

भारत सरकार
खान मंत्रालय
भारतीय खान ब्यूरो
क्षेत्रीय खान नियंत्रक का कार्यालय

No. MS/OTFM/20-ORI/BHU/2016-17

Plot No. 149, Pokhariput
Bhubaneswar – 751 020
Date: 20.03.2017

To

Shri Sourav Mishra, Director & Nominated Owner,
M/s Ghanashyam Mishra & Sons Pvt Ltd,
At/P.O- Gorumahisani,
Dist- Mayurbhanj, Odisha

Sub: Approval of Review of Mining Plan along with Progressive Mine Closure Plan under Rule 17 of MCR, 2016 of Gorumahisani Iron Ore Mine of M/s Ghanashyam Mishra & Sons (P) Ltd over an area of 863.614 ha in Mayurbhanj district of Odisha.

Ref: - i) Your letter No. GMS/IBM/03/2017 dated 02.03.2017.
ii) This office letter of even no. dated 06.03.2017.
iii) This office letter of even no. dated 06.03.2017 addressed to Director of Mines, Government of Odisha copy endorsed to you.

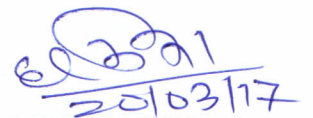
Sir,

This has reference to the letter cited above on the subject. The draft of Review of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on site inspection carried out on 10.03.2017 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 along with Progressive Mine Closure 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 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 Review 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 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 along with Progressive Mine Closure Plan. It may be noted that no extension of time in this regard will be entertained and the Modification of Mining Plan along with Progressive Mine Closure 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

Scrutiny comment on Scheme of Mining including PMCP in respect of Gorumahisani Iron Ore Mine of M/s Ghanashyam Mishra & Sons Pvt. Ltd. in Mayurbhanj district of Odisha State.

Date of Inspection: 10/03/2017

GENERAL:

1. Mineral Conservation and Development Rule, 2017 has already been notified in Gazette of India, hence, wherever necessary rule position to be changed accordingly.
2. Page 1,2 &15: The area over which Mining Plan/Scheme of Mining was approved to mentioned.
3. Page 5: The registration number of rule 45 of MCDR, 2017 to be mentioned and a copy of allotment letter of same to be enclosed.
4. The details of all existing infrastructure of lessee in lease area to be given.
5. The review to be given for entire scheme period instead of modified period. Further, the updated figure of production, waste generation etc. to be given.
6. The compliance of violation pointed out to be given for entire scheme period instead of modified period. Further, the gist of violation pointed out and its compliance to be given in tabulated form.
7. Qualification and experience certificate as required to prepare Mining Plan/Scheme of Mining as per rule 15 of MCR, 2016 to be submitted in respect of all Qualified Persons.
8. As per Steel and Mines Department, Government of Odisha, proceedings number 2297/SM. Bhubaneswar dated 16/03/2017, the lease period has been extended upto a period of 31/03/2020, hence, a undertaking may be submitted that final mine closure as per rule 24 of MCDR, 2017 will be submitted by lessee.

GEOLOGY:

9. The details like potentially mineralized area and its extent (coordinate in WGS 84), potentially mineralized area explored (in forest and non-forest area, Govt. land, Pvt. land etc.), remaining area, proposal of exploration to explore remaining potentially mineralized area to be given with justification of adequacy.
10. Para E: The details of exploration carried since inception of mining operation to till Feb 2017 to be given in tabulated form i.e. year, BH number, Location (Coordinate), nature of BH (Core/DTH), Drill length, mineralized/non-mineralized, Grid spacing etc. along with form J and K as per MCDR, 1988. Documentary evidence in respect of Expenditure incurred in various prospecting operations to be submitted.
11. As per guideline of "IBM manual on appraisal of Mining Plan 2014" at least 10% of total samples to be analyzed in accordance to BIS and reports form NABL accredited/Government Laboratory. Accordingly, BH wise sample details to be given and 10% of total samples to be analyzed from NABL accredited/Government Laboratory.
12. Locale geology of the area to be described in detail considering local stratigraphic succession, structure (dip, strike and presence of fold, fault, joints, fracture, unconformity, sedimentary /igneous/ metamorphic rock associated structures and any others), lithology, mode of occurrence of ore, controls of mineralization etc. Further, The different type of the ores available in lease area and its proportion to be given.
13. Detail Exploration (G1 level) proposal should be given for entire potentially mineralized area under the mining Lease and same should be carried out within a period of five years as per rule 12 of MCDR, 2017. Further, proposal of exploration to be given/revised as discussed during site visit.
14. Page 26&27: The depth of each proposed BH to be mentioned and each BH to be depicted in Geological Section for better referencing. All the proposed BH should be of Core drilling.
15. Page 29: For different quarry, different bulk density has been submitted, documentary evidence in respect of same to be submitted. Further, the recovery factor considered to be either justified with time series data or technical report/analysis. Further, Specific date to be mentioned on which Reserve & resource is estimated.

For
28/03/2016

16. Justification of different UNFC category to be given as per the guideline given in the per Mineral Evidence of Mineral Contents Rules 2015.
17. Page 28: it is mentioned that 'there are 10 numbers of existing quarry' however, on page 34 & 35 the details of 14 quarries has been mentioned. Verify and rectify.

MINING:

18. The length, width, top & Bottom mRL, number of benches as mentioned on page 34 & 35 does not match with the surface plan. Verify and rectify.
19. The quantity of lumps (+10mm) and Fines (-10mm) in ROM i.e. before crushing along with its grade for different type of Iron Ore to be given with documentary evidence/technical report.
20. The proposal of mineral excavation should be given in such a manner that at least one/two quarry should be exhausted within a period of one/two years and simultaneous backfilling can be carried out in the interest of scientific mining and protection of environment. Location of mine workings proposed has not been referred by grid lines in text part of documents.
21. Page 36: The quantity of mineral reject has been mentioned in table presented on page, justification along with nature of mineral reject and its grade to be given.
22. As discussed during field visit, excavation proposal to be given initially those quarry, which are going to exhaust first (for example quarry 2550) in the interest of scientific mining and protection of environment so that backfilling can be carried out exhausted area.
23. In Conceptual Mine plan the details about total excavation, Disposal of waste, Sub-grade generation and its beneficiation/utilization, mine development, manpower and equipment requirement, conceptual exploration, land degradation, waste required and its availability for back filling the ultimate pit, depth of the back filling, reclamation and rehabilitation, Proposal of any expansion, etc. showing on a plan with few relevant sections to be given. Post mining land use at final/conceptual mining stage to be described.
24. **Mine Drainage:** Mine is having large catchment area and hilly & undulating terrain, substantial quantity of rain water likely to flow through the lease area. Moreover, many seasonal nalas/water courses etc. are present within and near to lease area. However, adequate rainwater management plan i.e. drainage plan along with arrangement for arresting solid wash off is not incorporated with engineering details & material to be used for its erection/construction. Therefore, adequate rainwater management plan i.e. drainage plan along with arrangement for arresting solid wash off should be prepared by an institute of repute, incorporating engineering details & material to be used for its erection/construction.

STACKING OF MINERALS REJECT/ SUB-GRADE AND DISPOSAL OF WASTE

25. Indicate briefly the nature and quantity of top soil, overburden / waste and Mineral Reject to be disposed off as per table given in the "IBM manual for Mining Plan appraisal-2014".
26. Proposal of blending of Sub-grade/Mineral reject to be given in the interest of conservation of Mineral. Blending ratio also should be mentioned.
27. Dump plan and section need to be given separately. Method of waste dumping should be in retreating method instead of advancing in view of protection of the environment. It is observed that proposed waste dump area is not explored. Such area should be brought into the use after proving non-mineralized (to be mentioned in text part of the document) or temporary dumping for a short period to be proposed in mineralized area with technical constraints & justification. Hence, exploration proposal in proposed dump area to be given in the first year scheme.
28. Details of protective works carried out around each existing Dumps of Waste & Sub-grade, should be given with documentary evidence. Further, Proposal for protective works to be carried out year wise around waste and sub grade dumps should be given taking into consideration of average rain fall in the area.
29. The nomenclature of dumps in plan, section and text should be same. Further, the proposal of plantation over waste dumps to be given year wise.

30. Proposal of plantation to be given on waste dump area, old quarry area etc. as discussed during filed visit.

PROCESSING OF ROM AND MINERAL REJECT:

31. It is mentioned that flow sheet, material balance and technical specifications of the proposed crusher are attached as annexure-VIII, however, on verification of same it is observed that only technical specification is attached. Verify and rectify.
32. Para C: Indicate quantity (cum per day) of disposal of water and extent of recycling. Water balance chart may be given.

PROGRESSIVE MINE CLOSURE PLAN

33. Attach a note on the status of baseline information with regard to human settlements, public buildings, places of worship and monuments, Indicate any sanctuary is located in the vicinity of leasehold.
34. EIA : The details of base line data collected & assessment during recent past to be given along with name of agency, period of data collection, average value of data and whether it is conforming to the norms of MoEF.
35. To mitigate the impacts and ameliorate the condition, describe year wise steps proposed for phased restoration, reclamation of lands already/to be degraded in respect of Mined Out Land, Top Soil Management, Dump Management etc. Further, total area available for afforestation/reclamation to be given and accordingly proposal of plantain may be given.
36. Location of proposed retaining wall is not marked in the reclamation plan. Verify and rectify. PMCP plan may be revised to Reclamation Plan.

FEASIBILITY STUDY REPORT:

37. Financial analysis is not carried out as per UNFC guidelines. It should be carried out based on real time cost. Viability of the project should be analyzed up to the ultimate depth considering following points:
Capital cost, Cashflow forecast, Investment cost, Inflation forecast, Operating cost, Sensitivity studies, RR, IRR, NPV for the project life, cost of operation, Closure cost and Rehabilitation cost etc.

PLATES:

38. All drawings/plans are not certified to be correct by the certified Surveyor/ Qualified Person/ Mine Manager/ Mining Engineer / Mining Geologist. All plans and sections should be signed with date and certified to be correct by the certified Surveyor, Qualified Person, Mine Manager, Mining Engineer and Mining Geologist as per provisions of Rule 30 of MCDR, 1988 and Rule 66 of MMR, 1961.
39. All plans and sections should bear date and signature. Grid line to be drawn at 100 meter interval.
40. Date of observation of Magnetic Meridian should be given on all plans except Khasra Plan.
41. Surface Plan: Different type of dumps i.e. Waste Dump, Sub-grade dump etc. are not distinguishable on surface plan. Surface plan may be modified accordingly.
42. The contour value to be shown in all the plans. Further, ultimate pit limit to be shown in all the plans and sections.
43. Forest area, Non Forest area, Surface right acquired area etc. should be marked clearly over concern plan and section.
44. Color code given for different features in plans to be given same in sections.
45. Geological Plan & Section: Western part of the lease area has shown as float Iron Ore, however, same has at many places found as paddy/cultivated land. Same to be verified and rectified.
46. Geological and development section in respect of Kochar Quarry, as discussed in filed may be revised. The color code/hatching used to display various lithology should be same in plan and section.

47. A separated plan showing UNFC details should be submitted along with Entire Mineralized area, Grid Line, Outline of pit, Geology, Proposed and actual Exploration, the boundary of G1/G2/G3 need to be shown. The scale of the plan should be same as of geological plan.
48. Different lithology as shown in the section should be shown with different hatch colour for easy identification. Same color code to be given in plan. Further, direction along which section have been created to be marked. N-S grid line to be marked in section.
49. Development Plan and Section: Year wise development plan section need to be submitted. Each plan should contain present and proposed bench mRL along with the benches of the preceding year. The orientation of the benches in respect of Kocar Quarry, Kisuntanky Quarry and F-level quarry need to be revised as discussed in field.
50. Environment Plan: All existing surface features beyond the 60m of ore block area boundary to be shown in detail including permanent features present near to ore block area. Monitoring stations at the strategic points in core & Buffer zone for different environmental components should also be shown over this plan.

ENCLOSURE:

51. Copy of renewal application and receipt in form J and D respectively to be enclosed.
 52. The copy of transfer deed in the name and style of M/s Ghanashyam Mishra & Sons Private Limited to be enclosed.
 53. Photo id of lessee submitted is obscure, legible copy of same to be submitted. The signature proof of lessee to be submitted and it should be match with the certificate.
 54. All the annexure to be properly numbered/paged and signed by QP. Further, All the pages of the text and relevant pages of the annexure to be signed by qualified person.
 55. Few photograph of the Boundary pillars, present land use to be attached.
- In view of above, wherever necessary correction required to be made.

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