

Scrutiny comments in respect of Naredi-II Bauxite Mine, area-66.97Ha, M.L/Sy.No. 445,446,483P various, non-forest, A- category, situated in Naredi-villages, Abdasa-Taluka, Kuchh-Distt. Of Gujarat-State for approval of Review of Mining Plan under Rule 17(2) of MCR, 2016.

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

Cover page- The term "scheme of mining" & should be replaced as "Review of Mining Plan". The name of lease "Naredi-II" should be corrected. The type of land & corrected five year of block & approval period should be given. The expiry of lease period should be corrected as date of first grant of mining lease instead of renewal. Reconcile & corrected. The renewal of mining lease was given from 25.6.1999 for 20years but nowhere is it specifically given the first grant of mining lease. Therefore expiry of mining lease should be 50years from first grant/max renewal period as per MMDR Amendment Act, 2015. It needs correction in all relevant pages.

Summary-Page-9, The EC is given common for both the leases i.e. Naredi-I& II is 225000T/annum, therefore year wise distribution of ROM production should be given accordingly. It needs correction. The year wise proposed plantation/afforestation should be given as per EC/SPCB condition instead of NIL proposals. It needs correction. It was observed & discussed during inspection that proposed area is devoid of OB/waste mostly & entire ROM is saleable & utilised by proper blending etc., therefore necessary correction may takes place in plan period.

Introductory page-11, The past brief history of mine should be discussed from first grant of mining lease & subsequent approval of mining plan & Scheme/Review of mining plan, working & non-working period, lapsing of approval period & given with supporting documents. The expiry of lease period should be corrected & modified from first grant/max renewal period. It needs correction. The valid reason for discontinuance of mining operation in past should be given.

Location & Accessibility: - Page-13, The expiry of lease period should be corrected 50 years from first grant as per MMDR Amendment Act, 2015 instead of renewal date. It needs correction in relevant pages. (b) The ownership right should be given as per form-I&IV/Govt. revenue records & should be translated & enclosed in further submission.

Review of mining plan :- (a) The chapter has not been reviewed & discussed properly from mining plan period to till date. (b) The five year period of approval of RMP dated 23.7.2004 & 14.2.2013 should be discussed & lapsing year of plan period in between should be reviewed & discussed. It was proposed to drill borehole of 25m depth each but drilling was carried out only up to 14m depth. It needs justification. (b) The year wise ROM production achieved in past should be given as per monthly/annual return submitted to IBM. It needs correction. The proposal & achievement & deviation should be justified in remark column.

Geology:- (a) The reserves estimated in past by Hungarian Analytical & total existing pits/trenches/boreholes as given in text have not been shown on plan & section (Plate-4). Moreover detail Hungarian Analytical report has not been enclosed. Three type of bauxite deposit namely massive, boundary & soft earthy has been describe on page-23, it is to be made clear which type of bauxite is occurring in the mine under reference. Necessary exploration is also to be proposed. The year wise proposed ROM production proposal should be given in G1/G2 level of area as per MEMC Rule, 2015 & shown on plan & section (Plate-4). (b) It was observed during inspection that, ROM production proposed in both side of railway track passing with in lease area but permission from Central Railway Authority is not submitted to this office till date. (c) The proposed area adjacent to railway track is not explored enough as per MEMC Rule, 2015; therefore sufficient trenches/exploratory pits in proposed lease area should be explored & submitted. (d) The copy of few more chemical analysis reports of bauxite/intercalated waste/mineral rejects in proposed area should be submitted. (e) The remaining lease area should be proposed exploratory hole/pits/trenches as per provision of MEMC rule, 2015 in tabular form. The bulk density & average thickness of bauxite & borehole logs should be discussed & given with supporting documents.

Mining- Page-41-44,(a) Existing pit dimension with top & bottom RL, area & benches should be given in tabular form & reconcile & compare present broken up area with latest approved MP/RMP etc. (b) Page-42-50, The mine design parameter should be modified realistic & fit for present condition as discusses. It needs correction. Information on page-51&52 are confusing

and contradictory, where as there is no major waste dump is there. How dump working is possible. (c) It was observed during inspection that method of mining is being done by Rock-breaker & excavator-tipper combination without primary drilling & blasting proposed. Only secondary J/H drilling & blasting, as & when require, may be proposed. It needs correction & modification in relevant pages. (d) Page-45, The five year proposed plan period should be given financial year wise from 2018-19 to 2021-22 instead of I,II,III,IV,V. (e) The year wise proposed ROM production should be given in tonnage also with quality/grade of bauxite without change in format/table. (f) page-46, It was observed during inspection that there was no major waste dump was existed with in lease area to recover bauxite. It needs correction. (g) The year wise ROM production proposal should be distributed & given as per combined EC of Naredi I&II (h) The year wise proposal should be away from statutory barrier of HT power line/public road/railway line etc. as per provision of MCR, 2016. (i) The working permission in proposed area adjacent of railway track in both sides from Central Railway Authority should be submitted. (j) The common boundary working permission as per MMR, 1961 from DGMS should also be given. (k) The adequacy of man & machinery, calculation & their capacity should be discussed & justified. (l) It should be clarified whether HEMM proposed/used is own/hired/contract etc. with supporting documents. (m) The conceptual mining proposal should be modified block wise up to lease period. (n) Page-56, The minimum & maximum water table of area & present proposed working far above water table should be discussed & given. (o) The remaining chapters should be modified accordingly. The location of year wise proposed ROM production should be G1/G2 level of exploration only as per MEMC Rule, 2015. The present area under mining is 15.85Ha, reconcile with latest approved MP/RMP & production achieved should be discussed.

PMCP-Page-71, (a) land used table, up to conceptual stage/expiry of lease period should be modified as per above scrutiny. (b) Comprehensive proposal for restoration/rehabilitation of mined out land should be given with concurrently proposal of plantation/afforestation in worked out pit /non-mineralized area/within 7.5m statutory barrier should be given. (c) The land used details should be discussed as on 01.4.2018 & plan period & lease period/conceptual period. The existing as well as proposed environmental protective measures/safety measures should also be given in tabular form. Page-76, The year wise proposed environment protective measures should be given in tabular form. (14.3.7). The extent of degraded land is about 16Ha but no proposal for restoration of degraded land has been given.

Financial assurance, Page-80,-(a) It should be reconcile & furnish the break-up of entire degraded land including proposed side of railway line, etc. (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.

Plan & sections: -

Key Plan: Land use status i.e. Govt. land, private land & forest land, wind rose diagram etc must be shown by different colour code.

Surface Plan: The index & legend should be modified & effectively shown with different colour code. It needs correction. The OB/ROM stacks/mineral rejects should be effectively shown. 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/trench/pits & 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. The exploratory pits/trench has been done by Hungarian Analytical should be shown.

Production & Development plan& sections: The plan & section should be updated & modified yearly with proposed bench height, top & bottom RL & area, grade & tonnage etc. The protective measures, approach roads to working pits etc. should be proposed & shown properly. The year wise proposal should be modified pit wise in G1&G2 level of exploration only. The non-mineralized area of negative boreholes should be shown separately & proposed for plantation/afforestation.

Conceptual Plan: The pit position of mine at conceptual stage/expiry of lease of tentative mining should be shown with five year block period/plan period with area & location of proposed.

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 period should be matching with land used details given in past & present table & text.

Annexure:

1. All supporting documents of latest copy of lease grant, mining plan & subsequent RMP 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 permission of proposed mine working in adjacent railway track from Central Railway Authority should be submitted in further submission.
3. The copy of common boundary working permission with in 7.5m of statutory barrier under MMR 1961 from DGMS should be submitted in further submission.
4. The copy of field photographs of trail pits/borehole logs/Hungarian Report etc. with with sign of geologist should be given in further submission.
5. Field photographs of mine workings, lease boundary pillars with number, RL, latitude and longitude as provision of MCR, 2016 should be submitted.
6. Latest Quarterly monitoring report on air, water & noise is not enclosed as per category of the mine for duly signed with date & place.
7. All Geological reserves/ Block able reserves calculation & Year-wise production & development calculation tables should be annexed with relevant chapter / text of document.
8. The copy of original valid BG of extended period should be submitted in the form of annexure.
9. 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.

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