DRAFT SCRUTINY COMMENTS OF REVIEW & UPDATION OF MINING PLAN OF "HULIKATTE" MANGANESE ORE MINE" OF M/S BHARAT PARIKH AND COMPANY, OVER AN AREA OF 32.23 HA, ML. NO. 2571, IN HALEKALLU & GUDAHALU VILLAGES, JAGALUR & DAVANAGERE TALUKS, DAVANAGERE DISTRICTS, KARNATAKA STATE. THE FIVE YEARS PERIOD FROM 2020-2021 TO 2024-2025 (W.E.F. 01.04.2020 TO 31.03.2025). NON-FOREST REVENUE KHARAB LAND /NON-CAPTIVE, PRIVATE COMPANY, CATEGORY OF THE MINE IS MECHANIZED. SUBMITTED FOR APPROVAL UNDER RULE 17(1) OF MCR, 2016. MINE CODE IS 40KAR07009 & REGISTRATIN NUMBER IS IBM/ 6384/2011. VALIDITY OF ML PERIOD EXPIRES ON 28/09/2035 AS PER THE AMENDMENT OF MMDR ACT 2015.

- 1. On the cover page the IBM mine code and Registration number are not mentioned correctly/separately, should be mentioned as it is given above in future reference.
- 2. From the list of Annexure enclosed found that the date application/approvals are not given along with the number of pages in each annexure.
- 3. In para 1.0 (a) General, IBM mine code and Registration number are not mentioned correctly/separately.
- 4.The introductory part need to be attended in comparison with the previous approval, indicating any changes compared to the previous approval or there is changes compared to the previous and the present one. Any major changes should be highlighted.

Part-A

- 5. Para 1(i), under future exploration programme, in table no.7, it is given 28 bore holes of core drill will be under taken during the year 2020-21 of 100m x 100m grids and in the same year 19 nos. of trial pits of size 2m x2xm x 2m will be done, but in the text para it is mentioned that the exploratory bore holes drilling & trial pits for entire lease area of manganese ore zones during the plan period 2019-2024 respectively. From this it is understood that the proposals is drawn for five years period, whereas in the table it is particular year of 2020-21 is not appropriate and correct. The text para proposals & the table information should match, otherwise, the table proposals should be distributed year wise.
- 6. In table no. 09A, under estimation of Manganese ore proved category reserves, the TCF considered as 2.2 for the Mn ore is less comparing to the other mine of the area, need to be reconciled. How this factor arrived may be given for reference.
- **7.** Table no.11, under UNFC classification of reserves/ resources, brought out as on 1/4/2019, may be updated as on 1/1/2020.
- 8. Para 2A (a), the details of the number of working benches height, width, slopes, waste dumps, stacks and infrastructures, etc., similarly, the proposed method of working for the current proposal, provided work resumes in the mining lease area. 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.
- 9. Para 2A (a), in table no. Nil at page no.27, the production proposed for five years may be given with number of pits and similarly in the below table the number of waste dumps involved while working the old waste dumps for reference.
- 10. Table no.13, on re-handling of waste dumps/ sub-grade dumps, wherein dump nos., D1 to D5 & D7 referred for, what is the approximate quantity that is expected from each dump is not indicated. Besides, it is better to plan certain dumps can be undertaken re-handling in phased manner, so that the particular dump locations may be consider for re-use for back filling / or other useful purposes.

- 11. In page no.31 & 32, the five years proposals drawn for five years from the year 2019-20 to 2023-24, may be drawn from 2020-21 to 2024-25, the period for the 1st year is very short period, getting CFO & other clearance will be difficult, hence to reconsider the proposals.
- 12. Production plan for 2019-2020(Pit No.1 north block): it is proposed to work in the pit no.1 north block to produce the desired production of 2000t & remaining 2000t from the existing waste dumps cum sub grade dumps, but not specified particular dumps. It is expected to start from the dump no.7, instead of vague proposals, without indicating the sub grade stacks. If the dump no.7 is worked 1st and later others opposite to no.7, so that the exploited area may be used for dumping/ stacking purposes, instead of moving to dump area which is quite long distance. In the light of the above remarks, the text & the plates may be attended for the remaining years, wherever applicable.
- 13. Para 2(f), it is given that the during the ensuing period, 28 bore holes and 19 nos. of trial pits will be made for the entire lease area, since the bore holes are drilled, trial pits may be avoided for the ensuing period.
- 14. Table no.16, land use pattern, wherein the extent of the area for the waste dump is 5.90 ha, during the conceptual period, how this area is not used for back filling & other purposes may be explained. (ii). In the same chapter, in para drilling & blasting it is mentioned that the powder factor is 6t/kg of explosives used, is found to be low, this needs to be rechecked.
- 15. Table no.23, wherein the information have been furnished nil, and the proposed for is not year is for the year previous years.
- 16. The consent letter from the lessee is furnished without the date. It is must to have with signature. In the light of the above remarks, wherever it is signed, invariably the date and signature must be present.

Part-B

- 17. <u>Plate No.01A (Key Plan)</u>: In the index it is marked 5km buffer zone & 10km buffer zone, is not appropriate and correct. 1st one should be core zone & other one should be buffer zone.
- 18. Surface Plan: (Plate No. 03): The surveyor is not signed having mentioned the name of the surveyor. (ii). Three pits locations are marked without marking the boundary of each pit limits to know the limit of each pit for future reference. (iii). The pits, dumps, stacks etc., are must be depicted in the index/ plan as per the standard notation given in the MMR 1961.
- 19. Plate No -04 (Geological Plan): (i) This plan may be prepared as per rule 32 (1) (b) of MCDR 2017. (ii). The proposed core drill holes / the trial pits are programmed for one year itself, instead of phased manner. (iii). UPL in the plan and the ultimate pit slope in the sections must be marked appropriately, instead of ultimate pit limit in both the cases. (iv). The geological notations used in the index in this plate and in other plates must be same without any changes/ difference to avoid confusions. (v). The stacks of sub grades/ waste dumps indicated must be present out of UPL, on the mineral conservation point of view. Whatever, the waste dump/ stacks present within the UPL must be relocated from the UPL boundary to start the mining operations that is present within UPL must be planned to restart the mining operations.
- **20. Plate No.05** (Geological Cross sections): (i). The remarks given in the geological plan may be considered for geological sections. (ii). The ultimate pit slope is not depicted on the sections, which need to have. (iii). In all the cross sections, the ore zone of manganese is given, except in the longitudinal sections, what is the reasons for the same is not given nor justified. (iv). When there is a

proposals for bore holes, giving proposals for trial pits are uncalled for.(v). In some sections like E-E', F-F' reveals the presence of waste over burdens, but those things are shown with incomplete notations and the sectional views leads to confusions.

- **21**. **Plate No –06A** (Year-wise Production and Developments Plan-2019-2020): (i). The proposal should be drawn to work along the contour line almost north to south or east to west. Otherwise, considering the cross sections drawn, A-A', B-B' & so on, the locations shown is not systematic and scientific. The approach or the planning to work from one end to other end, considering the
- <u>22. Plate No –06B</u> (Year-wise Production and Developments Plan-2020-2021): The proposals drawn for the year need to attend in line of scrutiny comments offered for the 2019-2020 proposals. There is no approach road to the workings proposed for this year, which ought to have been. The proposals drawn reveals that not much development falls in the ore zone area, rather in the non mineralized and in the Banded ferruginous Cherts. In the light of the above remarks, the other development & production plan and sections may be attended appropriately.
- 23. Plate Nos. 08 (Conceptual plan & sections): (i). The plan and sections should be such that, what would be position of workings at the end of this plan period/ conceptual stage must be visualized and brought out accordingly. (ii). The present waste dumps and the sub grade dumps shown from No.1 to 7 will not appear in the conceptual stage as it is. There is a proposals to work and to exploit the sub grade materials from such dumps, how these dumps will be continued to be same may be examined. (iii). During the conceptual stage, the back filling(BF) undertaken using the waste dumps in the worked out area and in some areas bench plantations may be planned / undertaken depends on the outcome of the future exploration.(iv). The development and the production faces shown as it is even after the conceptual stage is not appropriate. The faces should be worked laterally and depth wards to know the extension of the orebody. (v). If there is a chance for creating water reservoir in the ML area, it should be undertaken/ created suitably and brought out accordingly.
- **24. Plate No-X** (Reclamation Plan): Proposed environmental monitoring station at core-zone, water monitoring station at water discharge point should be reflected. (ii) The year-wise afforestation & environmental protective measures to be shown. (iii). BF need to be undertaken only after exhaustion of ore body, without which no BF should be commenced. (iv). This plan should be prepared similar to conceptual plan/ sections, considering the BF i.e. reclamation & rehabilitations. (v). current year BF need to be deferred based on my scrutiny comments.