

Scrutiny comments in respect of Mevasa Bxt mine, M.L./Sy.No.-214 over an area of 3.5815Ha, non-forest land, A-category mine, situated in Mevasa-village of Kalyanpur-Taluka, Devbhumi Dwarka-Distt. of Gujarat-State for approval of Review of mining Plan under rule 17(2) of MCR,2016 for approval period 2018-19 to 2022-23 of M/s Saurashtra Calcine Bauxite and Allied Industries.

Cover Page- The expiry of lease period should be given as per MMDR amendment Act 2015. The copy of extension of lease period should be submitted in further submission.

Introduction- The brief history of mine is not discussed from first grant of mining lease, and subsequent approval of MP/SOM/Modification with period of approval etc. The copy of Environment Clearance /Consent to Air & Water etc should be discussed & submitted till date.

General-Page-3, The lessee is partnership firm, therefore copy of resolution of board of directors for nominated owner/authorised signatory should be enclosed. Power of Attorney of Shri D.K.Raichura is not accepted.

Location & Accessibility:-The type of land & ownership details of lease area should be given based on Govt. revenue record in tabular form. The copy of land revenue details should be enclosed.

Details of approved mining plan/scheme of mining-i) The ROM production, OB/Development, exploration, plantation done etc. should be discussed with location, top & bottom RL, area/tonnage & grade instead of general location/bench. The excess ROM production reported for the year 2016-17 should be discussed with valid supporting documents. The past year of exploration, location & depth of trial pits, agency etc. should be discussed here in chapter (page-10). The total bauxite ROM production achieved till date & estimation of reserves as per lease area of 3.5815Ha of average thickness of ore body of 4.5m is $(3.58 \times 10000 \times 4.5 \times 2.2 = 402918T)$ should be discussed & justified. It was observed during inspection that excavation of mine workings done within 7.5m of statutory barrier or outside the lease area near BP-6, 9, 3&4 etc. It was observed during inspection that total quantity of mineral rejects/subgrade stacked is within & outside the lease area which is more than as reported in periodic returns. It should be discussed with justification.

Para-3.4- It should also be discussed in brief regarding violation issued & compliances reported along with supporting documents.

The feasibility report should be discussed with latest economic parameters, IRR, viability of project etc. in conclusion.

Geology-(a) The reserves & resources estimated in earlier approved mining plan & depletion of production achieved till date should also be discussed. (b) The reserves & resources should be re-estimated as per MEMC rules 2015, where no extrapolation/influence of extreme borehole is allowed in lateral extension & depth wise, below pit/hole depth. (c) The reserves & resources blocked in statutory barrier of 7.5m /power line/road/nalla etc. should be given. (d) The detail calculation of reserves & resources as on date, based upon trial pits/existing pits; Avg. bulk density etc. should be discussed. (e) The part of lease area is still devoid of exploration, therefore sufficient number of exploratory core borehole should be proposed in extreme boundary of lease area/existing pit also as per MEMC Rule, 2015. All Geological reserves/ Block able reserves calculation & Year-wise production & development calculation tables should be annexed. The cut-off grade & threshold value of bauxite mineral should be discussed as per IBM circular 2009. {Bauxite-Al₂O₃-30 % (Min) and silica (reactive) 5% (Max) & for aluminous laterite: Al₂O₃, 20 % (Min)}.The above threshold & below cut off grade should be consider as mineral rejects. The presence of silica content in bauxite more than 5% should be considered as waste. The copy of borehole logs/trenches & chemical analysis report of limestone/intercalated waste/mineral rejects etc. should be submitted from an NABL accredited Laboratory duly signed by authorized person with date & place.

Mining:-The existing pit dimension along with no of benches, top & bottom RL etc., in tabular form should be given as on 01.4.2017 or till date. Page-18, The production table should be given in tonnage also. The term "mineral waste" at table page-18, should be replaced as "mineral rejects". The stripping ratio should be corrected as zero, since No OB generated. It needs correction. The

above threshold value & below cut-off grade should be given as mineral rejects. It was observed during inspection that mining operation done unsystematically & so many ROM/mineral rejects stacks developed & formed in lease area & it seem to be more than production quantity as reported in returns. It needs clarification with valid reason. The quantity of actual mineral stacks available in mine & closing stock shown in returns should be discussed & justified with supporting documents. The mine workings done outside the lease area, as illegal mining should be discussed & justified with valid reason.

Page-22, The adequacy of man & machinery & their capacity should be discussed & justified. It should be clarified whether HEMM proposed/used is own/hired/contract etc. with supporting documents.

The mining proposal in present plan period & conceptual period should be discussed properly as shown in plan & sections. The land used details should be discussed as on 01.4.2018 & plan period up to 31.3.2023 & up to lease period/conceptual period. Page-27, The term mineralised waste is incorrect, it should be deleted. Pare-7.0, the quantity of mineral rejects generation shown but their utilisation is not discussed properly. It was observed during inspection that large quantity of mineral rejects/low grade stacked in lease area, it should be shown properly with grade of stacks etc.

Page-31, The organisation chart as per MMR, 1961 & MCDR, 2017 is not given. Page-32, 34 PMCP: - Land use pattern should be mentioned as on date or 01.4.2018 and plan period up to 31.3.2023 and lease period. Page-35-table, The term "Overburden/dumping/mineral stack shown in same column is incorrect". It needs correction. The environmental monitoring results should be given in tabular form in text also. The existing as well as proposed environmental protective measures should also be given in tabular form with latest analysis results.

Page-43, financial assurance: It was observed during inspection that entire lease area is utilising for mining & other allied activities with in 7.5m of statutory barrier also. It needs correction. Land use pattern should be mentioned as on 01.4.2018 and plan period up to 31.3.2023. The copy of original valid bank guarantee of extended period for the A-category mine should be submitted in further submission in the form of Annexure. All plan and section, text & tables should be modified based on above scrutiny.

During the pendency of approval, if there is any change in the name / address / ownership of mining lease, it should be informed promptly. All plan and section, text & tables should be modified based on above scrutiny.

1. **Lease Plan:** It should be translated in English & DGPS coordinates of boundary pillar with numbers, latitude; longitude duly authenticated by CGM should be enclosed.
2. **Key Plan:** Lease area should be bounded by all sides showing latitudes and longitudes of extreme boundary points. Land use status i.e. Govt. land, private land & forest land, wind rose diagram etc must be shown by different colour code.
3. **Surface Plan:** The boundary pillar number with latitude, longitude as per state CGM, water nallah, pit benches, mineral stacks i.e. ROM, OB, Mineral rejects etc. is not shown correctly. The statutory barrier of 7.5m, power line, road, nallah etc. should be shown & leaving barrier as per provision of MCR, 2016. The surface plan should be signed & certified by mine surveyor/mine manager with date & place.
4. **Surface Geological Plan & sections:** The existing/proposed exploratory core boreholes/trenches is not shown correctly as discussed in text. All sections should show contact with host rock at bottom or maximum possible mineral thickness based on GSI/DMG data.

5. **Production & Development plan& sections:** The plan & section should be updated & modified year wise instead of composite plan. The year wise proposal should be shown properly with benches, top & bottom RL & area etc. The protective measures, approach roads to working pits etc. should be proposed & shown properly. The year wise proposal should be modified in pit wise in UPL/G1&G2 area as per MEMC Rule,2015. The area & location of waste dumping should be shown correctly. The conceptual plan should be updated & showing five year block up to life of mine.
6. **Conceptual Plan:** The pit position of mine at conceptual stage of tentative mining should be shown in conceptual plan with showing plan & block period of mining with levels as given in existing & proposed land used details.
7. **Reclamation Plan-**Existing & proposed afforestation is not shown properly in plan. Garland drain, retaining wall, rain water management and mine water discharge system is not shown in this plan.
8. **Environment Plan:** The plate is not prepared as per MCDR 2017 to show other details population, village boundary, types of land& features in 60m & 500 area etc.
9. **Financial Assurance Area Plan-**The break-up of mine land area in plan should be given as discussed in table & text. Land use pattern should be mentioned as on 01.4.2018 and subsequent plan period up to 31.3.2023.

Plan & sections:

Annexure:

1. All supporting documents of mining plan & subsequent scheme of mining, modification approval letters, state DMG letter for deemed extension of mining lease as per MMDR Act,2015, Leas plan duly authenticated by CGM, State Govt should be submitted in further submission. The other annexure/copy in Gujarati should be translated in either English or Hindi should be enclosed.
2. The copy of resolution of board of directors & nominated owner/signing authority should be submitted in further submission.
3. The copy of field photographs of trail pits/core boreholes, form K & L, borehole logs etc. with with sign of geologist should be given in further submission.
4. The latest chemical analysis report of ore/mineral rejects etc. should be submitted from an NABL accredited Laboratory.
5. Field photographs of present mine workings, corner boundary pillars with number, RL, latitude and longitude marked on it etc. should be submitted.
6. Latest quarterly monitoring report on air, water & noise should be enclosed as per category of the mine for last 2-3 quarters.
7. The copy of corrected original valid BG of extended period should be submitted in the form of annexure.
