Scrutiny comment on the Review of mining Plan submitted by M/s Mining resources India Private Limited for it's Muddavaram Iron Ore Mine (6.2 hectare) located in village Muddavaram, Bethamcherla Mandal, District Kurnool

- 1. In the In the key plan, north should be marked as per submission in the plan.
- 2. The copy of the lease sketch true to the scale has not been enclosed. In the lease sketch two set of coordinates have been submitted, which are not tallying, Clarify with reason and submit.and submit.
- 3. Comment, whether any order has been issued by State Department of Mines and geology regarding lapsing of lease as per provisons of MCR 2016 from the State Government.

Review of Mining Plan

- 1. In para 3.3.1 The proposal for the period 2009-10 and 2010-11 has not been submitted. Submit the quantity of ROM, segregated material and grade available in the mine. The document in support of the grade be submitted. Further submit, is it matching with the submission in the returns.
- 2. The proposal for review of development and production for the 2010-11 submitted in the monthly returns is NIL but in the document it is submitted as 300 T. Check and correct and submit the documentary evidence in it's support.
- 3. In para 3.3.3, it has been correctly mentioned that the work has extended within 7.5m safety zone in two directions. But the same has not been shown accordingly in the plate. The photographs of the area backfilled be enclosed. Submit the gridlines between which the area has been backfilled.
- 4. In para 3.4, the status of compliance of violation has not been recorded as on date correctly.

Geology

- 5. In para regarding local geology, last paragraph, it has been written that the average grade of Iron is 45-49% fe. Please clarify whether this is the Grade of the ROM in mineralized zone.
- 6. The data in table 18 regarding pits be checked and corrected.
- 7. The broad mineralized zone be discussed clearly stating the recovery as per recovery test undertaken. Submit the grade of ROM found in recovery test and the Fe % /grade of recovered material and in the waste.
- 8. From the document On page 12, it has been submitted that 15 samples have been drawn. It is not clarified from the document as whether the sample has been drawn by the qualified person for the purpose or not, whether it shows the ROM Grade or grade of the segregated material. Clarify and correct. The exploration data (Annexure- VIII) should be signed by the responsible person as per rule.
- 9. Part A , 1.0(f)- It has been found that the survey is done prior to the certification of boundary pillars. In the previous submission to this office which was done after the said survey pits had entered 7.5m buffer area, which has not been shown accordingly. Hence the survey be certified by the surveyor afresh for correctness.

- 10. The recovery is from the float area, so the proposal for drilling core borehole need to be justified. The objective of the drilling is to reveal the nature of mineralization, recovery % and it's quality. Hence a suitable exploratory bores may be proposed such as (core/ reverse circulation) to serve the purpose. DTH holes won't give the requisite data. A blend of pits and holes may be proposed.
- 11. It has been noticed that the iron ore exists as ferruginious nodules in the ferruginous quartzite and ferruginous chert and ferruginous shale as float type of deposit, thus may be considered under category 4 of MEMC Rules. If it is so, it may be recorded accordingly.
- 12. The processing of mineral need to be clarified in the entire document at relevant places, like feasibility report and other chapters; whether mechanized or manual screening, crushing and sizing is proposed.
- 13. The influence distance need to be taken correctly. Additional section be given inn between section AA' and Pillar E. The total mineral resource in the area need to be assessed as per available information on various factors.
- 14. In light of the above quantity and grade of the reserves/ resource need to be assessed correctly as per MEMC Rules.

Mining

- 15. The proposal for drilling and blasting is not justified for a float ore type deposit. Hence be corrected.
- 16. Yearwise status of benches be submitted.
- 17. The data submitted in table-25 regarding SB, ROM, Waste is either be corrected. This table is for unprocessed mineral information.
- 18. The para on dump rehandling be redrafted as per approved mining plan with backup calculation.
- 19. As per the returns submitted there is a closing balance of iron ore in mine. This has been marked on the plate, however during the mining/dump handling, recovery factor has been applied, which needs to be clarified. Table 28 need to be checked and corrected.
- 20. Further, the proposal to prevent washing away of the dump by means of retention wall and garland drains has not been proposed correctly as per requirement of Progressive Mine closure Plan.
- 21. The processing of mineral proposed in the lease area be discussed in detail in para 6.0(a). The remaining data is not useful. Also comment whether the recovery factor as assessed by you for reserve calculation is applicable for the mechanized operation as well.
- 22. The conceptual exploration proposed need to be justified along with the drilling technique for the purpose.
- 23. Clarify as how the dump and stock quantity has been assessed. It should be properly justified.

Progressive Mine Closure Plan

- 24. The base line data is required to be generated either as per MoEF Guideline. However the same has not been done accordingly.
- 25. In para 8.3, progressive Reclamation plan: proposal regarding retaining wall, garland drain, additional plantation yearwise need to be demarcated correctly.
- 26. All the annexures, plates be serially numbered correctly in the index.

- 27. The land put to use need to be assessed correctly and Financial Assurance be submitted accordingly.
- 28. If due to aforesaid changes, the data in other chapter or plates changes, they may please be done accordingly and ensure the consistency of the data submitted in various chapters of the document.