JOINT SITE INSPECTION REPORTIN RESPECT OFMODIFICATION TO APPROVED FINAL MINE CLOSURE PLAN PROPOSALSIN VIEW OF THE COLLAPSE OF OVERBURDEN/WASTE DUMP FORKARADIKOLLA SURESH IRON ORE MINE (ML NO 2502) OF M/S. P. BALASUBBA SETTY & SON, OVER AN EXTENT OF 42.10 HA (AS PER CEC) IN KARADIKOLLA VILLAGE OF SANDUR TALUK, BALLARI DISTRICT OF KARNATAKA

In view of the recent collapse of overburden/waste dump in the said mine, the Lessee was advised by IBM to conduct slope stability study of the mine pit and dump vide IBM letter dated 18/01/2023 and further to modify the final mine closure plan based on the recommendations of the above scientific study and modified R&R plan vide letter dated 05/04/2023. The Lessee was also advised to carry the blasting scientific study by DGMS vide letter dated 30/12/2022.

In response to the above said letters, the slope stability study for mine pit & dump has been completed by the Lessee through NIT-K and the study reports have been submitted to IBM on 11.05.2023.The blasting study wasalso completed by Lessee dated 16.05.2023 through NITK.Further, in this regard a meeting was conducted,under the chairmanship of Secretary to Govt., Commerce & Industries department (MSME & Mines) dated 08.05.2023. The ICFRE team along with officers of DMG Karnataka & Forest Officials of Bellary and Vijayanagara districts of Karnataka inspected the mine site on 16.05.2023. Based on the observations made during the site inspection and analysing various technical aspects and review of above said NITK reports, ICFRE has submitted report to Government of Karnataka on 12th June 2023 through CEC.

Accordingly, the Lessee has submitted draft modification to the approved Final mine Closure Plan to implement the R&R activities as per the recommendations of modified R&R plan. In view of above and in compliance to DMG letter dated 11.05.2023 & IBM letter dated 29.05.2023, joint site inspection of the above said mine was carriedon 15th June,2023, by the officers of Indian Bureau of Mines, Regional office Bengaluru and officer of Department of Mines & Geology along with the mine management team of the Lessee.

Inspection Team Members

1. Dr. Sudhakara T.L, Senior Mining Geologist (IBM Bengaluru)

2. Shri Sandeep Kumar Singh, ACOM (IBM Bengaluru)

3.Shri Chandrashekar H, Senior Geologist, (Department of Mines & Geology, Bellary, Government of Karnataka).

4. Shri Naveena G, Geologist, (Department of Mines & Geology, Bellary, Government of Karnataka).

Lessee members accompanying during inspection:

1.Shri Krishna Reddy, Mine Manager& Mining Engineer

2.Shri M. Ramesh, Geologist.

The site inspection of the Slided portion of the dump, proposed mine working and waste dump area were carried out and further the recommendations of the above said reports were discussed in details with the Lessee. The Lessee was advised to incorporate the following points in thefinal modified FMCP and further implementation in the field.

1. The terrace of the Slided dump to be constructed with individual terrace height of 10 metres, individual width 15m, Terrace slope-37 degrees, overall dump slope 27 degrees& maximum number of terraces 16 as proposed in the recommendations & dump and surface water management plan of modified R&R report.

2. Existing Slided dump should be compacted properly using roller/dozer before forming decks. Bottom to top approach to be adopted and decks to be formed one after other only.

3. Due to change in the deck configuration, decks will not be in alignment with the adjacent intact dumps, in such cases the existing and stabilized dump joining areas, a V-shape or trapezoidal shape troughs to be made which will act as water drainage channels as recommended in the dump stability study report.

4. The Lessee was advised to start the stabilization process of the Slided dump at the earliest. The stabilization of dump to be carried out very carefully under the supervision of a competent officer and the Progress report to be sent periodically to IBM Bangalore, DMG and Monitoring Committee, Karnataka.

5. The dump (AD-1) as proposed in FMCP was inspected. The Lessee was advised to specifically maintain the dump design parameters (Individual terrace height-10m, Width-15 m, Terrace slope-37 degrees, Overall slope-27 degrees, and max height 20 m, Area-0.85 ha) as proposed in the recommendations & dump and surface water management plan of modified R&R report.

6. All the Engineering measures as proposed for the Slided dump (ID-1), proposed dump (AD-1), Mine pit etc such as Toe walls, Garland drains, Geotextile/coir matting etc. to be incorporated in the Reclamation plan of modified FMCP as per the dump and surface water management plan of modified R&R report. Also, the water flow channels on inward slope of dump benches and proposed garland drain to be stone pitched to avoid percolation of water and water channel to be made with proper gradient.

7. The working pit as proposed in FMCP was inspected and it was observed that portion of the proposed pit working was within 150 metres of the proposed dump-AD-1. The Lessee was advised accordingly to maintain at least 150 metres or more for the current proposed working from dump ID-1 & AD-1. The mine working proposals to be reworked accordingly in modified FMCP. The maximum charge/delay to be also restricted to 30 kg and number of rows to be restricted to max 3 and number of holes per blast max to 40 as per the blasting study recommendations. NONEL initiation system and blasting parameters (Spacing, Burden etc.) to be mandatorily followed as per the study recommendations.

8. As per the monitoring Committee letter no. MC/R&R/MPAP/2023-24 dated 29.03.2023 which is attached in draft modified FMCP as Annexure-13, the annual production should be proportionately distributed over the 12 months for the purpose of scientific mining as observed by Hon'ble Supreme Court order dated 28.09.2022 in WP 562/2009. Accordingly, the ROM production capacity to be given for the period 2023-24(1st June 2023- 4th Sep 2023) after depleting the actual ROM production quantity from April-23 to May-23 from the existing CEC MPAP of 0.475 MMTPA. The corresponding waste quantity to be arrived accordingly and dumping to be proposed at AD-1 in line with the modified R&R report.

9. The mine pit & dump slope monitoring to be carried out periodically as per the recommendations of the stability study and the data generated to be maintained in separate register.

10. Further to the above points, detailed scrutiny w.r.t the submitted draft FMCP will be issued para wise and same needs to be incorporated in the Final modified FMCP.

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