

Report cum scrutiny comments on examination of Review of Mining plan with Progressive mine closure plan of Nandana Bauxite mine of M/s Minerals & Minerals Corporation over an area of 58.6793 hect. (Sur. No.529P)old, 838 renewal) situated in village Nandana, 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 MMDR Act, 2015 is not enclosed. In this regard letter received from State Govt. regarding mining lease is liable to be extended up to dt. 28.05.2022 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 qualified person are not furnished. District name is not correct. It needs to be corrected as modified in whole document & plan.
3. In whole document Owner name is not correct/ not as per lease deed except cover page.
4. Certificate/Undertakings from Owner and qualified person is not as per guide line. It should be updated.
5. Copy Environmental Clearance obtained from MOEF should be enclosed. Adequate water harvesting measures should be proposed towards protection of environment.
6. **Duly authenticated lease plan showing the coordinates or the lease area have not been given.**
7. Further consent to operate mine obtained from State Pollution control Board should be enclosed.
8. In document old rule are given. It should be updated by new rule.

Chapter: Introduction

9. Introduction is not described in standard format. Purpose of submission of mining plan is not given and rule is also not given.

Chapter no.2- Location and Accessibility.

10. KML file is not enclosed.

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

11. Bauxite production has done more than from proposal. It is about more than two to four times from proposal. No benches are seen in field. Mining has not done as approved mining plan. Deviation are in Development, exploitation and environment monitoring during previous passed period. Give reason of it.
12. In para 3.4, information on compliance of violation of rule is not furnished. As per mine file record violation for rule 45(5) (a) & 45(5) (b) is point out on dt. 13.03. 2013. Reply is not received from mine owner.
13. In para no. 3.5- Information regarding Suspension & revoke of mine is not correct. Mine is suspended by IBM on dt.29.07.2013 & revoked on 9.10.2013.
14. **Review is given in causal manner. Drilling of 6 DTH bore hole is not justified. No evidence i.e. submission of relevant information of bore hole logs have been is given. There is 3-4 times excess production during the year2014-15 and 2015-16.**

Part-A

Chapter no. 1.0 Geology & Exploration

15. Para no. (c)-Local geology of area is not described correctly. Soil thickness as per Geological section is about 5m. But in description it is 1m. In the same way below Bauxite about 15m thick is shown in section. But no description is given about this rock. So check and update it. On field inspection found that Soil is occurring in almost whole area. Succession of area is not given. What are the parameters to select sample for chemical analysis. Mark sample location in plan.
16. Para (e) (i) Information on sample analysis is not correct. Sample analysis report is not related to this mine. Give latest NABL accredited sample analysis of all the rocks.
17. Para (i) No information is given about future exploration. How much area is fully explored? Six bore holes are to be proposed in 2018-19. But no location of these holes is not marked in Geological or Development plan. What are the parameters to select these trial bore holes? Give justification.
18. **Entire exploration work claimed is arbitrary. No exploration is shown in Geological sections.**
19. 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. It is not clear whether depletion of produced Bauxite is done from reserve or not. UNFC code is not given for mineral block in boundary barrier/ benches etc. Reserve calculation for 333 code is not given. How much thickness limestone taken for code 333 is not given? Mineral reserve should be reassessed. The exposed thickness of Bauxite is contrary.
20. Methodology adopted for reserve estimation is not correct. Measured mineral reserve (331) & inferred mineral reserve (333) have not been calculated. There is no mineable reserve in UNFC. Proved & probable itself is mineable.
21. **Basis of assuming 13.5m thickness is not clear. It is not acceptable. No proposed Bore hole has been shown in Geological plan/section.**
22. 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

23. Mining chapter is not described correctly. On doing inspection no bench is seen in entire area. In Year wise description proposal of mining in pit no. 1 but actually as per plan mining proposed in pit no. 3. Check & rectify it. Table for In situ tentative excavation is not correct. Here pit no, total excavation are not correct. Total of excavation is not matched with breakup of Mineral reject + OB+ Bauxite. Check & reconcile the entire data.
24. **Proposed scale of production cannot be acceptable as mining was also been proposed in lower horizon which has not been proved.**
25. Table for Dump re handling of dump is not given.
26. Place of Proposal of backfilling is not correct. As per plan proposal of backfilling is proposed near pit no 1 where no mining yet to started. So how it possible to backfill the unmined area.
27. Para no. (f), Conceptual mining: In proposed reclamation table given: 23.3261 hect area to be reclaimed & rehabilitated proposed where it comes? Justify it. How it possible till the full thickness of limestone to extracted. Vital detail pertaining to life of the mine, ultimate pit size and post mining scenario and reclamation- rehabilitation aspect have not been discussed.

28. Proposed reclamation & rehabilitation table is not correct. Information column on to be reclaimed & rehabilitated is not correct or how to calculate it?

Chapter no. 3 Mine Drainage

29. Maximum & minimum depth of working are given same in table. But in mining chapter it is different. To check & reconcile it. Highest and lowest place in area is not matched with the previously described Geology chapter.

Chapter no. 4 Stacking of Mineral Reject

30. Proposal of Storage of Top soil & Mineral rejects are given in table. But proposal of backfilled area is not correct. In plan it is shown near pit no 1 which is the place where mining yet to be started.

Chapter no.5- Uses of mineral

31. What is the planning of Owner regarding sell of cement & chemical grade Bauxite?
32. Analysis report of limestone is too old & not supported by the certificate NABL (National Accreditation Board of laboratories) laboratory. Analysis report of limestone should be of active working pit.

Chapter no.7-Other

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

Chapter no.8-PMC

34. Entire proposal for PMCP is not correct. No proposal is given for rehabilitation of worked out benches, water management, plantation, fencing etc. Safety, security, disaster management plan is also incorrect.
35. In para no. 8.2, Impact Assessment: In given table area for dumping is 0.50 hect given. But nothing to be discussed in previous chapter. Describe it at proper place. Data air, water & noise pollution is not furnished. No information is discussed how to monitoring air, water & noise.
36. In PMCP, para no. 8.6-In financial table given proposal has not matched with FMCP plan. F A table is also not correct. Additional area required during plan period is given 24.64 hect. which is not correct. In the same way total is not correct which 39.76 hect instead of 38.36 hect.
37. Financial assurance has not been computed in terms of rule 27(1) of MCDR 2017.
38. **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.
39. **Surface Plan:** Surface plan is not submitted with all the information/prominent features as required under Rule 32(5) (a) of MCDR, 2017. In whole area Contour lines are not given. Mining Lease boundary not marked as per the standard conventions. Other permanent features like temple, buildings, hutments, etc. exist in the ML area may also be marked.
40. **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. This is Geological plan. So did not show feature of Surface plan? In the same way did not show geological feature in Surface plan.
41. **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. Section line & plan is mismatch.
42. **Environment Plan:** The plan has not been prepared incorporating all details as per rule 32(5) (b) of MCDR'2017 because plan is not prepared as standard scale (1: 5000). Monitoring stations of Air, Water & noise quality Survey not marked, position(s) of the adjacent leases are not shown on the Environment Management Plan. Land use, contour value 60m beyond the proposed ML area has not been prepared and all the surface features including human settlement may also be shown.
 43. **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.
 44. **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.
 45. **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.
 46. In document old rule are given. It should be updated by new rule.
 47. Numbering of annexure & plate is not in chronological order in text & index. Many annexures are not clear & nor readable.
 48. List of plate and annexure should be enclosed after content.
 49. Some of the mine photo such as pillar, working and old pit etc. should be enclosed.
 50. 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:

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