INSPECTION REPORT SCRUTINY COMMENTS CUM OF REVIEW OF MINING **PLAN** OF DUGAR VERMICULITE MINE -II OF M/S VERMICULITE PRODUCTS PRIVATE LIMITED **OVER** AN EXTENT OF 38.75 HA., IN SURVEY NO.1 OF PALICHERLA- RAJUPALEM VILLAGE GUDUR MANDAL SPSR NELLORE DISTRICT IN ANDHRA PRADESH STATE **SUBMITTED** UNDER RULE 17 (2) OF MCR, 2016, DATE OF INSPECTION-13.09.2019.

Cover Page, General and Introduction

- 1) The Mining Lease grant, execution, transfer and renewal details to be submitted correctly and in a sequential manner.
- 2) The lease was executed on 12.09.1975 for a period of 20 years and was valid upto 11.09.1995 and thereafter the state DMG has not issued any order pertaining to first and second renewal of the ML. The copy of supplementary lease deed execution towards extension of the lease period as per section 8A of MMDR Act-1957 needs to be submitted. Else letter indicating the status of the lease period extension as per section 8A of MMDR Act-1957 to be obtained from state DMG and needs to be submitted. The sentence like "Deemed to be Granted upto 31.03.2030" to be avoided as the state Govt has not granted the lease for captive purpose.
- 3) The state govt authenticated lease sketch along with boundary pillar co-ordinates needs to be submitted and all the plans should be prepared based on the authenticated lease sketch along with boundary pillar co-ordinates.
- 4) List of Mining Leases of lessee existing all over India needs to be submitted.
- 5) Details of approved mining plan/scheme of mining/review of mining plan to be submitted in tabular form indicating type of document, letter no, period for which it has been approved.
- 6) In the cover page the name of the document to be submitted as Modification of Mining Plan and the reason for modification to be submitted at column 3.6.
- 7) Board of Director's resolution to be submitted for the nominated owner and the nominated owner should sign the document.
- 8) The qualified person needs to submit his experience certificate wrt work done in mining geology related field.
- 9) Repetition to be avoided.

Review

- 10) The year wise review to be submitted from 2008-09 to 2018-19 and 2019-20(01.04.2019 to 31.08.2019) correctly in respect of exploration, excavation, reclamation. Justification for deviation needs to be submitted.
- 11) Status of compliance of violations pointed out by IBM to be submitted.
- 12) Indicate and give details of suspension /closure/ prohibitory order issued by any Government agency under any rule or Court of law.

Geology

13) Year wise exploratory details need to be submitted.

- 14) In the detailed description of the Geology of the lease area, the mode of occurrence of Vermiculite and its trend needs to be submitted correctly.
- The actual ground positions and levels are not matching with the surface plan. No of roads and dumps need to be demarcated in the surface plan. Pit limit boundary has not been shown in the surface plan. Sections should be marked with UPL. Bench mark needs to be established and transfer point details and Bench mark details needs to be submitted in the text. The surface plan needs to be prepared and submitted as per rule 31,32 and 34 of MCDR-2017. The survey needs to be carried out again and the surface plan needs to be updated and submitted.
- All the existing pits need to be shown in the Geological Plan. In the Geological plan all the geological features, lithological units needs to be demarcated The dimensions of the trial pit at page 12,28 and other pages needs to be submitted correctly in text and demarcated correctly in Geological plan and projected correctly in Geological cross section as per the actual position. The Geological plan and all the sections needs to be updated as per the updated surface plan. The Geological plan and Geological Cross Section are not in consonance with each other.
- 17) All the Parameters of reserves/resources needs to be submitted. Recovery factor is to be applied while estimating the reserves/resources. UPL to be demarcated based on the explored depth of mineralization.
- 18) Axis wise UNFC classification of Resources/Reserves to be justified. Area explored under different level of exploration need to be marked on the geological plan and UNFC code for area considered for different categories of reserve/resources estimation may also be marked on geological cross sections.
- 19) Trial pits lithologs and meter wise sample chemical analysis needs to be submitted. The Laboratory analysis reports of all the samples needs to be submitted. 10% check samples needs to be analysed from NABL/Govt Laboratory and report needs to be submitted.
- 20) Basis for considering the Bulk density and recovery percentage needs to be submitted.
- 21) Submit a feasibility study report along with financial analysis for economic viability of the deposit as specified under the UNFC field guidelines to be incorporated.
- 22) Reserve /resources have been estimated in excess by considering additional sectional area. It should be re estimated based on updated surface geological plan and Geological cross section. The production proposal should be modified accordingly.
- 23) With respect to all the above mentioned points in Geology section the reserves/resources needs to be established as per MEMC Rules-2015.
- 24) Exploration is to be proposed to explore the potential mineralised area in G1 level. Further year wise area proposed to be explored in different level needs to be submitted.

Mining

25) As amalgamation is pending at the state DMG. The sentence like Mines are operated as a combined mine as per amalgamation permitted by the Director of Mines and safety,

Hyderabad should be avoided. It should be mentioned as common boundary working and the permission with respect to common boundary working needs to be submitted.

- 26) Existing mining pit details like Pit no, dimension, no of benches, height of bench, highest and lowest level in mRL and co-ordinates need to be submitted.
- 27) Bench parameters needs to be mentioned clearly.
- 28) As per the existing exploration the max thickness of vermiculite mineralization is established maximum for a thickness of 2m, hence mining by 9 m bench height needs to be justified properly and status of obtaining permission from DGMS for mining with a bench height of 9m is to be submitted.
- 29) The proposed year wise location of production and development needs to be modified as the proposed production and development is not scientific and systematic. The production and development sections need to be modified accordingly as per the YPDP. Briefly describe the existing as well as proposed method of working with all design parameters indicating on plans / sections.
- 30) In the year-wise tentative Excavation details pit no to be mentioned.
- 31) Briefly describe the layout of mine workings, pit road layout, the layout of faces and sites for disposal of overburden/waste along with ground preparation prior to disposal of waste, reject etc. UPL or ultimate size of the pit is to be shown for identification of the suitable dumping site.
- 32) Conceptual Mine planning upto the end of lease period taking into consideration the present available reserves and resources describing the excavation, recovery of ROM, Disposal of waste, backfilling of voids, reclamation and rehabilitation showing on a plan with few relevant sections.
- 33) Back up calculation towards requirement of mining machinery to be submitted.
- 34) Year wise area to be utilised for mining, top soil and waste dumping, afforestation to be submitted.

Stacking of Mineral Reject and sub grade material and Disposal of waste

- 35) Top soil to be proposed to be dumped and spreaded along the 7.5m safety zone only for Green Belt Development purpose and its location co-ordinates needs to be submitted.
- 36) As the proposed waste dumping area is not proved for the presence or absence of mineral, all the waste dump need to be mentioned as temporary dump. Configuration and sequence of year wise build up of dumps along with the proposals for protective measures need to be submitted in Year wise production and Development plan. As the waste dumps will be temporary in nature proposal for stabilisation by plantation to be avoided.
- 37) All the existing waste dumps with its no, location co-ordinates, dimension and tentative volume need to be submitted.

Use of Mineral and Mineral Reject

38) Requirement of end use industry specifically in terms of physical and chemical composition need to be submitted.

Processing of ROM and Mineral Reject

39) Material balance chart and process flow sheet needs to be submitted.

Progressive Mine Closure Plan

- **40)** Base line environmental information be submitted.
- 41) Year wise environmental protection measures like afforestation, siltation pond, retaining bund, garland drain, environmental monitoring to be proposed. Details like quantity, frequency, dimensions and their locations to be submitted in text and demarcated in the plan.
- As the surface plan needs updation the PMCP plan needs to be updated on the basis of updated surface plan and the amount of bank guarantee to be calculated based on the updated PMCP plan. The financial assurance table is not covering all types of land put to use and needs to be corrected.
- 43) Environmental monitoring buffer zone location to be demarcated in the Key Plan and Environment plan and core zone location to be demarcated in the reclaimation plan.

Plans and Sections

- 44) GCP points and bench mark to be shown in the surface plan. Electric line to be shown in the surface plan along with safety zone. All the existing waste dumps, roads needs to be demarcated in the surface plan.
- 45) Environmental plan needs to be corrected as the other mines , plant and agricultural lands have not been demarcated.

Annexures

46) All the annexures need to be submitted and numbering to be corrected.



भारत सरकार/Government of India

खान मंत्रालय/Ministry of Mines

भारतीय खान ब्यूरो/Indian Bureau of Mines



हैदराबाद क्षेत्रीय कार्यालय/Hyderabad Regional Office

Phone No. : (040)-27539992/27539993 Fax No.(TF): (040)-27539991 No. 659(38MS)//Ver/2008/NLR Room No.603, 6th Floor, CGOTowers, Kavadiguda, Secunderabad.-50008. Date:20.09.2019.

To Shri N.Tarachand Dugar, M/s Vermiculite Products (P) Ltd., 7th Floor, Dugar Towers, No. 34(123), Marshalls Road, Egmore, Chennai – 600 008 T.N. State.

Sub: Submission of Review of Mining Plan of Dugar Mine-II of M/s Vermiculite Products Private Limited, over an extent of 38.75 ha in Palicherla – Rajupalem Village, Gudur Mandal, SPSR Nellore District of Andhra Pradesh.

Sir.

Ref:Your letter No. nil dated 20.08.2019

Sir,

With reference to your letter cited above on the subject, the inspection of the mine was carried out by Shri S.K.Muduli, JMG along with Sri Tikam Chand Dugar, Lessee, R.Shakthi Velu, Manager and Sri K.Sumanth Babu, Qualified Person on 13.09.2019 and found certain deficiencies which were forwarded to you and your Qualified Person on respective e.mail id i.e., vermiculite@dugar.in.

- 02. You are advised to attend the deficiencies as per the annexure and resubmit the document, complete in all respects, in three bound copies along with soft copy in the form of CD (2Nos.) In this regard you are also advised to submit the Financial Assurance in the form of Bank Guarantee for the area put on use for Mining and allied activities @ Rs.Three lakhs/hectare for category 'A' mines provided that the minimum amount shall be Rs.Ten lakhs as per the provision of Rule 27(1) of MCDR, 2017 at the time of submission of final copies of the document within 15 (fifteen) days from the date of issue of this letter, failing which the document will be disposed without giving any further opportunity.
- 03. The para-wise clarification & the manner in which the deficiencies are attended should be given while forwarding modified document.

Yours faithfully,

(Shailendra Kumar) Regional Controller of Mines

Copy to Sri K.Sumanth Babu, Qualified Person for information and necessary action.

(Shailendra Kumar) Regional Controller of Mines

मूलपतिपरनहीं

खाननियंत्रक (द), भारतीय खानब्यूरो, बेंगलुरू।

(शैलेन्द्र कुमार) क्षेत्रीय खाननियंत्रक