Report cum scrutiny comments on examination of Modified Mining Plan with Progressive Mine Closure Plan in respect of Aniyari Limestone Mine, Survey No-20/P over an area of 2.00 hectares in village- Aniyari, Taluka- Ranavav, District –Porbandar, Gujarat State submitted by the Lessee Sh. Balubhai Lilabhai Keshwala under rule 17(3) of MCR,2016 & 23 of MCDR 2017 for existing Mining Lease for excavation proposals from 2017-18 to 2021-22.

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 5-year period for proposed excavation from 2017-18 to 2021-22 for submission this document may be reviewed in view of previous approved MS for the period 2004-05 to 2008-09. The five-year block period shall be reckoned from original grant implementation from period of commencement of mine shall be 2014-15 to 2018-19. Out of which year 2015-16 & 2016-17 have already been lapsed. Hence, the proposals are to be made for 2 years only i.e. from 2017-18 to 2018-19.
3. In this document, photographs of other ML have been shown on cover page of PMCP chapter which need to be avoided.
4. As per this office records, whole mining operations in this mining lease was suspended vide IBM letter No San.Guj/Chu. Pa-246 dtd20.02.2010 for the violations of rules 12(2), 13(1), 23(a), 23(F) & 45(1)(a) of MCDR, 1988 and subsequently termination of this ML was recommended to the State Govt. vide letter No-Guj/Por/Chuna Pathhar-246 dtd 10.03.2011. After that, lessee has not made any application to revoke suspension of this mine. In this regard, necessary letter from State Govt. stating that, this ML is still alive and not terminated till date may submitted to this office in final submission else this document shall not be considered for approval.
5. While examining the document, it is observed that, various incorrect statement/declaration/narrations have been made regarding exploration of ML area, depth of mineralisation in the ML area, proposed method of mining by manual, etc. which need to be avoided in further submission.
6. Submission of this draft document for Modified Mining Plan with PMCP under the Rule 17(3) of MCR,2016 is incorrect and same may be submitted for Review & up-dation of Mining Plan with PMCP in view of previous approved SOM for the period 2004-05 to 2008-09.
7. Projection marked outside the ML area shall not be considered for the approval of this document except the projections shown on Environmental plan.
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 ML etc. are not furnished. Further, period of excavation proposals, document submitted for Modified MP with PMCP are also incorrect & need to be reviewed.
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 need to be furnished in correct manner. Detailed grant history of ML is not given correctly in chronological order.
11. **General:**
    a. Mining lease is executed on 14.06.199 for a period of 30 years from 14.06.1999 to 13.06.2029 but in view MMDR Amendment Act, 2015, extended 50 years lease period of this mine would be 13.06.2049. Hence, extension of mining lease period for 50 years as per MMDR Amendment Act, 2015 should be submitted.
    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**
    a. 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 in detailed manner. Give the details of all approved document on last occasion.
    b. 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. Further, actual work done during approved plan period to till the submission of this document not furnished.
    c. Last Scheme of Mining was approved for the period 2004-05 to 2008-09. After that no further MP/SOM was submitted. Necessary justification may be given in this regard.
    d. Para 3.5: Under the para, it is mentioned that "No violation pointed out by IBM" whereas IBM had pointed out serious violation vide letter no. San Guj/Por/chu Pa-246 dtd 23.12.2009 and due to non-compliance, mine was suspended vide letter no Guj/Por/Chuna Pathhar-246 dtd 10.03.2011. But, these facts have not been discussed.

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. Under proposed exploration 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.
    c. Details of reserves position as per the earlier approved MP/SOM given as on 11.07.2007 appears to be incorrect with respect to last approved document for the period 2004-09 to 2008-09. Further, depletion of reserves for production of limestone carried out in the past is also not attended.
    d. 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 7.0mts. Section given in Geological plan plate No-3 is arbitrary & imaginary.
    e. Reserves & Resource estimation with respect to cut of grade & threshold value of limestone is not discussed as per the IBM circular 2009 i.e. CaO- 34% (min) & MgO%-4(Max.).
    f. Page-9,10: Criteria given for estimation of category (111) reserves of 129120 tonnes & probable category (121/122) reserves of 96840 tonnes is not as per the UNFC & MEMC Rule,2015. Assumption for considering the whole mining lease area under mineralisation of 7mts and subsequent its calculations given without adequate exploration are completely incorrect and not accepted.
    g. Additional reserves & resources may be carried out based on only already excavated pits area up to proved depth of mineralisation in pits. No extrapolation is allowed as per MEMC Rule,2015.
    h. Imaginary assumption of probable reserves up to 3.0 mts. below proved depth of mineralisation and estimated reserves accordingly are not accepted as per provisions of MEMC Rules, 2015.
    i. As whole, reserves & resources estimation in this chapter not accepted at all and whole chapter need to be redrafted. Reserves estimation may be carried considering already excavated pit & maximum depth of mineralisation proved in it. Proper UNFC & MEMC Rule 2015 need to be followed in true spirit.
    j. 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. Existing or previous method of mining operation not discussed at all. Further, proposed method of mining are completely incorrect as various facts & figures given in the text like proposed method of mining operation by "Manual method", proposed height of bench, etc are completely incorrect.
    b. Method of mining operations is proposed by "Semi mechanised operations then why the bench height of 2.5m is proposed which may be applicable in case of manual mining only.
    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. The annual production is targeted at the tune of 22896 tonnes per annum need to be reviewed in view of already exploited mineral & presently available mineable reserves.

e. Page-14: 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. Further, mRL level projections given from 28.33mRL to 32.33mRL appears to be incorrect.

f. The actual production of ROM limestone carried out since opening of mine 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.

g. Under the extents of mechanisation, the details mining machineries to be deployed, its calculations for actual requirements are not given in the chapter.

h. Blasting parameters as furnished on the page no-14 appears to be incorrect and contradicting with given bench configurations.

i. Page-19: Conceptual mine planning is not given as per the guideline because adequacy of further exploration not discussed rather it is mentioned that lease has been fully explored, narration given in mine development may be checked, check the broken-up area as given in present land use pattern, proposed area to be broken-up at the end of mine is also not given correctly. Life of the mine, reclamation & rehabilitation aspects, conceptual land use pattern, etc. are also 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 10% 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. Specification given for limestone to be supplied to the soda ash industry are incorrect. Further, specification laid down by cement industry are 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. **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.

19. **Chapter: 8, PMCP**

a. Page-26: Land use pattern is given incorrectly as the broken-up area at the start of this MP appears incorrect. The same should be given at the start of plan period, at the end of plan period and till the lease period.

b. Impact assessment is not given as per the guidelines. Merely repetition of previous chapter's text is done. Subsequent remedial measure to mitigate environmental pollution may also be discussed in detail.

c. Under the item 8.3.5, details of protective measures as proposed in respect of afforestation (only 10 nos of saplings proposed), proposed barbed wire fencing of 104mts every year, environmental monitoring, etc may be checked in view of its actual implementation.

d. Financial assurance for semi-mechanised mine calculated at the rate of Rs.300000/per hectare for area put to use of 1.6191 hectare amounting Rs.485730/- may be checked thoroughly. 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.

e. As this is category A (Semi-mechanised mine) hence minimum FA of 10 lacks need to be deposited as per the rule 23 of MCDR, 2017. Further, the copy of original bank guarantee of extended period for A category of mines should be submitted in final submission of this document.

Plates : All the plans & sections are not prepared on prescribed scale. Plan & sections are not incorporated with updated survey details.

20. **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, surface features, etc not marked.

21. **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 not marked correctly, ML boundary pillars not georeferenced with fixed ground points, electric transmission line not marked correctly, mining operation are carried out under 7.5m statutory barrier, ML area not matching with actual grant area shown in cadastral map, road position not marked correctly, etc.

22. **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, sections are completely incorrect as depth of mineralisation marked on imaginary basis of 7.0m, trial pits as marked but not found during site inspection, lithology incorrectly marked in sections, proposed exploration marked incorrectly.

23. **Year wise working part plan:** Area marked under proposed exaction in Sq.M. appears to be incorrect, Production planning need to be given in view of available mineable reserves as on date, year wise production plan is not depicting with proper approach to faces, ultimate depth of working, advancement direction, etc., ultimate pit limits not marked, UNFC category of R&R not marked, in section existing pits profile of pit is not marked, sections not in natural scale.

24. **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, 60m zone not marked, monitoring stations, other MLs area with name of lessee falling within 500 m zone not marked, wind direction not marked, etc.

25. **Conceptual plan:** No provision for bench wise access to lower benches has been shown, environmental protective measure not marked prominently, conceptual sections are not prepared correctly, proposed reclamation & rehabilitation area not marked correctly, ultimate pit limit not marked, temporary stacks of undersize limestone marked till conceptual period.

26. **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.

27. **Financial Area Assurance Plan:** Exiting pits are not shown & its broken up area are 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 may be checked thoroughly.

28. **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. 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.
    c. Copy of Environment Clearance, CTE, CTO not enclosed.
    d. Specific gravity limestone mineral used for estimation of R&R from NABL accredited Lab is not enclosed
    e. Analysis reports of Limestone mineral, sub-grade undersize limestone minerals, etc have not been submitted.
    f. Photo ID of lessee not enclosed.
    g. Latest environmental Parameters monitoring/analysis reports for Air, Water & Noise as per the category of mine not enclosed.
    h. Copy of original bank guarantee for extended period should be deposited in further submission for approval of this ROMP.

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