

Scrutiny comments in respect of Bharwada Limestone mine, M.L/Sy. No.146 (P) over an area of 20.94Ha, non-forest, A-category, situated in Bharwada –village, Porbandar-Taluka, Porbandar-Distt. of Gujarat-State for approval of Review of Mining Plan under Rule 17(2) of MCR,2016 for the block period of 2017-18 to 2021-22 & actual period of approval 2017-18 to 2021-22 (expiry of Lease period 31.3.2030 as captive use) of M/s Saurashtra Chemicals, A Div.of Nirma Ltd.

**Cover page-** The IBM registration number & category of mine should be corrected as A-category mine.

**Introduction-** Page-3, The status of leases either working & non-working & expiry should be given. The brief history of mine should be updated/incorporated the order passed by state Govt. as per MMDR amendment Act, 2015 for extension period up to 2030 as captive use & authenticated lease map with latitude & longitude of boundary pillars.

**Location & Accessibility:** - Page-6, the name of nominated owner & partners with address & contact details in tabular form should be given. The latest copy of resolution of board of directors/nominated owner should be submitted. (Enclosed copies are dated 14.10.2015/10.6.2013) The type of land & ownership right should be given as per form-I&IV /Govt. revenue records & should be translated & enclosed in further submission.

**Review of mining plan/scheme of mining:** - It should be justified regarding non-submission of RMP within 180 before expiry of last approved MP/MS with valid reason. It should also be review the financial year 2017-18 till Dec.2017. The mine workings have been done unsystematically & irregular manner. It needs clarification. The mine was not operated in past/scheme of mining period should be discussed with valid justified reason.

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 present poor market condition should be concluded.

**Geology-**(a) The reserves estimation in earlier mining plan along with year wise depletion of production till date should also discussed. (b) The reserves & resources should be re-estimated as per provision of MEMC rules 2015, where no extrapolation/influence of extreme borehole is allowed in lateral extension & depth wise, below pit/hole is not allowed in G1/G2. (c) The reserves & resources blocked in statutory barrier of 7.5m /power line/village road/human settlement/submergence area/nalla etc. should be given specifically in tabular form. (d) The detail calculation tables of net arrival of reserves & resources as on, average depth of pits, correct bulk density etc. should be discussed. (e) The part of lease area is still devoid of exploration, therefore sufficient number of exploratory borehole should be proposed in extreme boundary of lease area/existing pit also as per MEMC Rule, 2015. (f) The word inferior grade should be replaced as “cement grade”, it needs correction.

The copy of borehole logs & chemical analysis report of limestone/intercalated waste/mineral rejects etc. should be submitted from an NABL accredited Laboratory only duly signed by authorized person with date & place.

**Mining-** Page-18, (a) The existing pit dimension with number of pits, top & bottom RL & number of benches in limestone should be given in tabular form. (b) The mining method should be proposed excavator & rock breaker/loader-tipper combination. Drilling & blasting should be eliminating since electric powerline is passing through proposed area & nearby village road, human settlement, submergence low lying area, agriculture field are there. Page-20 & 21-The 10% undersized limestone (non-salable presently in captive used) should be given in mineral rejects column & 5% mining losses is not correct & acceptable. It needs correction in respective places. (c) The reserves & resources area blocked in statutory barrier of 7.5m /power line/village road/human settlement/submergence area/nalla etc. should not be proposed in plan period. The area has been degraded in past due to unsystematic working. Aesthetic aspects of the area have also been affected adversely. Therefore comprehensive mining proposal from one end of the lease area along with simultaneous restoration is to be proposed. (d) The cut of grade & IBM threshold value should also be discussed. (e) The survey of lease area should be corrected & updated since surface features were not matching in field. (g) Page-20&21, The year of proposal should be 2017-18(Jan, 18 to March, 18) to 2021-22, it needs correction. (h) Adequacy of man & machinery, capacity & Optimization /detailed calculation should be discussed. (i) The year wise proposed production & development quantity has not been given pit wise, even more

that one different pit are available. (j) The tentative conceptual mining should be modified & discussed in text up to life of mine/lease period.

Use of Minerals-Page-30- The mineral rejects generation quantity (undersize10%) should be given in table & physical & chemical specification of end used industry should be discussed in para-5(a).

Page-31, the employment potential as required under MMR, 1961 /MCDR, 2017 should be discussed. The appointment of Part time Mining Engineer & Geologist in A-category mine is not accepted.

PMCP-35-37-The land use details should be mentioned as on 01.4.2017, plan period up to 31.3.2022. The year wise afforestation/plantation as per MOEF&CC, Pollution control, EC guideline should be proposed within 7.5m statutory barrier/non-mineralized zone with suitable protective measures/water arrangement should be proposed. The human settlement, agriculture field, submergence water logged low laying area etc should be should be given. The copy of distance of wild life sanctuary etc should be enclosed.

Page-46, The updated organization chart for disaster management plan should be given with name, designation & contact numbers of authorized person, their duties and responsibility.

Page-48, financial assurance: Land use pattern should be mentioned as 01.4.2017 and plan period up to 31.3.2022. Table should be modified for proposed year up to 2020-21 & category should be updated as A-category mechanized mines. The land used details should be updated & corrected based upon above scrutiny. The copy of original valid bank guarantee for extended period for the A-others category mine as per provision of MCDR, 2017 should be submitted to IBM Gandhinagar Regional office.

During the pendency of approval, if there is any change in the name / address / ownership of mining lease, it should be informed promptly.

Plan & sections: - The plan & section should be modified & updated as per above scrutiny & Rule 32 of MCDR, 2017 in further submission. The copy of KML/google image should be given.

1. **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.
2. **Surface Plan:** The boundary pillar number with co-ordinates as per lease plan authenticated by state is not shown in field. The plan should be updated by incorporating prominent surface features, submergence water logged area, correct position of village road etc. The statutory barrier of 7.5m, electric power line, public road, nallah etc. should be shown & leaving barrier as per provision of MCR, 2017. The surface plan should be signed & certified by mine surveyor/mine manager with date & place.
3. **Surface Geological Plan & sections:** The existing/proposed exploratory core boreholes/trial pits/trenches etc. should be judiciously shown. All sections should be modified as above scrutiny & show contact with host rock at bottom or maximum possible mineral thickness based on GSI/DMG data.
4. **Production & Development plan & sections:** The plan & section should be updated & modified year wise for 2017-18 (Jan., 18 to March, 18) & 2021-22 year wise instead of composite plan. (Plate No.5) The year wise proposal should be shown properly with benches, top & bottom RL & area as per EC condition etc. The protective measures, approach roads to working pits etc. should be proposed & shown properly.
5. **Conceptual Plan:** The pit position of mine at conceptual stage of tentative mining should be modified & shown in conceptual plan with showing block period & plan period of mining with levels as given in existing & proposed land used details.
6. **Reclamation Plan-** Garland drain, retaining wall, rain water management and mine water discharge system is not shown in this plan.

7. **Environment Plan:** The plate is not prepared as per rule 32 of MCDR 2017 to show other details population, village boundary, types of land etc.
8. **Financial Assurance Area Plan-** The Land use pattern should be mentioned as on date and subsequent plan period up to 31.3.2022.

**Annexure:**

1. All supporting documents in legible form should be given in chronological order. The other annexure/copy in Gujarati should be translated in either English or Hindi should be enclosed. The copy of lease extension order as per MMDR Act 2015 & lease plan coordinates should be given.
2. The copy of resolution of board of directors for nominated owner/signing authority should be submitted in further submission.
3. The copy of field photographs of trail pits/borehole logs etc. with sign of geologist should be given in further submission.
4. The few more chemical analysis report of ore/mineral rejects etc. should be submitted from an NABL accredited Laboratory.
5. Field photographs of corner boundary pillars with number, RL, latitude and longitude marked on it etc. should be submitted.
6. All Geological reserves/ Block able 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 to IBM Gandhinagar in final submission.
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.

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