

Scrutiny comments on the modification in the Mining Plan of Jururi Iron Ore mine over an area of 73.228 Ha of M/s Kalinga Mining Corporation situated in Dist. Keonjhar, Odisha State submitted under rule 17(1) of MCR 2016.

“General”:

1. Modification of the approved Mining Plan submitted under rule 17(1) which may be replaced with rule 17(3) and refer rule 17(3) in text parts also as per Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rule 2016.
2. 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”.
4. All the annexure to be properly indexed/ numbered/ paged and signed by qualified person.

Chapter-1, “Introduction”:

5. A brief review of status of Mining lease at present with documentary evidences may be given.
6. Para-IV, the extension of the mining lease up to 31/03/2020 may be marked with annexure.
7. Para 2.0(a), date of execution of lease may be mentioned with initial date along with date of supplementary lease deed.

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

8. Para 3.2.1, The details bore holes drilled in 2012-13 & 2015-16 may be described with Form-J submitted to this office under rule 47 of MCDR '88.
9. Para 3.3.4, actual afforestation done may be described with area.
10. Para 3.3, Under violation and compliance it may be written that compliance report has been submitted to IBM vide letter no.--, dated---
11. Para 3.5, Details of any suspension/closure/prohibitory order issued by any Government agency under any rule or court of law described under text may be marked with annexure.
12. Para 3.7, reason of modification described under text may be marked with annexure.

Part-A, Chapter-1, “Geology & Exploration”:

13. Dimension of pit as mentioned at page no. 17 does not match with the Geological plan.
14. As per Mining plan appraisal format 10% of the sample should be analyzed from NABL. The original analysis report of SGS laboratory to be enclosed.
15. Para-4, page-19 details of expenditure occurred in exploration/prospecting to be given.

16. Resources considered under 211 category along section HH' & GG' is not as per UNFC hence it should be revised as per UNFC.

17. 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”.

18. Documentary evidence in respect of density considered in resources estimation to be submitted (refer page no.-22). Recovery considered 90% wrt total excavation needs to be justified or should be as per time series data.

19. Under UNFC the area explored under G1, G2 to be delineated/marked properly and accordingly table at page no. 25 need to be modified. A separate plan showing geology and UNFC may be submitted.

Chapter-2, “Mining”:

20. Environment clearance obtained for 2.1 Million tonnes of Iron ore (ROM) therefore production proposed in 2017-18 should be in lieu with the Environment clearance obtained.

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. The average weighted grade of ore to be excavated and the grade of mineral rejects may be depicted.

23. Ultimate pit limit should be depicted on all relevant plans & sections.

24. Drilling and blasting may be described properly considering the parameters spacing, burden, depth of hole with explosive used and delay pattern.

Chapter-4, Mine drainage:

25. It was observed during inspection that a nallah passing through village pit in south-eastern part but no adequate measure has been described in text. The direction of flow also not shown in plans.

26. RL of present and proposed workings and summer and post monsoon water table in the area supported with ground water monitoring study done in the area may be given.

Chapter-4, “Stacking of mineral reject/ sub grade material and disposal of waste”

27. 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.

28. Retaining wall may be proposed around stack yard area as discussion during field visit.

29. In the text, details of blending of sub-grade ore to be explained.

30. 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-5, Use of Mineral and Mineral Reject:

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

32. In summary of PMCP table, Cumulative actual achievement as on date and specific proposal should be given year-wise in absolute quantified term.

Chapter-7, “Other”:

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

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

Chapter-7, “Progressive Mine Closure Plan”:

35. 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.

36. Updated air, water, noise, ground vibration and soil data with analysis from laboratory done at specified periodicity for last one year to be enclosed.

37. 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:

38. 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.

39. All the plan & sections prepared bear the signature of certified surveyor.

40. Wind direction may show through wind rose diagram in key plan and environmental plan.

41. Surface contours has not been drawn in south-western part near pillar I to K.

42. Plate no.2- Location Plan/Key Plan:

ML area may be marked with red colour. The approach road upto the Mining lease may be indicated. Authenticated lease plan from competent authority for the area 73.228 ha may be submitted.

43. Plate no.3 - : Surface Plan:

Latitude, longitude of all corner pillars may be indicated on the plan. Acquired area may be marked clearly. Few pillars may be correlated with some permanent ground features giving distance and direction. Different land use may be shown with colour codes.

a. Forest area (already cleared area), Surface right acquired area etc. should be marked clearly over a separate Lease Map Plan & Surface plan.

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

Geological features like strike, dip, dip direction etc to be marked. The reserve under G1 & G2 category and limits of reserves/resources 111 and 211 marked on geological plan and sections in different colour codes. The direction along which geological section has been prepared to be depicted on geological section.

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

a. In the development plan, proposed sub-grade dump and mineral stock yard has to be shown.

b. 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.

46. Plate No. 6: Reclamation Plan:

Year wise progress of dumping, dump re-handling, backfilling, afforestation and environmental protection measures using different colour codes for easy understanding. Year wise proposal for dumps to be handled may be shown.

47. Plate no 7- : Environment plan:

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.

48. Plate No.8: 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.

49. Plate no.9 - : Financial Assurance Area Plan:

In the Financial Assurance plan area of each individual land i.e land degradation due to mining activity working/dumping /reclamation and rehabilitation etc at the end of financial year 2019-20 may be shown separately on this plan with highlighted boundaries and different colour codes for FA calculation.

50. All plans & Sections should bear dated signature.

51. Date of observation of Magnetic Meridian should be given on all plans except Khasra Plan.