

Scrutiny comments on examination of Review of Mining Plan/Scheme of mining of Kumbhewade Bx. Mine over 95.577 ha. Of M/s Veet Rag Homes Pvt. Ltd., Ratnagiri District of Maharashtra state

Text:

GENERAL

1. The document should be named as Review of Mining Plan/Scheme of mining as per rule 17 of MCR, 2016.
2. Self-attested copy of qualification & experience certificates as required for qualified person to prepare mining plan/Review of Mining Plan/Scheme of mining under MCR'2016 should be enclosed.
3. Lessee is a company/firm. Hence, a Latest list of board of directors 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.
4. Certificates/ Undertaking should be signed by Nominated owner only. A latest resolution from board of directors of the lessee Co. regarding nominated owner of the mine to be submitted. Photo id of nominated owner to be enclosed.
5. Enclosed Copy of Photo id of Director is not legible.
6. Name of Director of lessee Co., who has signed lease deed is Mr. VK Agrwal. However, in certificate of incorporation (memo. and article association) of the Co. his name is not there. Hence, a latest copy of certificate of incorporation (memo. and article association) of the lessee company/firm along with subsequent change in directors/partners duly certified by competent authority to be submitted.
7. CCOM circular no.2/2010 and its addendum regarding geo-reference mining lease map and ML boundary pillars to be implemented.
8. In introduction, Brief lease history, Status of all statutory clearance obtained or to be obtained and Surface right acquired should be given along with documentary proof as enclosure. Lease period to be corrected/mentioned.
9. Chapter-I: Name of applicant /lessee should be given with IBM registration no. issued under Rule 45 of MCDR,1988.Although the lease is executed on 01/03/2014,it has been indicated that lease is yet to be executed .This shows casual approach.
10. Chapter-II: Details of lease area to be 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 =

11. Chapter-III: Review is not carried out. Exploration, production, development etc. proposed in earlier approved Mining Plan & Modification of Mining Plan to be reviewed.
12. As mentioned in para 3.1, Mining Plan approved on 22.01.2004 & Modification of Mining Plan approved on 31.10.2006, and lease is executed wef. 1.03.2004; that means proposal of approved Mining Plan & Modification of Mining Plan was valid upto 2007-08 itself. Now instant Review of Mining Plan/Scheme of mining is submitted. Reason for non-submitting Review of Mining Plan/Scheme of mining documents of gap period (2008-09 to 2015-16) to be given with justification.

GEOLOGY AND RESERVE

13. Details of exploration carried out i.e. BHs meterage drilled so far as reported to be given with year of exploration carried out along with detailed report and standard borehole logs in annexure.
14. (i) Name of prospecting /exploration agency (ii) Address (iii) E mail address and phone no. etc. to be mentioned.
15. Exploration carried out so far should be corroborated with documentary evidence in respect of name of agency, order for the work, cost involved, and payment details by the lessee etc. with copy of form J & K maintained as per rule 47 & 48 of MCDR and Photographs of BHs samples to be enclosed as evidence. All details of exploration carried out should also be certified by the concerned geologist of the mine.
16. Srl. No. of Paras to be corrected.

17. Earlier exploration carried out so far in the lease area should be summarized as per table below and given in the text.

Total Lease area:						
Item of information	Lease area explored as per UNFC norms (in Ha) as on dt...					Remarks/Comments including reasons for not carrying out the exploration as per UNFC norms.
	Total Lease area = A+B+C+D+E					
	G1 Level	G2 Level	G3 Level	Explored and found non-mineralized with level of exploration (Remarks)	Unexplored lease area	
	A	B	C	D	E	
Area as per level of exploration						
No. of BH Drilled						
No. of BH considered for Resource Estimation.						
Meterage Drilled						
Grid Interval						
Scale of Mapping						
Reserve estimated after above exploration as on dated :						
Remaining Resource after above exploration as on dated:						
Total Reserve/Resource after above exploration as on dated:						

18. Documentary proof for chemical analysis of BHs samples and bulk density/T.F. & recovery% considered for reserve/resource estimation may be submitted. It should be from NABL accredited lab. or Govt. lab. As per guideline of "IBM manual on appraisal of Mining Plan-2014". *Entire mineralized area should be analyzed meter wise with 10% of check samples. (At least for 10% of total samples may be analyzed 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. Exploration carried out reported inconsistently; No. of BHs and meterage drilled reported different at page no. 21 & 24.
20. Reserve & resources is not updated/estimated and categorized as per UNFC guideline. with reference to Geological sections; the influence taken for UNFC code-111, at Sections are not as per UNFC guideline and resource under code-333 has been taken in most of the un-explored lease area without any basis.
21. Considerable Float ore reserve has been estimated without any basis and also the same has not been marked/indicated over the Geological plan & section.
22. Substantial enhancement in Reserve & resources estimated is observed from last approved MP & MMP, its Reason with justification to be given.
23. Reserves/resources should be estimated both in slice plan method and cross-sectional method and variance, if any, to be analyzed and backup calculation of reserve/resource estimation to be given.
24. As per guideline of "IBM manual on appraisal of Mining Plan-2014", a NOTE to be added below the estimated reserve/resource Table regarding tentative reserve/resource.
25. Justification for Reserve & resources estimated and categorized in different UNFC code to be given.
26. "In-situ" ore should be written in place of IN-C-TU ore.

27. The future programme of exploration has not been given adequately and year-wise with nos. of Borehole & meterage etc. to be drilled as per guideline of “IBM manual on appraisal of Mining Plan-2014”. Exploration proposal for the entire lease area should be given on a regular grid pattern (excluding the area already covered) to be completed during this proposed plan/scheme period for assessing the total mineral reserve/ resources as per UNFC. Core-BHs should be proposed covering the DTH exploration area. Check BHs should be proposed in non-potential resource area.
28. The Mine is A-category & new one, a detailed feasibility Study report should be enclosed. In the UNFC feasibility study enclosed in annex: Economic evaluation of the project is not carried out properly. Cost-Benefit analysis and Financial appraisal are not carried out based on real time cost involved and also Viability of the project up to the ultimate depth has not been analyzed.
29. Further, In the UNFC feasibility study, following important parameters are not 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 operation, sale price etc.

MINING

30. Guideline/Format of “IBM manual on appraisal of Mining Plan-2014” is not followed in this chapter. 1st Proposed mining method has to be described., then conceptual mining to be given. In view of this, this chapter needs complete recast.
31. Substantial increase in ore production has been proposed from previous approved Mining Plan from about 80,000 tonne to 10,12,500 tonne. But, the actual exploitation of ore reported as nil till date. Hence, enhancement in production from the already approved quantity, that had not yet been achieved as indicated above needs proper justification in terms of conservation of mineral etc. as per Rule 10 of MCDR,88.
32. As per guideline of “IBM manual on appraisal of Mining Plan-2014”, year-wise tentative Excavation in Cubic Meters to be indicated from (i) In-situ excavation & (ii) Dump re-handling, if applicable.
33. Then, a NOTE to be added below the proposed year wise excavation summary Table regarding tentative tonnage as arrived considering recovery % and Bulk-Density based on time series data and few samples test.
34. Page 34: waste dump should not be proposed here.
35. Incidence/recovery % of saleable/usable ore and mineral reject/Intercalated waste from ROM & Total excavation to be clarified.
36. Pit Bench Geometry and its design parameters to be described as per Technical circular of DGMS and MMR,1961.
37. Layout of mine hauls road/pits roads, its design with road slope & gradient at the curve etc. in safe and scientific way, and its maintenance should be described in detail.
38. Post mining land use at final/conceptual mining stage to be described.
39. Drilling Optimum selection of Drill M/cs are not carried out. 16nos. of Drills proposed for deployment is not appears to be safe & environment friendly.
40. Excavator: It is not clear whether 1 cum or 2.5 cum excavator is proposed for deployment.
41. Optimum selection of machineries is not carried out. Calculation of adequacy of various mining equipments to be carried out in scientific way.
42. A Summary of equipments/machineries proposed to be deployed to be given.
43. Only description mining equipments proposed for deployment to be given. Manufacturer manual/Advertisement of mining equipments should not be given.
44. Blasting: bench height is considered as 5m, whereas expected tonnage, P.F. etc has been estimated by considering 4m depth.
45. Optimum Charge per delay to be clarified and most suitable drilling & blasting design along with initiation/firing pattern should be proposed.
46. In view of above, this chapter needs complete recast.

MINE DRAINAGE

47. Depth of workings and water table to be given clearly by mentioning mRL of the same.

48. Arrangement of Sump, Capacity of de-watering pump etc. needs to be calculated and proposed accordingly along with Manner of discharging mine water & related environmental concern.
49. As reported, Mine is situated near to a nalla & river and having large catchment area; substantial quantity of rain water likely to flow through the lease area. However, adequate rainwater management plan i.e. drainage plan along with arrangement for arresting solid wash off is not incorporating with engineering details & material to be used for its erection/construction. Therefore, adequate rainwater management plan i.e. drainage plan along with arrangement for arresting solid wash off should be prepared, along with engineering details & material to be used for its erection/construction. Accordingly, Proposals should be incorporated in this document in view of environmental protection.

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

50. Ore Production & waste generation proposal mentioned in this chapter is different from what mentioned in Mining Chapter.
51. Guideline/Format of “IBM manual on appraisal of Mining Plan-2014” is not followed in this chapter, details & proposal are not given adequately.
52. In view of above, this chapter needs complete recast.

USE OF MINERAL & MINERAL REJECT

53. Instead of general use of Bauxite; Use of mineral to be discussed in respect mineral produced from this mine specifically.
54. Requirement of end-use industry to be given in terms of physical & chemical composition matching with proposed production of mine. Production of ore to be specified with quantity and grade along with its proposed sell/use to end-use industries.
55. In view of above, this chapter also needs complete recast.

PROGRESSIVE MINE CLOSURE PLAN

56. Environmental Base line information & EIA : It should be clarified that base line data collected & assessment done by which agency, period of data collection & assessment and whether it is conforming to the norms of MoEF.
57. Mitigation measures of impacts associated with mining i.e. mainly related to air, water, noise, vibration, land, aesthetics etc. are needs to be elaborated.
58. Summary of PMCP table, 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 in text. specific proposal should be given year-wise in absolute quantified term.
59. The Para “Disaster Management & Risk Assessment” is not dealt with properly; safety management plan and risk analysis of different mining operations need to be elaborated in scientific manner & the Para must be re-written accordingly.

Enclosure:-

60. All the annexure to be properly indexed/numbered/paged and signed by the TQP.

Plates:-

61. Colour copy of authenticated/certified mining lease map to be submitted.
62. Copy of DGPS lease map duly authenticated/certified by State Govt. to be submitted.
63. All plans to be prepared based on recent and accurate survey and to be correct as per existing surface features & mine profile. Such plans should be prepared and certified by the certified Surveyor; and surveyor certificate should be enclosed with the document.
64. Over Development/Production plan & section : X-section lines to be matched/corrected.
65. Environment Plan: 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 over this plan.
66. Reclamation plan: A reclamation plan depicting waste dumping proposal, rehabilitation and protective measures around waste dumps like Retaining Wall, Garland Drain, Check Dams, Settling tanks, plantation/coir matting over dead end etc. shown clearly in distinct colours should be enclosed.
67. Post mining land use at final/conceptual mining stage to be shown over the conceptual plan & section.
68. Over FA Plan : proposed land use to be shown clearly in distinct colours.