Scrutiny comments on examination of Modified Mining Plan with Progressive Mine Closure Plan in respect of Bhod Limestone Mine, Survey No-358/3 over an area of 16.18 hectares in village- Bhod, Taluka-Ranavav, District –Porbandar, Gujarat State submitted by the Lessee Sh. Ahokbhai Babulalbhai Sindhav under rule 17(3) of MCR,2016 & 23 of MCDR 2017 for five years excavation proposals from 2017-18 to 2020-21.

- 1. Reference of MCDR, 1998 given in all the certificates, text report, annexure, etc. may be changed in view of recently notified MCDR, 2017.
- 2. Given 4 years period for proposed excavation from 2017-18 to 2020-14 for submission this document may be reviewed in view of previous approved MP for the period 2006-07 to 2010-11. The five-year block period shall be reckoned from original grant implementation from period of commencement of mine shall be 2016-17 to 2020-21. Out of which year 2016-17 has already been lapsed. Hence, the proposals are to be made for 4 years only i.e. from 2017-18 to 2020-21.
- 3. Mining lease was renewed in favour of Sh. Ashok Babulal Sindhav vide letter No-GP/ML/Renewal/928/994 dtd 12.10.2001 and lease deed was executed on 29.09.2001 for 20 years. All the documents are to be signed by Sh. Ashok Babulal Sindhav and his photo ID is to be enclosed.
- 4. Reference of MCDR, 1998 given in all the certificates, text report, annexure, etc. may be changed in view of recently notified MCDR, 2017.
- 5. All the supporting tables, figures, annexure furnished in the report are not properly numbered with appropriate nomenclature.
- 6. Projection marked outside the ML area shall not be considered for the approval of this document except the projections shown on Environmental plan.
- 7. Photographs of some of the mining lease pillars indicating the details of co-ordinations, mRLs, etc. may be given.
- 8. Final 3 copies of ROMP with PMCP and all required plans/sections should be given in single bounded text report manner to avoid misplacing of drawings and text report.
- 9. Cover page- Name of the mineral, Original lease period & extended ML period, Reference of Act given for extended period of lease, period of excavation proposals, etc, are not furnished.
- 10. **Introduction** Though this chapter is not part of standard guideline but in order to understand actual status of lease in chronological order, status of Mining lease since initial grant to till date, status of EC, CTE, CTO, status of another ML/PL held by the lessee, Status of renewal, etc are not furnished in correct manner.

11. General:

- a. First Mining lease renewal period effective from 18/04/1994 to 17/04/2014 and second renewal not obtained till date. Hence, extension of mining lease for 50 years as per MMDR Amendment Act, 2015 should be submitted else document shall not be considered for approval.
- b. Mining lease boundary pillars & its latitude-Longitudes not found as per the statutes as observed during the site inspection. Given GPS co-ordinates of BP are no more allowed and same should be furnished as per DGPS in view of CCOM circular 2/2010/MCR/2016.

12. Chapter-2: Location and Accessibility

Latitude & Longitude co-ordinates of Mining Lease boundary pillars have not been furnished in degree, minutes format. KML file of the lease is to be given in the soft copy while submitting final copies of MP, ownership of mining lease area as per Govt. revenue records is not given.

13. Chapter-3: Details of approved Mining Plan/Scheme of Mining:

- a. Details of different MP, MS either approved or not on account of initial grant of mining lease has not discussed. Review of MS/MP approved proposals Vs actual status in respect of exploration, excavation, reclamation & justification for deviation thereof are not given in correct manner. Proposed qty of ROM in Cum & tonnes are given incorrectly.
- b. Last mining plan was approved for the period 2005-06 to 2010-11. After that no further SOM was submitted and huge limestone production was carried out from 2011-12 to till date without having valid approved MP/ROMP. Necessary justification may be given in this regard.
- c. Para 3.5: Status of violations pointed out by the IBM and its final compliance status are not given though it is applicable as per the office records.

14. Part A: Geology & Exploration:

- a. Future exploration proposals need to be given as per the rule 12(3) of MCDR,2017 with an objective of bringing entire mineralized area under G1 category.
- b. As mentioned, area was explored by way of putting DTH drilled holes up to 10.60 mts. Details of such exploration have been given in text report completely and also not marked on Geological plans & sections. Necessary boreholes logs, its analysis, Intimation in Form-I need to be given to validate the same.
- c. Proposed exploration not planned in correct manner as no DTH holes have been proposed in virgin area whereas maximum DTH holes proposed in already excavated pits. Further, adequate nos. of trial pits or BHs in mineralised area may be proposed for ascertaining the mineral depth continuity below the present depth of the pits.
- d. Details of reserves as per the earlier approved MP/SOM given as on 11.07.2007 appears to be incorrect. Further, depletion of reserves with respect to huge production carried out in the past also not attended.
- e. Parameters considered for categorization of R&R under different geological axis, basis for awarding final UNFC codes, etc. are not given correctly & not supporting with ground reality. Entire reserves estimation is incorrect. Nowhere limestone is exposed up to 10.6 mts. Section given in Geological plan plate No-3 is arbitrary & imaginary.
- f. Additional Reserves & Resources estimations are not given in systematic manner. Basic parameters considered for reassessment of R&R not discussed in chronological order as per the UNFC & MEMC Rule, 2015.
- g. Page-9: Criteria given for estimation of category (111) reserves of 323618 tonnes & probable category (121/122) reserves of 152650 tonnes is not as per the UNFC & MEMC Rule, 2015.
- h. Estimation of reserves & resources without adequate exploration is not acceptable as per the provision of MEMC Rule, 2015. Further, given R&R calculations are completely incorrect.
- i. Thickness limestone 10.6 mts considered for estimation of Measured Mineral Resources (331) and 5.0 mts considered for estimation of Indicated Mineral Resources (332) are completely incorrect and imaginary.
- j. Imaginary assumption of probable reserves up to 5.0 mts. below proved depth of mineralisation and estimated reserves accordingly are not accepted as per provisions of MEMC Rules, 2015.
- k. Feasibility report is not prepared as per the guidelines as most of important aspects like proper justification for awarding UNFC codes, economic viability, are not discussed in correct manner.

15. Mining:

- a. Details furnished on present & proposed method of mining are completely incorrect as various facts & figures given in the text like proposed method of mining operation by "Manual method", mine not worked since lease sanctioned, ultimate slope of pit 16 deg, etc are completely incorrect. Hence, whole para need to redrafted.
- b. The annual production is targeted at the tune of 200000 tonnes per annum need to be reviewed in view of already exploited mineral & presently available mineable reserves. Such voluminous production is not feasible when most of the lease area already exploited.
- c. The details of existing pits and its dimensions have not been given. Further, depths of pits, bench configuration, etc. have not been marked correctly on relevant plans & sections. Updated survey of the whole ML areas appears to be incorrect and same need to be rectified.
- d. Year wise development & excavation planning is not given in correct manner as it not supported with proposed extents of ROM excavation in co-ordinates pattern, year wise total area to be excavated, no mRLs wise excavation proposal are given to achieve targeted production, etc.
- e. The actual production of limestone carried out from 01.04.2017 to till date of submission of final copies may be given separately and further production proposals for the remaining period need to be given separately.
- f. Under the extents of mechanisation, the details mining machineries to be deployed, its calculations for actual requirements are not given in the chapter.

- g. It was observed during the mine inspection that existing mining operation being carried out unsystematically. Undersized crusher material & ROM were stacked within mining lease area and it seem to be more than the production quantity reported in the return. It need to clarified with valid justification. The quantity of actual mineral stacked and closing stock to that extent should be discussed.
- h. It was also observed during the inspection that mine working is done outside the lease area as illegal mining. Efforts of lessee to report such illegal mining to concerned State Govt. authority is done or not should be discussed & copy of such correspondence may also be provided if any.
- i. Blasting parameters as furnished on the page no-14 appears to be incorrect and contradicting with given bench configurations.
- j. Page-19: Conceptual mine planning is not given as per the guideline because adequacy of further exploration, present land use pattern pit & quarries areas marked as "Nil", life of the mine, reclamation & rehabilitation aspects, conceptual land use pattern, etc. are not discussed in detailed & correct manner.

16. Chapter 4: Stacking of Mineral Rejects/Sub-grade Material & Disposal of Waste:

- a. Year wise generation of undersize limestone envisaged to about 15% of total proposed production of ROM per annum. But, the actual criteria set for generation of this undersized material is not discussed in detailed manner.
- b. It is mentioned that, undersized limestone mineral will be stacked inside pit floor on temporary basis but its actual proposed stack location neither discussed not marked.

17. Chapter 7: Use of Mineral and Mineral rejects

- a. Specifications given for limestone to be supplied to the soda ash industry are incorrect. Further, specification laid down by cement industry is also not given.
- b. Various facts given in the chapter reproduced as "individual block shows marginal variation quality based on DTH holes", "surface samples like R2O3", "No selling of mineral limestone is proposed" etc. appears to be incorrect.

18. Chapter 7: Use of Mineral and Mineral rejects

It is mentioned that, no beneficiation has been carried out whereas, one small crushed was installed within mining lease and undersized limestone material was generated & stacked near ML pillar No-07. But, this fact not discussed in the chapter. Give the complete flow chart of crusher plant.

19. Others, Page-27: Under the employment potential requirement skilled, semi-skilled persons and technical and non-technical persons are not given in detailed manner as per the prescribed rules.

20. Chapter: 8, PMCP

- a. Page-26: Land use pattern is given incorrectly. The same should be given at the start of plan period, at the end of plan period and also till the lease period.
- b. Impact assessment is not given as per the guidelines. Merely repetition of previous chapter's text is done.
- c. The given calculation for financial assurance is completely incorrect as area put to use at the start of plan period is mentioned as "Nil" despite of huge broken up area as on date. Hence, it is not accepted and complete reassessment of FA area should be carried out.
- d. Financial assurance for semi-mechanised mine calculated at the rate of Rs.3,00,000/per hectare for area put to use of 6.8743 hecatre amounting Rs.20,62,290 is completely incorrect & not accepted. Financial area should be assessed correctly based on the actual area put to use as on 01.04.17 and subsequent additional area requirement during plan period. Further, the copy of original bank guarantee of extended period for A category of mines should be submitted in final submission of this document. Efforts proposed for restoration of land degraded by mining operation have to be made.

Plates

- a. All the plans & sections are not prepared on prescribed scale.
- b. Plan & sections are not incorporated with updated survey details.

21. Key Plan:

Key plan is not submitted with all the information as required under Rule 32(5)(a) of MCDR, 2017 as Mining Lease not marked with boundary pillars co-ordinates, land use status including Govt. land, Pvt. Land, Forest land etc. not marked, wind rose diagram, village boundary, other ML area, village road, etc not marked.

- 22. Surface plan: Surface plan is not submitted with all the information/prominent features as required under Rule 32(5)(a) of MCDR, 2017 as Lat & long of the lease boundary pillars as marked found some deviations at site, existing pits & bench configuration with its mRLs, dimensions are not marked correctly, ML boundary pillars not georeferenced with fixed ground points, electric transmission line not marked correctly, stacking of ROM, undersized material also not shown, etc.
- 23. Surface geological plan & Sections: Geological plan is not submitted with all the information as required under Rule 32(5)(b) of MCDR, 1988 as ML area with level of exploration & Reserves category (111/121, 1211) as per MEMC Rule, 2015 not marked, strike, Dip of litho formation not marked, previous drilled DTH not marked on plan & sections, proposed exploration not marked correctly, sections are completely incorrect as depth of mineralisation marked on imaginary basis, sections lines incorrectly marked on plans, various prominent features as shown on plan but not marked over sections, ML boundary pillars co-ordinates missing.

24. Year wise working part plan

Area marked under proposed exaction in Sq.M. appears to be incorrect, in proposed excavation area most of the working pits area have already reached to 38 to 36mRL then how proposed production planning can be given from 41.74 to 32.94mRL, Production planning need to be given in view of available mineable reserves as on date, year wise plan is not depicting with proper approach to faces, ultimate depth of working, advancement direction not shown, ultimate pit limits not marked, UNFC category of R&R not marked, in section existing pits profile is not marked, sections not in natural scale.

- 25. Environment plan: The plan has not been prepared incorporating all details as per rule 32(5)(b) of MCDR'2017 as land use pattern within 500Mts zone are not marked distinctly, 60 mts zone area not marked, proposed plantation is incorrectly mentioned as at the end of life of mine, contour value 60m beyond the proposed ML area has not been prepared and all the surface features including human settlement, etc. not shown, monitoring stations, other MLs area with name of lessee falling within 500 m zone not marked.
- 26. Conceptual plan: Incorrect representation given for conceptual planning, no provision for bench wise access to lower benches has been shown, environmental protective work like fencing at ultimate stage is not marked, conceptual sections are not prepared correctly, proposed reclamation & rehabilitation area not marked correctly, ultimate pit limit not marked.
- 27. **Reclamation plan:** Para 8.3: the details of progressive mine closure plan is not depicted distinctly on plan. The year wise fencing, year wise plantation, Environmental monitoring stations, garland drains, etc. have not been shown properly.
- 28. **Financial Area Assurance Plan:** Exiting pit wise broken up area is not given, the plan may be given by showing year wise area broken up at the start of MP period & additional area requirement during proposed plan period, FA table as shown on plan is incorrect.

29 Annexure:

- a. Copy of approval letter for previous approved MP is not enclosed. Further, letter from concerned CGM, SG for extension of mining lease as per MMDR Amendment Act,2015 is not provided.
- b. Copy of Environment Clearance, CTE, CTO not enclosed.
- c. Specific gravity limestone mineral used for estimation of R&R from NABL accredited Lab is not enclosed
- d. Analysis reports of Limestone mineral, sub-grade undersize limestone minerals, etc have not been submitted.
- e. Cadastral map showing mining lease with DGPS co-ordinates of all BP as per the CCOM circular 02/2010/MCR/2016 duly authenticated by the CGM, SG need to be submitted for final approval of this document.
- f. Latest environmental Parameters monitoring/analysis reports for Air, Water & Noise as per the category of mine not enclosed.
- g. Drilled DTH Boreholes logs, sample analysis reports, Form-K, etc not submitted.
- h. Copy of original bank guarantee for extended period should be deposited in further submission for approval of this ROMP.
