

Scrutiny comments on examination of draft Modification of Mining Plan submitted under rule 17(3) of MCR' 2016 in respect of Muddapur Limestone Mine (M.L.No.2343-A) of M/s. J.K.Cement Ltd. over an area of 161.87Ha, situated in Muddapur Village, Mudhol, Taluka, Bagalkot District of Karnataka State.

Text:

GENERAL

1. Copy of qualification & experience certificates as required for qualified person to prepare mining plan/Review of Mining Plan/its modification under MCR'2016 as enclosed should be Self-attested.
2. Mining lease area and period are given differently at places in enclosed ML deed/grant document. Further, in respect of ML transfer, area and period is not clearly mentioned; over annexed lease plan/sketch with ML transfer deed, over-writing was carried out for transferred area. Enclosed copies of ML deed/grant order /ML transfer deed are also not legible. Hence, Mining lease area/ transferred area and ML period to be clearly mentioned in chronological order since first grant of the lease in Introduction and Para 2 (b). Legible copies of ML deed/grant order /ML transfer deed to be enclosed as Annex.
3. It appears that part of ML area has been transferred to M/s JAYKAYCEM Ltd., and for the same precise lease plan/sketch was supplied with ML transfer deed. However, over precise lease plan/sketch, over-writing was done for transferred area. Hence, precise lease area plan/sketch of transferred area indication exact area with survey no. and ML boundary, duly authenticated by the competent authority of State govt. to be enclosed.
4. ML boundary pillars positions (BP- 10,11 &12) and shape of lease as indicated over the precise lease area plan/sketch is not matching with pillars positions shown over the Surface Plan & DGPS Plan. Submitted DGPS Plan is also not authenticated by the competent authority of State govt.
5. Shape of lease area is totally different in submitted High resolution cartosat 2 satellite image plan of mining block (as Plate-1D).
6. ML area has been transferred to M/s JAYKAYCEM Ltd., and it is reported that M/s JAYKAYCEM Ltd. has been amalgamated with M/s J K CEMENT Ltd. subsequently. However, copy of document submitted w.r.t. amalgamation is not legible.
7. It appears from the ML transfer deed that part ML has been transferred w.e.f. 17.10.1998 for unexpired period of the said lease that means lease will expire on 16.10.2018. Whereas, the ML validity/ expiry date is mentioned up to 31.03.2030, but executed ML deed for extension of lease up to 31.03.2030 is not enclosed. One letter of Director, DMG, Karnataka addressed to the Secretary, dtd. 06.06.2015 enclosed as annex I E, indicating eligible mining leases for extension of lease period as per MMDR Act-2015, even in this letter itself it is mentioned that Lessees may be permitted to resume mining operations only after execution of rectification deeds.....and upon registration.....However, mining proposal is made in to submitted MMP document up to 2020-21. Hence, Mining proposal beyond 16.10.2018 cannot be made without extension of lease for further period.
8. 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 of board of directors in other firms/company/organization should be given.

9. Chapter-2: Para 2. b): Surface right acquired in ML area by lessee to be clarified along with documentary proof as enclosure.
10. Chapter-3: Para 3.3: Review of earlier approved proposal is not carried out properly. Review of less ROM production, Nil Development/Waste generation i.r.o. earlier proposal to be carried out with reason/justifications for deviation. Irrelevant descriptions given i.r.o. outsourcing of limestone to be eliminated.
11. Chapter-3: Para 3.4: Submission of MMP should not be considered as compliance.
12. Chapter-3: Para 3.6: Reason given for submitting this modification of approved MMP is not observed to be convincing. Hence, detail reason with justification for submitting the present modification of approved MMP needs to be given. Irrelevant descriptions as given to be eliminated.

MINING

13. Existing and proposed mining method should be described in detail with sequence of different mining operations.
14. 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 samples test. Documentary proof for bulk density/ T.F. and Recovery % considered to be submitted. It should be from NABL accredited lab. or Govt. lab.
15. Year-wise development/excavation proposals are given in unsystematic and scattered manner from different pits. The same to be re-planned in scientific and systematic manner from one side of the Mining lease, preferably from Pit 3 & Pit 1 as sufficient reserves is available, to facilitate concurrent back-filling and progressive closure of the mine.
16. Blasting is not explained properly. The same to be discussed with the site specific considerations and precautionary measures to be undertaken (i.e. Vibration Control, Average Charge/Delay, Pattern of Blasting, P.F. etc.). Blasting parameters, firing sequence, blasting pattern etc. needs to be explained with consumption and type of explosive to be used.
17. Conceptual Plan is not prepared properly with post mining land use. Detailed Conceptual Planning needs to be envisaged up to life of the mine with post mining land use.

MINE DRAINAGE

18. Para 3.d): Rainwater management plan i.e. drainage plan along with arrangement for arresting solid wash off should be given. Existing arrangement and proposal for protective measures to control wash-off from mine discharged water should be given in quantified terms. Manner of discharging mine water & related environmental concern also to be discussed.

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

19. Details of existing Sub-grade/mineral rejects stocks within the lease area, if any, should be given in text vis-à-vis that is actually available on the site.
20. Adequate proposals of protective measures and plantation to be given around the Stacks/dumps of waste material.

21. Protective measures already taken and proposed to be taken around the waste dumps like Bund, retaining wall, garland drains, settling ponds/pits etc. should be given in quantified terms in tabular form.
22. One NALA exists near to ML area. Its protective measures to be discussed.

PMCP

23. Latest Environment Monitoring Data should be furnished in respect of base line information.
24. Mitigation measures of impacts associated with mining based on EIA i.e. mainly related to air, water, noise, vibration, land, aesthetics etc. to be elaborated.
25. Para 8.3: Summary of PMCP table for Item No. 8.3, Under heading 'others', environment protective works to be carried out year wise and environment monitoring measures to be given.
26. Para 8.4: Risk assessment of different mining operations to be carried out with description of precautionary measures.
27. Para 8.6: Financial assurance: Area utilized for Protective measures already taken and proposed to be taken around the waste dumps to be included in Area considered for financial assurance.

ENCLOSURE:-

28. All the annexure to be properly indexed, numbered, paged and signed by the TQP.
29. Mining Lease Sketch/Map i.e. khasra plan of ML and DGPS Plan duly authenticated by State Govt. to be enclosed.

PLATES:

30. Rule 31, 32 & 34 of MCDR, 2017 and convention of MMR-1961 to be followed for preparation of plans & sections.
 31. All plans to be prepared based on recent and accurate survey and to be correct as per existing surface features & mine profile.
- 1) **Geology and Exploration:** - i) Regional geology is not discussed with reference to the location of the lease area. ii) Under local geology Strike of the formation should be mentioned. iii) Thickness of the different litho units as per borehole data need to be mentioned. Further at page number 15 under general sequence dolomite is shown after limestone bed as per borehole data and surface geological plan no dolomite is available in the lease area. General sequence of the lithounits and thickness should be based on exploration data. iv) Under exploration already carried out number of boreholes drilled so far with total meterage and area explored under different level of exploration (G-1, G-2, etc), area proved as non-mineralized and area to be explored needs to be discussed in detail not necessary to discuss proposal of the earlier documents. v) Under details of samples analysis it is mentioned that for bore holes total samples collected are shown as 4705 and total samples analyzed is shown as 512 (NABL) this needs to be rechecked and corrected. vi) Rules under which plans and sections prepared need to be mentioned as per MCDR-2017.vii) Reserves/resource estimation chapter should be a discussed as per IBM manual on appraisal of mining plan-2014. Waste and topsoil estimation shown in the reserve/resource estimation should be removed. viii) Bulk density and recovery factors

should be based on the test conducted. ix) Lateral extension from the extreme boreholes cannot be considered for estimation of reserves. In some sections it is observed that lateral extension is taken for estimation of reserves. x) Depth below the drilled boreholes cannot be taken for estimation of reserves/resources. Accordingly reserves/resources need to be re-estimated. Reserves/resources need to be estimated as per MEMC rules 2015.xi) Feasibility report should be given as per IBM manual for appraisal of mining plan-2014.

2) **Plates:-**

Geological plan and cross sections:- i) UPL and 7.5mtr safety zone is not properly shown on plan and sections. ii) UNFC codes should be corrected after re-estimation of reserves/resources as per scrutiny comments given in the geology and exploration chapter. iii) Level of exploration marked on geological plan and cross sections are not matching.