

Scrutiny comments in respect of Mothala Balachod Bauxite Mine, area-280.76Ha, M.L/Sy.No.336-338 & 246-248 various, non-forest, A- category, situated in Mothala & Balachod-villages, Abdasa-Taluka, Kuchh-Distt. Of Gujarat-State for approval of Review of Mining Plan under Rule 17(2) of MCR, 2016 for five year block period 2016-17 to 2020-21 & the approval period of 2018-19 to 2020-21.(11.6.2056)

The draft RMP should be modified in IBM manual on Appraisal of Mining Plan, 2014 format & entire para, table & text should be discussed with supporting documents. The plan & section, relevant annexures as per guidelines should be modified.

Cover page- The term "scheme of mining" should be replaced as "Review of Mining Plan". The type of land & five year block & approval period should be given.

Page-2, Certificate/Undertaking- It would be desirable to give single certificate instead of multiple certificates as per IBM manual for appraisal of mining plan 2014.

Page-3, The yearly proposed ROM production quantity shown as 51500T, whereas EC capacity is 42000T, It needs to be justification. The quality/grade of mineral rejects should be given. The above threshold value & below cutoff grade should be given as mineral rejects. It was observed during inspection that entire ROM is utilizing by proper sizing, sorting & blending of mineral. Therefore it needs correction.

Page-5, Introduction-The legible copy of first grant of lease deed & actual date of grant should be discussed & corrected. The expiry of lease should be given 50 years from first grant as per MMDR Amendment Act 2015. The incorrect date of grant & execution should be corrected. It should be discussed the five year approval period of MP/RMP etc. & lapsing of period should be discussed with valid reason. The MCDR 88 should be replaced as MCDR 2017.

Page-8, The expiry of lease period should be corrected 50 years from first grant of lease as per provision of "The mineral (mining by Govt. Company) Rules 2015" It needs correction. Para-3.9, any prominent surface feature nearby area should be given.

Page-11, Review of mining plan: -(a) It should be discussed the five year approval period of MP/RMP etc. & lapsing of period should be discussed with valid reason.(b) The copy of form-J & K, borehole logs, analysis etc. of exploratory borehole done from 2013-14 to 2017-18 should be given with field photograph etc. Page-14, the location of development proposal & ROM production proposal & actual should be given. The (\pm) deviation should be justified. Reasons for not carrying out backfilling is to be given. Page-17, The present land used details should be reconcile & corrected. Page-18, copy of violation & their reply should be submitted in the form of annexure. The copy of violation & show-cause letter & reply should be enclosed in the form of annexure with discussed in respective para.

The feasibility report should be suitably linked to the reserves estimated with latest economic parameters and it should be discussed regarding viability of project with conclusion. The intrinsic cash flow of project should be given in tabular form.

Geology:- Page-20-44,(a)The copy of few more chemical analysis report of bauxite/intercalated waste/mineral rejects (Block-A,B &C, borehole logs duly signed & date etc. should be submitted in further submission. (b) The re-estimate the reserves & resources as per provision of MEMC Rule15 in block wise, since additional exploration have been carried out from 2013-14 to 2017-18. The AMB-1,12,17,31 is mentioned as barren, the Litho units encountered in the boreholes should be mentioned. (c) The remaining lease area should be proposed exploratory hole/pits as per MEMC rule, 2015 /IBM Manual in block-C & block-A&B in any. (d) The net available reserves either (\pm) from last approved RMP should be discussed & justified. The bulk density and recovery factor should be taken based on the test conducted.

Mining- Page-45 (a) Existing dimension of pits with top & bottom RL, area etc. should be given in tabular form. (b) Page-51, The proposed year of production & development should be financial year wise instead of I-II-III-IV-V & different Block wise (A, B & C) should be given. (c) Page-52, stripping ratio & proposed ROM production calculation incorrect. (d) It was observed during inspection that there were negligible OB generated & entire ROM is salable, therefore entire production & development calculation should be modified. (e) The present method of mining is being done by Rock-breaker & excavator-tipper combination without primary deep hole drilling & blasting proposal. Only secondary J/H drilling & blasting, as & when require, may be proposed. It needs correction & modification in relevant pages. (f) Page-47-49, The adequacy of man & machinery, calculation & their capacity should be discussed & justified.

It needs correction. (g) It was observed during inspection that mining operation done unsystematically & so many pits of irregular bench height developed & formed in lease area. Same should be proposed for regular benches & level of the area in PMCP. The copy of scientific study/case study of mine, if any & report thereof should be discussed & submitted in the form of annexure.

Conceptual mining- conceptual mining proposal should be discussed & given five year block wise up to lease period of up to 11.6.2056 respectively.

PMCP-Page-68, (a) The land used details should be given block wise in different table & a summary of area should be given in tabular form. (b) Page-73, tables(14.3.7) should be given & proposed year wise protective measures of plantation on reclaimed area, instead of shown on dump area, which is incorrect. It needs correction. (c) A comprehensive proposal for restoration/rehabilitation of mined out land is to be given. The year wise afforestation/plantation as per MOEF&CC guideline should be proposed with in lease area only & within 7.5m statutory barrier/non-mineralized zone with suitable protective measures/water arrangement should be proposed. Location of different monitoring stations as per IBM/MOEF guidelines and frequency of monitoring should be discussed in text in tabular form.

08. Financial assurance, Page-76, -(a) It should be reconcile & furnish the break-up of entire degraded land block wise & summary of land degradation should be given. (b) The copy of original valid bank guarantee for extended period of five years for the A-others category mine as per provision of MCDR, 2017 should be submitted to IBM Gandhinagar Regional office. (Minimum 10Lakh)

All plan and section, text & tables should be modified based on above scrutiny. The entire document should be modified as per above scrutiny & appraisal of mining plan 2014 format & guidelines.

Plan & sections: -

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, population of nearby village etc must be shown by different colour code.

Surface Plan: The relaxation of scale from CCOM office should be acquire & submitted. There is no need to show the section in surface plan, only geological plan & section should be given. The index & legend should be modified & effectively shown with different colour code. The boundary pillar numbers with latitude, longitude as per state CGM, OB/ROM stacks/mineral rejects should be effectively shown. The statutory barrier of 7.5m, electric power line, public road, nallah etc. should be shown & leaving barrier as per provision of MCR, 1960. The surface plan should be signed & certified by mine surveyor /mine manager with date & place

Surface Geological Plan & sections: The existing/proposed exploratory core boreholes, mine pits with G1, G2, and G3 level of exploration should be judicially shown. The Collar level of drilled borehole & field RL of hole should be reconcile & corrected. All sections should show contact with host rock at bottom or maximum possible mineral thickness based on GSI/DMG data.

Production & Development plan& sections: The plan & section should be given financial year wise instead of composite plan & updated & modified as per above scrutiny. The protective measures, approach roads to working pits etc. should be proposed & shown properly. The year wise proposal should be modified block wise, pit wise in G1&G2 level of exploration only. The non-mineralized area of all negative boreholes should be proposed for plantation/afforestation. Presently 11Ha area is degraded, new proposal for its restoration is to be made.

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.

Reclamation Plan-Existing & suggested proposed afforestation should be shown properly with retaining wall, water harvesting pits & fencing.

Financial Assurance Area Plan- The break-up of mine land area in plan should be reconcile & details given in table & text.

Annexure:

1. All supporting documents in legible form, from first grant of lease to till date, Mining plan & subsequent scheme of mining approval should be given in chronological order. The copy of lease deed with full pages along with lease plan should be enclosed.
2. The copy of scale relaxation permission from CCOM IBM should be submitted in further submission.
3. Field photographs of mine workings, lease boundary pillars with number, RL, latitude and longitude as provision of MCR, 2016 should be submitted.
4. The copy of field photographs of holes, form K & L, borehole logs etc. with date of commencement & completion with sign of geologist should be given in further submission.
5. Latest Quarterly monitoring report on air, water & noise is not enclosed as per category of the mine for duly signed with date & place.
6. All Geological reserves/ Blockable reserves calculation & Year-wise production & development calculation tables should be annexed with relevant chapter / text of document.
7. The copy of original valid BG of extended period should be submitted in the form of annexure.
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.
