

Scrutiny comments on examination of Review of Mining Plan with Progressive Mine Closure Plan in respect of Ran Bauxite Mine, Survey No- 403, over an area of 5.2700 hectares in village- Ran, Taluka- Kalyanpur, District –Devbhumi Dwarka, Gujarat State submitted by Shri D.K. Raichura, Partner of M/s. Saurashtra Calcine Bauxite & Allied Industries under rule 17(2) of MCR,2016 & 23 of MCDR 2017 for five years excavation proposals from 2018-19 to 2022-23.

1. Mining lease was executed on 19.04.1979 for a period of 20 years up to 18.04.1999 and last scheme of mining was approved for the period 2013-14 to 2017-18. Therefore, considering the subsequent block period, the submission of this Review of Mining Plan block period may be reviewed.
2. This draft Review of Mining Plan is submitted by the Partner Shri D.K. Raichura but resolution passed by all the Partners for authorising him to submit this document is not enclosed. Moreover, in registration of Firm, the name of Sh. D.K. Raichura is not mentioned. Further, copy of partnership deed which is in Gujarati language may be provided in English language for easy understanding.
3. 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.
4. **Cover page-** Excavation proposals wrongly mentioned as “mining plan” which need to be rectified, given excavation proposals may be reviewed in view of previous execution of mining lease period. Further, extended ML period with reference of MMDR Amendment Act, 2015 is not given, mine code is also not mentioned correctly.
5. **Introduction-** Mining lease grant details not given in chronological order and in detailed manner, Environmental Clearance details not furnished with all facts, CTO & CTE details not furnished. Other ML/PL held by the lessee not furnished. Further, broad gauge railway line is passing along the ML boundary but it is not discussed.
6. **General:** a) Mining lease executed on 19.04.1979 and extended mining lease period would be till 31.03.2030 as per the MMDR Amendment Act,2015. Hence, extension of mining lease period for 50 years from the date of execution as per MMDR Amendment Act, 2015 should be submitted else document shall not be considered for approval. b) Updated & current list of partners may be provided. Further, it has mentioned that, Shri D. K. Raichura is having power of attorney which is not acceptable and resolution passed by the entire partner in this regard may be provided. c) 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.
7. **Chapter-2: Location and Accessibility:** a) Total mining lease area of 5.27 Ha mentioned as Govt. land, necessary revenue details such as 7/12, land schedule including details of land may be provided. Further, extents of ML in the form of co-ordinates, details of topo-sheet no. etc. are not furnished. b) Enclosed cadastral map along with latitude & longitude of ML boundary pillars marked & duly authenticated by competent State Govt. authority is not accepted without date of signing the map.
8. **Chapter-3: Details of approved Mining Plan/Scheme of Mining:** a) Date and reference of earlier approved MP/SOM not given in detailed manner since execution of mining lease. Further period of approved document not given in correct manner. b) Review of approved proposals Vs actual status in respect of exploration, reason for deviation in less production, year wise waste generation & reason for deviation in less reclamation compare to the proposed reclamation is not given. Further, details of locations from where a production is achieved are also not given. c) The existence of various mineral stocks available in the field appears to be more as compare to the closing stocks quantity reported in statutory returns, it needs to be justified. d) The copies of violations, show cause notices issued by IBM/MMS Nagpur & its compliance positions should be given clearly with necessary supporting documents.
9. **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. Details of previous exploration carried out by the lessee including intimation to IBM, sample analysis report, details on commencement and completion of exploration activities, etc. should be furnished.
  - c. Proposed exploration programme is not given correctly as very limited exploratory trial pits have been proposed which is not meeting the criteria of rule 12(3) of MCDR,2017 with an objective of bringing entire mineralized area under G1 category.
  - d. The cut grade and threshold value of bauxite should be discussed as per the IBM circular 2009, (Al<sub>2</sub>O<sub>3</sub>- 30% (Min) and Silica (reactive) – 5% (max)). Further, copy of chemical analysis report of

bauxite/intercalated waste/mineral rejects/metallurgical grade of bauxite, etc. may also be submitted from NABL accredited laboratory.

- e. The whole ML area placed under proved category (III) without adequate exploration is not acceptable. As per MEMC Rules, 2015 for G1 level the depth continuity of mineralisation may be considered limited to the depth upto which direct evidence of mineralisation is established. For lateral extension of mineralisation should also be considered as per the provisions of MEMC Rules,2015.
- f. Reserves & resource estimated as per last approved SOM and subsequent depletion of reserves & remaining Reserves position as on date is not furnished.
- g. Recovery of 25% as high grade (Abrasive & Refractory) grade and rest 75% as low non plant grade have been proposed while calculating R&R which need to valid justification and also given the recovery for the same in last approved plan period.
- h. Detailed calculation of reserves/resource estimation considering UNFC classification, MEMC Rules, 2015 should be given. Basic parameters like depth of mineralisation, bulk density of bauxite, various statutory barriers, avg. quality of each blocks, etc. need to be addressed suitably in R&R estimation.
- i. Whole exercise of re-estimation of reserves & resources need to reviewed in term of assigning UNFC codes, how much lateral extension of mineralisation to be considered, status of present exploration, proved depth of mineralisation, etc. need to considered very thoroughly. Further, total area under G1 level of exploration is also not mentioned.
- j. Feasibility report is not prepared as per the guidelines as most of important aspects like proper justification for awarding UNFC codes are not discussed in correct manner. Further, grades of established reserves also not furnished.

**10. Mining:**

- a. The existing pit dimensions have not correctly as the depths of the pits have not been mentioned. Further, top & bottom mRLs of pits also not furnished. Further, proposed method of working not given in detailed manner as the same not supported with description of haul road, mines working shifts, regarding deployment of mining machineries, etc.
- b. Broad gauge railway line is passing all along the ML boundary and necessary statutory barrier has to be left from such permanent structure. But, this same has neither discussed nor exercised.
- c. When mining operation has been proposed by formation of single bench as depth of mineralization is restricted /proved up to 4.5m only then how the bench width is proposed as 10mts. Justify the same.
- d. In proposed planning, it mentioned about recovery of 95% bauxite which appears to be unrealistic and need to be justified suitably. Further, at the same time production of 25% high grade & 75% low grade production which is conflicting with above narration. Moreover, constraints in achieving the same like generation mineral rejects in manual sorting, geological formation, etc. need to be thought of.
- e. Under proposed year wise excavation planning blocks extents proposed under excavation not mentioned in term of co-ordinates pattern. Further, mRLs wise proposed production is completely missing.
- f. Proposed area/avg. production target at the tune of 60000 MT/Annum should be by ascertaining the true potential area and available mineable reserves.
- g. Adequacy of man and machinery, detailed calculations and its capacity not discussed. Further, it should be clarified that HEMM used/proposed is own, hired or contractual basis with necessary supporting documents.
- h. Page-23-24: Conceptual mine planning is not given as per the guideline because adequacy of further exploration, present land use pattern, reclamation & rehabilitation aspects, conceptual land use pattern, post mining land use, anticipated generation of waste, ROM at conceptual stage, etc. are not given.

11. **Chapter 4: Mine Drainage:** Source of information for reporting minimum & maximum water level in the ML area not mentioned, location details for maximum & minimum depth of working not mentioned. Annual rainfall details not given in detailed manner.

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

- a. Quantity furnished under mineral storage appears to be incorrect w.r.t. previous narration. Further, detailed location for proposed dumping mineral reject is not discussed.

**13. Chapter 5: Use of Mineral and Mineral rejects**

- a. Specification of buyers for high grade & low grade shown here is generalized, the same should be specific to this mine/lease only. Further, details of plant locations its capacity, quality of ROM required, etc. not furnished.
14. **Chapter: 8, PMCP**
- a. Page-33: The existing land use pattern appears to be incorrect & same should be updated as on 01.04.2017 & further plan period 31.03.2023.
  - b. Para-8.2, Page-35: Impact assessment to cater various environmental polluting parameters not discussed in detailed manner & necessary remedial measures, environmental monitoring schedule, have not been discussed. Further, no blasting & drilling is proposed but under para 8.2(V) details of vibration level is given which is not applicable.
  - c. Under afforestation programme 20 saplings proposed to be planted per year during plan period appears to be incorrect and at least 100 to 150 saplings need to be proposed per annum considering less survival rate in the area.
  - d. Page-38-41: year wise area proposed under rehabilitation by making water reservoir seems to be incorrect. The same need to be justified correctly. Further, proposals of barbed fencing, environmental monitoring proposals, etc. are not given.
  - e. Area put on use at start of plan & additional area required during plan period appears to be incorrect and same should be updated on 01.04.2017 & further plan period up to 31.03.2023. Financial area should be assessed correctly based on the actual area put to use as on date 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.

#### Plates

15. **Key Plan:** Plan is not submitted with all the information as required under Rule 32(5)(a) of MCDR, 2017 as land use status including Govt. land, Pvt. Land, Forest land etc. not marked, village boundary, other ML area, village road, etc. should be shown by different colour code. High Tension power transmission line not marked distinctly.
16. **Surface plan:** Existing Pits numbers/nomenclature has not been given, Existing pit along Northern side have not been assigned with its different benching mRLs, Statutory barrier all along HTL have not been marked, ML boundary pillars have not been geo-referenced with permanent ground features, various mineral stacks as observed during site inspections have not been marked, working as marked under 7.5m statutory barrier need to be justified.
17. **Surface geological plan & Sections:** ML area with level of exploration & Reserves category (III/211) as per MEMC Rule,2015 not marked correctly, proposed exploration not marked correctly in grid pattern, lithology of the area not marked correctly throughout the ML area, strike/dip of litho-units not shown, explorations pits have not been incorporated in section, various prominent features as shown on plan but not marked over sections.
18. **Year wise working part plan :** Area marked under proposed excavation in Sq.M. appears to be incorrect, Proposed production should be given considering actual pits positions, virgin area, etc., proposed mines haul road projection appears to be incorrect, proposed mineral and waste stacking with its locations not marked, ultimate depth of working, ultimate pit limits, advancement direction, etc. should be shown prominently, plan should be updated/modified based on latest survey work, year wise sections on same scales have not been provided.
19. **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, proposed afforestation/plantation not shown, surface features including human settlement, etc. not shown, monitoring stations in core & buffer zone not marked correctly, other MLs area with its lessee name not mentioned.
20. **Conceptual plan:** Incorrect representation given for conceptual planning as no provision for bench wise access to lower benches has been shown, proposed reclamation & rehabilitation area not marked correctly as various waste dumps have been marked within proposed water logged pits at conceptual stage.
21. **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, mine water discharge arrangements, etc. have not been shown. Some ML area along southern part not taken into consideration under conceptual planning.

22. **Financial Area Assurance Plan:** Existing pit broken area and subsequent 5 years area proposed under excavation planning not furnished in hectares, block wise area already reclaimed & rehabilitated also to be mentioned & highlight in hectare, the plan may be given by showing year wise area broken up at the start of MP period i.e. 01.04.2017 & additional area requirement during proposed plan period up to 31.03.2023, FA table should also be shown on plan.
23. **Annexure:**
- a. Copy of resolution passed by all the Partners for authorising him to submit this document is not enclosed. Further, copy of partnership deed which is in Gujarati language also not provided in English language.
  - b. The latest chemical analysis reports of Bauxite ore/mineral rejects/waste etc. should be submitted from an NABL accredited laboratory.
  - c. Copy of coloured field photographs showing present mine workings, lease boundary pillars with its nomenclature should be given.
  - d. Copy valid environmental Clearance is not enclosed.
  - e. List of all existing mining leases with all relevant details is not provided.
  - f. Land schedule indicating the type of land either private or Govt. with other details has not been provided.
  - g. Cadastral map showing granted ML area and its boundary pillars DGPS co-ordinates duly authenticated by concerned SG authority need to be submitted in final submission.
  - h. Exploratory prospecting pits samples analysis report has not been submitted.
  - i. Copy of field photographs of trial pits/borehole logs with signature of geologist should be submitted in further submission.
  - j. The copy of adequate experience certificate of technical person who has prepared this document should be submitted in further submission.
  - k. Copy of original bank guarantee for extended period should be deposited in further submission for approval of this ROMP.

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