No. . MPM/FM/23-ORI/BHU/2016-17

Plot No. 149, Pokhariput Bhubaneswar - 751 020 Date: 01.12.2016

To

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

Sub:

Approval of Modification of Mining Plan along with Progressive Mine Closure Plan under Rule 17(3) of MCR, 2016 of Oraghat Iron Mine of M/s Rungta Sons (P) Ltd over an area of 82.961 ha in Sundargarh district of Odisha.

- Ref: i) Your letter No. RSPL/ED/GEO/2016-17/821 dated 20.11.2016.
 - ii) This office letter of even no. dated 21.11.2016.
 - iii) This office letter of even no dated 21.11.2016 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 Modification of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on site inspection carried out on 24.11.2016 by Shri Dayanand Upadhyay, 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 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 23 F of MCDR 1988 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 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,

क्षेत्रीय खान नियंत्रक / Regional controller of Mines

Scrutiny comments on the modification in the Mining Plan of Oraghat Iron ore mine over an area of 82.961 Ha of M/s Rungta Sons (P) Ltd situated in Dist. Sundergarh, Odisha State submitted under rule 17of MCR 2016.

"General":

Modification of the approved Mining Plan submitted under rule 17(3) may be mentioned on cover page and also refer rule 17(3) in text parts as per Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rule 2016.

List of table as depicted in different chapter may be enclosed with annexure.

- 3. Consent letter/ Undertaking/Certificate as furnished by the Lessee may be included the para as "I do hereby undertake to complete exploration in time bound manner in accordance with Ministry of Mines letter no.-10/75/2008-MV, dated 23.12.2010".
- All the annexure to be properly indexed/ numbered/ paged and signed by qualified person.

Chapter-0, "Introduction":

A brief review of status of Mining lease at present with documentary evidences may be given.

The extension of the mining lease up to 09/12/2032 and date of execution of

lease deed & supplementary lease deed may be marked with annexure.

Chapter-3, "Details of approved Mining Plan/Scheme of Mining":

Para 3.3.1, The details bore holes drilled in 2016-17 may described with Form-J submitted to this office under rule 47 of MCDR'88.

Para 3.4, Status of compliance of violation pointed out by IBM may be 8.

described.

Para 3.6, reason of modification under rule 17(3) of MCR 2016 may be 9. described properly.

Part-A, Chapter-4, "Geology & Exploration":

It has been observed during inspection that the out of 12 bore as proposed in 2016-17, bore no. 114, 115, 117,118, 119 & 121 have not drilled till date. It may be clarified.

Page no. 17, it is mentioned 16 bore hole drilled in 2016-17 in text & table 11. while in review of approved mining plan plan/scheme, chapter-3 there is 22 nos. of bore holes has been mentioned. It may be clarified.

Exploration carried out in 2016-17 have not been furnished with NABL

analysis report along with bore hole data.

Some no. of bore holes has not been projected in geological section. All the 13. bore holes should be considered while estimation of reserves & resources.

- 14. Data of bore hole logs has not been considered properly while estimation of reserves & resources.
- 15. The complete lease area should be proposed to cover under exploration to quantify reserves /resources with cut of grade corresponding to threshold value suggested by IBM in accordance with Ministry of Mines letter no.-10/75/2008-MV, dated 23.12.2010".
- 16. Recovery considered 80% wrt total excavation needs to be justified or should be as per time series data.
- 17. Under UNFC the area explored under G1, G2 to be delineated/marked properly. A separate plan showing geology and UNFC may be submitted.

Chapter-5, "Mining":

- 18. Page-15 table 5.1, tentative excavation of ROM yearwise may be furnished with handling of sub grade dump.
- 19. Backfilling proposed along side of tailing pond has not been described in text.

20. Para 5.10.4, storage of explosive may be described properly.

- 21. In the development and production tables bench wise, year wise area of excavation and average thickness of the excavation or average area of cross section of bench and its average advance is to be given along with RL of bench with direction of advance at the end of the year.
- 22. It has been proposed to enhance the production from 5.0 million tonnes to 8.36 million tones. Keeping in the view of expansion site proposed for mineral stack and space for accommodation of waste may be modified.
- 23. There is no. of temporary ore stacks lies in the pit and other parts of the lease area, and covered large area. Therefore an undertaking may be furnished by lessee to remove the temporary stacks lies in the lease area and in the pit in time bound manner to facilitate the enhancement of production and conservation of mineral.
- 24. The average weighted grade of ore to be excavated and the grade of mineral rejects may be depicted.
- 25. Ultimate pit limit should be depicted on all relevant plans & sections.

Chapter-6, Mine drainage:

26. This chapter is not dealt with properly. Mine having hilly & undulating terrain with large catchment area and, substantial quantity of rain water measured to flow through the lease area. However, adequate rainwater management plan i.e. drainage plan along with arrangement for arresting solid wash off is not incorporating with engineering details & material to be used for its erection/construction.

Chapter-7, "Stacking of mineral reject/ sub grade material and disposal of waste"

27. Dumping of waste and re-handling of dump should be marked in different colors.

28. Place of storage of concentrate has not been marked in relevant plan.

29. Keeping in view of enhancement of production the proposal of dumping may

be modified accordingly to accommodate the huge amount of waste.

30. Dumping proposal should be in such a manner that low grade ore dump should not be mixed with waste. The dumping of waste should be on non-mineralized ground.

31. Yearwise re-handling low grade ore dump with particular dump no. may be

described also shown in relevant plans and sections.

32. All the dumps exist in the mining lease should be analyzed from NABL accredited lab and accordingly sub grade and waste dump should be differentiated.

33. Retaining wall and garland drains may be proposed around stack yard and

along the dump slopes.

34. Storage/Stacking of Sub-grade material/ Mineral reject in earmarked area to be described with m. RL and area on year to year basis with description of the manner of its disposal.

Chapter-8, Use of Mineral and Mineral Reject:

35. Specifications stipulated by user industry using your mineral viz-a viz grade of mineral being produced from mine may be given.

36. In summary of PMCP table, Cumulative actual achievement as on date and

specific proposal should be given year-wise in absolute quantified term.

Chapter-10, "Other":

37. Existing manpower both direct and contractual has to be mentioned in the text.

38. An organizational chart has to be provided for risk assessment study to whom communication to be made in case of any accident.

Chapter-11 "Progressive Mine Closure Plan":

39. Updated break up of present land degradation (pit, water body, dumps, infrastructure, settlement etc) under different land types (forest, revenue, waste, grazing etc) may be given.

40. Under impact on land, cumulative land degradation at present, at the end of proposal period and at the end of conceptual period may be given referring to

conceptual mining plan given in scheme of mining.

Plates:

- 41. The plans and sections submitted do not bear the certificate that --the plans and sections are prepared based on the lease map authenticated by the state government.
- 42. All the plan & sections prepared bear the signature of certified surveyor.
- 43. Wind direction may show through wind rose diagram in key plan and environmental plan.
- 44. All plans & Sections should bear dated signature.

45. Magnetic north and date of observation of Magnetic Meridian should be given on all plans except Khasra Plan.

46. Plate no.1- Key Plan:

Wind direction may show through wind rose diagram.

47. Plate no.3 - : Surface Plan:

i) Latitude, longitude of all corner pillars may be indicated on the plan. Acquired area may be marked clearly.

ii) Few pillars may be correlated with some permanent ground features giving distance and direction. Different land use may be shown with colour codes.

iii) Forest & Non forest area, Surface right acquired area etc. should be marked clearly over a separate Lease Plan & Surface plan.

48. Plate no 4 & 4A - : Geological Plan & Section:

i) Geological features like strike, dip, dip direction etc to be marked.

ii) The reserve under G1 & G2 category and limits of reserves/resources 111 and 211 marked on geological plan and sections in different colour codes.

- iii) The geological section has not been matched with the actual bore hole log. In section E-1200, mineralization occures in bore hole no. 82 has not been shown. In section E-1400, bottom mineralization occurs as per bore hole no. 52 not shown in section, similarly bore hole no. D-53 & D-54 not depicted correctly in sections. All the sections should be re-checked as per bore hole data and modified accordingly.
- iv) The direction along which geological section has been prepared to be depicted on geological section.

49. Plate no -5 & 5A: Year wise development plan:

- i) In the development plan, proposed mineral stock & concentrate yard are to be shown.
- ii) Excavation in ore and OB is not clear hence on year wise plans and sections ore and OB may be marked. Show position of faces and bench Rls at the beginning and end of the year distinctly with direction of advance and individual year workings with colour code. Spot levels at sufficient no of places on original surface, in the pit, and at the toe of benches may be shown so as to ascertain the average depth of excavation in a particular bench.

50. Plate no 6-: Environment plan:

- i) Adjacent lease has not been marked.
- ii) Contours have not been marked in buffer zone.
- iii) Environmental monitoring stations have not been marked.
- iv) Wind direction may show through wind rose diagram.
- v) The Environment Plan as prepared should be satisfied the provision as laid down rule 28(5)(b) of MCDR'88. In the Environment plan Environment monitoring stations to be shown.

51. Plate no.8 -: Financial Assurance Area Plan:

In the Financial Assurance plan area of each individual land i.e land degradation due to mining activity and processing unit etc at the end of plan period may be shown separately on this plan with highlighted boundaries and different colour codes for FA calculation.

52. Plate No. 9: Reclamation Plan:

Year wise progress of dumping, dump re-handling, backfilling, afforestation using different colour codes for easy understanding. may be shown.

53. Plate No.10: Conceptual plan:

This may be prepared considering mineralization as revealed from the borehole logs. One longitudinal section may also be submitted. Direction of run off from the area based on surface contours may be shown on the plan and the sections.

54. Plate no.8 -: Financial Assurance Area Plan:

Area as depicted in text for FA not matched with area given in plan. In the Financial Assurance plan area of each individual land i.e land degradation due to mining activity and processing unit etc at the end of plan period may be shown separately on this plan with highlighted boundaries and different colour codes for FA calculation.