

**TABLE SCRUTINY COMMENTS ON REVIEW OF MINING PLAN OF CHINNADASRAPALLI LATERITE & IRON ORE MINE OF SRI K. SIVA SANKAR REDDY OVER AN EXTENT OF 50.198 HA IN CHINNADASRAPALLI VILLAGES PENDLIMARI MANADAL KADAPA DISTRICT OF ANDHRA PRADESH**

**General**

1. Category of mine needs to be submitted in the Cover page.
2. Initial Grant Order No and date needs to be mentioned in the text and needs to be annexed.
3. The document should be strictly as per the format provided in the IBM Manual for Appraisal of Mining Plan 2014.
4. Copy of lease sketch should be submitted in full without any reduction in size.
5. In Chapter 2(b) the updated Toposheet no needs to be submitted.

**Details of Approved Mining Plan / Scheme of Mining**

6. In chapter 3.
  - a) Details of approved Mining Plan / Scheme of Mining needs to be submitted in tabular form duly mentioning the approval letter no and date and plan / proposal period.
  - b) Review of earlier approved proposals in respect of exploration needs to be submitted in tabular form.
  - c) Proposal in the review of ROM and OB waste needs to be submitted correctly.
  - d) Copy of relevant portion of the document approved by the state DMG in respect of Laterite needs to be submitted. The copy of approved document along with copy of approval letter in respect of Laterite needs to be submitted in full separately.

**Geology and Exploration**

1. In Part-A Chapter 1(a) the highest and lowest topographic level should be submitted before start of mining and at present.
2. In Part-A Chapter 1(c) the detailed information on association of iron ore with rock name needs to be submitted clearly. Petrographical and mineralogical study of Laterite needs to be carried out.
3. In Part-A Chapter 1(d) Name of exploratory agencies, Address, Email Id and Phone no needs to be submitted.
4. In part-A chapter 1(e) the analysis reports needs to be submitted dully mentioning the details like BH No and depth of sampling. Bore hole wise summarized bore hole lithologs with grade needs to be submitted.
5. In Part-A Chapter 1(g) and 1(h)
  - a) Float iron ore zone and Laterite bearing area needs to be separately demarcated in the Geological Plan. The Mineralised zone needs to be demarcated clearly in the Geological Plan and its extent needs to be mentioned in the text as per the exploration already carried out. The different type of iron ore formation with associated rock types needs to be clearly demarcated in the Geological Plan.
  - b) The level wise explored area needs to be demarcated correctly in the Geological Plan.

- c) Locations of trial pits dug for recovery test needs to be submitted in the Geological Plan.
  - d) The bore hole lithologs, mining pit wall lithologs, Geological Plan and Geological cross section should corroborate with each other. Geological Cross section is not in consonance with the Geological Plan. Geological sections should be drawn from boundary to boundary.
  - e) In the Geological Cross Section the Mineralised Zone needs to be clearly demarcated in the Geological Cross Section for laterite and iron ore. The UPL and the BH collar mRL needs to be demarcated in the Geological Cross Section. UNFC coding needs to be mentioned in the section. The Geological Cross Section needs to be drawn taking into consideration all the points of Geological evidence.
6. In Part-A Chapter 1(i) the exploration proposal needs to be submitted to explore the deposit in G1 level of exploration. The co-ordinates of all the proposed bore holes with depth needs to be submitted.
7. In Part-A Chapter 1(j)
- a) the category of the deposit needs to be submitted correctly as per UNFC and MEMC Rules-2015.
  - b) the area explored under different level of exploration may 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.
  - c) As per the submission in the draft the mineralised zone is explored in (Detailed Exploration)-G1 level but the reserves / resources has been estimated under 122 category. Incongruity observed needs to be clarified and corrected.
  - d) In the Feasibility axis justification, processing needs to be submitted. The economic viability needs to be justified correctly. The Statutory clearances obtained with capacity and validity needs to be mentioned in Other Factors.
  - e) In the Economic axis justification information pertaining to Mining report/mining plan/ working mines needs to be submitted.
  - f) Submit a feasibility study report along with financial analysis for economic viability of the deposit as specified under the UNFC field guidelines may be incorporated.
  - g) The justification for G1 level exploration needs to be properly justified for the type of deposit as per MEMC Rules-2015.
  - h) Detailed three-dimensional delineation of the mineralised zone/deposit has not been done.
8. In part-A chapter 1(l)
- a) The area explored under different level of exploration, with resources and grade needs to be submitted.
  - b) As observed from the Recovery Study Report annexed the ore recovered (90%) from Laterite is having iron(Fe) content is between 45%. to 55% the same can not be considered as Laterite instead **it should be considered as Lateritic iron ore or float iron ore.**
  - c) Incongruity has been observed in the grade of Laterite as submitted in the recovery study report and grade submitted for Laterite in the reserves/resources column. In

this regard the recovery study for Laterite should be carried out again and the report thereof should be submitted.

- d) Recovery of iron ore from different type of rock formation like Ferruginous Schist, Quartzite/Ferruginous Quartzite needs to be studied again and reports thereof should be submitted.
- e) Size wise grade recovery details from Laterite and Iron Ore Zone needs to be furnished **to check the correctness of the process flow submitted.**
- f) Parameters considered for reserves/resource estimation needs to be submitted.

### Mining

9. Under Part-A Chapter 2(a) briefly describe the existing as well as proposed method for excavation with all design parameters indicating on plans /sections. Bench Parameters like (height, width, slope), Ultimate Pit Slope, Blast drill hole parameters needs to be submitted. Percentage of slurry explosives and ANFO to be used needs to be submitted. Crushing and Screening needs to be included as a part of mining operation.

10. Under Part-A Chapter 2(b)

- a) Production proposal should be progressive in nature.
- b) In the Insitu Tentative Excavation table the 40% intercalated waste generation out of ROM should be mentioned as Sub Grade as per the recovery study report and the Insitu Tentative Excavation table should be submitted Pit wise as per the format of IBM Manual on appraisal of Mining Plan-2014.
- c) **The Production and development section is not in corroboration with the calculation submitted in the Year wise section wise Production table at Page 43 and also the Production and development section is not in corroboration with the Geological Cross Section.**
- d) The bench wise weighted average grade of proposed mining block for each year needs to be furnished and the mechanism for the grade control for optimum utilization of mineral along with blending techniques needs to be furnished.
- e) The details like Stack No, dimension, volume and grade of mineral stack needs to be submitted.

11. Under Part-A Chapter 2(c)

- a) The year wise Production and Development Section should corroborate with the Geological Cross Section.
- b) Mineralised zone should be clearly demarcated in the Year wise Production and Development section.
- c) Mining has been proposed in Ferruginous Schist. Iron Ore recovery related information from Ferruginous Schist needs to be carried out and report thereof should be submitted.
- d) Mining has been proposed out side the UPL and also outside the G1/G2 level explored area. Thus Mining should be proposed within the UPL and also in G1/G2 level explored area.
- e)

12. Under Part-A Chapter 2(d)-

- a) the Machinery Calculation should be carried after considering the annual required maximum excavations correctly.
  - b) The drilling machine requirement needs to be submitted in Part-A Chapter 2(d).
  - c) Calculation needs to be submitted with respect to crushing and screening requirement.
13. Under Part-A Chapter 2(e)-
- a) The Position of waste dumping, mineral reject dumping, pit road lay out, lay out of faces, ramp position, UPL needs to be demarcated in the year wise production and development plan.
  - b) 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 needs to be submitted in the text.
14. Under Part-A Chapter 2(f)-
15. 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.

#### Mine Drainage

16. Mine drainage chapter has been dealt very casually. The likely depth of water table has been submitted as 480m level, which is doubt full as in page 10 the same has been submitted as 153mRL(60 m BGL) thus documentary evidence needs to be submitted. Maximum and minimum depth of Workings needs to be furnished. Pumping arrangement needs to be furnished.

#### Stacking of Mineral Reject/Sub Grade Material and Disposal of Waste

17. Under Part-A of Chapter-4(a) Indicate briefly the nature and quantity of Top soil, over burden, Side Burden and Mineral Reject to be disposed off year wise. Also the existing waste dump details like No, Dimension, Volume needs to be submitted.
18. Under Part-A of Chapter-4(b) Simultaneous back filling needs to be proposed only after complete exploration of the potential mineralised area in G1 level. Hence purely temporary dumping of OB, Side burden needs to be proposed. Mineral reject dumping should be proposed separately.
19. Under Part-A of Chapter-4(c) Attach a note indicating the manner of disposal of waste, configuration and sequence of year wise build up of dumps along with the proposals for protective measures.

#### Use of Mineral and Mineral Reject

20. Under Part-A of Chapter-5(a) Describe briefly the requirement of end-use industry specifically in terms of physical and chemical composition separately for Laterite and Iron Ore.

#### Processing of ROM and Mineral Reject

21. Give a material balance chart with a flow sheet or schematic diagram of the Processing procedure indicating feed, product, recovery, and its grade at each stage of crushing and screening.

#### Progressive Mine Closure Plan

22. In Part-A Chapter 8.1(Environmental Base Line Information) in the existing land use pattern in the others row Specify the details. Furnish the Water Quality, quality of air and Noise level. Recent Environmental Parameters monitoring reports needs to be annexed.
23. In Part-A Chapter 8.3 (Progressive reclamation Plan) Year wise Green belt development along the 7.5m Safety zone and Environmental Monitoring of environmental parameters in Core and buffer zone needs to be proposed. Retaining bund/wall, garland drain, Settling pond needs to be proposed for the waste dump and mineral reject dump.
24. The area put to use and proposed to be put to use has not been represented correctly in the Financial Assurance Plan and the net area put to use by the end of the plan period is more than that submitted. Accordingly the amount for financial assurance needs to be calculated and bank guarantee needs to be submitted.

#### Plans and Sections

25. In the production and development plan limits of different benches needs to be demarcated with levels. Further ramp positions need to be demarcated. All quarry development should be restricted to at least G2 level explored area. The quarry development proposal should be in a practical manner showing the proposed reduced level.
26. Indexing needs to be done for all the features demarcated in the plans.
27. Proposed Waste, Mineral Reject dumping area needs to be demarcated in the Year wise Production and Development Plan.
28. Few Longitudinal Conceptual sections needs to be drawn and submitted.
29. Environmental monitoring locations need to be demarcated in the Key Plan and Reclamation Plan.
30. As exploration has not been done in full and that to in G1 level back filling is not allowed. Waste and Mineral Reject dumping area, Environmental Protection Measures activity area needs to be demarcated separately in the concerned plans and the area needs to be considered for calculation of bank guarantee.
31. Green Belt developement needs to be proposed all along the 7.5m safety zone and demarcated in the Reclamation Plan. The locations of Waste dump, Mineral Reject dump and environmental protective measures like Retaining bund/wall, garland drain, Settling pond, Check dam needs to be demarcated in the Reclamation Plan.
32. As per the Environmental Plan a power line is shown passing adjacent to lease area. The 50meter safety barrier zone on either side of the power line should be drawn in all plans and sections and no mining operations should be proposed within the area.
33. Countour levels needs to be shown in the Environmental Plan
34. All the Plans needs to be prepared in the UTM grid.
35. All the plans and sections should be submitted as per the provision of rules 31, 32, 33 & 34 of MCDR, 2017 and signed by the surveyor having Certificate of Competency of Survey from DGMS.

#### Annexure

36. Copy of Address proof needs to be annexed.
37. Consent letter of the lessee should be in lessee's letter head.
38. Bore hole lithologs needs to be signed by the Qualified Person and Lessee.

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No. 659(527)I/O & Lat/2005/Hyd.

Room No.603,  
6th Floor,CGO Towers,  
Kavadiguda,Secunderabad.-50008  
Date: 06.07.2020.

To  
Shri K.Siva Sankar Reddy, Lessee,  
H.No. 2/346, Ramanagar,  
T.B.Road,  
Proddatur-516 360,  
Kadapa District,  
Andhra Pradesh.

Sub: Submission of Review and updation of Mining Plan in respect of Chinnadasarapalli Laterite & Iron Ore Mine Sri K.Siva Sankar Reddy over an extent of 50.19 ha. Situated in Sy.No. 15 of Chinnadasarapalli Village Pendlimarri, YSR Kadapa District, A.P. submitted under Rule 17(2) of MCR, 2016.

Ref: Your letter no.Nil, dated 017.06.2020.

Sir,

With reference to your letter cited above on the subject, the draft Review of Mining Plan has been examined by Sri S.K.Mudali, JMG. Due to covid-19 lockdown inspection couldn't be carried out and the table scrutiny comments were prepared and have already been forwarded to you and Qualified Person on respective e.mail ids i.e. [manohar.karakondu@gmail.com](mailto:manohar.karakondu@gmail.com) and [skmyageri@gmail.com](mailto:skmyageri@gmail.com)

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 (3Nos.) in this regard you are directed 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 Dr.S.K.Myageri, Qualified Person for information and necessary action.

(Shailendra Kumar)  
Regional Controller of Mines

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