

**SCRUNITY COMMENTS ON MODIFICATION TO THE APPROVED REVIEW AND UP-DATION OF MINING PLAN OF NARAYANAPUR MANGANESE & IRON ORE MINE (M.L NO. 1602) OF M/S NARAYAN MINES PRIVATE LTD., OVER AN AREA OF 107.51 HA. IN NARAYANAPURA VILLAGE, SANDUR TALUK, BALLARI DISTRICT OF KARNATAKA STATE. THE PRESENT MODIFICATION PERIOD IS FROM 2017-18 TO 2019-20, AGAINST THE PREVIOUS APPROVED DOCUMENT PERIOD 2016-17 TO 2019-20. CATEGORY-A(FULLY MECHANISED), RESERVE FOREST -105.15 HA, NON-FOREST-2.36 HA, NON-CAPTIVE MINE.**

**COVER PAGE**

1. Date of first grant of the ML to be furnished in the cover page. The Modification to the approved Review and up-dation of Mining Plan including PMCP, under rule 17(3) of MCR, 2016 should be indicated.

**NOTE**

2. Under the contents, in part-A, the PMCP under rule 23 of MCDR, 1988 is given which must be corrected as 2017.
3. All the list of annexures indicated must be indicated with date, ML. No. etc., wherever applicable to avoid confusions & for clarity.

**INTRODUCTION**

4. Modification to the approved review & Up-dation of Mining plan should be written, instead of just approved mining plan. In the light of the above remarks, the whole text and the plates may be attended, wherever applicable.
5. In page-2, in 3<sup>rd</sup> para, it should be written as the mining operation has been commenced / started in the ML area from 11/02/2017. Besides, the present modification is sought for inclusion of exploration undertaken in the ML area, followed by addition of reserves based on the exploration and the ore body exposure in the pit, reduction in the manganese production and the changes in the location of developments and production during the year 2017-18 to 2019-20 respectively.

**GENERAL**

6. The name of the lessee should be given, based on the resolution made in the annexure-13, instead of just giving the name of the company.
7. Para 2(b), under the details of forest, it is given SM Block reserve forest, but in the cover page it is given as SM- Block Kumaraswamy reserve forest. Better to give appropriate names wherever applicable in the text and the plates.
8. In table -8, the three GCP's are given with all details, including the distance from the BP, but not indicated in the surface plan.

**DETAILS OF APPROVED SCHEME OF MINING**

9. Para 3.3, it is given mining activity has started only in 2016 after execution of lease renewal is accepted, but the year given is wrong, in the introductory part it is given as 11/2/2017. Care should be taken furnish the information appropriately without any ambiguity.

10. Para 3.3, under exploration, it is given 17 nos., of RC boreholes only, and sunk 11 nos., of trial pits during July-2017 to a total depth of 716m is not appropriate and correct. The method of indicating the trial pit quantum of excavation is not correct. This should be given appropriately.
11. Para 3.3, in table-11 & 12, the details of the construction furnished, without furnishing the date of completion and the cost incurred in each item of the work should have been indicated for clarity.

#### **PART-A**

12. Para 1.0 (i): under the future programme of exploration, the total extent of mineralized area should be furnished here, and in line with that it is to be mentioned whether entire mineralized area has been explored under G1 stage or not. Entire potential mineralised area should be explored by detailed exploration (G1 stage) in accordance with Rule 12(3) of MCDR, 2017.
13. Para 1.0 (J): it is given proved ore is considered up to the depth of ore intersection in boreholes and the exposure level, what is the depth taken in individual hole or average depth taken in the RC drill holes may be indicated.
14. Table-27, under feasibility study report, Sl.no. 4, it is given bore holes were drilled at 100 x 100m grid interval, but in para 1( e), & 1(j), it is given as 50m x 100m for RC drill holes and 100m x 100m for trial pits. This paras and other related paras need to be attended appropriately, without any difference.
15. In page-24, under feasibility axis, the mining operation is proposed to work as A (Mechanised method), but in the cover page and in other mining chapter, it is given for A (FM), hence the para should be attended suitably.
16. Para 2.0 A (a): (i). The text paras should be strictly followed as per the guidelines format. The existing working pits, approach roads to the working benches are not brought out and not explained accordingly in this para. (ii). The existing number of pits, their sizes, top & bottom RLs and average depth etc., may be given in tabular form. (iii). Further, it is expected to brief on the slope of faces, direction of advancement, approach road to the working faces & specification of roads, etc., to be marked. (iv). Also, the existing dumps spread parameters, height, slope protective works etc., to be marked. (v). The proposed bench height to 6m & width more than 6m is not appropriate proposals. The bench wise, mRL wise, opening reserves, exploitation and the closing balance (reserves) should be furnished for the proposed periods. (vi). In the light of the above remarks, the remaining part of the text and the plates may be attended.
17. Para 2.0 (c), under proposed rate of production & anticipated life of the mine, it is given 21.57 years for iron & 20 years for manganese, with the existing reserves/ resources, provided no changes in the enhancement of production from the DMG/ monitoring committee. Under the dump re-handling, for the purpose of recovery of minerals, the para need to be attended with clarity, including the paras are repeated.
18. Para 2(d), under salient features of the proposed method of workings, the proposals need to be modified by increasing the proposed height to 6m to 8m and the width may be from 8m to 10m, since there is a scope to develop the workings towards NNW and SW, which is coming under the provision of ultimate pit limit demarcated in the field.
19. Para 2.0 (d): the drill holes and the explosives consumption details are not calculated as per blast and no. of blast / week / month anticipated , but the explosives consumption is given just like that 1.5 tonnes approximately is not correct, and the requirement of explosives given with

rough estimate also not appropriate and correct. This needs to be reassessed month wise and the year wise.

20. In page-34, the production and development (2017-18-Aug-17 to March-18), the proposals given to work 936mRL to 858mRL, in iron ore area, forming 8 benches, is found to be not appropriate, the top bench should be advanced towards backwards i.e. NNW and SW at least 50m to 100m, so that the existing benches within the given above mRL can be worked systematically. In the light of the above remarks, the remaining two years (2018-19 & 2019-20) period proposals should be attended and modified suitably.
21. Para 2(f), under disposal of waste dumps, it is given 1.54 lakhs tonnes of waste generation is anticipated and ear marked 21.40 ha area will be used for dumping and ear marked are will hold 5.38 ha area is not appropriate and correct, since the allotted area is on higher side. This needs to be examined and reduced. Besides, subgrade generation during the year is not proposed, but the table-39 reveals the 2.5 ha area taken for subgrade, in the land use pattern. This must be checked for the justification. Similarly, the mineral stock area indicated as 5.20 ha & road 4.30 ha must be checked.
22. Para 8.1, under existing land use pattern, the table no.45 & 47 needs to be rechecked and corrected if applicable, based on the remarks/ observation in the above paras.
23. Para 8.6, under financial assurance, table-49, in sl.no.4, mineral stock at the start of the plan period is given 7.70 ha, but the during the plan period -3.6 ha is getting subtracted from 7.7 ha, how this is may be explained, including the Sl.no. 13, where -16.52 ha is getting subtracted. In table-45, under the existing land use pattern, for mineral stock area is given as 5.20 ha., if it is so, how the 7.7 ha is written in the table 49 may be reconciled.

## **PART-B**

24. Para 10, Plates:

- a) Key Plan (Plate 1/b): The approach road to the ML area marked is not legible. The forest boundary marked is found to be coming out of ML area, but the majority of the area falling under reserve forest as per this ML is not appropriate. Please check and correct. Nearby ML areas are required to be demarcated in this plan.
- b) Surface Plan (Plate no. II/a): On the plate it is expected to write Modification to the approved Review & Up dation of Mining Plan. Same manner, it is to be attended in all the plates. The Mining operation proposed in the year 2016-17 and up to 27.07.2017 as per the date of survey indicated in the plan, accordingly, the changes in the pit position, sorting and stacking position should have been updated, but the same is not brought out as per existing situation in the mine.
- c) Geological Plan (Plate no. II/b): Area covered under G1 and G2 stage of exploration should be indicated in plan and sections. From the sections A-A' & B-B', it reveals that, only 5 drilled bore holes in Iron ore area and two bore holes in Manganese area, but no holes drilled in between the area, except few trial pits, which will not give enough information which need to have for future planning and reserve estimation. Therefore, these areas must be drilled all along the strike with the grid of 100m x 100m to understand the ore body extension laterally and also in depth wards.

- d) Geological section (Plate no. II/C/1 & II/C/2): From the geological sections, viz. C-C', F-F', H-H', J-J', K-K' & up to S-S', adequate drilling has not undertaken to predict the ore deposits at the bottom and the continuation of the ore body
- e) **Year wise Development Plan & section (2017-18, Plate No. III/a, b & c):** the ultimate pit limit drawn and the three years development & production proposals drawn for the need to be modified by extending the benches towards NNW & SW, that the top benches should be moved at least 50m, as exploratory mining to expose the ore body to know the continuity of the ore body. In the light of the above remarks, the remaining developments & production plan and sections should be attended and modified suitably.
- f) **Conceptual Plan & Section (Plate No.VI):** The development & production undertaken as per the proposals in the development & production plates and as per the document is found to be not appropriate. The faces proposed in the plan and the one shown in the conceptual plan is not matching. It should be in the way, as per the proposals. Even in the conceptual sections, the biodiversity area shown also looks barren without any plantations, which ought to be.
- g) **Reclamation Plan (Plate no. IV):** This plate should be written as Reclamation and rehabilitation plan, instead of just reclamation plan as per the R & R approved by ICFRE, indicating the work completed and the work under progress.

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

- a) In the consent letter, it is expected to mention as Modification to the approved Review & Up-dation of Mining Plan, under rule 17(3) of MCR, 2016, instead of just mining plan. Further below para need to be attended accordingly.
- b) Certificate from the QP, wherein MCDR, 1988 should be corrected as MCDR, 2017, with the latest amendments.
- c) Copy of the 1<sup>st</sup> ML deed need to be specified.
- d) Copy of the application given by the lessee to the State Govt. of Karnataka, seeking extension of ML period. Similarly in the annexures, whatever the annexures enclosed must be clearly indicated in all the annexures.
- e) Annexures-4 should be given with date of the letter and the valid period.
- f) Annexure 16, have been furnished on progress of the R & R works, but the period of completion for the proposed works are not given.
- g) Annexure-20 a & b, for production of manganese & iron given separately should be indicated accordingly.
- h) Copy of valid Bank Guarantee, in accordance with Rule 27(1) of MCDR, 2017, valid till 31.03.2020 may be enclosed.