

SCRUPINITY COMMENTS ON THE REVIEW & UPDATION OF MINING PLAN OF INJEPALLI LIMESTONE MINE (ML NO. 2417) OF M/S KESORAM INDUSTRIES LIMITED. OVER AN EXTENT OF 897.86 HA, AS PER ML DEED, IN PART OF INJEPALLI VILLAGE, SEDAM TALUK, KALABURGI DISTRICT OF KARNATAKA STATE. THE MINING PLAN PERIOD IS FROM 2017-18 TO 2021-22, IN NON-FOREST AREA, CATEGORY OF THE MINE IS A (FM- FULLY MECHANISED MINE). SUBMITTED FOR APPROVAL UNDER RULE 17(1) OF MCR, 2016.

COVER PAGE

1. It should be written as review and up-dation of Mining plan and not as scheme of mining. The document may be corrected as submitted for approval under Rule 17(1), of MCR, 2016.
2. The status of the lessee should be written as private company and captive mine. In the light of the above remarks, the text and plates may be attended, wherever applicable.

GENERAL

3. Under contents, certificate of RQP is indicated need to be replaced with Qualification of BE (Mining)/ M.Sc. (Geology), with minimum five years professional experience certificate to be enclosed.
4. The undertaking/ certificates enclosed should be corrected, wherever applicable, by suitably correcting scheme of mining to review and updation of mining plan, recognized person, should be replaced with qualified person, etc.
5. This is a captive mine, if it is so, how the lessee M/s Kesoram Industries Limited, can supply limestone to M/s Vasavadatta Cement, please clarify with the supporting documents.
6. Five years block period to be determined as per Rule 17(1) of MCR,2016.

INTRODUCTION

7. When was the 1st grant of mining lease is not indicated, which ought to have been. Besides, wherever scheme of mining is indicated for the present submission need to be changed to review & up-dation of mining plan. The clinker capacity increased at different period with different production capacity, which may be present in table format for easy reference. Besides, the extension of lease period as per MMDR Act, 2015, a copy of the extension letter may be enclosed.
8. The registration number given in para 1(f), may be deleted along with the period indicated.

LOCATION & ACCESSIBILITY

9. Para 2.0 (a): the date of grant of lease is given as 9/12/2002, whereas in the introductory part, the date of mining operation commenced is given as 18/6/1984, if it is so, than the date of grant should be before the mining operation commencement may be reconciled. As per new MMDR, 2015, the expiry period is given as 8/12/2052, whereas in the cover page, 17/8/2034. There should not be any ambiguity while furnishing the datas.
10. Para 2.0 (a): Boundary pillar identification no. should be specified.
11. Table-3, under type of land is given as 896.86 ha as Govt. waste land, in total it is given as 896.96 ha and also in the note.

DETAILS OF APPROVED SCHEME OF MINING

12. Para 3.1: References of earlier approved documents viz. last approved mining plan and subsequent Schemes of Mining with validity period may be furnished in this para in a tabular format.

13. Para 3.3: All reviews in respect of exploration, excavation, production, reclamation etc. may be furnished up to Oct. 2016. Year of exploration may be given as remarks. Attend table-06. The top soil is precious, need to be stacked & preserved separately as per MCDR, 1988. The top soil could not be considered as OB waste. In the light of the above comments, all the documents should be attended, wherever applicable.
14. Table-6 & 7, the reasons furnished in the remarks column for the decreased production is not appropriate and justified.
15. Under reclamation & rehabilitation measures, it is given instead of waste, water is used as back filling in the exhausted area for the depth of 60m as Hydro-reclamation, but the same is not brought out under the reclamation/ rehabilitation head for the proof of the work undertaken, which ought to have been in the annual return land use pattern, followed by in the present submission land use pattern and also in the financial assurance chapter. The proportionate amount of area may be considered as already reclaimed and rehabilitated. That much amount may be removed from the total BG calculations.
16. Para 3.4: Violations pointed out by IBM and status of rectification should be furnished here for last Scheme of Mining period (2012-13 to 2016-17). Copies of violation letter and subsequent reply from the lessee may be enclosed in the document as annexure.
17. Para 3.6, rule 22(6) & 1960 to be replaced with 17(3) of MCR, 2016.

PART-A

18. Para 1.0 (a): the elevation reported maximum & minimum may be corrected as 432.70m above MSL & 370m above MSL respectively.
19. Para 1.0 (e): Type of drilling, borehole ID, year of drilling, total run and location of drilling may be furnished in 'summary of exploration' in a tabular format.
20. Para 1(f), the surface plan should be prepared as per the provision of Rule 28(1)(a) of MCDR,88. Similarly in para 1(g), geological plan should be as per Rule 28(1)(b) of MCDR,1988.
21. Para 1.0 (i): Nil future exploration programme is not acceptable, north of the ML area is still unexplored (explored only under G3 stage); evidence of mineralization is prominent in this unexplored area along section nos. E-E' and I-I'. Therefore, boreholes should be proposed in such areas to ascertain the extent and depth of mineralization by detailed exploration./ If not justification may be given.
22. Para 1.0 (j): Reserve and Resources of the deposit may be updated as on 01.11.2016 by depleting production from last updated surface plan. Quality of grey limestone and siliceous limestone may be given in table no. 12 in respect of CaO, SiO₂ and MgO.
23. Para 1.0 (k): Section wise estimation of reserve and resources are not found to be furnished w.r.t. the UNFC codes as mentioned in the Geological Sections. Blocked Limestone Resources (UNFC categories 211 and 222) are not demarcated in the sections.
24. Para 1.0 (k): Level of explorations may be corrected in table no. 14.
25. Para 1.0 (l): All UNFC codes as mentioned in the table 22 should be duly demarcated in the sections. In justification of UNFC codes (Geological Axis), nos. of boreholes drilled to suffice each stage exploration (G1, G2 and G3) may be corrected.
26. Para 2A (a), Instead of mentioning extent of Mining lease, extent of mining is given as 897.86 ha, which should be attended appropriately. Besides, it is given soil bund is created along the lease boundary, but during the inspection, it is observed along the acquired area and not along the ML boundary. In the proposed method of excavation, though the pit geometry proposed, in addition to that, the slope of faces, direction of advancement, approach to the faces & specification of roads, etc., to be

marked. Also, the existing dumps parameters spread, height, slope protective works etc., to be marked. Besides, year wise/ bench wise, mRL wise, opening reserve, exploitation & the closing balance may be tabulated for the five years for both the pits A & B. Existing as well as proposed size of the pit may be given. The overall pit slope should be maintained at 45°. In the light of the above remarks, the other text paras need to be attended, wherever applicable. Table-34 may be attended on the above remarks.

27. In the same para as above, the present submission is referred as scheme period, which should be attended as review and updation of mining plan in page-41. In page-44, under blasting, subgrade drilling, inclination of hole, controlled blasting technique to be proposed along with shot delay detonators etc. Besides, slurry explosives & safety fuse were proposed, which is not appropriate. In the light of the above remarks, the text and the plates may be attended, wherever applicable. Further, in page-45, under secondary blasting, it is given, if any boulders comes through excavators, the same will be broken manually is not appropriate proposals, since the proposed working of mine is through fully mechanized mining operations.
28. Para 2(b), table-33, the year wise excavation details furnished for grey & siliceous limestone and also for shale together as ROM, which should have been given separately and the shale should have been separately, stacked.
29. In page-47, the development proposals in pit-A, section D-D', wherein the sections indicated from 422.5 to 420.5m with depth indicated for 2.5m against 2m, which should be corrected. In the light of the remarks, the other paras may be attended. Besides, the benches / should be brought out at the end of each year respectively with bold line.
30. Table -37, gives the details of production & development for different limestone and the shale, especially shale should be kept separately and not to use, until the clearance/ concurrence from the state Govt. In the light of the above remarks, the other remaining years may be attended in line with above.
31. Para 2(c), the proposals made to dump top soil in the buffer zone/ safety zone from the plate No.6A to 6E should be such that, it should not be along the acquired land, where future workings are anticipated to move.
32. Para 2(d), the pit geometry given as 10m height x >10m width, whereas in other paras, the width is proposed for >100m, >38m etc. care should be taken to propose appropriately and with uniformity. Besides, in the same para, top soil dump/ waste dump/ rejects are used to refer, top soil, which much be in single name as top soil dump only and not to use differently at places. The category of the mine is A(FM), proposals should be maintained appropriately. Proposing tippers is not appropriate.
33. Para 2(f), in page-63 it is proposed for complete reclamation and rehabilitation of pit and only part of the pit area will be active in mining operation, but not indicated, what type of reclamation and rehabilitation will be undertaken in the exhausted pit is not clarified. In the light of the above remarks, the para 2(g) is not attended appropriately, how the pit will be reclaimed and rehabilitated is not described.
34. Para 3(C), it is given no ground water encountered, mining is in hilly region hence, there is no encountering of water table. Besides, it is observed during the inspection that the mine is falling in flat terrain and not hilly terrain. Please refer to Part-A on topography.
35. Para 4.0 (c): Year wise proposed disposal of waste and proposed environment protective measures for waste dump(top soil) should be deliberated here in detail.
36. Para 5.0 (c): Desired quality of limestone of all radicals for captive limestone plant, location of plant and ROM feed capacity may be discussed here briefly. Besides, the provision adopted to upgrade the ROM is not briefed.

37. Para 5.0 (e): Existing blending practice of siliceous limestone and shale with high grade grey limestone should be discussed here with blending ratio.
38. Para 7.0 (b): Employment potential may be corrected in accordance with Annual Return of 2015-16.
39. Para 8.3: Particulars of proposed environment protective measures should be specified with dimension of toe wall, nos. of water garland drains, area (in Ha.) to be covered under greenbelt development etc. In view of above table no. 49 may be corrected.
40. Para 8.3.1, under mined out land, whatever reclaimed/ rehabilitated as on date may be included, based on the remarks given in the above paras. Table-50 need to be checked and modified.
41. Para 8.4: Name of the responsible person to be contacted in case of any emergency should be specified in table no. 52.
42. Para 8.6: Total 'area put on use at start of the plan' is not matching with the total ML extent, un-broken/un-used area should be mentioned in the 'others' particular. Already reclaimed and rehabilitated areas are not found to be mentioned. Copy of valid Bank Guarantee may be enclosed as annexure, valid up to 31.03.2022. The amount indicated must be checked again and submitted.

PART-B

43. Key Plan (Plate No. 01A): The approach road to the ML area with approximate distance is not marked. The name of the lessee/ owner, written as M/s Vasavadatta Cement, whereas in the text part it is given as M/s Kesoram Industries Limited, and also M/s Vasavadatta Cement. Better to given correct name in every part of the document, without difference. This plan should be prepared as per rule 28(5) (a) of MCDR, 1988. In the light of the above remarks, the other plates may be attended.
44. Surface Plan (Plate no.3): The QP indicated with certificate No., for surveyor should be deleted, except qualification & QP should be retained. Safety barrier zones from Kamalavathi Nala, HT line and from Injepalli village should be demarcated in the plan. On the left top corner, the index given with notations for the bore holes, red color for the existing and already drilled bore holes as per standard notations in MMR,1961, except for the proposed bore holes, This plan should be prepared as per rule 28(1) (a) of MCDR, 1988.
45. Geological Plan (Plate no. 4): Index of drilled boreholes should be corrected in the plan, blocked ore areas by safety barrier should be demarcated in the plan. Scrutiny remarks given in the above plates may be attended, wherever applicable. This plan should be prepared as per rule 28(1) (b) of MCDR, 1988. Ultimate pit limit is not marked.
46. Geological Sections (Plate no. 5): Blocked Limestone Resources (UNFC categories 211 and 222) are not demarcated in the sections. Proposed boreholes and UPL should be drawn in the sections. Various sections drawn to show the sectional views, but certain sections were not brought out, what is existing in the fields.
47. Development & production Plan (Plate No.6A to 6E): The proposal shown for the year 2017-18 should reveal the workings at the end of the 1st year, i.e. up to 31.03.2018, similarly for the 2ND year as 31.03.2019 and so on up to 31.03.2022 respectively. Besides, the respective development should be aligned straight to the possible extent and the curved working/ development may be avoided, for the benefit of many aspects. Year wise buildup of dumps also not shown properly. In the light of the above remarks, the other plates for remaining years may be attended.
48. Development & production sections (Plate No.07): The sections are not attended as exist in the mine and also as per the proposals. The sections should attend in line with the remarks in the plan.
49. Slice Plan (Plate No. 07A to 07F): The slice plan submitted reveals incomplete, hence need to be rechecked and submitted.
50. Conceptual Plan (Plate No.8 & 9): This plan need to be attended based on the remarks given in the text part also in the plan. The present workings shown will not appear at the time of conceptual stage. The

extent of the workings considered to show beyond the present submission period must be attended suitably. Wherever scheme of mining indicated need to be deleted and added with review and updation of mining plan. The extent of the area shown for different 5 years block period workings are not appropriate on the conservation point of view.

51. Environment Plan (Plate No.10): the other ML areas present within the 500m buffer zone are not brought out in the plan.
52. Reclamation Plan (Plate No.11): The plan need to be attended, based on the instruction given during the field inspections. Whatever, the areas presently used for water reservoir after the exhaustion of mineral at depth should be revealed in the plan & in sections for clarity?
53. Financial Assurance Plan (Plate no. 12): Outlines of the proposed working, dumps, stacks, etc. covering all the items under the financial assurance table and at the end of F.Y. 2021-22 may be shown. FA table should be pasted on this plan.

Para 11, Annexure: Following items are required to be annexed with the document:

54. Copy of ML deed for first grant.
55. Copy of ID and address proof of the nominated owner, enclosed one is not legible.
56. Copies of violation letter and subsequent reply from the lessee during last scheme period.
57. Corrected section-wise reserve and resource calculation, updated as on 01.11.2016
58. Copy of valid Bank Guarantee, valid till 31.03.2022.