Scrutiny comments on examination of Review of Mining plan with Progressive mine closure plan of Lumba Limestone mine of Laxman Bhai Jiva Bhai Mori over an area of 4.0 hect. (Sur. No.40/2P3, 41P/5, 40/3P1) situated in village Lumba, Taluka Veraval, District Gir-Somnath submitted under Rule 17(2) of MCR, 2016 and 23 of MCDR, 2017 for block period 2018-19 to 2022-23 & approval period 2018-19 to 2022-23.

Chapter no.2- Location and Accessibility

- 1. KML file/google image map of instant lease area is not enclosed.
- 2. Lease boundary Pillar coordinate (page-5) is not matching with the Surface plan. BP No.2 reading taken in field was 20^o 58 46.3" & 70^o 32 37.5" which is not matching with surface plan. The DLR map duly signed by state authorized person is not enclosed. Reconcile & furnished.

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

- 3. The reason for excess production achieved in plan period is not discussed in remark column. Making of unnecessary benches without any proposal cannot be considered as exploration.
- 4. The dimension of existing trenches, number, location & true depth is not given. Mining operations has been done irregular manner & deviated in Development, exploitation and environment monitoring in previous plan period. Give reason of it in remark column.
- 5. The total ROM production achieved & total excavated area in lease is to be discussed.
- 6. The online monthly & annual return has not been submitted in IBM website.

Part-A

Chapter no. 1.0 Geology & Exploration

- 7. Page-11, the 8-10m depth of mineralization without any true exploration is incorrect & not acceptable. The existing exploratory details of trenches/pits & true depth is not given correctly. There were no DTH boreholes shown in field during inspection.
- 8. Contradictory and false information have been given in respect of Geology, Exploration, and Reserves & Resources calculation. It is mentioned on page no.6 that exploration by way of trench 10mx5mx5m was made, whereas in geological para at page no.12, it is stated that 3 borehole of 22m each. No information was observed & given by officer about such borehole exploration. These borehole could not be verified in field nor any record about the borehole log was made available so inspecting officer hence this exploration cannot be considered. Accordingly geological description given on pages 11, 12, 13, geological section (Plate-2) and reserves estimation on page no 14&15 is totally wrong. Qualified person is advised to desist for such fabricated false information. Moreover, existing excavation in not matching with the production reported on page no.7.
- 9. It was observed during inspection that survey of lease area was not updated & correctly shown pits dimension, mRL of area on Surface Geological plan & section. The area should be re-surveying & submitted.
- 10. Page-12, The existing pit dimension is not correctly shown, it should be given the corrected resurvey of lease area & furnished. The other details/information in tables at page-12, 13 is not given properly & correctly.
- 11. Page-15, The Re-estimate the reserves & resources & detail calculation is to be taken only up to true depth of mineral area i.e.3-4m in irregular manner of pit/trench. It needs correction in entire reserves & resources. The Geological section shown is incorrect on DTH borehole. DTH is not acceptable. The section is to be shown up to true depth of mineral only (up to pit/trench depth), imaginary lithology should not be shown & acceptable. Entire reserve estimation wrong. Assuming limestone continuity up to 32mRL (10m depth from surface) is baseless. Reserve estimation calculation given on page no 13, 14, and 15 is total wrong. mRL of lease area needs to be reconcile & corrected.
- 12. Page-15, 16, Entire calculation & Tables needs to be revised & modified.
- 13. In Entire lease area, minimum 04-05 core bore holes up to 25m depth each or more is to

be proposed in corner of lease area in minimum 400mx400m grid as per provision of MCDR, 2017. It needs proposal in plan & section.

Chapter no. 2-Mining

- 14. Since entire estimation calculation is wrong, therefore mining proposal is also wrong. Mining up to 32mRL (20m depth from general ground level) cannot be accepted. So far mining has been carried out in the form of surface scrubbing. It is not understood, how such a depth is proposed without any systematic exploration.
- 15. It was observed during inspection that latitude & longitude of boundary pillar of lease area were not matching erected as per statutes. The existing pit dimension (0.4Ha) & correct excavated area & production achieved 2, 44,839T needs to be justified.
- 16. It was observed during inspection that associated trap rock crushed material stacked with in lease area & crusher and screener was being used in lease area. It needs justification.
- 17. The topsoil was being stacked outside lease, which is not acceptable. Same should be utilized for plantation/afforestation purposes.
- 18. There no drilling & blasting proposed, only rock breaker/excavator of required capacity with tipper combination should be proposed.
- 19. Proposed scale of production is on higher side. It cannot be accepted for an area of 4.0 hect. with limited thickness based upon trench/pits.
- 20. In present plan, proposal of limestone target is about 1,98,000T without any true exploration data/reserves is not acceptable.
- 21. Reduce the annual targeted production based upon the true potential area of existing pit/trench only. It needs correction.
- 22. There is no topsoil proposed in table at page-18 whereas page 27 shown. It is contradictory & incorrect. It needs correction.
- 23. Plantation survival rate is very poor; therefore more plantations (100Plants/year) is to be proposed in present Review of mining plan.
- 24. Page-18 annual planning & reduced optimum annual ROM targets are to be modified & corrected.
- 25. Page-22, 23-The calculation of drilling & blasting is not required. It needs correction. Conceptual mining: There is no OB/waste generation, therefore conceptual stage of mine may be water reservoir only after mineral exhausted. No reclamation is required except afforestation/embankment in 7.5m barrier

Chapter no. 3 Mine Drainage

26. The water table shown at 105-110mRL without any study is incorrect. Same should be based upon the field observation. The minimum & maximum depth of working shown same 18mRL, which in incorrect. Reconcile & corrected.

Chapter no. 4 Stacking of Mineral Reject

27. The topsoil generation & utilization is not discussed. Page-18, Table-Top soil generation shown NIL which is incorrect. It needs correction & topsoil is not allowed to utilize outside the lease area. It needs discussion.

Chapter no.8-PMCP

- 28. The present land used pattern is to be given as on 01.4.2018. The table is to be modified by re-survey the lease area. Excavated area, Screening plan & crusher, mineral stack is not updated by re-survey & submitted. It needs correction.
- 29. Page-38, No of plants should be proposed 100 instead of 20 & survival should be about 80%. It needs correction.
- 30. Page-39-44, The plantation proposal should be given in "others" column instead of "Rehabilitation in waste land" column. Other environment protective measure of embankment wall is to be given.
- 31. Page-46, FA-Table & present land used details & area to be utilized in plan period needs to be corrected. Reconcile the table in PMCP & existing pit dimension & furnished. The detail calculation should be modified based upon above scrutiny.

Plan & Section:-

- 1. **Surface Plan:** It was observed during inspection that in surface plan, excavation of lease area is not matching with field & Screening plan & crusher, mineral stack is not updated further BP co-ordinates were not matching. Re-survey the area & submitted in further submission.
- 2. **Surface Geological Plan:** The BP co-ordinates reconcile with DLR map & corrected. The existing pit, trenches with mRL, proposed core boreholes etc should be given. The geological axis of G1/G2 level of area is not marked. Lithology below depth of pit/trench is not to be shown in sections.
- 3. **Production & Development Plan**: yearly proposal should be shown in G1/G2 level of area only & environment protective measure should be shown. Litho below depth of pit/trench is not to be shown in sections.
- 4. **Environment Plan:** plan has not been prepared & submitted. The position(s) of the adjacent leases are not shown on the Environment Plan; Land use in 60m/500m beyond the ML area is to be shown including human settlement etc.
- 5. **Reclamation plan:** The title of plate "Environment Management Plan" should be replaced as reclamation Plan & updated as above scrutiny.
- 6. **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.
- 7. **Financial Area Assurance Plan:** Plan should be updated & modified as per above scrutiny.

Annexures-

- 1. The copy of DLR map signed by authorized person & Lease sketch plan should be submitted.
- 2. The copy of field photographs of present mine workings, exploratory pit/trenchs with dimension, location, Boundary Pillars with no; Lat & Longitude, mRL etc. should be submitted.
- 3. Latest few more chemical analyses of pit/trench samples from NABL should be submitted.
- 4. Quarterly monitoring of Air, Water, Noise, land etc. in last quarter has not been enclosed.
- 5. The copy of valid BG/Original BG of extended period of lease should be submitted.
- 6. The further submission of document should be properly binding having sufficient strength and the plates are properly folded so that they can be accessed easily.