SCRUNITY COMMENTS ON MODIFICATION TO THE APPROVED REVIEW AND UP-DATION OF MINING PLAN OF RAMANADURGAIRON ORE MINE (M.L. NO. 2141) OF M/S SHRI KUMARASWAMY MINERAL EXPORTS PVT. LTD., OVER AN AREA OF 59.36 HA AS PER CEC &60.86 HA AS PER ML DEED. VILLAGE DHARMAPURA, SANDUR TALUK, RAMANADURGA RANGE, BALLARI DISTRICT OF KARNATAKA STATE. THE PRESENT MODIFICATION PERIOD IS FOR2017-18 TO 2021-22, AGAINST THE PREVIOUS APPROVED DOCUMENT PERIOD WAS 2017-18 TO 2021-22. CATEGORY OF THE MINE -A(FM-FULLY MECHANISED), COMPLETE FOREST LAND, NON-CAPTIVE MINE.

COVER PAGE

- 1. Date of first grant of the ML to be furnished in the cover page. The extent of the ML area as per the ML deed may be indicated.
- 2. The private company and the non-captive mine to be indicated.

INTRODUCTION

- 3. The forest clearance and the environment clearance limit for the period may be indicated in the introduction part for reference.
- 4. The present document is submitted for modification under rule 17(3) of MCR, 2016 in the previous approved document after undertaking the explorations. The details of exploration undertaken date and the completion with number of bore holes etc. While giving the reasons for modification in the document, it is reflected for reserves changes only, whereas in the document, some other changes also proposed, which are not indicated in the introductory part. Without which it is not in-appropriate in the document.

GENERAL

- 5. Para 2(b), under the details of forest, it is given forest of 59.36 ha, but in cover page it is reported as Ramanadurga range and Ramgad reserve forest, if it is so, it is expected to mention same everywhere.
- 6. Para 3.3, under review of exploration, it is expected to brief the details of exploration undertaken and completed should be given for reference. The exploration bore holes undertaken in this respect need to be furnished with photographs for all the bore holes (core drill holes), plugging the holes with pipes, details of the holes diameter, length, angle of the hole with mRL.
- 7. Para 3.3, in table-1.8, the proposals drawn and the actual does not look appropriate, and correct. Before, submitting the proposals, it is expected to do well long term and the short term planning before making commitment/ proposals.(ii). Para 3.3(II), in table. No.1.9, the proposals to achievements also reveals that the lessee has not given appropriate proposals in the previous documents. (iii). Under year wise production for the year 2012-13 to 2016-17 are given for the year 2017-18, instead of 2016-17, which should be attended correctly. (iv). The subgrade stacks were e-auctioned and dispatched from old waste dumps, whether it is from old waste dumps or from the subgrade stacks and the details of dumps and the stacks may be given with numbers. (v). Under table no.1.13, the proposed R & R works and achieved reveals still some of the retaining walls, RW, drains etc., are required to undertake, which must be given with proposed date of completion of the same may be given. (vi). Under waste dumping, other than waste no.2, if selected for dumping, stacking may be clarified.

PART-A

- 8. Para 1(e)(i), under exploration already carried out reveals that from 25/2/2002 to 5/9/2012 17 bore holes drilled to calculate the reserves, which may be given with brief, what is the depth drilled and the length of extent taken for calculation, besides in the present submission, i.e. from 16.10.2017 to 25.01.2018, what are the bore holes drilled to assess the calculation from the new area or to reassess from the old area & also new area may be indicated with clarity, what is the depth achieved and taken for calculation of reserves / resources may be indicated.
- 9. Table-1.19, wherein the expenditure details furnished for the 68 bore holes, which may be separated, showing separately for the present core bores holes instead of what is done in the previous document may be shown separately.

- 10. Para 1(i), under the future exploration programme, table-no.1.20, what is proposed for the year 2017-18 & 2018-19, is not appropriate, since already 51 bore holes drilled during the present submission to re-assess the reserves/ resources and submitted the document for approval, if it is so, the proposals drawn for the year 2017-18 may be dropped and included in the 2018-19 to be appropriate.
- 11. Para 1(j), under reserves/ resources, in page-39, under UNFC codification 111, it is indicated by clubbing previous exploration and the present exploration, instead of explaining withthe latest exploration details only. The additional depth and the lateral extension of ore body established may be briefed for reference. Besides, what are the reserves/ resources added from the previous resources in to reserves under UNFC codification may be specifically given with clarity without any confusion. In the light of the above remarks, the related text paras may be attended appropriately. (ii). The field test conducted for arriving bulk density for lump ore, fines, BHQ, laterite lumpy ore and for waste are not given. (iii). The recovery factor given for ore zone, from the lump ore zone and from BHQ are not appropriate, because in ore zone, there are chances for 100% recovery, but not in the BHQ zone, and even in the lateritic lumpy ore zone.(iv). Table no.1.21, wherein reserves/ resources indicated as on 29/12/2017, need to be updated as on 1/1/2018.
- 12. Under feasibility report, in sl.no.7, under marketing, it is given that the iron ore produced from this mine will be sold to domestic buyers after dry screening is not appropriate, it is sold through e-auction only, without which it is not sold to be mentioned. (ii). In the economic axis, under sl.no. 2, the modification submitted for the approval need to be briefed about the other purposes for which it is submitted.
- 13. Para 1(k), under table 1.24, reserves/ resources calculation given for different types of ores from Normal ore to siliceous ores, which must be given with the percentage of lump and the fines from these categories of ores for future reference and the overall lump and the fines ratio for clarity. In the light of the above remarks, the related text para and the tables if applicable may be attended suitably.
- 14. The reserves/ resources indicated in table no.1.26, with normal ores & the BHQ +35%fe, which may be clarified with normal ores, where the percentage of fines and the lumps it contains may be given for reference. 15. Para 2.0 A (a): (i). It is written systematic benches are formed to work out full ore to prove depth, instead of proved depth.(ii). It is written wheel loaders are used for levelling waste dumps is not appropriate, it should be Dozer for dozing and levelling in the waste dumps, stacks and also in the working faces for dozing all the broken materials in the blasted faces before loading (iii). Table no.2.2, wherein two dumps D1 & D2 are given with extent of the area, and the volume of the dumps, whether the quantity indicated exist in the dump or the capacity only indicated. (iv). what is the reason for keeping subgrade stack on the waste dump is not justified, which may be placed separately as temporary stack within the lease.(v). The waste dump D1 is indicated as inactive and afforested completely, if it is so, further re-handling is not possible in that dump in future may be clarified/ specified. (vi). For the existing working (2017-18), it is not specified / indicated which pit is considered for the 1st year working. (vii). The Subgrade dumps/ stacks given as SG1 & SG2 location and the extent of the area is not given.
- (16). In the proposed working from 2017-18 onwards, in the drilling of holes for blasting purposes, what is the diameter and the length of the holes proposed to be drilled is not indicated. (ii). The tables no. 2.4 & 2.5 refers to five years workings both production & the development, but not indicated with the pits considered for these five years in the tables. (iii). It is written 111000/annum quantity indicated without giving the unit of the same.(iv). It is given D1 & D2 are occupied by subgrade stacks of which around 5.00 lakhs tonnes quantity has been auctioned & sold, what is the remaining quantity of subgrade present in the subgrade and when it is expected to remove and how the new waste generation is going to be handled and dumped in which dump area are not specified with clarity.
- 17. Table no.2.6, the location indicated for the column 3, & 4, for which the period is not indicated.(ii). Table no. 2.7, reveals year and the quantity, but the dump number is not indicated.(iii). The table No. 2.8, under the machineries details, the dozer which is required to be used for dozing the blasted materials and the levelling at the waste dump sites are required very much, which is not indicated in the list of machineries. Besides, the Volvo indicated in sl.no.11, the details of the machinery is not mentioned.
- 18. Under drilling and blasting, the powder factor indicated as 7 and 6-7/kg of explosives is found to be less in softer formation, which should be re-assessed.
- 19. Para 2(b), in table-no. 2.10, the information expected from respective pit wise, but in the table, no such pit details not given. (ii). In table no.2.11, the normal ore indicated in column .2, must be given with clarity, what you mean by normal ore, whether it is only lump or fines or both or something else may be clarified. In the

light of the above remarks, the remaining tables and the paras relevant if any may be attended with clarity, indicating the ratio of fines and the lumps from the ROM and in total of the ML area, after the recent exploration.

- 20. Para 2(II), table no.2.16, estimated available materials given referring to the location, dump number/ stack number or Subgrade stack number should be given for reference, instead of location number only.
- 21. Para 2(d), need to be attended in line with the remarks, furnished in the previous paras above and attended wherever applicable, including para 2(e) & 2(f). Table no.2.17 need to be mentioned with clarity, which are engineering works completed and those are yet to be completed and tentative date of completion may be given for reference.
- 22. Para 4, under stacking's, whatever the changes that is coming in this paras related may be attended accordingly.
- 23. Para 5(e), the screening and crushing location installed in the field need to be depicted in the plate.
- 24. Para 8.1, the land use pattern may be given as per the surface plan prevails in the ML area may be given without any variation or difference in any document.
- 25. Para 8.6, under financial assurance, table no.2.39 need to be attended and corrected in each rows and the column appropriately. The area indicated in the sl.no. 1, and the column 7, to be corrected.

PART-B

- 26. The consent letters/ undertakings given must be from the lessee and not from the applicant, since it is an existing Mining lease area.
- 27. The photographs of the Core drill holes need to be given for the holes drilled recently to enhance the reserves/ resources may be furnished.
- 28. Surface Plan (Plate No.2): The pit-a, Pit-B & Pit-C and the extent of the each pit may be marked on the plan for reference. (ii). The subgrades stacks and the waste dumps are required to be kept away from each other, instead of mixing in the waste dumps and getting mixing with the waste and the ore, thereby causing loss of ore, may be avoided in future. (iii). The quantity of stacks available in the subgrade grade ore may be indicated and the programme to clear the stacks as per the proposals if any may be dealt. (iv). Crushing and the screening area selected may be given with clarity. (v). The existing working pit should be shown legibly as exist in the field. (vi). The notations used for the mineral stacks should be modified from the workings, shows some confusion of same color codes. (vii).
- 29. Geological Plan (Plate No.3): The exploration proposals drawn for the year 2017-18 may be shifted to the next year i.e 2018-19, instead of 2017-18, since already current submission for the enhancement of reserves/ resources is in progress. (ii). The existing core drill bore holes shown/ depicted on the pit-A side(i.e. NE), where much core drill holes were not seen, only few drill holes could be seen plugged with pipes. In the same manner on the north west, the drilled bore holes(core), should be plugged with PVC pipes and cemented for future reference. (iii). Shale / phyllitecolor notations may be changed suitably for easy reference. (iv). G1 level of exploration marked on the plan does not look correct, during the field visit, it was observed that the ore on the south east was continuing, hence the line marked for G1 level found to be not appropriate.
- 30. Geological Section (Plate No.4A & 4B): The different level of exploration is not marked in the sections.
- (ii). The lump ore, fine ores are not indicated in the sections for reference, based on the recent exploration.
- 31. Proposed development & production Plan (Plate No. 5): The proposals drawn for the year 2017-18 demarking the ultimate pit limit extent may be considered for developing the area and also for production and workings can be extended along and across and moving towards the pit –B, i.e. in the way the section lines drawn. Similarly the other developments and production for the years 2018-19 & onwards may be developed favourably to the exploiting conditions.
- 32. Conceptual Plan(Plate No.9): With the existing development made in the mine in the past, may be continued from Pit-A to Pit-B and pit-B to Pit-C should be extended systematically, instead of the development faces shoed from the Pit-B to Pit-C is not appropriate. In the light of the above remarks,