

The Scrutiny Comments on examination of Modified Mining Plan with Progressive Mine Closure Plan of Kochariya Mine for Garnet(Abrasive) mineral (M.L.No. 432/2007) over an area of 4.0011Ha. situated near Village- Kochariya Tehsil- Bhilwara, District- Bhilwara Rajasthan submitted by Shri Ummed Singh Ranawat Under Rules 17(3) of MCR,2016. Date of inspection 16/06/2016.

1. The chapters and paragraphs should be numbered as per guidelines given.
2. The proposal should be given for remaining two year period i.e for 2016-17 to 2017-2018 not for next five years.
3. Only proposal for Garnet(abrasive) should be given in the present documents, as Quartz is in minor mineral., Hence on cover page and in text only proposal for Garnet(abrasive) is to be given.
4. The Mine code and IBM registration no. on cover page is not given correctly.
5. Date of consent letter from lessee is more than one year old, at that time rule17(3) was not exist, hence fresh should be submitted.
6. Photo ID with address proof of lessee is not found enclosed.
7. On line Scrutiny sheet from DMG Rajasthan for all the boundary pillars should be enclosed with the documents.
8. Copy of all the violation letter/show-cause notices issued by this department with their compliance report is not found enclosed with the documents.
9. Chemical analysis report from NABL should be enclosed with the documents.
10. Khasra map of the applied area marking lease boundary in **different color code**, duly authenticated by State official should be enclosed.
11. Chapter 1.f . the status of mining engineers employed is mentioned as not applicable, instead of not applicable either name to be given or mentioned that not employed.
12. The details given under Para 3.3 on page no. 7 is without application of mind and very casual. The review chapter is the most important chapter, hence data may be given carefully in the chapter 3 for review of mining plan and PMCP proposals on year wise basis.
13. The item no. 3.4 to 3.6 is missing; The details for item no. 3.4 to 3.6 should be given in brief as per guidelines. Proper justification for submitting modified mining plan may be given under item no. 3.6.
14. Geology and exploration:-
 - i The recovery of Garnet (abrasive) is taken as 35%, it is very higher side, during the field visit it is observed that the recovery of Garnet (Abrasive) is not more than 10% as it is assessed in field with a sample recovery from a piece of garnetiferrous mica schist.

- ii The physical properties along with bulk density may be given along with chemical analysis of mineral.
- iii The reserves and proposal is to be given only for garnet mineral.
- iv It is existing mine, hence reserves and resources as per previous approved mining plan should be given first, than depletion and balance reserves may be given. If additional or fresh estimation of reserves than proper justification why need of fresh estimation should be given. BD may also be shown in calculation table. The recovery of garnet mineral should not be taken more than 10% or as specify above.
- vi The reserves is not properly calculated. The justification of parameter like strike length, width and depth of mineral body considers for the estimation of category wise reserve and resources under UNFC has to be explained in detailed. The resources blocked under statutory boundary, under benches beyond UPL should also be given separately. **The necessary correction in reserves and mining chapter and other relevant chapter may be done.**
- V The exploration proposal may include conversion of resources into reserves may be shown year-wise on geological plan and section.

15. Mining:-

- i All the proposal in mining chapter is to be given for garnet only. Accordingly this chapter should be revised carefully.
- ii During field visit it is observed that the depth and extension of pit no. 1 is not given correctly. The size of pit observed as 35-40mts long, 9-10mts wide and 4m-7mts in depth which was not tally with size and extension given in text and plans may correct in text and plan also.
- iii in Para (a) the ROM/ Waste ratio is to be revised in view of recovery of Garnet (Abrasive) is not more than 10%. The proposed production is very higher side in comparison to proposed in earlier approved mining plan, may be reconsider in view of revised recovery factor as discussed in field.
- iv During the field visit it is noticed that the lessee wants to use mining equipment to win the mineral, but here it is mentioned that the pit will be

developed by manual opencast. This may be reconciled. The bench height and width may also be in accordance with the proposed mining equipment's.

- v The year wise proposals should be revised in view of revised recovery factor and supported with Grid.
 - vi The blasting is not required in excavation of garnetiferrous mica schist as it is not hard formation as observed in field. This chapter may be revised. If blasting may be justified.
 - vii The year wise layout of mine workings should also be given in brief indicating year wise working, excavation, development direction, indicating pit no. and supported with grid pattern.
16. Under Conceptual mine Planning (i.e. in the Text) the details of Conceptual Status of the pits, exploration, excavation, waste disposal, land degradation, reclamation and rehabilitation etc (five yearly as well as at the end of the life of the mine) be shown along with pit-wise ore to OB ratio, extent of dumping and the adequacy of dumping space etc
17. Chapter 7.0 Stacking of mineral reject/sub-grade materials. The nature and quantity of top soil, waste, mineral reject already stack should also be given to actual access the size and shape of proposed dump. The proposed size and shape dumping may be revised accordingly.
18. Chapter- Use of Mineral- Information is not given as per chapter requirement.
19. Para 10.b- The employment potential may be revised in view of change of method of mining.
20. In PMCP Chapter-
- i the year wise no. of plantation and expenditure on them is missing.
 - ii The year wise PMCP proposal table is also not given.
 - iii In so many places the correction is required as marked in chapter.
- 21 Para 8.0 of PMCP the Copy of financial assurance is not found mentioned. The financial assurance is to be revised in term of revised method of mining and accordingly the Financial assurance co-terminus with mining plan period in favour of Regional Controller of Mines, IBM, Ajmer should be submitted in Original with a copy annexed in the documents.

- 22 Plans & sections;-
- i Numbering on plates not in order.
 - ii Location plan is not found enclosed with the documents. Hence a rout map showing the route from district headquarters and from Ajmer may be given.
 - iii Surface plan- Coordinate and FRP may be given on surface plan. Whatever shown on plan are not matching with field position. Proper survey is required to be done for depicting surface features Size of pit and dumps.
 - iv Surface Geological plan- for different category of reserves and UPL line different color code may be used. Dip and strike is missing. Index is incomplete. Geological cross sections are not prepared from lease boundary to lease boundary for entire leasehold area and UPL are not drawn on it. Different zone of proved , probable reserve and other resources have not been marked on plan and section based on exploration so far carried out as per UNFC norm. The lateral and depth wise extension taken for marking such zone of mineral may be detailed text part also.
 - v The year wise development is not prepared as per rules and guidelines,. Benches shown in plan have not been marked bench like manners. Benches and dump should have been depicted like bench and dump manner in plates. Section for every year should be given separately.
 - vi Reclamation plan should be given separately as per guidelines
 - vii Conceptual plan is incomplete it may be for entire lease period not only for present life of mine as life of mine may change.
 - viii Financial Assurance Plan-The table given for calculation of Financial assurance should also be given on plan and correlate them with actual ground condition.
- 23 Some photographs representing the mine working, boundary pillar, stacks etc. should also be enclosed with the documents.
- 24 The minor typographical mistakes/correction/omissions marked on the plates as well as text should also be attended carefully.
- 25 All the above maps/plate will be properly colour index & duly attested and authenticated with date of survey.

Dated 21-06-2016

Place Ajmer

(Chetan Parkash)
Asstt. Mining Geologist
