

Report cum scrutiny comments on examination of Review of Mining plan with Progressive mine closure plan of Vishavada Bauxite mine of Sh. Naresh Kumar P. Makhecha over an area of 20.2342 hect. (Sur no. 731/P) situated in village Vishavada, Taluka Porbandar, District Porbandar submitted under Rule 17(2) of MCR, 2016 and 23 of MCDR, 2017.

1. The Cover Page do not have standard format. Phone no, Mobile no and e mail address of Mine owner & qualified person are not furnished. It needs to be corrected as modified in whole document. **Authentic lease map duly certified by State Government indicating co-ordinates of the pillar have not been enclosed.**
2. Certificate/Undertakings from Owner and qualified person is not as per guide line. It should be updated.
3. **Chapter: Introduction:** Introduction is not furnished.
4. Information regarding the lease period extended up to fifty period 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. 13.06.2022 as per provision made under Section 8A (5) of MMDR Amendment Act 2015 is to be enclosed.

Chapter no.2- Location and Accessibility

5. As given coordinates of Pillar A in text but in plan no pillar A. Rectify it.
6. KML file is not enclosed.
7. All Pillar coordinate 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

8. No benches are seen in field. Deviation are in Development, exploitation and environment monitoring during previous passed period. Give reason of it.
9. In para 3.4, information on compliance of violation of rule is not correct. As per mine file record violation for rule 12(3), 13(1) & 23E (2) is point out on dt. 13.08.2014. Reply is received on dt. 27.09.2014 from mine owner.
10. **Review of the mining plan has been incorrectly. It is mention that 10 trenches were made but dimension, outcome of the exploratory trenches and expenditure incurred has not been given. Moreover exploration so carried out has also not been on page no.9 of Geological chapter.**

Part-A

Chapter no. 1.0 Geology & Exploration

11. Para no. (e)- As written five working pit in area. But dimensions are given only three pit and location also shown only three pit in Geological plan. Grade of limestone is not described. Analysis report enclosed is too old.
12. Para (i) written that area is fully explored. But in North West lease area no exploration has done nor mining activity has started. On filed inspection it is seen that about 60% area to be explored. Ten trenches are to be proposed in 2018-19 & 2019-20. But no location of these trenches is not marked in plan. Five proposed trial pit is marked in plan. But no description is given in text. What are the parameters to select these trial pit? Give justification.
13. There is contrary statement given regarding area taken for proved reserve (111) at page no. 10 & 12. Entire area is considered as mineralized zone and considered as proved but at page no. 12, 100 m of influence in all direction from working pit considered as probable. Check & rectify it.
14. Entire reserve estimation is incorrect. 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.

15. Entire reserve is placed under Non plant grade. Its meaning is not clear. It needs to be clarified elaborately.
16. As given in text outcrops have been taken under proved (111). But in many sections no mining started such as section C-C', H-H' to J-J'. So how to take it in proved category? These area is covered with soil. Check it & again to re calculate reserve.
17. 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

18. Mining chapter is not described correctly. On doing inspection no bench is seen in entire area. Dimension of three pit are given. Give detail of all the five pits. But in plan numbering of pit is not given.
19. There is contrary statement given regarding Bench height and width at page no. 15 & 17. Bench height and width are given 4m & 1m to 4m respectively at page no. 15 but at page no. 17 bench height & width are given 4m & 5m. Check & rectify it at relevant places. There is need to rewrite the whole mining chapter carefully.
20. Para (b) Table given is not as per guide lines. One column of total excavation is not given. Rectify it.
21. Yearwise development plan & yearwise section plan are not matching such as section F-F'. In section line mark the year of development. Check & rectify it. Justify it.
22. Para no. (f), Conceptual mining: In proposed reclamation & rehabilitated how much area to be reclaimed & rehabilitated is not furnished. In given section D-D' Bauxite is not mined. Give justification. Proposal of this section should be given. Vital detail pertaining to life of the mine, ultimate pit size and post mining scenario and reclamation-rehabilitation aspect have not been discussed.

Chapter no. 3 Mine Drainage

23. 100m garland drain is proposed to be made. But what is the location not marked in any plan. Give it in proper plan & describe.

Chapter no. 4 Stacking of Mineral Reject

24. 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.
25. Analysis report of limestone is too old & not supported by the certificate NABL (National Accreditation Board of laboratories) laboratory. Analysis report of Bauxite should be of active working pit.

Chapter no.7-Other

26. During inspection Geologist at mine is not present. Give information about employment of Geologist.

Chapter no.8-PMC

27. In para 8.1, (a) Information of highest RL is not matching RL given in earlier chapter.
28. In existing land use pattern about 0.0100 hect. area used for plantation. Give type of species of tree & number of tree survived.
29. 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 are not furnished.
30. In para no. 8.2, Impact Assessment: In given table area for Soil stacking is not given. Calculation of this table is not correct. Recheck it.
 31. 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. There is no information of virgin area.
 32. Financial assurance has not been computed in terms of rule 27(1) of MCDR 2017.

Plates

33. All the plans & sections have not been prepared on prescribed scale.
34. Cadastral plan duly authenticated by concerned Govt. indicating coordinately has not been given.
35. **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, various monitoring stations have not been marked, etc.
36. **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 of all pillars is not given. Other permanent features like temple, buildings, hutments, etc. exist in the ML area may also be marked.
37. **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.
38. Geological section plan: All UNFC code is not given.
39. **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
40. Year wise Geological section: In section line proposed year is not mention.
41. **Environment Plan:** The plan has not been prepared incorporating all details as per rule 32(5)(b) of MCDR'2017 because position(s) of the adjacent leases are not shown on the Environment Management Plan.
42. **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.
43. **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.
44. **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.
45. 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.
46. Copy of last Scheme of mining approval letter dt. 13.11.2014 is not furnished.
47. In document old rule are given. It should be updated by new rule.
48. Numbering of annexure & plate is not in chronological order in text & index. Many annexures are not clear & nor readable.

49. List of plate and annexure should be enclosed after content.
50. Some of the mine photo such as pillar, working and old pit etc. should be enclosed.
51. 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