

Scrutiny comments of mining part in respect of Udgiri-Dhangarwadi Bauxite mine, over an area of 121.56Ha, non-forest land, A-others category mine, situated in Udgiri & Dhangarwadi villages of Shahuwadi-Taluka,Kolhapur-Distt. Of Maharashtra-State for approval of modification in approved mining Plan under rule 17(3) of MCR,2016 for block period /approval period of 2017-18 to 2021-22 of M/s R.M.Mohite, (Registered firm) .

Remarks- The document should be prepared & submitted as per manual of appraisal of mining plan 2014. The surface plan should be updated & duly signed by qualified person & accordingly other plates should be modified as per lease sketch map given by the state DMG, Govt. of Maharashtra.

Cover Page- The mining lease was executed on 11/1/2017 but copy of lease deed is not submitted. The expiry of lease period should be given as 10/1/2067 as per MMDR amendment Act 2015. The rule under which document is submitted should be 17(3) of MCR, 2016. It needs correction in other relevant places. The survey number, mineral granted as per lease deed should be given. The five year block period of MMP should be given as 2017-18 to 2021-22.

Certificate/Undertaking- The compliance of CCOM circular 02/2010 should be given, since state Govt. of Maharashtra has already been recognized the agency for DGPS survey. The copy of DGPS plan duly signed by recognized agency with date & place and duly authenticated by state DMG, should be submitted in the further submission.

Introduction-The brief history of mine should be discussed in text from first grant of LOI of 1312.41Ha area to execution of 121.56Ha lease in chronological order with supporting documents. The mining plan was approved vide letter no.MP/MAN-448(MAH)/GOA/2001-02 dated 23.1.2002 for 883Ha area where as mining lease was recently executed on 11/1/2017 for 121.56Ha.area. It should be discussed & justified.

The precise lease area map of 121.56Ha given by state DMG should be submitted in further submission. The LOI of applied area of udigiri block was given to M/s R.M. Mohite & mining plan was approved by IBM. It was observed during inspection that maximum part of udigiri block was exploited by Universal Mining Company (Devasthan committee) earlier as reported & matter is subjudice, but surface plan shown virgin. It should be resurveyed & discussed with supporting documents.

General- The lessee i.e. M/s R.M.Mohite should be registered with IBM as Registered firm & submitted. Page-7, the provision& name of QP under rule 15(1) of MCR, 2016 should be given. The other para should also be discussed as per IBM manual for appraisal of mining plan 2014.

Location & Accessibility:-i) Page-8, The word "proposed" lease is not required, since mining lease is already executed. It was observed during inspection that boundary pillar were not erected as per specified dimension & not available in field. The name & contact details of recognised agency, who had conducted the DGPS, is not given in text. Page-8-10,The type of land & ownership details of lease area should be given based on Govt. revenue record in tabular form. The surface rights of land used for the plan period is presently held with lessee or not, is not discussed.

Details of approved mining plan/scheme of mining-i) Para 3.1, the copy of approval of MP & subsequent modification/FMCP etc. should be submitted in the form of annexure along with justified reason.

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

The cut-off grade & threshold value of minerals should be discussed as per IBM circular 2009. {Bauxite-Al₂O₃ - 30 % (Min) and silica (reactive) 5% (Max)& for aluminous laterite:Al₂O₃, 20 %

(Min)}. The enclosed analysis report & borehole logs, presence of silica content more than 5%, should be considered in waste/mineral reject.

Mining:- Page-17, The chapter should be discussed & given as per manual of appraisal of mining plan 2014. Other irrelevant information is not required. The proposed production & development quantity should be given in tonnage also. The production & development proposal should be given block wise (Udigiri & Ainwadi) in tabular form. The year wise proposal should be given from 2017-18 to 2021-22 instead of 1st, 2nd, ..., 5th year since mining lease is already executed. It was observed during inspection that there is no sufficient exploration data as per UNFC/MEMC rule, 2015. The mine lease area is in float & drilling & blasting may not be appropriate. The use of HEMM & rock breaker with required drilling & blasting may only be proposed.

The proposed mine design parameters should be described in brief. The year-wise proposed ROM production & development quantity should be given in details in section wise & level wise in tabular form. The above threshold value & below cut-off grade should be given as mineral rejects. The optimum recovery of bauxite in float ore should be discussed & justified with valid reason.

The adequacy of man & machinery & their capacity should be discussed as per manual of appraisal of mining plan 2014. It should be clarified whether HEMM proposed/used is own/hired/contract etc. with supporting documents.

Page-25, The mining proposal in present plan period & conceptual period should be discussed properly as shown in plan & sections. The land used details should be given as on start of plan period & five year block period & up to lease period/conceptual period. The tentative conceptual mine planning should be discussed in text up to life of lease period.

Page-28, the quantity of mineral rejects generation & their utilisation should be discussed properly as per manual of appraisal of mining plan 2014.

Page-34, It should be discussed the employment potential as required under MMR, 1961. It should be time bound commitment for appointment of mining engineer & Geologist as required under provision of MCDR, 2017.

Page-36, PMCP: - Land use pattern should be mentioned as on start of plan period and subsequent next five year of block period and lease period. Existing land use pattern/Baseline information-The baseline information of environmental components, Location of different monitoring stations as per IBM/MOEF guidelines for EMP and frequency of monitoring may be discussed and given in tabular form. (Page-36-38)

Environment Impact Assessment:-No description of impact of mining & mechanisation on environment for both plan period and conceptual plan period has been given.

EMP:- All protective measures should be mentioned specially towards village area, and waste washed off & stabilization etc. during plan period. It should be proposed year-wise environmental protective measure, afforestation, etc. as per format of appraisal of mining plan 2014.

Financial assurance: The updated land use pattern should be mentioned as on date and subsequent five years of plan period. The copy of original valid bank guarantee for the A-category mine should be submitted in further submission in the form of Annexure as per provision of MCDR, 2017. (Minimum 10Lakh Rs.)

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.

Geology & Exploration:-

1. Prospecting report of GSI, DGM of Maharashtra in the applied area may be enclosed for additional support.
2. During inspection it was observed that the Bauxite was been mined out in the lease area of Udgiri Block in between Boundary Pillar-1 & 2. Hence this area belongs to the lessee, how mining has been carried out before Mining Lease has been grant.
3. Ten Boreholes has been drilled by the lessee in the lease area. Borehole logs with lithology, co-ordinates to be enclosed. Further permission to drill boreholes in the applied area from the state Govt. should be enclosed.
4. Reserves & Resources table to be enclosed as per the prescribed format. Section wise calculation sheet to be enclosed.
5. It is observed from Chapter-III, that the BH-No-7 bauxite occurs for a thickness of about 0.85m i.e from 0 to 0.85m only. However, while estimating reserves 6m, thickness has been considered. This aspect needs to be reviewed.
6. The year wise number of boreholes to be drilled has to be tabulated indicating the grid wise location, depth of each hole, collar RL etc.
7. Detailed estimation table for reserves & resources as per UNFC has to be given in text. Minerals (Evidence of Mineral Contents) Rules 2015 has to be followed for UNFC reserves & resources estimation. Beyond & below the depth of boreholes, should be considered as resources as per above said rule.
8. Surface Geological plan to be updated. UNFC code is not marked in Geological Plan & sections. UNFC code has to describe in text part. Lithology should be shown in Geological sections.
9. The reserves & resources should be modified as per provision of MEMC rule,2015 & by leaving the mineral blocked in statutory barriers i.e. seasonal nallah, check dam, river etc.

Plan & sections: All plan and section, text & tables should be modified based on above scrutiny & deficiencies should be rectified.

1. **Key Plan:** Lease area should be bounded by all sides showing latitudes and longitudes of extreme four points. Land use status i.e. Govt. land, private land & forest land, wind rose diagram etc must be shown by different colour code.
2. **DGPS plan:** The copy of DGPS plan/Cartosat image as per CCOM circular 02/2010, duly authenticated by state Govt. should be submitted in the further submission. It should be mentioned about the path row of the satellite and date of pass of DGPS survey. The soft copy of full set of auto generated files of super imposed output or text file etc. should be enclosed in further submission.
3. **Surface/Geological Plan:** Resurvey the area as per precise lease sketch map given by the state DMG & be submitted in further submission. The co-ordinate of BP should be reconciled. It should be signed by a certified surveyor with date & place. All sections should show contact with host rock at bottom or maximum possible mineral thickness based on GSI/DMG data. The surface feature outside the lease area is not required.
4. **Production & Development plan-** The plan should be modified as per above scrutiny & rectified. The year wise proposal should be given in G1&G2 level of exploration as per MEMC Rules, 2015. The protective measures, approach roads to working pits etc. should be proposed & shown properly. The advancement of faces should be judicially planned & minimum bench height & width should be proposed & maintained. The year wise proposed production & development sections should be shown by showing benches & levels & leaving statutory barrier of water course, power line & nallah etc.

5. **Conceptual Plan/Reclamation Plan & section**-The pit position of mine at conceptual stage of mining should be shown in conceptual plan with showing plan & block period of mining with levels. The Reclamation Plan should be showing rainwater management and mine water discharge system, proposed afforestation & year wise environmental protective measures should be shown by different colour code.
6. **Environment Plan**: The plate is not prepared as per MCDR 2017 to show other details population, village boundary, types of land& features with in 60m & 500 area etc.
7. **Financial assurance area Plan**- Land use pattern should be mentioned as on date and subsequent five year plan period as per MCDR, 2017.

Annexure:

1. DGPS surface plan duly signed & authenticated by state Government should be submitted in further submission or inward to state DMG should be enclosed.
2. The letter from state DMG in Marathi language should be translated in English/Hindi & notarised & submitted in further submission.
3. The latest chemical analysis report of ore/mineral rejects etc. should be submitted from an NABL accredited Laboratory.
4. The copy of resolution of board of directors of firm & nominated owner/signing authority should be submitted in further submission.
5. The copy of nearest distance of mining lease area from NP/WLS/ESZ, should be enclosed in the form of annexure.
6. The latest copy of Form-I&IV or 7/12 should be enclosed in further submission in the form of annexure.
7. Field photographs of present mine workings, corner pillars with number, RL, latitude and longitude as specified marked on it etc. should be submitted.
8. Latest baseline information on environmental monitoring report on air, water & noise, soil should be enclosed as per category of the mine from last 2-3 quarters.
9. The copy of original valid BG period should be submitted in the form of annexure.
10. 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.
