 1: 2000.
39. Existing and proposed protective measures and plantation should be shown in different colors around all waste dumps and mineral reject dumps. Index of safety zone boundary and surface right area should have distinct color. Year-wise development plan and section should be separately submitted on same scale. Color index of the year wise proposal should be modified as discussed in during field inspection. Re-handling of dumps should be marked in development plan & section. Development plan has not been furnished with existing benches.

DUMP PLAN AND SECTION

40. Dump plan and sections should be modified to the extent that sub surface lithology has not been shown. Dumping proposal should be outside the UPL and in barren area. Section showing reclamation of mined out pit through backfilling should be submitted with due justification of exhaust of minerals.

ENVIRONMENT PLAN:

41. The environment plan has not been prepared as per the provision laid down in rule 32 (5) (b) of MCDR'2017. Adjacent lease boundaries within 500m of lease boundary have not been shown.

RECLAMATION PLAN:

42. Existing and proposed protective measures and plantation should be shown in different colors along all waste dumps and mineral reject dumps. Backfilling proposal should be shown clearly. Index of safety zone boundary and surface right area should have distinct color.

FINANCIAL ASSURANCE AREA PLAN:

43. The area degraded due to mining and allied activity and waste dump sites to be considered in FA calculation. The existing area and additional area under different heads should be shown properly under different colored hatching.

CONCEPTUAL PLAN AND SECTION:

44. Conceptual Mine planning up to the end of lease period taking into consideration the present available reserves and resources describing the excavation, recovery of ROM, disposal of waste, backfilling of voids, reclamation and rehabilitation showing on a plan with few relevant sections.

ANNEXURES:

45. Few photographs showing Land use of the lease area, environmental status of the area have not been furnished. All the annexure to be properly numbered / paged and relevant annexure to be signed by qualified person etc. It is observed that many of the annexures are not legible. A legible copy of same to be enclosed. The details of all the BH to be annexed year wise BH wise. The lithology of the borehole logs should match with the lithology shown in Geological sections.
46. Bulk density test reports of ore and mineral reject separately from NABL accredited laboratory has not been submitted. Copies of Form I and Form J of all drilled boreholes have not been submitted. The chemical analysis results of borehole samples from NABL accredited laboratory have not been submitted. Need to submit the same.
47. NABL accreditation certificate of the laboratory has not been furnished. Copy of valid bank guarantee has not been enclosed. Indexing of borehole logs with page numbers have not been done in sequence. Need to do necessary corrections.

Somasundar
9/4/21
(Sudip Ranjan Mazumdar)
Senior Mining Geologist

R. Dalip
9/4/21
(Ramkishan R)
Sr.Asst. Controller of Mines