

Scrutiny comments on examination of draft Review & Updation of Mining Plan submitted under Rule 17(2) of MCR' 2016 in respect of Thimmapur Limestone & Dolomite Mine (M.L.No. 2272/2481) of Shri. P.H.Pujar over an extent of 15.641 Ha, situated in Thimmapur Village, Mudhol Taluka, Bagalkot District of Karnataka State.

GENERAL :

1. As per Mining Lease deed copy enclosed, ML will expire on 18.06.2020 and as per MMDR Amendt Act, 2015, Lease period shall be valid up to 18.06.2050. However, Extension letter from State Govt./supplementary ML deed has not been enclosed in this regard; the same needs to be enclosed.
2. Para 1(b) : Unnecessary and irrelevant descriptions are given in this para. Only relevant and necessary description to be given as per 'guideline/format of preparation of mining plan or its modification'.
3. Para 2(b): Surface right acquired in ML area by lessee to be given/clarified along with documentary proof as enclosure.
4. DGPS map based on Survey carried out in year 2015 is enclosed. However, the same has not been authenticated/certified by the state govt. ML area arrived as per DGPS survey to be mentioned & DGPS Map duly authenticated/certified by the state govt. to be submitted.
5. As per Rule 12(1)(V) of Minerals Concession Rules,2016, the lessee shall at his own expense, erect, maintain and keep in repair all boundary pillars according to the Act and rules made there under with respect to the manner of construction and upkeep of boundary pillars as enumerated in this rule. However, it was observed that although corner pillars were posted around ML area, but intermediate boundary pillars were not posted and other requirements regarding size and colour code under this rule with respect to corner boundary pillars were also not full filled. The same needs to be erected as per rule and its photographs to be enclosed with RMP document.

DETAILS OF APPROVED MINING PLAN/SCHEME OF MINING :

6. Chapter-3: Para 3.3: Review of earlier approved proposal is not carried out properly. exploration carried out to be mentioned along with proposa and year.

GEOLOGY & EXPLORATION :

7. Exploration carried out so far in the lease area should be summarized as per table below and given in the text.

...2/-

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 TPs/BHs carried out						
No. of TPs/BHs considered for Resource Estimation.						
Meterage Drilled/ Size of TPs						
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:						

8. Future programme of exploration is not given properly. Exploration proposal is given near to boundary of ML area. The same should be given inner side of ML area in a regular grid pattern. Earlier Core BHs are carried out upto 30m to 40 m depth only. Hence, now some Core BHs should be proposed at greater depth upto the end of mineralization.
9. In feasibility Study report, Economic evaluation is not carried out properly. Capital cost/Capex is not assessed properly and operating cost/recurring expenditure is mentioned lower than what reported in Annual Return. Further, in the UNFC feasibility study, following important parameters needs to be dealt with:-
 - Assessment of IRR (Internal Rate of Return) and NPV for the project life.
 - IRR based on operating cost, reclamation/ rehabilitation 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.
 - Cash flow statement for the period considered for assessment of IRR.

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- Sensitivity analysis on cash flow due to market changes, i.e. cost of operation, sale price etc.

MINING

10. As per authenticated/certified lease map/sketch (khasra map) supplied by State Govt., the safety margin to Yadwad-Muddapur Road is shown, where no Mining activities i.e. Excavation & waste dumping etc. should be proposed in this area. The area should be marked as NO MINING ZONE. However, it is observed that some mining activities has been carried out in this area. This is to be rectified immediately, proposal should be given accordingly.
11. Para b): A NOTE to be added below the proposed year wise excavation Table given in Cubic Meters, regarding tentative tonnage as arrived considering Recovery % and Bulk-Density (Tonnage factor) based on time series data and/or samples test. Documentary proof of time series data or Samples test analysis to be given for bulk density/ T.F. and Recovery % considered. If Samples test analysis has carried out, it should be from NABL accredited lab. or Govt. lab.
12. Pit benches height of 6m and width of 10m are proposed as mentioned in text. However, Pit benches height of 5m and width of about 8m observed to be shown over the Production & Development Plans. The same to be rectified.
13. Back-up calculation of Development & Production (D&P) planned to be enclosed in Annex.
14. Drilling & blasting details to be explained properly. Site specific considerations i.r.o. Vibration Control, optimum Charge/Delay, Pattern of Blasting, explosive to be used, P.F. etc. to be explained along with proposal of ground vibration study while blasting.
15. 7.5 m statutory barrier to be maintained all along the ML boundary. Any proposal for mining activities i.e. excavation & waste dumping etc. not to be given in this area without the approval of competent authority.

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

16. Waste dumping and Top soil Stacking to be planned in retreating manner from one end of the lease. Configuration and sequence of Waste disposal & Top soil stacking and its year-wise build up to be described in detail at each stages/terraces with mRL.
17. Adequate proposals of protective measures and plantation to be given around the proposed Waste dump and Top soil Stack.
18. Protective measures already taken and proposed to be taken around the dumps/stacks and the pits like Bund, retaining wall, garland drains, settling ponds/pits to be given in quantified terms in tabular form. Its design parameters and material to be used for its construction should be described.

OTHER

19. Employment potential to be furnished as per requirement under MMR 1961 & MCDR 2017.

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PMCP

20. Mitigation measures of impacts associated with mining and mineral processing based on EIA i.e. mainly related to air, water, noise, vibration, land degradation, aesthetics etc. to be elaborated as discussed.
21. Para 8.3: Summary of PMCP table for Item No. 8.3, should be given with actual cumulative achievement as on date with year wise future proposal. Under heading 'others', environment protective works to be carried out year wise and environment monitoring measures to be given.
22. Para 8.4: Care & maintenance during temp. discont. to be discussed in detail with measure to be taken to monitor pit slope failure & dump erosion/failure.
23. Para 8.6: Financial assurance: The Area considered for financial assurance needs to be re-checked as no major un-utilized ML area persists.

ENCLOSURE:

24. Copy ML deed of ML No. 2272 to be enclosed.
25. All the annexure to be properly indexed, numbered, paged and signed by the TQP.

PLATES:

26. Rule 31, 32 & 34 of MCDR, 2017 and convention of MMR-1961 to be followed for preparation of plans & sections.
27. All plans to be prepared based on recent and accurate survey and to be correct as per existing surface features & mine profile.
28. Surface Plan : Every surface features, including roads, dumps, ROM, mineral stacks etc. to be shown on the Surface Plan. Surface plan should be prepared by the qualified Surveyor and certified by the mining engineer of the mine for its correctness. Plantation carried out, natural vegetation, existing drainages, road & nalla/ water course if any within the ML shall be shown with different colour codes.
29. Position of Yadwad-Muddapur Road as shown over Surface plan and other plans is not in consonance with authenticated/certified Lease sketch/map and Geo-referenced vectorised cadastral map of the ML area. The same to be rectified.
30. 7.5 m statutory barrier along the ML boundary and Safety Zone/distance as per statutory provisions and Lease Deed should be shown clearly over plans. No working to be proposed in this safety zone area without the approval of competent authority.
31. "NO Mining Zone" within the ML area to be indicated over all plans as per authenticated/certified Lease sketch/map.
32. 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. Natural streams/ nalla/water course within 500m shall be marked.
33. All relevant plans to be re-prepared/modified in view of above comments.