Report cum scrutiny comments on examination of Review of Mining plan with Progressive mine closure plan of Malvada mine of Sh. Prakash Jethalal Thakore over an area of 4.90 hect. (Survey no. 35/P (old)) situated in villages Village Malvada, Taluka: Jamjodhpur, District Jamnagar, Gujarat submitted under Rule 17(2) of MCR, 2016 and 23 of MCDR, 2017.

General

1. Information regarding extension of lease period from State Govt. as per provision made under Section 8A (5) of MMDR Amendment Act 2015 has not been enclosed.
2. The Cover Page do not have standard format. It is Review of mining plan so rule under submission is not correct. Period of mining plan is not correct. Qualified person email address & mobile no. are not furnished. E mail ID & mobile number of lessee has not been given correctly. Representative photographs of mine is to be given page.

3. As the year 2016-2017 & 2017-18 has already passed. So this document should be prepared only for remaining three year from 2018-19 to 2020-21 and submitted as Review of mining plan with PMCP under rule 17(2) of MCR 2016 & 23 of MCDR 2017.

4. Certificate/Undertakings from Owner & Qualified person are not as per guide line. It should be corrected & updated.
5. The lease plan showing area and all the pillar coordinates duly authenticated by state Govt. is not enclosed.
6. Copy Environmental Clearance obtained from MOEF should be enclosed. Adequate water harvesting measures should be proposed towards protection of environment.
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 written as per guide line. Rule under document submission is not correct. It is review of mining plan. Enclosed copy of lease grant order & lease deed are not of this mine. Gist of the proposal for ensuing years are also to be given.

Chapter no.2- General

10. IBM registration no is not furnished.

Chapter no.2- Location and Accessibility

11. KML file is not enclosed.
12. Date of opening of mine is not given.
13. Compliance of CCOM circular 2/2010 with regard to Geo-referenced mining lease map has not been done.
14. Boundary pillar should be erected and the photographs of pillar erected with coordinates should be enclosed.

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

15. This chapter is not written as per guide lines.
16. Deviation is seen in exploration, exploitation and plantation.
17. Contrary information is given about drilled bore holed & production of ROM.
18. Entire description given under review chapter is confusing and contradictory. It is written as DTH hole in text. But same is written as core drilling in Geological plan.
19. Two prospecting pit was proposed on earlier SOM. But lessee drilled 2 bore hole. It is not understood why bore holes was drilled against proposal of pits. Whereas no

document pertaining to such exploration has been submitted. Such bore holes cannot been considered.

20. Review given in respect of ROM production and mineral production is not clear.
21. Information regarding proposed excavation of previous year is not correct.
22. No supporting document is enclosed regarding Air, water & ambient noise pollution.
23. Information regarding violation point out & their Compliance position are not furnished.

Part-A

Chapter no. 1.0 Geology & Exploration

24. This chapter is not prepared as per guide lines.
25. Description of topography given on page no. 6 is not correct. Instead of giving surface features irrelevant description of limestone height is given.
26. On inspection of mine location of drilled bore hole is not confirmed. Exploration work has done without information to the statutory authorities. As per new rules such DTH exploration work cannot be accepted. Sampling & analysis report is not enclosed. No information given to IBM about commencement of bore holes drilling. Local geology is not correctly described. Geological succession is not furnished.
27. There is mismatch regarding no of blocks. As plan there is no blocks but in text four block.
28. Depth of limestone in existing pits is vary from 2 to 5m. It needs further systematic exploration.
29. In future exploration Grid coordinates of proposed bore hole are not given and number of proposed bore hole is mismatch with the plan. Exploratory proposal given is not adequate.
30. Enclosed chemical report is not related to this mine.
31. Analysis report of Limestone should not more than six month old & be supported by the certificate NABL (National Accreditation Board of laboratories) laboratory. Analyzed Sample location of limestone is not marked in any plan. Entire reserve estimation is incorrect & not done by MEMC Rules 2015.
32. 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 on the basis of section wise. No extrapolation/influence of extreme borehole is allowed in lateral extension & depth wise, below pit/hole in G1/G2.) The reserves & resources blocked in statutory barrier of power line/State highway/nallah should be given in tabular form. The exploratory borehole/pit should be proposed & shown in extreme lease boundary/corner up to depth of mineralization as per MEMC Rules 2015.
33. A cart road is passing through the lease area. Status of the road is to be ascertain correctly. If it is public road then requesting statutory barrier is to be left. Mineral blocked in the barrier should be depleted.
34. Reserve estimation carried out for 111 category upto 9m depth is not correct. Further methodology adopted for reserve is not correct. First 331(G1) i.e. measured mineral reserve and 332(G2) indicated mineral reserves are to be calculated. Basis of assuming 1.91 specific gravity is also not clear.

Chapter no. 2-Mining

35. This chapter is written very carelessly. Many pages are repeated and some pages is missing.
36. Entire mining proposal is incorrect. Limestone is exposed only upto 159 mRL. But mining proposal has been made upto 153 mRL by further deepening of the pit. It cannot be accepted without proper reserve estimation.

37. Proposal in this chapter should be modified after correction of Geology chapter accordingly.
38. As area is not explored how to take bench height from 9m. It is not justified. As written in text & confirm in field present mining is doing by JCM & loading by machineries in trucks so proposal as manual mining is not acceptable
39. Mining proposal given on page no. 11 to 13 and plate no. 3 neither correct nor justified. In given table no. 2.2 year wise total excavation is not correct. Mining up to 153.35 mRL cannot be accepted without detailed exploration. Recovery of 90% is also not justified. It is not understood what is remaining 10% sized.
40. Excavated ROM is sizing and sorting in crusher. But it is not mention where to install crusher.
41. As the year 2016-2017 & 2017-18 passes away, give information about location of excavation & production of ROM in review of mining plan in chapter no. 3. So mining proposal in this chapter should be only for three years.
42. Year wise grid location of excavation is not furnished. Year wise RL is not correct. It should be from higher (top) to lower (bottom). In many sections RL is not correct. In the same way proposed year wise plantation area & location is not described.
43. Propose area of excavation at the end of plan period is not correct at page no. 17. It is mismatch with page no.19.
44. Para no. (f): Conceptual mining: Contrary information given about future exploration programme at page no. 17. 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 properly.
45. Mining proposal is to be given without drilling and blasting.

Chapter no. 3 Mines Drainage

46. Proposal in this chapter should be modified after correction of Geology & Mining chapter accordingly.

Chapter no. 4 Stacking of Mineral Reject

47. Proposal of Storage of soil & mineral reject should be made accordingly changes in mining chapter. Location of under size mineral stack is mismatch in text with plan.

Chapter no. 7.0-Other

48. Rule for employment of mining Engineer & Geologist under MCDR rule 2017 is not correct.

Chapter no.8-PMC

49. The proposal in this chapter should be changed as per Geology & mining chapter accordingly.
50. In para no. 8.2-As in given table information is not correct for end of plan period.
51. Para no. 8.2: Air /Noise/ water pollution report are not discussed & references of monitoring report of air, noise & water pollution report is not furnished.
52. In, para no.8.3.5, page no.32- 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.
53. Table given on page no. 35 should be given as year to year basis.
54. 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 responsible person address is not furnished.
55. In PMCP, para no. 8.6-Information given in table is needed to check & update as per mining chapter.

56. The Financial assurance co-terminus with review of mining plan period in favour of Regional Controller of Mines, IBM, Gandhinagar.

Plates

57. All the plan is prepared on one year old survey (dt. 25.04.2017). All the plans should be resurveyed & updated. Index should be given as per plan.
58. Cadastral plan duly authenticated by concerned Govt. agency is not furnished.
59. **Key Plan** is not submitted with all the information/ prominent feature as required under rule 32(5) (a) of MCDR 2017 because some of important aspects are not incorporated like existing tree density, Wind direction, Village population, land status, topo sheet no, various monitoring stations have not been marked, etc.
60. **Surface Plan**: Surface plan is not submitted with all the information/prominent surface features as required under Rule 32(1) (a) of MCDR, 2017. Other permanent features like temple, buildings, hutments, etc. exist in the ML area may also be marked.
61. **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. UNFC code in Geological sections is not marked. It should be updated as geological reserve changed. All the Geological sections assuming mineral occurrence in G1 category upto 150mRL are not correct. Thickness of limestone shown in geological plan & section is incorrect. All the sections are arbitrary and imaginary. Correct sections are to be drawn. In plan mRL of all the sections are not correct as per text.
62. **Year wise Plan**: Plan is not prepared as per guide line. Three year planning with grid lines is not shown. Ultimate pit limit not marked, proposed protective works have not been marked correctly.
63. **Year wise Section:** Three year development section are not prepared as per guide lines. In the same way RL of sections are to be checked & update
64. **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 all the surface features including human settlement may also be shown. Wind direction is not marked.
65. **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. Sections have given which are required for this plan.
66. **Conceptual Plan**: Five year block wise mine planning till the life of mine 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.
67. **Financial Area Assurance Plan**: Area given under FA table is not matched with the broken up areas as marked on plan.
68. Feasibility report should be modified as per above relevant scrutiny points. This report is submitted without signature of qualified person.
69. Numbering of annexure & plate is not in chronological order in text & index. Many annexures are not clear & nor readable.
70. Many annexures are in Gujarati. So these annexures should be submitted in English version also.
71. Some of the mine photo such as pillar, working and old pit etc. should be enclosed.
72. 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

Date: 08.05.2018

(Dr. N K Mathur)
A M G
R O, Gandhinagar