

**Report cum scrutiny comments on examination of Review of Mining plan with Progressive mine closure plan of Ranpur Limestone mine of M/s Tata Chemicals Ltd. over an area of 28.85 hect. (S no. 209/p) situated in village Ranpur, Taluka Bhanvad, 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 from State Govt. as per provision made under Section 8A (5) of MMDR Amendment Act 2015 should be enclosed.
2. The Cover Page do not have standard format. E mail address of Owner & qualified person are not given. Lease period is not correct. In the same way cover mine photo is not clear nor standard size. Rule for review of mining plan submitted is not correct.
3. Certificate/Undertakings from Owner is not as per guide line. It should be updated. Certificate of Qualified person is unsigned.
4. Copy Environmental Clearance obtained from MOEF should be enclosed. Adequate water harvesting measures should be proposed towards protection of environment.
5. Further consent to operate mine obtained from State Pollution control Board should be enclosed.
6. Lease plan showing area and all the pillar coordinates is not duly authenticated by state Govt. Pillar coordinates is not matched with the coordinates given Location chapter.
7. Mine name is not correct. Ran or Ran A is to be checked. It should be changed accordingly in whole document.
8. The document is submitted without signature of qualified person.

**Chapter: Introduction:**

9. As given previous scheme of mining is approved on 08.02.2012. Accordingly this review of mining plan should be for next five year period. This review of mining plan is prepared too late as year 2017-18 is on the completion.
10. The document submitted under rule is not correct. No description of lease grant order is given. Many annexures are not enclosed.
11. Entire lease area mentioned as Govt. waste land. But agriculture land exist in the south eastern portion of the lease area.
- 12.

**Chapter no.2- Location and Accessibility**

13. Date of lease grant is not correct. As well as date of expiry is not correct.
14. KML file is not enclosed.
15. All pillar Co-ordinates are not matched with the lease plan.
16. 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**

17. Review of the mining plan has not been correctly given.
18. No proper benches are seen in field. In review no information is given regarding last scheme approved on dt. 08.02.2012. From 2013-14 to 2015-16 given that no work has done by the State suspension order dt. 01.06.2013. In this regard no supporting document is enclosed.
19. In para 3.5, information on suspension of mine is not correct.

## **Part-A**

### **Chapter no. 1.0 Geology & Exploration**

20. This chapter is not prepared as per guide lines.
21. Details of existing pits is given as table in many places. It should be at proper place.
22. Local geology is not described correctly. As per succession Soil is there. But no description of soil is given.
23. In Geological section basement rock Granophyre is not marked.
24. As discussed in field with owner Geologist encroachment shown in plan is not correct.
25. Check the geological section line C\_C' and D\_D' & update it.
26. Thickness in drilled bore hole is 3.7m to 6.65m taken. But in geological section maximum thickness is 28m. This thickness is also mention in local geology. So check & update it accordingly.
27. Para no. (e) (ii)- Given number bore hole is not matched with Geological plan. In text no. of bore hole is 14 but as per plan it is 17. So all the information of 14 bore hole data is not correct. It seems to be of other mines. As well as location of bore hole no. is not marked in plan.
28. Distinct not layer of chemical grade and cement grade limestone occurs in the lease area as per geological section. But reserve of only chemical grade limestone has been assured. Reserve of cement grade has not been estimated.
29. Analysis report of limestone as annexure no. 12A & 12B is too old. It should be supported by the certificate NABL (National Accreditation Board of laboratories) laboratory. Analysis report of Limestone should be of active working pit & after submission of draft Review of plan. Analyzed Sample location of limestone is not marked in any plan.
30. In para no. (j)(i) : Depth considered for reserve estimation is not correct. As per bore hole data record it is 4.35 to 15.55m instead of 3.70m to 6.65m.
31. Tonnage factor report as annexure no. 14E is not enclosed.
32. Entire reserve estimation is incorrect. Mineral reserve is to be re-estimate on the basis of Mineral (Evidence of mineral content) Rules 2015. Accordingly only exposed thickness of mineral shall be considered in whole reserve/ reserve estimation. Lateral extension for G1 & G2 is to be taken not more than 50% of the grid spacing of the probe point. So as per rule reserve re-assessed.
33. The mineral reserve re-estimated as on 1.04.2017. But in all table how much thickness of chemical & cement grade limestone is to be taken for reserve calculation is not given. Accordingly to change all the table.

### **Chapter no. 2-Mining**

34. Mining chapter is not described correctly. On doing inspection no proper mining bench is seen in entire area. Five year Mining proposal should be made.
35. A significant fraction is mentioned as mining losses at page no.22. It is not understood how such mining losses are occurring. It cannot be accepted.
36. Table for five year proposed production in tonnes is not prepared.
37. Year wise development & section plan is not prepares.
38. Dump rehandly information is not furnished in table. As undersize limestone is stacked. But no planning is proposed.
39. Para no. (f): Conceptual mining is not described as per guide line. Ultimate limit is not calculated. Vital detail pertaining to life of the mine (5 year block wise), ultimate pit

size and post mining scenario and reclamation- rehabilitation aspect have not been discussed.

40. Para at page no.34 Reclamation and rehabilitation: In mined out area depth taken 2m is not correct.

### **Chapter no. 3: Mine Drainage**

41. Proposal of Mine Drainage should be made accordingly changes in mining chapter.
42. Proposed maximum depth of working as per plan is 10m but in text it is taken 15m. Check & update it.
43. Area is surrounded by agriculture field. Hence there is need for controlled as non-explosive rock bearing techniques.

### **Chapter no. 4 Stacking of Mineral Reject**

44. Proposal of Storage of soil & mineral reject should be made accordingly changes in mining chapter. Many dump/mineral stack are marked in plan.
45. But nothing to be discussed where to dump store Mineral stack. What is the dimension and grade of it?

### **Chapter no.8-PMC**

46. Proposal of PMC should be made accordingly changes in mining chapter.
47. In para no.8.1 (ii): Water, air & noise pollution reports are too old or not enclosed.
48. In para no. 8.2, Impact Assessment: Total area degraded due to mining is given 9.7562 hect. But as given table it is 9.262 hect. Check & update it.
49. No proposal is given for rehabilitation of worked out benches, water management, plantation, fencing etc. Safety, security, disaster management plan is also incorrect. In any emergency in the mine no reasonable person address is not furnished. Monitoring report of air, noise & water pollution report is not furnished.
50. In PMCP, para no. 8.6- Total area put to use during plan period is not correct as per table. All the calculation is needed to be checked & updated. In financial table given proposal has not matched with FMCP plan.
51. The Financial assurance co-terminus with review of mining plan period in favour of Regional Controller of Mines, IBM, Gandhinagar.
52. About 13 hect. area has already been degraded due to mining. There is need for a proposal for restoration of such large area.

### **Plates**

53. All plans signature of draftsman & qualified person is not done. In the same way scale index are not correct.
54. **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, village population , various monitoring stations have not been marked, etc.
55. **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. Pillar coordinates are not furnished. Bore hole no. 7 is not marked on plan. Other permanent features like temple, buildings, hutments, etc. exist in the ML area may also be marked.
56. **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.

57. **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.
58. **Environment Plan:** The plan has not been prepared incorporating all details as per rule 32(5)(b) of MCDR'2017 because rejection dumps, detail of adjacent leases, flow direction of nallah, monitoring stations of Air, Water & noise quality Survey not marked, surface features including human settlement may also be shown.
59. **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 correct.
60. **Conceptual Plan:** Five year block wise plan is not made. 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.
61. **Financial Area Assurance Plan:** In plan year wise area to be broken up not marked. 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. Index is not correct.
62. Feasibility report should be modified as per above relevant scrutiny points.
63. Numbering of annexure & plate is not in chronological order in text & index. Many annexures are not clear & nor readable.
64. Some of the mine photo such as pillar, working and old pit etc. should be enclosed.
65. Many annexures are in Gujarati. So these annexures should be submitted in English version also.
66. 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: Gandhinagar

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