

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

No. MS/OTFM/02-ORI/BHU/2016-17 **1554**

Plot No. 149, Pokhariput
Bhubaneswar – 751 020
Date: 06.06.2016

To

The General Manager
(BIM, KIM, Taldih Mine)
M/s Steel Authority of India Ltd.
At/P.o – Tensa, Dist – Sundargarh
Odisha - 770042

Sub: Approval of Scheme of Mining of Kalta Iron Ore Mine (ML-139) along with Progressive Mine Closure Plan (PMCP), over an area of 25.981 Ha. in Sundargarh district of Odisha State, submitted by M/s Steel Authority of India Ltd under Rule 12 of MCDR, 1988.

Ref: - i) Your letter No. Nil dated 13.05.2016
ii) This office letter of even no. dated 16.05.2016.

Sir,

This has reference to the letter cited above on the subject. The draft Scheme of Mining along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on earlier site inspection carried out by Shri Prem Prakash, Deputy Controller of Mines on 27.11.2015. The deficiencies observed are enclosed herewith as Annexure I.

You are advised to carry out the necessary modifications in the draft Scheme of Mining in the light of the comments vide Annexure I and submit **two (2) 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)** within 30 (thirty) 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 Scheme of Mining 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 Scheme of Mining. It may be noted that no extension of time in this regard will be entertained and the Scheme of Mining 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,

OR

(M BISWAS)

क्षेत्रीय खान नियंत्रक / Regional controller of Mines

1 sent
6.6.16

Scrutiny comments on examination of Scheme of Mining of Kalta Iron Ore mine (ML-139) over 25.981 ha. in Sundergarh District of Odisha state, of M/s SAIL

Text:

GENERAL

1. As Reportedly original ML expiry date was 16.01.1975 and 2nd RML was filed for further period up to 16.01.2015 and last Modification of Mining plan was approved on dt. 21.06.2013 for period up to 16.01.2015. Further, As per State Govt. letter dtd. 10.02.2016, enclosed as annex.-X, the period of the original lease is deemed to be granted for 50 years i.e. from 17.01.1975 to 16.01.2025 as per Amemded MMDR Act, 2015. Hence, instead of submitting 'Scheme of Mining', Modification of Mining plan document should be submitted for further lease period from dt. 17.01.2015.
2. As per State Govt. letter dtd. 10.02.2016, enclosed as annex.-X, the period of the original lease is deemed to be granted for 50 years i.e. from 17.01.1975 to 16.01.2025 subject to execution of supplementary lease deed and obtaining all statutory clearances, payment of requisite dues etc. within three months. In view of this, as three months period has already elapsed as on date; whether lease is valid or not as on date should be clarified.
3. Status of all statutory clearance obtained or to be obtained should be given in introduction along with documentary proof.
4. As reported last Modification of Mining plan was approved on dt. 21.06.2013 having proposal up to 2014-15. Hence, this document should be prepared for next 05 year starting from 2015-16. As year 2015-16 has already been elapsed, the same should be mentioned in the document.
5. The Mining plan/scheme document should be prepared by qualified person as per rule 15 of MCR, 2016, not by RQP. Consent letter from lessee should be given accordingly. Self-attested copy of qualification & experience certificates as required for qualified person to prepare mining plan under MCR'2016 should be enclosed.
6. Enclosed Consent letter from lessee/nominated owner is older one. A fresh/latest Consent letter should be submitted.
7. Lessee is a company/firm. Hence a latest list of board of directors duly certified by competent authority along with address/contact nos. to be enclosed. Also, Undertaking regarding working/interest in other firms/company/organization from board of directors/partners should be given.
8. Copy of Photo id of nominated owner enclosed is not legible.
9. ML deed was executed in the favour of HSL. However, in submitted document, Lessee Company is mentioned as M/s SAIL. Revised lease deed in respect of M/s SAIL to be enclosed.
10. CCOM circular no.2/2010 and its addendum regarding geo-referenced mining lease map and ML boundary pillars to be implemented.

GEOLOGY AND RESERVE

11. Details of prospecting/exploration already carried out within the ML area is not described properly. ML area is of only 25.981 ha. Whereas prospecting/exploration stated carried out by trenching and pitting in 1970 in 136 ha. The same to be clarified.
12. Reserve & resources are not estimated and categorized conforming to UNFC guideline. Reserve & resources are considered beyond the actual depth of Trail pits and exposed quarry benches/faces at most of the x-sections indicated over geological plan & section. Reserve/ resources should be estimated and categorized strictly as per UNFC guideline
13. Ore recovery factor of 100% has been considered for resource estimation. Justification for the same to be given.
14. Documentary proof for Tonnage factor/Bulk Density considered for resource estimation should be submitted. It should be from NABL accredited lab. or Govt. lab.
15. As per guideline of "IBM manual on appraisal of Mining Plan-2014", a NOTE to be added below the estimated /updated Reserve/resource table regarding tentative tonnage arrived considering approximate recovery % and Bulk-Density/Tonnage factor .

16. In the UNFC feasibility study: Economic evaluation of the project is not carried out properly. For this new mine, the economic factors have significant bearing over the sensitive issues like, environment management, progressive and final closure. Thus following important parameters are to be dealt with:-
- a. Assessment of IRR (Internal Rate of Return) and NPV for the project life.
 - b. IRR based on operating cost, reclamation/ rehabilitation cost, closure cost and other important parameters as per UNFC guidelines for the life of the project on the basis of ore body geometry, i.e., depth, width, length etc. as estimated and considered for reserve/ resource estimate.
 - c. Cash flow statement for the period considered for assessment of IRR.
 - d. Sensitivity analysis on cash flow due to market changes, i.e., cost of operation, sale price etc.

MINING

17. Excavation proposal for year 2020-21 is not given scientifically. Excavation should be proposed align to existing Quarry/Pit taking into consideration of deposition of ore body and final & progressive closure operations.
18. As per guideline of "IBM manual on appraisal of Mining Plan-2014", Summary of year wise exploitation/excavation proposed should be given in cu. m. at the starting of the chapter with detail to be described in next paras and a NOTE to be added below the proposed year wise excavation table regarding tentative excavation/tonnage as arrived considering approximate recovery % and Bulk-Density/Tonnage factor based on time series observation.
19. Controlled Blasting along with Shock tube initiation system/NONEL system should be proposed for getting optimum blast result and minimization of hazards, instead of conventional system. Blasting induced vibration study should be proposed immediately after opening of mine and accordingly optimum Charge per delay and most suitable drilling & blasting design along with initiation/firing pattern should be considered

MINE DRAINAGE

20. This chapter is not dealt with properly. Mine is having hilly & undulating terrain any many seasonal nalas/water courses etc. are reported 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 given, incorporating engineering details & material to be used for its erection/construction.

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

21. Part of Waste to be generated is proposed for back filling in adjoining another lease area as shown over development plan, which is not acceptable. Modify accordingly.
22. As per the Hon'ble Supreme Court judgment in W.P. (C) No.435 of 2012, dated 21.04.2014, all mining activities related to a certain mining lease to be confined within the granted lease area. Hence, Waste disposal or any other mining and ancillary activities should be proposed within the granted lease area only.
23. Before any area brought into use for waste disposal or subgrade stacking, site preparation works; like, construction of retaining wall, check dam, plantation around proposed dump must be carried out and be completed well in advance. Accordingly proposal should be given in quantified terms supported with plan/sections.

MINERAL PROCESSING/BENEFICIATION

24. It should be clarified that whether whole ROM shall be processed manually. Else, requirement of crushing & screening plant should be given with capacity and Flow sheet, conforming the ROM to be processed. Material balance chart for such process be enclosed.

PROGRESSIVE MINE CLOSURE PLAN

25. Environmental Base line information & EIA : It should be clarified that base line data collected & assessment done by which agency, period of data collection & assessment and whether it is conforming to the norms of MoEF.
26. Mitigation measures of impacts associated with mining i.e. mainly related to air, water, noise, vibration, land, aesthetics etc. are not given properly. The same to be elaborated.

27. In summary of PMCP table, specific proposal should be given year-wise in absolute quantified term.
28. In Para "Risk Assessment", risk analysis of different mining operations and safety management plan needs to be given.

Plates:-

29. Location of lease in key plan doesn't match properly as per Lat. & Long. given (co-ordinates) given in the text. The same to be corrected.
30. DGPS plan/map to be submitted.
31. Forest area, Non Forest area, Surface right acquired area etc. should be marked clearly over lease Plan & Surface plan.
32. All plans to be prepared based on recent and accurate survey and to be correct as per existing surface features & mine profile. Such plans should be prepared and certified by the certified Surveyor; and surveyor's certificate should be enclosed with the document.
33. Reserve & resources should be estimated and categorized strictly as per UNFC guideline and different UNFC code of resource/reserve should be indicated over geological plan & section.

Enclosure:-

34. All the annexure to be properly indexed/numbered/paged and signed by the QPs.
35. Some photographs covering ML Boundary pillars of the lease area to be enclosed.