

Report cum scrutiny comments on examination of Review of Mining plan with Progressive mine closure plan of Ran Bauxite mine of M/s Minerals & Minerals Corporation over an area of 1.3051 hect. (S no. 421/p) situated in village Ran, Taluka Kalyanpur, District Devbhumi Dwarka submitted under Rule 17(2) of MCR, 2016 and 23 of MCDR, 2017.

General

1. Information regarding the lease period extended up to fifty periods as per MMRD Act, 2015 is not enclosed. In this regard letter received from State Govt. regarding mining lease is liable to be extended up to dt. 10.01.2032 as per provision made under Section 8A (5) of MMDR Amendment Act 2015 is to be enclosed.
2. The Cover Page do not have standard format. Phone no, Mobile no and e mail address of Mine owner & qualified person are not furnished. Mine village name is not correct. It needs to be corrected as modified in whole document.
3. In whole document Owner name is not correct/ not as per lease deed except cover page.
4. Content of mining plan is not as per guide line.
5. Certificate/Undertakings from Owner and qualified person is not as per guide line. It should be updated.
6. Duly authenticated lease plan showing the coordinates or the lease area have not been given.
7. Copy Environmental Clearance obtained from MOEF should be enclosed. Adequate water harvesting measures should be proposed towards protection of environment.
8. Further consent to operate mine obtained from State Pollution control Board should be enclosed.
9. In document old rule are given. It should be updated by new rule.
10. In Mining plan period is five years. But in places written that four year in place of five year mining plan/Scheme. So update it in whole document.

Chapter: Introduction:

11. Introduction is not furnished.

Chapter no.2- Location and Accessibility

12. KML file is not enclosed.
13. All Pillar numbering & Co-ordinate are not furnished. Compliance of CCOM circular 2/2010 with regard to Geo-referenced mining lease map has not been done.

Chapter no. 3-Details of approved mining plan/scheme of mining

14. Last mining plan dt1.09.2017 is not approved by IBM. Give reason.
15. Proposed production and achievement of bauxite is not furnished. No benches are seen in field. Deviation are in Development, exploitation and environment monitoring during previous passed period. Give reason of it.
16. In para 3.4, information on compliance of violation of rule is not old/updated. As per mine file record violation for rule 12(3), 13(1) & 23E (2) is point out on dt. 06.06.2016. Reply is received on dt. 27.09.2014 from mine owner.

Part-A

Chapter no. 1.0 Geology & Exploration

17. Para no (a) Topography– Information on Highest, lowest level and direction are not correct. Highest level is 28m instead of 100m and as well lowest level is 22m instead of 95.1m. Check and rectify it.

18. Para no. (c)-Thickness of Bauxite is given 3.5m but in succession it is given 20m which one is correct? Check & rectify it.
19. Para no. (e)- No. of working pit in area, location and dimension are not furnished in text as well as plan. Description about drilled Bore hole (PB-1) such as year & location are not furnished.
20. Information on sample analysis is not furnished. Give latest NABL accredited sample analysis of all the rocks.
21. Para (i) No information is given about future exploration. How much area is fully explored? Two bore holes are to be proposed in 2020-21. But no location of these holes is not marked in plan. What are the parameters to select these trial bore holes? Give justification.
22. Para no. (k)-In Succession Bauxite thickness is given 20m. Here in proved category taken 20m, 5 m thickness given in probable & possible category. In all 30m thickness. So there is difference of 10m thickness. Check and rectify it.
23. Method is adopted for reserve calculation is not furnished. Total reserve of Bauxite is 870595.2 tonnes given. But detailed category wise (UNFC code), pit, bench wise calculation is not furnished. No information is given about how much previously produced bauxite is depleted from present reserve.
24. Entire reserve estimation is incorrect. Nowhere 20m thick bauxite zone is expected. Grid & spacing given in part III of the schedule given in Mineral (Evidence of mineral content) Rules 2015 have not been followed. Methodology adopted for reserve estimation is not correct. Measured mineral reserve (331), indicated mineral reserve (322) have not been calculated.
25. Exploratory proposal is to be given as per rule 12(3) of MCDR 2017 with an objective of bringing entire area under G1 category.

Chapter no. 2-Mining

26. Mining chapter is not described correctly. On doing inspection no bench is seen in entire area. Dimension of pit is not given.
27. Para (a)(i)- In existing method of mining, after removal of soil OB benches in sandstone are excavated which is about 4-5m thick. But in previously described Geology chapter there is no sandstone. So check which is correct and rectify it.
28. In yearwise description there is written mining is controlled by section M-M'. But in plan there is no section M-M' line. In year 2017-18 mining is proposed in north part. But development plan shows mining is proposed in whole area. In the same way mining proposal for next four years from 2018-2022 given in text are not matched with development plans. There is need to rewrite the whole mining chapter carefully.
29. Para (b) Table given is not as per guide lines. One column of pit is not given. Rectify it.
30. Para no. (f), Conceptual mining: Ultimate pit bottom up to 06mRL is not correct. Bauxite reserve 812255 tonnes is not correct and matched with reserve given in Geology chapter. In proposed reclamation & rehabilitated how much area to be reclaimed & rehabilitated is not furnished. Give justification. Vital detail pertaining to life of the mine, ultimate pit size and post mining scenario and reclamation- rehabilitation aspect have not been discussed.
31. Entire mining proposal is imaginary and arbitrary. Mining has been proposed in deeper horizon without proving the mineral content.

Chapter no. 4 Stacking of Mineral Reject

32. Given table is not as per guide line. Information for the year 2021-22 is not given in table. Proposal of Storage of soil are not given. But nothing to be discussed where to dump store top soil. What is the dimension of it? Nothing to be discussed it in mining chapter. Plan no. for this chapter no.is 5 instead of 7.
33. Analysis report of Bauxite is not enclosed. It should be supported by the certificate NABL (National Accreditation Board of laboratories) laboratory. Analysis report of Bauxite should be of active working pit.
Chapter no.5-Uses-Give the name of plant which is situated in Khambaliya using high grade bauxite.

Chapter no.7-Other

34. During inspection Geologist at mine is not present. Give information about employment of Geologist. OMS information in text is 10tonnes but in table it is 4.0 tonnes. Check and rectify it.

Chapter no.8-PMC

35. In existing land use pattern table-Total land put in used and remaining area 0.7684 hect. is not correct. As per table total area is given 1.3051 hect. But on rechecking total area comes 1.6284 hect. Which is more than the lease area. How it is possible? Recheck & update it. Green belt area is 0.01 hect. used for plantation. Give type of species of tree & number of tree survived.
36. No proposal is given for rehabilitation of worked out benches, water management, plantation, fencing etc. Safety, security, disaster management plan is also incorrect. Monitoring report of air, noise & water pollution report is not furnished.
37. In para no. 8.2, Impact Assessment: In given table area for Road is not given. Calculation of this table is not correct. There is lot of mistake. Here again total area is comes 1.6884 hect. Recheck & update it.
38. In, para no.8.3.5, page no.33- Surface subsidence mitigation measures- Year wise information on dump management, worked out benches, reclamation & rehabilitation of backfilling & waste etc. are not correct as per new guideline. Here table is correct. But information is not year wise. There is no fill material for backfilling hence proper proposal for restoration of mined out area is to be given. So make necessary correction.
39. In PMCP, para no. 8.6- F A table is also not correct nor show the column wise correct total area. In financial table given proposal has not matched with FMCP plan.
40. Financial assurance has not been computed in terms of rule 27(1) of MCDR 2017.

Plates

41. All the plans & sections have not been prepared on prescribed scale. In all plans signature of person who prepared is not done. In the same way caption of plans is not proper place.
42. Cadastral plan duly authenticated by concerned Govt. agency is not furnished.
43. **Location plan:** Plan is not prepared as per guide line. Scale is not correct.
44. **Key Plan** is not submitted as required under rule 32(5)(a) of MCDR 2017 because some of important aspects are not incorporated like existing tree density, directions of road not shown, 5km radius is not marked, scale is not correct, various monitoring stations have not been marked, etc.
45. **Surface Plan:** Surface plan is not submitted with all the information/prominent features as required under Rule 32(5) (a) of MCDR, 2017. Mining Lease boundary not marked as per

- the standard conventions. Coordinates and numbering of all pillars is not given. Other permanent features like temple, buildings, hutments, etc. exist in the ML area may also be marked.
46. **Surface Geological Plan:** is not submitted as per the relevant details as required under rule 32(1) (b) of MCDR 2017 because depth persistence & horizontal for different category of reserves not marked, strike & dip of the formation not shown, lithological contacts not marked distinctly, other adjoining ML area marked on sections but not shown on plan. Proposed bore hole numbering is not correct. This is Geological plan. So did not show feature of Surface plan? In the same way did not show geological feature in Surface plan.
 47. **Year wise Plan:** Plan is not prepared as per guide line. Area marked under the year wise excavation appears to be incorrect & need to be reviewed, Ultimate pit limit not marked, advancement of excavation, approach to the faces are not marked, proposed protective works have not been marked correctly.
 48. Year wise Geological section: In section line proposed year is not mention & proposed mining is not matched with development plans.
 49. **Environment Plan:** The plan has not been prepared incorporating all details as per rule 32(5)(b) of MCDR'2017 because rejection dumps not marked monitoring stations of Air, Water & noise quality Survey not marked, surface features including human settlement may also be shown.
 50. **Reclamation plan:** Para 8.3: the details of progressive mine closure plan is not depicted distinctly on plan. The year wise completion status of proposed protective works should be incorporated in this plate.
 51. **Conceptual Plan:** Pit configuration at the ultimate stage not marked, benching pattern not indicated in section, ultimate depth of working not marked, approach to faces at conceptual stage not marked. Section line is not matched with the plan.
 52. **Financial Area Assurance Plan:** Area reclaimed and considered as fully reclaimed and rehabilitated if any may be shown clearly. Area marked under FA table must should be matched with the broken up areas as marked on plan. FA table should be available at FMCP plan for ready reference.
 53. Copy Environmental Clearance obtained from MOEF should be enclosed. Adequate water harvesting measures should be proposed towards protection of environment. Further consent to operate mine obtained from State Pollution control Board should be enclosed.
 54. Copy of last Scheme of mining approval letter dt. 13.11.2014 is not furnished.
 55. In document old rule are given. It should be updated by new rule.
 56. Numbering of annexure & plate is not in chronological order in text & index. Many annexures are not clear & nor readable.
 57. Copy of violation letter and reply are not enclosed as annexure.
 58. Copy of lease deed is not readable. Numbering of pages in lease deed are not complete or not in order.
 59. List of plate and annexure should be enclosed after content.
 60. Some of the mine photo such as pillar, working and old pit etc. should be enclosed.
 61. There are certain omissions, deficiencies in the text and plates. Some of them are marked in the text & plates. QPs should ensure thorough editing before preparing the final copies.

Place:

Date:

(Dr. N K Mathur)

Assistant .Mining Geologist
Regional office, Gandhinagar