

Annexure

Scrutiny comments on the draft scheme of mining of Chettichavadi Jagir magnesite mine GO No.74 over an area 449.364 ha in Chettichavadi village Salem taluk & district Owned by M/s Dalmia Bharat Sugar & Industries Ltd., submitted under rule 12 of MCDR-1988 for the period from 2016-17 to 2020-21.

General:

Rule mentioned on the cover page and report should be changed as 17(3) of MCR-2016 instead of rule 12 of MCDR-1988.

1. Para 2(a): The initial grant of mining lease for magnesite mineral may also be furnished for information and copy of order need to be annexed for record.

Part-A

2. Geology & Exploration: Para 1(c): Grade and quality of magnesite and its distribution, variation in different blocks with respect to depth also need to be discussed under the para. Method of reserve computation and the important parameters such as bulk density recovery of magnesite and dunite should be briefed under the chapter.

3. Para 1(e)(ii): Block wise no of bore holes and its depth drilled under exploration programme should be discussed and litho logs should be furnished under the para.

4. Para 1(j): It is stated in the para that "ore body exposed and benches will be pushed laterally 50m on either side of present workings", in this regard the reserve/resource estimated block wise pits wise upto ore exposed/last scheme period indicating the present level of working/depth may be also be discussed in this para and it may be illustrated in a table for better understanding, as no exploration carried out recently.

5. Balance reserves Table no.3a&4(page 21&24): It may be explained whether in table 3a the reserve includes dunite or not and the table no.4 is not showing the quantity of reserve (III) UNFC category of dunite. The UNFC reserve of magnesite and dunite should be updated as on 1.4.2016 as the programme year 2015-16 has already been completed. It may be noted that, magnesite reserve is considered only in the areas that are active/working pits. Reference symbols and colours should be allocated for reserve/resource of UNFC codes (111),(121)and (211)like symbols allocated for geological formations/rock types to cross check and to arrive the reserve computation indicated in annexure with sections.

6. Para 1(l)a: As the dunite is having economic value, its recovery % may also be discussed under the para.

7. Magnesite ore reserve & resource (page 28): The reserve/resource computation table is not showing magnesite reserve of (III) UNFC category and it may be updated as on 1.4.2016.

8. Para 2A(a): Method of mining: General working pit configuration i.e. no of benches and its dimension need to be described under the para. Insitu excavation table in page no.32, shows 5 year development & production proposed for pit nos.17,19&31 only but, yearly development scheme and annexures in volume -II also shows the development of pit nos.36 of B block and 23 of MT block which are not reflected in page no.32 should be verified and corrected. Further dump working for recovery of dunite @ of 50% of waste also made for year wise proposal (as per table 2B-II, in page no.33) it appears dunite recovery is too high and "these dumps could be better than reserve" the figures furnished need to be verified and corrected.

9. Blasting: The measures taken while blasting, to avoid fragmentation especially to enhance the recovery of dunite and magnesite may be discussed under the para.

The annual consumption of large dia explosives as per the page no.45 in the year 2014-15 shown as 6.25tones whereas, the ave., consumption for the proposed period shown as 148.750 tones should be verified. As per the figures furnished in the report, the consumption of explosives in the year 2011-12 was 57.59 tones for production of 27483tons of magnesite.

10. Page no 52: Proposed block wise production : The pit advancement in terms of length ,width bench wise also need to be discussed under the para for better understanding for all the pits programmed.

11. Use of mineral: Clear statement may be added at the beginning of the para that magnesite mineral being used for captive consumption.

12. Para 8.1: All the monitoring reports of Air, water and related reports of PMCP need to be annexed at the end of text or as a separate volume.

13. Para 8.2(ix): Amount spent on community development may depicted year wise.

14. Para 8.3.5: The information on protective measures for reclamation and rehabilitation work of previous period need to be discussed/furnished under review chapter of para 3.3. The year wise proposal (table) for the proposed period needs to be furnished under the para separately.

15. All details under PMCP should be given exactly as per IBM guidelines.

Annexures:

16. A-13, reserve calculation for pit no.23 of MT block ,dated as 1.4.2011 should be verified and corrected.

17. Annexure A1-21: Cross section name required to be indicated especially in reserve computation and year wise development production tables for better understanding. The recovery % under column no.6 shows 4.0-4.1% for A,B blocks and C and MT blocks recovery as 4.1,4.6 and 5.4%,the reason for recovery % variation may be explained.

18. Annexure XX: A copy of acknowledgement to ML renewal application need to be submitted.

19. Few photographs showing land use i.e. systematic mining and recent plantation showing the environmental status of the lease area, block wise also be annexed.

Plates:

20. All the plates showing the date as 1.4.2015 should be corrected and updated as on 1.4.2016. Scale should be invariably marked on sections. Plates not showing any section lines only reference levels, but cross sections drawing shows section lines which should be corrected.

21. Plate-II : Topo sheet no, coordinates range and Predominant wind direction with season have not been marked on Key plan.

22. Plate no.VI-a: The green dotted line on southern periphery of ML passing through water logged pit should be labeled/ indicated in index. Geological plans VII-(a)-(c) implies that the ore bearing zone comprises of mostly/only dunite as per the drawing representation. Hence, the drawing should be suitably modified/captioned.

23. Plate no.VII(a)-(f):The quantity of reserve/resource calculated as per UNFC codes with colour code index should be furnish in a table in geological cross section.

24. Plate AXI(a):Year wise production development proposals shown with colour, but it is represented in index, should be verified and updated.

25. Soft copy of the report in the in pdf form of CD need to be submitted as per the guidelines.