**ANNEXURE** 

SCRUTINY COMMENTS ON DRAFT REVIEW & UP-DATION OF MINING PLAN OF KARADIKOLLA IRON ORE MINE, M. L. NO. 2520 OF M/s GOGGA GURUSHANTHIAH & BROS, OVER AN AREA OF 15.10 HA AS PER LEASE DEED/ 17.02 HA AS PER CEC. IN VILLAGE NEB RANGE, SANDUR TALUK OF BALLARI-DISTRICT, IN STATE KARNATAKA. SUBMITTED FOR APPROVAL, UNDER RULE 17(1) OF MCR, 2016. SANDUR BLOCK IN NEB RANGE, RESERVED FOREST, CATEGORY OF THE MINE IS A-FM (FULLY MECHANIZED). FOR THE PERIOD 2019-20 TO 2023-24, I.E. UP TO LEASE PERIOD IS 03.09.2023. CATEGORY OF THE MINE IS B-MANUAL / OPEN CAST. M.L. EXPIRY DATE IS 03.09.2023.

## **COVER PAGE**

- 1. The registration number of the company is given as IBM/202/2011, where as in the general Para 1, it is given IBM/1010/2011, under rule 45 of MCDR, 1988. Care should be taken to give the correct registration number in appropriate places.
- 2. The list of annexures given, which must be added with another column to give number of pages in each annexure for clarity. All the annexures must be given with date and validity also in each annexures as applicable to each letter, including the approved mining plan/ scheme etc. Name of the mine with lessee need to be given in the photographs.
- 3. Introduction: It is mentioned in the introductory part, that this mine is not in operation since 30/04/2008, due to environmental clearance, but now the RMP (review & up-dation of Mining Plan) has been prepared under rule 17(1) of MCR, 2016 for approval without indicating the status of the permission or clearance on the issue indicated earlier EC. This point should be attended specifically in this introductory part & also in the relevant para's of the text for clarity. Para 3.3(a) & Table no.8 & 3.5.
- 4. Table no.2, number of leases already held by the lessee given without indicating the lease no.2520.
- 5. Table no.6, the boundary pillars & GCP's are enclosed in annexure-VII, are not appropriate and correct. The three GCP's locations are need to be given along with main surface plan, instead of showing separately.
- 6. Table No.10, the years indicated like 1 year, 2 years & 20 years etc., are pertaining to from which year is not clear.

## Part-A

- 7. Para 1(i), the future exploration programme, given trial pits for the year 2019-20 & 2020-21, and with single bore hole for the year 2020-21, to assess the mineralization in the ML area is found to be non appropriate. Considering the existing situation, it is better to have few bore holes of core/ non core drill holes to get more information on the lateral & depth wise mineralization for future mining operations. In the light of the remarks given above the related text para if any may be attended.
- 8. In para 1(j), cut-off grade is considered as per new threshold values i.e. 45% Fe for iron ore, but the new threshold value fixed by IBM, it is not with clarity whether the presence of +45% Fe or +35% Fe siliceous ore as per the new thresh hold limit published recently. In the light of the above remarks, the related text and the plates, wherever applicable may be attended if applicable.
- 9. Table no.17, shows the updated reserves/ resources as on 1/9/2019, the grade is indicated in the last column for the A-mineral reserves only as 45% to 65.38% Fe, but not for the remaining mineral resources. Besides, the reserves & resources quantity shown as 103,844 tonnes, which is less in quantity comparison to the previous document approval of more than 2.00lakhs. Hence, need to be justified with explanation, why it is reduced in the present circumstances.

- 10. Para 2A (a), the details of the number of pits, dumps, stacks & infrastructure etc., non working benches height, width, slopes, 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.
- 11. Para 2(b), under year wise tentative excavation, the production limit of 3700t/ annum need to be maintained for the present till further any changes takes place based on change in reserves/ resources on the basis of fresh/ future exploration in the ML area and the change of production.
- 12. Para 2A(c), the present proposals may be attended in line with the comments of para 2A(a) if found appropriate and good for future mining. Table no.19, given after sorting iron ore, the waste will be simultaneously back filled in the float worked out area. Instead of starting back filling in the 1<sup>st</sup> year itself, better to commence from the 2<sup>nd</sup> year after sufficiently advanced the face, stacking the waste material within the ML area near for immediate back filling. In the light of the above remarks, the table no.20 may be attended appropriately.
- 13. Table No.21, the machineries if any addition may be added/ deleted depends up on the decision in selecting the mining operations.
- 14. Para 2(f), may be attended in line with the para 2A (a), wherever if applicable. Table no.22, on land use pattern need to be attended wherever applicable. Table no.23 need to be attended, if any corrections based on the remarks of Para 2A (a).
- 15. Para 4(b), the back filling proposals is indicated in the float ores area is accepted only, if it is proved to be barren and non existence of ore at depth. The back filling proposals may be taken in the present five years period, after confirming the exhaustion of ore at depth/ by proving the same through the drill holes.
- 16. Para 8.3.1, under mined out land, there is a proposal for back filling, in the float area is not accepted in the present proposals, it is better to have it in the 2<sup>nd</sup> year onwards, provided, the area is confirmed for exhaustion of minerals/ devoid of ore beneath, it should be at least confirmed through non coring drill holes.
- 17. Para 8.6, under financial assurance, the area put to use for mining & other allied activities may be checked for correctness of the datas based on the remarks in para 2A(a) & other paras before arriving the figure for calculation of financial assurance.

## Part-B

- 18. <u>Plate No.1 (Key Plan):</u> The approach road to the ML area with approximate distance from the known place needs to be marked.
- 19. Surface Plan: (Plate No. 3): The three Ground control points should be given in the main plate, instead of showing separately. (ii). The existing pits, stacks, dumps and other infrastructure if nay need to be depicted in this plate. (iii). The pits, dumps, stacks etc., are must be depicted in the index/plan as per the standard notation given in the MMR 1961.
- 20. Plate No -4 (Geological Plan): The plan may be as per rule 32 (1) (b) of MCDR 2017. (ii). So for no bore holes of core/ noncore drill has been undertaken in the lease area to assess the ore deposits, except taking the influence of the adjacent mines and the floats ores on the surface & sub-surface. Therefore, few bore holes may be propose to under taken at random location in the ML area for better understanding on the lateral & depth ward extension of the ore body.( atleast one in each sections & another one each in western boundary/ one in eastern boundary. (iii). UPL in the plan and

the ultimate pit slope in the sections must be attended 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 future planning for development & production must be in such a way for scientific & systematic mining.

- **21. Plate No.5** (Geological Cross sections): The remarks given in the geological plan may be considered for geological sections. (ii). The UPL/ UPS, ultimate pit slope, indicated in the sections X-Y & C-C'are found to be not appropriate and correct. For the whole area only single hole is given proposals for core drills, which is not adequate to assess the mineralization of the area.
- **22. Plate No: 6** (Year-wise Production and developments Plan-2019-20 to 2023( i.e. up to 3/9/2023): The five years working faces shown for the development & production plan without revealing the approach road & exit roads from the working faces and also the waste dump faces. (ii). The concurrent back filling may be started from the 2<sup>nd</sup> year onwards, instead of 1<sup>st</sup> year itself. (iii). The production limit should be maintained and not to exceed the approved quantity by CEC/ DMG, Karnataka. (iv). What is the reason for taking the shape shown in the development /production plan, including back filling may be explained, instead of taking regular rectangular/ square shape for development & for production, to maintain the uniformity. In the light of the above remarks, the remaining four years mining operations may be attended and modified.
- **23**. **Plate No.7**(Production section): This sections should be attended in line with the remarks furnished in para 2A and above development /production plan. Without getting exploration in the form of drill holes datas, we cannot be satisfied with the trial pits.
- **24. Plate Nos. 09** (Conceptual plan & sections): The it is written as scheme of mining, mentioning the period as 2015-16 to 2017-18, which is not at all related. Care should be taken while preparing the document. (ii). 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. (iii). In the present mining plan period, better to avoid BF in the float area. Better to take up in the 2<sup>nd</sup> years period onwards suitably after the exhaustion of ore body at depth. (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/ in some place water reservoir, it should be undertaken and brought out accordingly. But, what is shown is incomplete.
- **25. Plate No-X** (Reclamation Plan): The year-wise afforestation & environmental protective measures to be shown. (ii). BF need to be undertaken only after exhaustion of ore body, without which no BF should be commenced. (iii). This plan should be prepared similar to conceptual plan/sections, considering the BF i.e. reclamation & rehabilitations. (iv). current year BF need to be deferred based on my scrutiny comments.