

Scrutiny Comments on draft ‘Modified Mining Plan’ in respect of M/s N satyanarayana, covering 14.66 Ha of area in Swami Malai Block, Sandur Taluk , Bllari District of Karnataka State.

All the **headings, subheadings, para nos. & format should be strictly replicated** as per the standard guidelines as given in “IBM Manual on Appraisal of Mining Plan 2014” and information’s to be given in order.

All the chapters may be given on a new page.

COVER PAGE:

1. Name of the document may be corrected as “Modified Mining plan including Progressive Mine Closure Plan” along with rule no. at all places in the text, certificates & plates.
2. Name of the mine, location of the village & other details where the mine is situated may be furnished.
3. Date of grant of ML & Expiry of the ML may be given.
4. Break up of forest and non forest may be given for the ML area.
5. Under Category, it may be given as A-(FM)/Opencast/Partnership firm/Non captive/Private.
6. Address of the QP may be deleted.

INTRODUCTION:

7. In the introduction chapter, chronology of obtaining the Mining Lease since the notification of PL till date may be furnished along with supporting documents as annexure.
8. Reasons for non execution of the said mining lease may also be given in this para.
9. No mining area within the ML area may be discussed as shown in surface plan (plate no.II/a).
10. It is also pertinent to mentioned here that the said mining lease has been granted under the provision of clause (b) of sub-section (2) of section 10A of MM (D& R) Amendment Act 2015.Copy of the same may be annexed as Annexure.
11. State wise leases already held by the lessee, other than the said lease may be furnished.

GENERAL:

12. Para 1.0 (a): Para 1(a): In this para, the details like phone no., Fax, Mobile No and E-mail ID of the nominated partner may be given.
13. Para 1.0(c): Since, this is a case of fresh grant; minerals which are included in the prospecting license may be given.
14. Para 1.0(d): Minerals which are included in the letter of intent may be furnished.

LOCATION AND ACCESSIBILITY:

15. Para 2.0(a): All the details of the lease like name of the mine, Lat/Long. of any boundary pillar, date of grant of lease, expiry date, name of the lease holder along with postal address & other

details may be furnished as per standard guidelines as given in “IBM Manual on Appraisal of Mining Plan 2014”.

16. Para 2.0(b): The topo sheet no given is not the same as mentioned in key plan (Plate no.I/b).

DETAILS OF APPROVED MINING PLAN:

17. Para 3.3: Review of approved proposals in respect of explorations, production, development & reclamation may be given in the appended table separately.

For exploration:

Year	No of bore holes/ pits/trenches planned	Achieved	Deviation in %	Reasons for deviation

For Production, Development & reclamation:

Year	Production/Development /reclamation Proposed	Achieved	Deviation in %	Reasons for deviation

18. Para 3.6: Since the mining plan is submitted for modification, reasons & justification of modification may be given.

PART-A; GEOLOGY & EXPLORATION:

19. Para 1.0 (e): (i) Year wise exploration carried out in the past (since the inception of the mine) may be tabulated indicating dimensions, spacing etc along & across the strike/foliation with reference to geological plan may be furnished. (ii) Under details of sample analysis, at least 10% of total samples may be completely analysed for all radicals from a NABL accredited laboratory or Government laboratory. Findings in terms of quality may be enumerated in brief.

20. Para 1.0 (i): (i) Due to the presence of iron ore reef in the said ML area, future exploration may be proposed & tabulated indicating the year, type, no of boreholes, grid interval, depth, location & total meterage. (ii) Proposed future exploration may be aligned as per Rule 12(3) of MCDR, 2017 which requires detailed exploration (G1 level) to be carried out over the entire potentially mineralised area under the mining lease, within a period of five years from the date of opening of the mine.

21. Para 1.0 (j): (i) The area under G-1, G-2, G-3 and G-4 may be given in a tabular form based on the exploration carried out in the past. The same may be shown in the geological plan and sections as well. (ii) Bulk density of each of the material handled in the mine & recovery factor may be furnished for float & reef ore separately. The same may be supported by field test report from NABL accredited /Govt. authorised Laboratory.

22. Para 1.0 (k): (i) Section wise detailed calculation of reserves/resources may be furnished in this para. instead of annexure. Blocked reserves due to seasonal water course & no mining area may also be given. (ii) Parameters considered for reserve/resource estimation may be aligned as per Minerals (Evidence of Mineral Contents) Rules, 2015.

23. Para 1.0 (l): (i) Mineral reserve/resources may be furnished as per the format specified in the standard guidelines as given in “IBM Manual on Appraisal of Mining Plan 2014” & be corrected as per the section wise calculation. (ii) Lumps & fine ratio may also be discussed in this para. (iii) Grade of +35% Fe may also be calculated & tabulated.

MINING; OPEN CAST MINING:

24. Para 2.0(A)(a): Since drilling & blasting in combination of HEMM is proposed for operating the mine, the category of the mine may be corrected as ‘A’ Fully Mechanized instead of ‘A- OTFM’. The same may be corrected at all places in the text, certificates & plates. (ii) It is mentioned in this para that only one pit be opened for exploitation, as per production & development plan 2 pits, one for float & one for reef ore is proposed. Clarification may be given.

25. Para 2.0(A) (b) (I): (i) In this para it is mentioned that the yearly production programme is as per CEC production limit of 30,000 Tons per annum. The same may be supported by letter from CEC and annexed accordingly. (ii) The year wise tentative excavation indicating development, ROM, pit wise may be summarized in only one table given below. (ii)Bulk density & recovery factor of each of the material proposed to be handled in the mine may be tabulated below the appended table.

Year	Pit No	Total Tentative Excavation (Tons)	Top soil (Tons)	OB/IB/S B (Tons)	ROM		Mineral reject	ROM/Waste ratio
					Ore (Tons)	Mineral Reject (Tons)		

26. Para 2.0 (c): (i) Year wise, bench wise, section wise calculation of production & development quantities may be given in this para instead of annexure & discussed in brief. (ii) The details of working may be furnished in the below appended table.

Year	Area	Sections	Advancement	No of Benches		Level mRL		Working depth	UTM coordinates	
				Ore	Waste	Top	Bottom		Northing	Easting

(iii) Details of dumping may be given in the table given below:

Year	Extent (Ha)	Quantity (Tons)	Top mRL	Bottom mRL	No of Stages	Slope angle	Northing coordinates	Easting coordinates

27. Para 2.0 (d): Under extent of mechanization, calculation may be furnished to calculate the no. of drills, excavators & tippers based on the maximum material handling in the proposed plan period.

28. Para 2.0 (e): Brief description on preparatory work to be carried out for the disposal of waste & reject may be given on yearly basis citing references of the section line.

29. Para 2.0 (f): (i) Engineering measures proposed for OB dump given may be given year wise. (ii) Re-grassification of the entire mined out area at the conceptual stage of mining may be proposed & few sections of the same may be given. (iii) Land use pattern at the conceptual stage of mining may in regard to mineral storage & mobile crushing plant be verified & furnished as per Financial Assurance Table given in para 8.6.

30. Para 4.0(b): In this Para, it is to clearly state that the dumping ground is proved for presence or absence of mineral supported by exploratory data and be outside/inside the UPL.

31. Para 4.0(c): (i) Details of OB dumping may be given in the appended table

Year	Extent (Ha)	Quantity (Tons)	Top RL	Bottom RL	No of stages	Slope angle	Location

- (ii) Proposed engineering structures for environment protective measures may be given year wise and be shown on the plates.
32. Para 8.2: A tabular column may be inserted for monitoring the environment parameters of air, water, noise & soil in the core & buffer zone with their respective locations and no of samplings proposed in core & buffer zone.
33. Para 8.3.1: (i) Land use pattern at the end of plan period & conceptual stage may be tabulated and discussed in this para. (ii) Mitigative measures for noise & vibration may be given as drilling & blasting is proposed to be carried out in the mine.
34. Para 8.3.5: (i) since there is no proposal of backfilling, the information furnished in table no.47 may be reviewed & corrected accordingly. (ii)The information pertaining to environmental monitoring, year wise construction of retaining wall, garland drains may be given under the head 'others' in page no.49.
35. Para 8.6: (i) since retaining wall & garland drains are proposed to be constructed in the plan period, the area may be considered for FA calculation under the heading "others".
36. The Consent letter/Undertaking /Certificate from the lessee may be submitted on the Original letter head if any.
37. Certificate from QP may be duly signed.

PLATES:

- a) Key Map (Plate No.1): Monitoring stations of air, water & noise in the core & buffer zone may be shown prominently with distinct colour.
- b) Geological Plan (Plate No. II/b): (i) Area under G-1, G-2, G-3 & G-4 may be shown tabulated & indexed accordingly. (ii) DGPS reading & GCP readings may be deleted from this plate. (iii) Previously dug trial pits (PL stage) may also be depicted in the geological plan. (iv)Year wise proposal of bore holes may also be shown in this plate & indexed accordingly.
- c) Geological cross sections (Plate No. II/c): The sections may be prepared as per the guidelines given in Minerals (Evidence of Mineral Contents) Rules, 2015. (ii) Interpolation of the ore body may be confined only to the maximum depth of the ore body explored. Necessary corrections may be done accordingly.
- d) Production & Development Plan (Plate No.III/a - III/e): (i)Year wise progress of retaining wall & garland drain may be shown prominently with thick lines & indexed. (ii) Production & development plates may be renamed year wise. (iii) The reef ore workings may be shown prominently & indexed. (iv) Geological parameters may be deleted from these plates. (v) Year wise colour coding for the third year may be changed. (vi) Year wise area for mineral stacking may be shown.
- e) Production & Development Sections (Plate No. III/f): (i) Production & development section may be given in 1: 1000 scale . (ii) Interval of the Y axis in the section may be decreased and confined only till the bottom of the working pit.(iii) Progress of the year

wise dumping of waste /OB dumping may be shown & indexed accordingly.(iv)
Geological features may be removed from this plate.

- f) Reclamation Plan (Plate No. IV): Proposed retaining wall, garland drain & road may be shown prominently with thick lines.
- g) Conceptual Plan (Plate No.VI): (i) In this plate only the details pertaining to conceptual land use pattern may be shown with outlines & solid fill colours. The same may be tabulated. (ii)Re-grassification of the entire mined out area at the conceptual stage of mining may also be proposed & shown.

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