

Inspection report cum Scrutiny Comments on review of mining plan of Peddayekkaluru Limestone, Dolomite, White Shale, Serpentine and Steatite Mine of M/s Swathi Mines spread over an area of 16.998 ha, in Peddayekkaluru Village, Peddapappuru Mandal, Anantapur Dist, Andhra Pradesh, Date of field inspection-23.08.2017

1. General

- a) In the heading section mention Review of Mining Plan including Progressive Mine Closure Plan instead of only Review of mining plan and the corresponding rule should be mentioned correctly.
- b) The review of mining plan should be as per the standard format as prescribed by IBM.
- c) Clarify the status of the lease and status of letter from the state regarding extension of the lease period upto 31.03.2020.
- d) The method of mining to be adopted is not clear, as the Lessee is of the opinion of carrying out mining by manual method, whereas proposal has been submitted for mechanized mining –Category-A (OTFM).

2. Review

In the review chapter the details of production of all the minerals has not been furnished and whatever furnished is not correct. So furnish the details of year wise production of all the included minerals from 2000-01 to 2016-17. Mention the plan period 2006-07 to 2010-11, 2011-12 to 2015-16 as lapse plan period. Mention 2016-17 as lapse in the plan period 2016-17 to 28.08.2020.

3. Geology & Exploration

- a) Rain fall and temperature related information must be in respect of the particular village/Mandal instead of the whole district and the source of information should be mentioned.
- b) The bench marks needs to be connected to the national grid and accordingly all the plans and section should be drawn.
- c) The shape of the precise area shown in all the plans are not matching with that of the precise area marked in lease sketch. The surface plan has not been authenticated by certified surveyor.
- d) Dip and strike direction not mentioned in the geological plan.
- e) Area explored under different level of exploration has not been furnished correctly and also has not been marked correctly on the Geological plan and UNFC code considered for different categories of reserves/ resources estimation needs to be marked correctly on the Geological cross section.
- f) As per rule 12(4) of MCDR-2017 the entire mineralised area within the lease area should be explored under G1 level of exploration. Thus the future programme of exploration should be proposed for the entire lease area by core drilling under G2 level of exploration with infilling bore holes by RAB to explore the lease area under G1 level of exploration. Trench needs to be proposed to find out the contact between Limestone and Dolomite and other occurring lithologies. Future programme of exploration table needs to be given year wise having co-ordinates, collar RL, proposed depth of drilling and dimension of pit/trench.
- g)
 - i) The Geological sections drawn is not as per the Geological Plan. Geological sections should be drawn correctly.
 - ii) Geological index (colour) for Limestone and Dolomite with serpentine is same which needs to be furnished in clearly in different colour.
 - iii) Ultimate pit limit has not been marked on the geological plan & sections.
 - iv) The thickness of lithology has not been projected correctly in the Geological Sections. Geological sections should be corrected and the UNFC category/ Level

of exploration should be mentioned. Ultimate pit depth has not been shown in the geological section.

- v) While estimating resources / reserves of Limestone the BHs have been considered which are without any Limestone. The detailed estimation of reserves resources. Thus the estimated resources/reserves in respect of Limestone needs to be corrected and according the production proposal of Limestone should be modified.
- vi) The reserves / resources estimated for Limestone, Dolomite with Serpentine and weathered rock and shale are not acceptable.
- vii) Top soil estimation has not been done for all the sections and whatever estimated for three sections are less.

Thus the reserves /resources are not estimated correctly. In light of the above comments the total mineral resource, reserves need to be assessed along with grade and categorized correctly as per MEMC rules-2015.

4. Mining

- a) Mining should be proposed upto the UPL boundary both laterally and depth wise.
- b) The development of shale and Dolomite with Serpentine has been proposed year wise whereas there is no occurrence of such mineral within the proposed year wise development area. The top soil production & development has not been shown for all the section in which production has been proposed. The development proposal should be corrected accordingly. Year wise production & development Plans and corresponding sections should be corrected accordingly.
- c) The production and development proposal is not scientific.
- d) The calculation for mining machineries has not been done correctly as bucket fill factor, fill factor, equipment availability have not been considered in no of cases.
- e) Either waste should be proposed to be dumped in the working pit falling within the 50 m safety zone area along the road. Thus the proposal of temporary waste dump should be modified accordingly. Calculation for area required for dumping of waste should be furnished. Existing waste dump quantity should be removed and utilized for backfilling/stabilization/restoration of the working pits falling within the 50m barrier zone along the west boundary of the lease from BP-11 to BP-18 needs to be furnished. Manner of disposal of waste along with construction of retaining wall, garland drain and plantation to be carried out needs to be furnished.
- f) Year wise proposal for backfilling/stabilization/restoration of the working pits falling within the 50m barrier zone along the west boundary of the lease from BP-11 to BP-18 needs to be furnished. Furnish details like location, coordinates, dimension, volume/quantity to be filled.
- g) **Plantation-** Furnish year wise location, coordinates, area, dimension, no of plants to be planted. The plantation should not be proposed on the road and should be proposed within the mining lease area, safety zone and stabilized working pits falling within the 50m barrier zone along the west boundary of the lease from BP-11 to BP-18 and along both sides of the public road within the Mining lease.
- h) Mining Machinery should be proposed accordingly to carry out mechanised mining activity of Category-A (OTFM) and accordingly propose bench height and width.
- i) The top-soil excavation quantity has not been estimated correctly. Propose dump for top soil storage with location and dump area. Area calculation for dumping of waste has not been furnished.

5. Use of Mineral and mineral rejects

- a) The specification given is not matching with the available Dolomite mineral within the mine. Clarify.

- b) **The process flow sheet** for ROM is not as per the requirement and is having without any feed size, product size and grade, different screen size. Thus the process flow sheet is not clear.

6. Others

Manpower-OMS is not furnished.

7. Progressive Mine Closure Plan-

- a) In the base line information the details of analysis reports pertaining to quality of air, water, noise and soil also needs to be furnished for the last season in gist form at first for each item.
- b) **Financial Assurance**-Area put to use for mining and allied activities is on lower side which has to be recalculated as per field condition accordingly financial assurance amount should be suitably modified.
- c) **Environmental Monitoring**-Air, Noise to be monitored for at least two locations within the mine i.e mine working pit area, crushing and screening plant area. Monitoring of Water quality of the Mines Bore well has not been proposed. Monitoring of water quality of Penneru River has not been proposed.
