



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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BHUBANESWAR-751020

No. MPM/A/08-ORI/BHU/2021-22

Date: 15.07.2021

सेवामे

Shri Vinod Nowal, Nominated Owner,
M/s JSW Steel Ltd,
Plot No-468/1075, At- Sundara 13,
Po- Barbil, Dist- Keonjhar,
Odisha-758035

विषय: Approval of modification of Mining Plan of Narayanposhi Iron Ore Mine along with Progressive Mine Closure Plan (PMCP), over an area of 347.008 ha (As per DGPS) / 349.254 ha (As per RoR) in Sundargarh district of Odisha State, submitted by M/s JSW Steel Ltd under Rule 17(3) of MCR, 2016.

संदर्भ: - i) Your letter No. Nil dated 24.06.2021 received on 28.06.2021.
ii) This office letter of even no. dated 28.06.2021.
iii) This office letter of even no. dated 28.06.2021 addressed to the Director of Mines, Govt. of Odisha, copy endorsed to you.

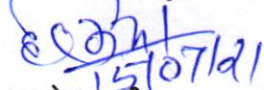
महोदय,

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 by Shri Ramkishan R, Senior Assistant Controller of Mines & Shri S K Mahapatra, 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 USB Pendrive/Flash drive 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 USB Pendrive/Flash drive)** 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 मीना)

क्षेत्रीय खान नियंत्रक

Copy for kind information and further necessary action to Shri Padmaraja Tumati & Shri Yeddla Ramesh, M/s JSW Steel Ltd, Plot No-468/1075, At- Sundara 13, Po- Barbil, Dist- Keonjhar, Odisha-758035.

(हरकेश मीना)
क्षेत्रीय खान नियंत्रक

Scrutiny comments on examination of modification of mining plan with PMCP of Narayanposhi Iron & Mn ore Mine Mines over an area of 349.254 Ha (as per ROR) in Sundargarh District of Odisha State of M/s JSW Steel Ltd

GENERAL POINTS:

1. All the text, tables and annexures has not been properly indexed/ numbered/ paged and signed by qualified person. The certificates/annexures are not with date and signature. All the information on cover page has not been furnished as per the IBM Manual 2014. The QPs have not signed each page of the document with name. Need to do necessary corrections.
2. Name of the lease should be clearly mentioned as per executed lease deed.
3. PMCP submission rule should be under rule 25 of MCDR, 2017.
4. In Para 3.3, review of earlier approved proposal in respect of excavation, reclamation & rehabilitation under PMCP etc. along with justification for deviations have not been properly furnished. Need to do necessary corrections.

Geology and Exploration

5. The signed final geological report along with its plans & sections and annexures, which was vetted by State Government have not been submitted as a separate annexure volume altogether with the document. The block summary report also has not been submitted. Need to submit the same.
6. The future exploration proposal should be modified to the extent that the boreholes proposal are not sufficient for the entire lease area to bring under G1 level of exploration as per exploration norms specified in Part III of MEMC Rules 2015. The area under G1/G2/unexplored/mineralized/non-mineralized area is not marked distinctly on the geological plan. Further, if any boreholes have been terminated prematurely then re-drilling of the boreholes should be proposed. Need to modify exploration proposal accordingly.
7. As per Rule 22 of Mineral (Auction) Rules, 2015, the holder of a mining lease shall complete detailed exploration (G1 level exploration) and prepare a detailed feasibility study report conforming to Part IV and V of the Mineral (Evidence of Mineral Contents) Rules, 2015 over the entire area under the mining lease, within a period of five years from the date of commencement of such mining lease. It is further observed that entire area has not been explored under G1 level of exploration. Therefore, pre-feasibility report conforming to Part V of Minerals (evidence of Minerals contents) Rules 2015 need to be submitted instead of Feasibility report. Further, the UNFC codes for reserves and resources should be changed accordingly at all relevant places in the document i.e. text and plates. Need to do necessary corrections.
8. The existing features of the lease area shown in the surface plan and respective plans of the draft document are not matching with the exact field ground profile. As discussed during the field inspection, the area needs to be surveyed afresh and accordingly the surface plan and other respective plans and sections needs to be prepared.
9. The geological plan and sections needs to be prepared based on the revised surface plan in line to the comments as cited at sl. no. 8 above. All the litho units existing in the field, needs to be shown in the geological plan and accordingly geological sections needs to be prepared.
10. In page no.43 the resources depletion calculation considered should be for mineral rejects and ore separately and then after total resources should be derived by updating the geological sections
11. The reserves and resources of ore and mineral reject for revised UNFC codes as mentioned above should be calculated and furnished by cross sectional method of estimation. Further, the economic axis, feasibility axis, and Geological Axis for the revised UNFC codes should be discussed in the text. They are to be justified properly as per UNFC guidelines. Need to do necessary corrections.

MINING

12. The details regarding the transportation of ore within lease area only should be furnished. Necessary modifications should be made at relevant places of the document. Bulk density of waste should be justified with test report of NABL laboratory. Need to do necessary corrections.
13. Conceptual Mine planning has not been furnished by 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.

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

14. The proposed dumping of mineral reject will not be allowed over the existing mineral reject dumps created by earlier lessee within the stipulated time frame as allowed by State Govt. to remove it in favor of earlier lessee as per rule. Need to do necessary corrections.
15. The disposal of mineral rejects stacks should be explained in detail regarding their location of disposal and whether it is mineralized area or non-mineralized area, UPL etc., year wise details of quantities disposal should be furnished in tabular format.
16. The year wise buildup of waste dumps has not been described in detail. The information should be furnished in the following table. No proposal should be submitted for dumping/stacking of mineral rejects over existing minerals rejects stacks/mineral reject dumps of previous lessee within the stipulated time frame as allowed by State Govt. to remove it in favor of earlier lessee as per rule. Need to do necessary corrections.

Year	Waste Generation (in m ³)	Waste Dumped (in m ³)	Dump Name	Location of Dump (coordinates)	Existing or new dump	Top RL of the Dump	No of terrace proposed	Individual Terrace height	Slope of the terrace	Overall slope angle of dump

17. The information about stacking of mineral rejects should also be furnished in above similar table.
18. During field inspection it is observed that mineral stacks were kept over backfilled area. It should be proposed that the mineral stacks should be evacuated immediately and stacked over suitable place. The proposal of keeping mineral over waste material is not allowed. Necessary changes should be in entire document along with plans and sections.
19. Existing as well as proposed year wise 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.
20. During field inspection it is observed that reclamation and rehabilitation along with environment protection measures proposed during the year 2020-21 have not been carried out. So proposal should also include the same.

PROCESSING OF ROM AND MINERAL REJECTS

21. It is proposed to setup a 1500 TPH central processing unit and 6 MTPA grinding and beneficiation plant. The details of above units with capacity have not been furnished along with their specific location. Further, it is mentioned that iron ore will be sourced from nearby mines for as feed to beneficiation plant. The said proposal has not been justified with relevant documentary evidences from the competent authority of the relevant statute and its material balance has not been furnished. Further, the study report from institute of repute for feed, recovery and grade at each stage of processing has not been furnished. Need to do needful.
22. The proposed 1500 TPH central processing unit and 6 MTPA grinding and beneficiation plant should be in non-mineralized area and outside UPL. Need to justify the same. The location of the proposed plants and related facilities should be clearly demarcated in relevant plates and sections. The area proposed for setting up/ installation should be in one specific location.
23. In page 126&127, it is mentioned that tailings generated as waste will be disposed in the waste dumps and also as mineral reject dumps. In view of the rule 14(3) and 37(1) of MCDR'2017 the quantity of tailings, ore, and mineral rejects, waste dumps etc. shall be stacked or dumped separately and should not be allowed to be mixed. Accordingly, necessary modifications should be proposed. However, if tailings as waste together with mine waste generated are proposed to be dumped together, then study report from reputed institute regarding stability of the dump should be carried before any such disposal. Need to do necessary corrections.

PROGRESSIVE MINE CLOSURE PLAN

24. The monitoring of various environmental parameters as per the relevant statute has not been proposed in the core and buffer zone the lease area. The details of monitoring stations have not been marked on the environment plan.
25. The information furnished regarding the area put on use at start of plan period of under different heads and at the end of plan period should be rechecked.

26. In page no.147 of the table summary of year wise reclamation and rehabilitation proposals, the backfilling proposal details have not been furnished though it is proposed in the stacking of waste chapters. Accordingly necessary changes should be made in entire text and relevant plans and sections.
27. 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.

FEASIBILITY REPORT

28. Pre-feasibility report confirming to Part V of MEMC Rules 2015 should be submitted instead of feasibility report. Need to do necessary corrections.

PLATES (General):

29. 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.

Key Plan:

30. The key plan should incorporate all features as mentioned rule 32 (5) (a) of MCDR 2017 and all features should be shown in index as well. The key plan has not been prepared in the original toposheet. Need to do necessary corrections.
31. 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. Wind rose diagram should be depicted.

Lease Plan:

32. The lease plan authenticated by the competent authority of state government has not been submitted. Need to submit the same.

Surface Plan:

33. The features shown in the index is not distinguishably shown in the plan. Diverted forest area to be shown in the plan as well as marked in the index of the map. The UPL should be shown over the plan and in index. Surface right area and forest, non -forest area, diverted forest area has not been shown on the plan.
34. During filed inspection it is observed that existing surface features has not been updated in the plan. Need to do necessary corrections. All the boundary pillars coordinates should be furnished in a tabular format. The Surface Plan should be prepared to satisfy the provision as laid down rule 32 (1) (a) of MCDR'2017.

Geological Plan & Section:

35. Area under G1/G2/G3 has not been marked distinctly on the Geological plan. Revised UNFC codes complying the above scrutiny points should be mentioned in the cross sections. On the cross sections, the details of boreholes drilled such as total depth, RL are not mentioned. The revised borehole proposal is to be shown in dotted lines in cross sections. The vertical scale of the sections should be in line with scale of the section. The Geological Plan are not prepared as per rule 32 (1) (b), (c) and (d) of MCDR'2017. Need to do necessary corrections.

Development plan & Section:

36. Quarry name, existing and proposed year wise bench profiles, waste dump, mineral reject dumps etc. has not been shown in the development plans and sections including legend. The lithology of the area has not been clearly shown in year wise development plan and sections in the area proposed for development.
37. The development plans and sections should be prepared on updated geological plan and sections. Year wise mining plan proposals should be submitted in soft copy in the format of .kml or .shp file along with document. Need to do necessary corrections.
38. In addition to part development plan and section in 1: 2000, a composite development plan and section in a scale of 1:5000 should be submitted. Need to do needful.

Environment plan:

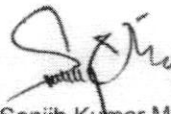
39. The Environment Plan as prepared should be satisfy the provision as laid down rule 32 (5) (b) of MCDR'2017. The proposed environment protective measures to be shown in environment plan. The drainage pattern has not been shown on the plan. Wind rose diagram has not been shown with predominate wind direction.

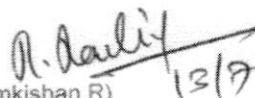
Reclamation plan along with sections for the backfilling proposal.

40. Reclamation plan has not been submitted as per IBM appraisal of mining plan describing the proposals to be implemented for reclamation and rehabilitation of mined-out land including the manner in which the actual site of the pit will be restored for future use. The plan and sections should depict yearly progress in the activities for land restoration/ reclamation/rehabilitation, afforestation, protective measures etc.

Annexures

41. The final geological report along with its plans & sections and annexures, which was vetted by State Government have not been submitted as a separate annexure volume altogether with the document. The block summary report also has not been submitted. Need to do submit the same.
42. The copies of the qualification & experience certificate in respect of all the Qualified Persons has not been to be enclosed as per Rule 15 of MCR, 2016. The Id proof may also be submitted.


(Sanjib Kumar Mohapatra)
Senior Mining Geologist
13/07/2021


(Ramkishan R)
Senior Asst. Controller of Mines
13/7/21