

ANNEXURE-I

Scrutiny comments on examination of draft copy of modified mining plan submitted under Rule 17(3) of MCR'2016 in respect of Udgiri & Dhangarwadi Bauxite Mine of M/s. R.M.Mohite over an extent of 121.56 Ha. situated in Udgiri & Dhangarwadi Villages, Shahuwadi Taluka, Kolhapur District of Maharashtra State submitted for approval under rule 17(3) of MCR'2016 for block period /approval period of 2017-18 to 2021-22.

Text:

GENERAL :-

1. Cover Page :- The lease period, expiry date of lease etc. are not given over the cover page. Name of the lessee i.e. M/s R. M. Mohite & Co. is also not mentioned correctly.
2. Consent letter/Certificate/Undertaking:- Consent letter/Certificate/Undertaking given from the lessee is not correct. Review of mining Plan is written instead of Modification of mining Plan. Name of mine is also written in-incorrectly at places. The compliance of CCOM circular 02/2010 is not carried out. The same to be complied, since state Govt. of Maharashtra has already been recognized the agency for DGPS survey.
3. As per copy of mining lease deed executed on 11.01.2017, two partners are there i.e. S/Shri R. M. Mohite & A. R.Mohite & Co. in lessee firm - M/s R. M. Mohite & Co. and lease deed signed on behalf of lessee by Shri Shivaji Mohite. However, Enclosed Undertaking/certificate/consent in respect of preparation of this MMP is signed by one person, whose name is not clear. The same should be signed by both partners or authorized partner/nominated owner. The copy of resolution of partners of firm in case of authorized partner/nominated owner should be submitted/enclosed.
4. Lessee is a company/firm. Hence a latest list of board of directors/partners duly certified by competent authority along with address/contact nos. to be enclosed. Also, Undertaking regarding working/interest in other firms/company/organization from board of directors/partners should be given.
5. Introduction:-The brief history of mine should be discussed in text from grant of L.O.I. of 1312.41Ha area to execution of 121.56 Ha lease in chronological order with supporting documents. The 1st mining plan was approved vide letter no.MP/MAN-448(MAH)/GOA/2001-02 dated 23.1.20:12 for 883 Ha. area (Non-forest Block), where as mining lease was recently executed on 11/1/2017 for 121.56 Ha.area.
6. In introduction, Status of all statutory clearance obtained should be given along with documentary proof as enclosure.
7. The LOI of applied area of Udgiri block was given to M/s R.M. Mohite & after that mining plan was approved by IBM. It was observed during inspection on 27.02.2017 by Sr. Asstt. Controller of Mines and Jr. Mining Geologist of this office that maximum part of udgiri block was exploited reportedly by one Universal Mining Company (Devasthan committee) earlier & matter is reportedly sub-judice. However, surface plan shown as virgin area. The matter should be discussed in detail along with supporting documents in respect of court case etc.
8. It was also observed during aforesaid inspection that ML boundary pillar were not erected as per specified dimension & not available in field at places. ML boundary pillars needs to be posted immediately quoting coordinates on the pillars. Photographs of all boundary pillars with coordinates (Lat.-Long.) should be enclosed.

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9. The precise lease area map of 121.561 Ha. executed ML area, duly authenticated by the state Govt. has not been submitted. The same to be enclosed in further submission.
10. Chapter-I: GENERAL: Lease and lessee details, IBM registration no. of the lessee i.e. M/s R. M. Mohite & Co., Name of QP etc. are not mentioned. The other paras are also not discussed as Guideline/Format of “IBM manual on appraisal of Mining Plan-2014” to be followed.
11. Chapter-II: Location & Accessibility: “IBM manual on appraisal of Mining Plan-2014” is not followed properly in this chapter. Details of lease area is not given as below:

| Forest | | Non-forest | |
|------------------|-----------|--|--------------|
| Forest (specify) | Area (ha) | (i) waste land, (ii) grazing land, (iii) Agriculture land, (iv) others(specify) | Area (ha) |

Total lease area =

The name & contact details of recognized agency, who had conducted the DGPS, is not given. The type of land, ownership right of lease area, Surface right acquired by lessee etc. are also not given. The surface rights of land used for the plan period is presently held with lessee or not, is also not discussed.

12. Chapter-III: Details of approved mining plan/scheme of mining- Reference no. of earlier approved MP is not given correctly. The copy of approval of earlier MP to be submitted in the form of annexure.
13. Chapter-III: Para 3.6: Reason for submitting this modification of MP is not mentioned. Reason & Justification for submitting this modification of approved MP to be given in detail.

MINING :-

14. Guideline/Format of “IBM manual on appraisal of Mining Plan-2014” is not followed properly also in this chapter.
15. In Para b) - year-wise tentative Excavation in Cubic Meters to be indicated from (i) In-situ excavation as per guideline. Then, a NOTE to be added below the proposed year wise excavation summary Table regarding tentative tonnage as arrived considering Recovery % and Bulk-Density(Tonnage factor) based on time series data and samples test. The optimum recovery of bauxite in float ore to be discussed & justified.
16. Individual year-wise development plans summary of to be given in Para C) instead of Para b) indicating direction of advancement, bench parameters, depth of working with mRL etc.
17. As observed during aforesaid inspection and communicated to lessee & QP, that there is no sufficient exploration data as per UNFC/MEMC rule, 2015 and also mentioned in Para d) that ‘It is planned to work both the float ore in the first year and after in-depth exploration in year 2017-18 and depending upon the results thereof both float ore and bedded ore mining will continue’. Hence, the development/excavation to be proposed in this MMP in fully explored area (G1) only up to the proved depth with corresponding annual production limit of ore.
18. Mineral Reserve & remaining resources estimated is 9,35,857 te & 67,255 te only respectively. However, annual production of ROM ore is proposed for about 10,00,000 te and in 5 years total ROM production is proposed for 4039542 te. Without having Mineral reserve of 05 years ROM production, how is the proposal given?

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19. Para d) Maximum Production & development per annum considered w.r.t. proposed deployment of mining machineries is in-correct.
20. Para e) Pit Bench Geometry and its design parameters to be considered as per Technical circular of DGMS and MMR,1961.
21. Excavation is proposed in float ore, drilling & blasting may not be needed. However, use of Ripper Dozer or drilling-blasting is not clarified. At some places Ripper Dozer or at some places drilling-blasting is mentioned.
22. The conceptual mine planning should be discussed up to lease period as per guideline.
23. In conceptual mine planning, anticipated life of the mine is mentioned/estimated for about 2 years only. Whereas production has been given for 05 years.

HANDLING OF MINERALS REJECT/ SUB-GRADE AND DISPOSAL OF WASTE :-

24. Instead of storage, concurrent back-filling of OB/waste should be proposed.
25. The quantity of mineral rejects generation & their utilisation should be discussed properly as per manual of appraisal of mining plan 2014.

PROGRESSIVE MINE CLOSURE PLAN :-

26. Data generated by lessee for air quality is mentioned as given in Annex-20. However, Annex-20 is not enclosed. The baseline Environmental monitoring data to be enclosed.
27. The baseline information of environmental components as per IBM/MOEF guidelines for EMP and frequency of monitoring to be discussed. Base line data collected & assessment done by which agency to be clarified with Period of data collection.
28. Para 8.2 (iii): Regarding Air Quality, it is mentioned that *wet drilling & regular water spray is done. The crusher is enclosed and regular water spray is done surrounding the crusher.* Whereas mine is not opened so far.
29. Environment Impact Assessment with Mitigation measures of impacts associated with mining i.e. mainly related to air, water, noise, vibration, land, aesthetics etc. are needs to be elaborated properly. Protective measures specially towards village area to control washed off & afforestation etc. should be proposed to be carried out during plan period.
30. Table of PMCP Summary, indicating specific proposal year-wise as per Guideline/Format of "IBM manual on appraisal of Mining Plan-2014" is not given. Summary of PMCP proposal for item no. 8.3 to be given with specific proposal year-wise in quantified term.
31. Financial assurance-Table to be given as per Guideline/Format of "IBM manual on appraisal of Mining Plan-2014".
32. Financial assurance: The Area considered for financial assurance should be rechecked in view of aforesaid comments and accordingly financial assurance to be paid.

PLAN & SECTIONS :-

33. All plan and section should be modified/ rectified based on above scrutiny points.
34. Khasra Plan of the lease area as submitted is not signed and certified by any authority; not even by the preparing agency & QP.
35. Location Plan: Only one plan should be given showing both blocks.

36. DGPS lease plan: DGPS plan having latitudes and longitudes of ML boundary points and duly authenticated by state Govt. should be submitted. DGPS plan having Cartosat image as per CCOM circular 02/2010; about the path row of the satellite and date of pass of DGPS survey also should be mentioned. The soft copy of full set of auto generated files of super imposed output or text file etc. should be enclosed in further submission.
37. Surface Plan: Plan to be prepared based on recent and accurate survey and to be correct as per existing surface features. The co-ordinate of BPs should be reconciled with precise lease sketch map given by the state DMG. It should be prepared by the qualified Surveyor and signed with date & place; and certificate of Surveyor to be enclosed.
38. Production & Development plan- The plan should be modified/rectified as per above scrutiny. 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 year-wise advancement of faces should be shown with levels (mRL), and planned leaving the statutory barrier for water course, power line & nallah etc.
39. Environment Plan: The plan to prepared showing details as per MCDR 2017. All existing surface features beyond the 60m of lease boundary to be shown in detail. Monitoring stations at the strategic points in core & Buffer zone for different environmental components should also be shown.
40. Reclamation plan: as per Guideline/Format of “IBM manual on appraisal of Mining Plan-2014, A reclamation plan depicting waste disposal proposal, rehabilitation and protective measures, rainwater management and mine water discharge system, proposed afforestation etc. in distinct colours should be enclosed.
41. Post mining land use at final/conceptual mining stage to be shown over the conceptual plan & section.
42. Financial assurance area Plan- over FA Plan, proposed land use to be shown clearly in distinct colours.

ANNEXURE:-

43. The precise lease area map of 121.561 Ha. executed ML area, duly authenticated by the state Govt. to be enclosed in further submission.
44. 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 with satellite imagery.
45. Baseline information/report on environmental monitoring of air, water & noise, soil etc. should be enclosed.

Remarks – Draft copy of this MMP was also submitted earlier by the lessee/QP on dt. 10.01.2017, and Scrutiny comments was issued from this office vide letter dtd. 09.03.2017 after site inspection on dt. 27.02.2017; but the MMP was not approved due to time bar. However, again now, the draft MMP is submitted without attending the most of the Scrutiny comments/points as issued from this office vide letter dtd. 09.03.2017.

GEOLOGY & EXPLORATION :-

1. Highest and Lowest RL as mentioned in text part is not matching with plans. Contours are not in uniform, i.e, IN 5m contour interval, there is no 875m RL in between 870m & 880m.
2. During last 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. Udgiri is wrongly mentioned as nearest village in Dhangarwadi block. Topography, drainage pattern are copied & paste for both block as same.
4. Prospecting report of GSI, DGM of Maharashtra in the lease area may be enclosed for additional support. As mentioned there is no annexure has been enclosed regarding exploration.
5. Analysis report is not having any basic details like, date, signature, name of Mine owner etc.
6. 18 Trial pits have been dug in the lease area by the lessee, but the information has been not sending to the office. Trial pits with lithology, co-ordinates & Analysis to be enclosed. Total expenditure incurred towards the exploration should be furnished along with the details of exploring agency. Name of exploration agency for exploration and tentative cost has to be included in text.
7. Form-J has not submitted to this regarding intimation of Trial pits.
8. All the Trial pits shown in Geological sections are digging upto laterite only. Not the single pit has been touching the bottom of Bauxite. Based on this reserves can't be estimated.
9. Reserves & Resources table to be enclosed as per the prescribed format. Section wise calculation sheet to be enclosed. Section line should be uniform for calculation.
10. Recovery of bauxite is mention as 60% in page-30, but in reserve table only 10% recovery has been considered. Based on that life of mine has been estimated. Hence both the recovery percentage is not uniform.
11. Reserves have to be shown separately how much blocked in 7.5m safety barrier around the lease boundary.
12. G-1 category of bauxite is estimated as 935857 tons only. But production has proposed as 10 lakhs/ year for this plan period.
13. Detailed estimation sheet for reserve and resources need to be furnished showing sectional area as per UNFC category, influence, BD, recovery factor, location on plan & sections etc. The basis of bulk density and recovery factor should be given on the field tests conducted for different grade of minerals.
14. 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.

15. 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, it should be considered as resources as per above said rule.
16. Surface Geological plan to be updated. UNFC code & UPL is not marked in Geological Plan & sections.
17. During last inspection, it was observed that boundary pillars are not as per standards prescribed by IBM. Photo copy of the constructed boundary pillars has to be enclosed. DGPS plan is not enclosed.
18. Documentary proof for chemical analysis of BHs samples and bulk density / T.F. & recovery percentage considered for reserve / resource estimation may be submitted. It should be from NABL accredited laboratory or Govt. lab. As per guideline of “IBM Manual on Appraisal of Mining Plan-2014” entire mineralized area should be analysed meterwise with 10% of check samples. (At least for 10% of total samples may be analysed in accordance to BIS and reports from NABL accredited / other government laboratory). NABL accreditation certificate of laboratory from where chemical analysis of BH samples and bulk density test carried out, should also be enclosed.
19. This is an A category and new mine, a detailed feasibility study report should be given / enclosed as per guideline. Further, in the feasibility study, following important parameters to be dealt with :-
 - a. Assessment of IRR (Internal Rate of Return) and NPV for the project life.
 - b. IRR based on operating cost, reclamation / rehabilitation cost, closure cost and other important parameters as per UNFC guidelines for the life of the project on the basis of ore body geometry, i.e. depth, width, length etc. as estimated and considered for reserve / resource estimate.
 - c. Cash flow statement for the period considered for assessment of IRR.
 - d. Sensitivity analysis on cash flow due to market changes i.e. cost of production, sale price etc.