

Report cum scrutiny comments on examination of Review of Mining plan with Progressive mine closure plan of Rakka Limestone mine of Sh. Rajendra P Trivedi over an area of 4.0 hect. (Sur. No.160/1P) situated in village Rakka, Taluka Lalpur, District Jamnagar 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 qualified person is not furnished. It needs to be corrected as modified in whole document.
2. Certificate/Undertakings from Owner and qualified person is not as per guide line. It should be updated.

Chapter: Introduction

3. 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

4. KML file is not enclosed.
5. Pillar coordinate is not matching with the Surface plan.

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

6. Instead of exploration by way of pitting 4mx4mx4m, three DTH bore holes were put. But findings of bore hole have not been given. Limestone production has done more than 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

Part-A

Chapter no. 1.0 Geology & Exploration

7. In topography drainage direction is not correct.
8. Para no. (c)-Local geology of area is not described correctly. On field inspection found that Soil is occurring in almost whole area. Grade of limestone is not described. Succession of area is not correct. Bore hole drilled but lithology of drilled bore is not described. What are the parameters to select sample for chemical analysis. Mark sample location in plan.
9. Para (e) (i) Two pit dimension are given. But in field/ plan no Pit numbering is given. Rectify it. Laboratory name is not matched with analysis report.
10. 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 limestone 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?
11. Methodology adopted for reserve estimation is not correct. Measured mineral reserve (331), indicated mineral reserve (322) have not been calculated. There is no mineable reserve in UNFC. Proved & probable itself is mineable.
12. Basis of assuming 20m thickness is not clear. It is not acceptable. No Bore hole has been shown in Geological section. No bore hole section/log drawn has been given.
13. On which ground grade of limestone whether chemical or cement is nor given.
14. In future programme for the year 2018-19, three DTH hole to be drilled but location of these are not given in any plan. What are the criteria to select location?
15. 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

16. Mining chapter is not described correctly. On doing inspection no bench is seen in entire area. Dimension of two pit are given. But in plan numbering of pit is not given. In Year wise description Scale of plan are not correct /not matching with scale given on Year

wise Development given. Table for Dump re handling of dump is not given.

17. In previous approved plan limestone production target was about 8200 to 8900 tonnes. But at present plan proposal of limestone target is more than about 10 times, i.e. 85000 tonnes. On which ground increase limestone target? Justify it.
18. Proposed scale of production is on higher side. It cannot be accepted for an area of 4.0 hect. with limited thickness.
19. Para no. (f), Conceptual mining: Movable reserve estimated about 1165934 tonne-from where it comes? Justify it. In proposed reclamation table given: 2.3143 hect area to be reclaimed & rehabilitated proposed. How it possible till the full thickness of limestone to be extracted. 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

20. Maximum & minimum depth of working are given in table. But in mining chapter no mRL is discussed. How to correlate it. From where 127mRL is comes or what to mean 127mRL. Describe it also in mining chapter.

Chapter no. 4 Stacking of Mineral Reject

21. Proposal of Storage of Top soil & Mineral rejects are given in table. But nothing to be discussed where to dump mineral reject or store top soil. Nothing to be discussed it in mining chapter nor it to be plotted in any plan.

Chapter no.5- Uses of mineral

22. What is the planning of Owner regarding sell of cement grade & under size limestone? Give in detail how much cement grade limestone to sell.
23. 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

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

Chapter no.8-PMC

25. In para 8.1, Information of 20 tree is earlier planted & survived. Give type of species of tree.
26. 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.
27. In para no. 8.2, Impact Assessment: In given table area for dumping is 0.0925 hect given. But nothing to be discussed in previous chapter. Describe it at proper place.
28. In PMCP, para no. 8.6-In financial table given proposal has not matched with FMCP plan. F A table is also not correct.
29. Financial assurance has not been computed in terms of rule 27(1) of MCDR 2017.
30. **Key Plan:** is not submitted.
31. **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.
32. **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. Pit no is not there. In index symbol SBZ line given. But what is represent by SBZ. Give detail. This is Geological plan. So did not show feature of Surface plan? In the same way did not show geological

- feature in Surface plan.
33. **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.
 34. **Environment Plan:** The plan has not been prepared incorporating all details as per rule 32(5)(b) of MCDR'2017 because 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.
 35. **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. Index is not given.
 36. **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.
 37. **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.
 38. 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.
 39. In document old rule are given. It should be updated by new rule.
 40. Numbering of annexure & plate is not in chronological order in text & index. Many annexures are not clear & nor readable.
 41. List of plate and annexure should be enclosed after content.
 42. Some of the mine photo such as pillar, working and old pit etc. should be enclosed.
 43. 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