

SCRUTINY COMMENTS ON DONIMALAI IRON ORE MINE OF M/S. SHREE GAVISIDDESHWARA MINERALS., OVER AN AREA OF 136.25 HA, AS PER CEC/ 134.00 HA AS PER ML DEED, M. L. NO. 2552, IN VILLAGE RANJITPUR, BLOCK DONIMALAI, SANDUR TALUK, BALLARI DISTRICT, STATE KARNATAKA. SUBMITTED UNDER RULE 17(1) OF MCR, 2016. FOR THE PERIOD FROM 2017-18 TO 2021-22. COMPLETE AREA FALLS IN SANDUR RESERVE FOREST, CATEGORY OF TH MINE IS A (MECHANISED MINE), NON-CAPTIVE.

COVER PAGE

1. The document submitted under rule 17(1) of MCR, 2016 must be indicated along with PMCP.
2. In the introductory part, the present submission is mentioned, for review & up-dation of mining plan. But, the purpose for which the present document submitted is not briefed. Besides, in the ML. area, Iron & Manganese was included in the grant, which may be indicated.

GENERAL

3. Para 1(a), the lessee name is given, but, the nominated owner name is not declared.
4. Para 3.3, review under excavation, given up to 1st November, 2016 for the year 2016-17 as blank, without indicating anything, but in the below para it is given, due to market problems. This may be updated to 31/12/2016.
5. Para 3.3, under exploration proposals, it is mentioned that some holes were drilled covering area proposed for back filling, it is expected that, the holes pertaining to back filling area may be specified. The date of commencement and completion of drilling of 33 RC boreholes may be given. Out of 33 RC boreholes, the analysis report of only 9 boreholes has been enclosed. The analysis report of remaining 24 RC boreholes may be enclosed.
6. Para 3.4: the violation letters issued by IBM may be given with details.
7. Para 3.5, it is mentioned that mine was stopped by the forest department between October, 2013 and September, 2014, but not indicated the reasons for stopping the mining operations, in specific.

PART-A

8. Para 1(e), it is given that no pits or trenches were carried out in three years, if it is so, in para 1(i), it is mentioned that lessee drilled holes as well as pitting, reveals contrary, better to reconcile and attend the para appropriately. Besides, the details of exploratory trial pitting carried out may be furnished due to that the estimation of Reserves/Resources have been carried out for float ore.
8. Para 1.0(e)(iii): Analysis report of all the 33 RC borehole samples from NABL may be submitted as Annexure-15.
9. Para 1.0(e)(iv): The quantum of exploratory work carried out in the previous document to that of the present document, but the cost indicated for the previous to the present is not justified, when comparing the quantum of work. This may be explained.
10. Para 1.0(J): under mineral reserves/resources: As no further exploration has been carried out for reef ore after last previous document, there should not be any change in the estimation of quantity of Reserves/Resources for reef ore. No valid reason has been justified/mentioned for re-estimation of

Reserves/ Resources in this present document. All the exploratory data of 33(24+9) RC boreholes have been taken into account for estimation of Reserves/Resources of reef in the last document and the same was approved during December, 2015. Therefore, the reserves/resources of last approved document can be considered. Accordingly the necessary modifications may be made wherever applicable in this document.

11. Para 1.0(K): (a) The section-wise reserves/resources estimated for Iron ore in the last approved modifications in the approved Scheme of mining in December, 2015 are not matching with that in the present document submitted. (b) In the last document, the proved reserves (111) of Iron ore reef was 7, 45,603 tonnes, whereas now it is reported as 9, 98,426 tonnes in this document. The difference is 2, 52,823 tonnes. There was no additional exploration carried out. Hence, it is not justified for re-estimation of Reserves/Resources by assuming the proposed boreholes. Further, in table-22, under inferred mineral resources, the tonnage factor taken for insitu iron ore is 3, in table-23, under float ores, bulk density is taken as 3 is not appropriate and correct. This must be checked and reconciled.

12. Table-24, in page-19 on total resources in tonnes as on 1/10/2016 reported need to be brought out as on 1/12/2016. In the light of the above remarks, the text and the plates, wherever applicable, must be attended.

13. Para 2A (a), under mining, pits dimension given in table-26, without giving the pit details. Further, the slope of faces, direction of advancement, approach to the faces & specification of roads, etc to be marked. Also, the existing dumps spread parameters, height, slope protective works etc., to be marked. The bench wise, mRL wise, opening reserves, exploitation and the closing balance should be furnished for the proposed periods.

14. Para 2(b), under insitu tentative excavation, the reef ore reported in table-27 given for both ROM ore & the BHQ must be restricted within the CEC permitted limit. The ROM percentage of recovery taken for calculation at 95% reveals on higher level. Similarly float ores at 75% recovery. Need to be rechecked and calculated afresh. Annexure-19, need to be enclosed in the main text part itself, instead of on the annexure side. Besides, Para 2.0 (b): The year wise and block wise working details of reef Iron ore and float ore may be proposed as per the available reserves/resources estimated as on 1.10.2015 of last document approved in December,2015 after depletion in accordance with the production limit of CEC. Accordingly, the entire para may be modified wherever applicable in the text.

15. Para 2(d), it is proposed for 10t tippers only, however, 16t tippers were also furnished in the machineries list and proposed for mining operation, if it is so, why the same is not indicated.

16. Para 2(e), it is given ore and the waste will be hauled by dumpers, but in some other para it is given through tippers, care should be taken to propose correctly.

17. Under float mining, it is given 6.15 ha area is proposed for mining & con-current back filling during the five years period as per the section 4c, but out of which 1.67 ha will be used during plan period, but 6.15 ha area comes for the plan period. The section 4c indicated, with reference to which plate number may be indicated. The proposed backfilling locations should be ear marked for reference.

18. Para 2(f), it is given final pit limit is designed based on depth, average dip & width of the ore body, as well as float ore distribution, is not correct, it is based on the ultimate pit slope and the ultimate pit limit.

19. Para under land use pattern, in table-35, present dumping is given as 4.59 ha, but during the plan period, the area reduced to 0.33 ha, how this extent of the area is reduced, further under subgrade ore stock, for the plan period, it is given 1.97 ha, area, but under para 2(f), in page-27, under disposal of

dumps, no sub grade generation is proposed, which must be clarified. Similarly, the back filling proposals and the actual may be checked.

20. Para 3(b), the maximum and the minimum mRL indicated must be indicated with above MSL.

21. Para 4(a), table-36, back filling proposals made for five years plan period, accordingly, the extent of the area is not reported in the para 8.6, which ought to have been. Further, the year wise quantity of waste in tonnes may be modified as per the modified working proposals.

23. Para 4(b), tables-37 & 38, reveals the back filling proposals in north & south blocks, and other sections indicated totalling to 9.35 ha, if it is so, why the same is not brought out accordingly in the text tables may be explained. Para 4.0(b): The year wise backfilling proposals may be modified as per the modified production & development proposals. In the page no. 31, it is mentioned that all BHQ produced will be sold as low grade ore. The specifications of buyer for low grade ore (BHQ) may be furnished and a copy of documentary proof of buyer's specifications and method of adopting beneficiation process to meet the required grade by using BHQ may be enclosed.

24. Para 5(e), it is given that ROM (ore and BHQ) produced will be suitably blended, how BHQ will be blended may be explained.

25. Para 8.6, under financial assurance, the extent of the area utilized for back filling, indicated in column- 4 as 1.67 ha, if it is so, than the same area can be considered under column -6 and the bank guarantee amount for the extent of the area may be avoided/ deleted from the total amount.

Part –B

26. Key Plan (Plate No. I/b): The lessee name is written as M/s Shree Gavisiddeswara Minerals, not as Sri. Gavisiddeswara Minerals. The approach road to the ML area needs to be marked with approximate distance from a known place. In the light of the above remarks, the other plates may be attended.

27. Plate no. I/d : The title of plate is to be modified as the area is proposed to surrender, but not surrendered already.

27. Surface Plan (Plate No. II/a): The extent of north block and the south block should be shown/ demarked with clarity. The pits, dumps, stacks should be numbered or given with identification for easy reference. Existing pits in the ML area must be numbered. Fines stacks present on the hill slope must be taken protective measures against wash-off during heavy rains. The proposed bore holes in the mineralised area may be avoided and included in the float areas atleast two/ three holes to understand the mineralization at depth. Besides, the reclamation/ back filling areas similarly to confirm the exhaustion of minerals at depth/ before undertaking back filling, must be confirmed. This plan should be prepared as per rule 28(1) (a) of MCDR, 88.

28. Geological Plan (Plate No. II/b): The notation used for both UPL and the UNFC codification for 333 resembles similar, which may be changed suitably. Existing and the proposed stacks falls within the UPL must be brought out/ shifted, so that there will not be any interruption for systematic mining operations. Geological Plan and Sections may be prepared on the lines of that of last document and the same are to be signed by Surveyor. This should be prepared as per rule 28(1) (b) of MCDR, 88.

29. Geological sections (Plate No. II/c): The ultimate pit limit marked in the sections should be corrected as ultimate pit slope. Accordingly, the UPS marked in cross sections, attended and corrected. Siliceous ore should be different from BHQ. A Geological longitudinal section may be prepared. In the light of the above remarks, the plates and the text need to be attended, wherever applicable.

30. Development & Production Plan (2017-18, Plate No. III/a, to III/f): The proposed workings for the year 2017-18, both in the insitu and in the floats must be marked at the end of the working, 2017-18(i.e. up to 31.3.2018). In the light of the remarks, the remaining years workings also must be shown as at the end of the working (i.e. 31.3.2019), and so on up to 31.3.2022. Besides, the developments and production along with back filling shown in the north block is found to be not matching and not appropriate. The back filling location and the adjacent faces required to be worked in the present plan period to exploit the ore body as much as possible along the strike and across the strike (i.e. towards western side) for optimum exploitation of mineral and later in the 2nd year proposals, back filling can be continued. Further proposals for the remaining years may be changed and continued. In the light of the above remarks, protective works should be attended. Approach road to the each bench should be marked. CCOM circular No.4/91 & 5/91 may be taken full care while preparing these plates.

31. Back filling (2017-18): The back filling may be continued from the 2nd year for better conservation point of view. Therefore, the sections have shown along A-A' and B-B' are found to be not to reality. During the site inspection, it was observed that the location shown for back filling was having both the side benches, if it is so, the back filling will be on both the sides and not on one side. So the filling should be shown as per the site locations. From the sections, it is observed that the prevailing lithology pertains to each sections are not brought out.

32. Development & Production Plan (2018-19, Plate No. III/b): The proposed workings on the western portion in northern block, reveals along with some waste dumps, by the side of the workings and also stacks of c-ore/ fines etc., which found to be unsystematic and unscientific, instead keeping the stacks and the waste dumps away from the workings/ UPL. Due care is required to plan accordingly to move the stacks/ waste dumps, wherever feasible for better exploitation of minerals. In the light of the above observations, remaining years workings may be planned to the reality.

33. Environment Plan (Plate No. V): The other ML areas present within the 500m buffer zone must be brought out for clarity & reference. Environment Plan should be as per rule 28(5) (b) of MCDR, 88. 500m core zone should be replaced with buffer zone.

34. Conceptual Plan & section (Plate No.VI): The conceptual plan should be prepared in such a way to represent the position of workings at the end of conceptual stage. The present workings will not be appearing at that stage. Different stacks indicated in the index part will not appear at that stage. Whatever the way the dumping or back filling undertaken within the ML area, should be brought out accordingly without any changes. Back filling undertaken in the worked out area, should be shown as back filling or reclamation and not as dumping. The present submission shows, many aspects as if like existing working. Therefore the conceptual plan and section should be attended in line with the remarks given in other plate and the text.

35. Reclamation Plan (Plate No. IV): Just submitting the dumping and plantation activities will not come under the back filling or reclamation plan. Whatever the back filling proposals drawn in the float areas as concurrent backfilling and other areas for back filling with the waste, those areas to be marked specifically, that those areas undertaken backfilling after exhaustion of mineral at depth.

ANNEXURE:

(i). Few photographs of the mine workings, waste dumps, stacks, infrastructure, R & R works, plantations, reclamation & rehabilitation work undertaken if any for reference may be enclosed.

(ii). Photographs of three GCP's and the boundary pillars may be enclosed, with M.L. No. written on the boundary pillars.

(iii). The certificate submitted by the lessee should be attended in the relevant places as lessee only and not as applicant. Besides, on the cover pages and in other places, the lessee company is written as M/s Shree Gavisiddeshwara Minerals, but in some places it is given as Shree Gavisiddeshwara Minerals, better to be given uniformly, both in the text and in the plan & sections to avoid confusion. In the light of the above remarks, the certificate from QP and other relevant paras if any may be checked.

(iv). The scheme of mining and the modification document approved letters enclosed; the dates of each letter may be indicated.

(v). The copies of QP certificates enclosed without indicating the qualification & the experience certificates for all the three QP's, to be specific.

(vi). Annexure-23 enclosed for CFO by KSPCB for the period 1/7/2016 to 30/6/2017 only, the CFO for the remaining periods may be obtained in due course of time and intimated to this office.

(vii). A copy of letter of deemed extension of lease period as per new amendment of MMDR Act.2015 may be referred in the text and enclosed.

(viii). Annexure-13: A copy of letter submitting the form-J which is incomplete. The complete letter along with the enclosure may be submitted.

(ix). Annexure-15: Analysis reports: It contains only report of samples of trial pits and 9 boreholes (SGM-29 to SGM-37). The analysis report of samples of 24 boreholes may also be enclosed.

(x). Annexure no. 6: Resolution copy of the nominated owner: All partners have not signed the resolution letter including the nominated owner.

(xi). Annexure no.18: Feasibility Study Report:

(a). Para 2: It is stated that the pitting was not carried out, but the estimation of float ore was made on the basis of trial pits, if it is so, it may be given correctly.

(b). The table of Reserves/ Resources may be modified as suggested in PART-A.

(c). The production program may be modified as stated in Para-2: Mining.

(d). The Feasibility Study Report is to be signed by the lessee/QP.