Scrutiny comments on examination of Review of Mining plan with Progressive mine closure plan of Damasa Limestone mine of M/s Shree Vikram Chemicals & Co. over an area of 2.0 hect. (Sur. No.110 (P) situated in village Damasa, Taluka Una, District Junagarh submitted under Rule 17(2) of MCR, 2016 and 23 of MCDR, 2017 for block period 2015-16 to 2019-20 & approval period 2018-19 to 2019-20.

- 1. Cover Page- IBM registration No IBM/11231/2012 was issued to Sh. Meraman Kisa bhai Pampaniya, individual whereas lessee of instant lease is M/s Shree Vikram Chemicals & Co., Firm, It needs correction & apply to IBM for updation. Five year block period is 2015-16 to 2019-20 & approval period is 2018-19 to 2019-20. It needs correction. The name of technical person & their company name should be appropriate small font size. It needs correction. The word" Mineral rules, 2015 is incorrect, its needs correction.
- 2. Introduction- The five year period of approval of MP/RMP is to be given. Introduction chapter is not discussed properly. Document is not submitted as per Appraisal of mining Plan 2014 format. It needs correction & modification in all relevant page, text & plates.

Chapter no.2- Location and Accessibility

- 3. Email ID & contact number of lessee is not given.
- 4. KML file/Google image map/Authenticated DLR map of instant lease is not enclosed.
- 5. Lease boundary Pillar coordinate (page-4) needs to be reconcile with DLR map & furnished.

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

- 6. Para-3.1, financial year format is to be given correctly i.e.2013-14 instead of 2013-2014. It needs correction.
- 7. The exploratory DTH borehole for scientific estimation of reserves/resources is not considered & accepted. Without proposal in last approved RMP, exploration of DTH borehole is not accepted. The correct dimension & depth of trenches is to be given with field photographs. The exploratory trenches of 6m depth is not possible & also not observed/verified in field.
- 8. The correct dimension of existing trenches, number, location & true depth is not given. Mining operations has been carried out irregular bench & deviated in Development, exploitation and environment monitoring in previous plan period. Give correct reason of it. Survival of plantation/afforestation is very poor in previous plan period, correct reason needs to be given.
- 9. The existing pit dimension (0.1.3172Ha) & correct excavated area & production reported in past (About 1, 55,465T) needs to be discussed & justified.
- 10. The online monthly & annual return has not been submitted in IBM website. Therefore compliance needs to be submitted.

Part-A

Chapter no. 1.0 Geology & Exploration

- 11. Since instant lease is very small area of 2.0Ha & past achieved ROM production needs to be given & reconcile with excavated area.
- 12. Page-9, the 8m depth of mineralization without any true exploration is incorrect & not acceptable. The existing exploratory details of trenches/pits & true depth is not given correctly.
- 13. The trenches mentioned at page-9 of 3mx2mx8m depth but no such exploratory trenches were observed & verified in field. The copy of field photographs, logs, true dimension of is to be given. Without proposal in approved scheme of mining, these exploratory DTH boreholes is allowed & accepted for scientific estimation of reserves & resources. Entire reserves & resources estimated is wrong & incorrect. It needs revision & modification.
- 14. Page-10, It was observed during inspection that survey of lease area was not updated & corrected 8m depth, pits dimension, mRL of area etc on Surface Geological plan & section. The area should be re-surveying & submitted.

- 15. 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 section is to be shown up to true depth of mineral only (up to pit/trench depth), imaginary lithology should not be shown & acceptable. Assuming limestone continuity up to 30mRL (8m depth from surface) is baseless. Reserve & resources estimation calculation needs to be given. (Page no 11). mRL of lease area needs to be reconcile & corrected.
- 16. Entire calculation & Tables needs to be revised & modified.
- 17. In Entire lease area, minimum 04 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

- 18. Since entire estimation calculation is wrong, therefore mining proposal is also wrong. It was observed during inspection that boundary pillar of lease area were not available & erected as per statutes.
- 19. It was observed during inspection that mine workings have been carried out with in 7.5m of statutory barrier or appears to be outside the lease area. It needs justification. The adjoining lease of instant mine should also be discussed.
- 20. Since category of mine is B-manual, therefore only J/H drilling & blasting with manual breaking & loading of limestone with tractor trolley combination is to be proposed.
- 21. Proposed scale of production is on higher side i.e.40000T. It cannot be accepted for manual working.
- 22. Reduce the annual targeted production based upon the true potential area of existing pit/trench only. It needs correction.
- 23. The production table Page-21, 22, 23 (table No.-2.2, 2.3, 2.4 etc is to be modified as per appraisal of mining plan 2014 format. It needs correction. Entire proposal needs modification at pages 24, 25 It was observed during inspection that intercalated waste/morum observed intermittently, therefore annual quantity needs to be proposed for bund/embankment in 7.5m barrier.
- 24. Plantation survival rate is very poor; therefore more plantations (100Plants/year) is to be proposed in present Review of mining plan.
- 25. Conceptual mining: There is small amount of 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 10-12mRL without any study is incorrect. Same should be based upon the field observation. The minimum & maximum depth of working needs modification, Reconcile & corrected.

Chapter no.8-PMCP

- 27. Page-32, 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, mineral stack, old workings is not updated, re-survey & submitted. It needs correction.
- 28. Page-36, No of plants should be proposed more of 100 nos in within 7.5m of statutory barrier instead of 20 & survival should be about 80%.
- 29. Page-37-42, The plantation proposal should be given in "others" column instead of left blank column.
- 30. Page-45, 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 & adjoining lease common boundary pillars, mineral stack

- is not updated. Further BP co-ordinates are not given as per DLR map. Re-survey the area & submitted. Surface plan should be signed by surveyor.
- 2. **Surface Geological Plan:** The BP co-ordinates reconcile with DLR map & corrected. The existing pit, trenches with mRL, proposed core boreholes in corner of lease etc should be given. The geological axis of G1/G2 level of area is not marked. Statutory barrier of power line, road is not shown.
- 3. **Production & Development Plan**: Plate name need to be given "Production & Development Plan Instead of 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. Statutory barrier of power line, road is not shown & proposal needs to be given outside statutory barrier.
- 4. **Environment Plan:** 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 "Progressive Mine Closure 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/trenches with dimension, location, Boundary Pillars with no; Lat & Longitude, mRL etc. should be submitted.
- 3. Photo ID & contact details of both partner needs to be given.
- 4. Copy of resolution of partners of firm & signing authority needs to be given.
- 5. Latest few more chemical analyses of pit/trench samples from NABL should be submitted.
- 6. Quarterly monitoring of Air, Water, Noise, land etc. in last quarter has not been enclosed.
- 7. The copy of valid BG/Original BG of extended period of lease should be submitted.
- 8. 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.