

SCRUTINY COMMENTS ON DRAFT REVIEW OF MINING PLAN IN RESPECT OF MANOHARPUR ORE MINES (SUKRI LUTUBURU LEASE HOLD) (AREA- 609.554 HA.) OF M/S STEEL AUTHORITY OF INDIA LTD. LOCATED IN VILLAGE MARANGPONGA (SARANDA R.F.), DISTRICT- WEST SINGHBHUM SUBMITTED UNDER RULE- 17(2) OF MCR, 2016.

A Text

1. a) The Review of Mining plan has not been prepared as per IBM Manual on appraisal of mining plan 2014.
- b. Instead of scheme of mining period, Review of Mining plan period may be written.
2. On the cover page (a) instead of SUKRI LUTUBURU Leasehold, SUKRI LUTUBURU Iron Ore Mine may be written.
- b. Category of mine may be written as Category A (Other than Fully mechanized mine)
3. The certificate and consent letter from the owner has not been dated.
4. In the consent letter/undertaking from the applicant, para 02 is not correct. It may be stated that CCOM Circular 02/2010 will be implemented within three months from the date of approval of Review of Mining Plan .
5. In the certificate from Qualified person, Date and place have not been given.
6. Chemical analysis report from NABL approved laboratory has not been given. It may be stated whether MECL laboratory is NABL approved or not. If so, the valid certificate from NABL in favour of MECL may be given.
7. Page 2, para 1.0: Introduction: Date of renewal of lease has been given as 04/12/2006 which may be checked.
8. Page 5, para 2.6: Manganese ore has not been stated.
9. Page 5, para 2.8: The Xerox copy of Degree certificate w.r.to Ms Sujata Sumar, M.Sc Tech(Applied Geology) & Mr. Ravi Ranjan, B.Tech(Mining) not submitted.
10. Page 10, para 3.10 & page 11, para 3.11- The new number of NH20 i.e. NH320G may be given for Hatgamharia-Manoharpur-Kolabira Road.
11. Page 20, para 6.2 (Regional Geology) & page 1, para 1.0(Introduction): It has been stated that the area has been explored since 1916 by M/s IISCO, but on page 1, para 1.0 it has been stated that the mine was taken over by M/s IISCO in the year 1935.May be corrected.
12. Page 29, para 6.5.1: Threshold values should be 45% of Fe value.
13. Page 24, para 6.4.5 & page 30, para 6.5.3, page 33, para 6.5.9: On , para 6.4.5 the area explored only under G-1 has been given, whereas on para 6.5.3 the G2, G3, G4 exploration has been given, which is not clear. On para 6.5.9, it has been stated that no further drilling was carried out in the lease area outside the broken area for want of forest clearance. Then, how the additional mineral resources have been established is not clear.

14. Page 34, para 6.6: (a) The yearwise meterage is not matching with the meterage given in the geological plan & feasibility report. The total meterage value is not correct. May be reconciled.

b) The future exploration programme should comply Rule 12(4) of MCDR, 2017.

15. Page 39, para 7.2.1(b): Stripping ratio may also be given.

16. Page 49, para 7.14: As per specific condition no. (xxxii) of E.C. dated 10/06/2013 it maybe stated that 'No transportation of ore outside the mine lease area will be carried out after the sunset.'

17. Page 50, para 7.16- a) The bucket capacity of Front End loader have not been given.

b. Rated production/hr for Hydraulic Excavator & Front End loader has not been given.

18. Page 63, para 13.2: Employment potential: It may be stated that condition no. 20 of Forest Clearance dated 07/03/2011 will be followed in letter and spirit.

19. Page 64, para 13.2, Employment potential: Out of 35 regular employees and 344 contractual employee to be shifted to Sukri Lutuburu mines, how many will be local employee have not been given. Here also it may be stated that condition no. 20 of Forest clearance dated 07/03/2011 will be followed in letter and spirit.

20. Page 68, para 14.1(b), Rainfall and Temperature at Manoharpur ore mine- The minimum temperature during 2012 has not been given as 23⁰c. It may be checked.

21. Page 70, para 14.2(i) Deforestation: It has been stated that 30.43 ha. has been demarcated as broken area. But the broken area at the start of plan period is only 10.81 ha. May be reconciled.

22. Page 72, para 14.2(ii)(e) & Page 77 to 83: On page 72, para 14.2(ii)(e) plantation of trees around the dump has been proposed. Accordingly para 14.3.7 and Reclamation Plan may be corrected.

23. Page 77 to 84, para 14.3.7- The afforestation programme inside the lease area may be given for 2019-20 to 2023-24 in line with specific condition no. (xiv) of Environment clearance dated 10/06/2013.

24. Page 85, para 14.3.8(A): Disaster Management: Name and address, phone no. of the responsible person for Disaster Management have not been given.

25. Page 92, para 14.3.13. (a): The financial assurance instead of Rs. 1,00,20,000/- (Rupees One crore twenty thousand only) Rupees Ten lakh twenty thousand has been written.

(b) The financial assurance of Rupees One crore twenty thousand valid upto 31/03/2024 not submitted.

B. Plan & Sections.

1. General:- (a) On all the plan and sections it has been stated that "The plan is prepared on lease plan authenticated by State Govt." is not correct. It may be deleted.

(b) Lease area has not been given on all the Plan & Sections.

2. CCOM Circular 02/2010 has not been complied.

3. Key Plan(Drg. No. CET RN 4476 RM 700 001):
 - (a) Boundaries of all villages along with their population have not been given.
 - (b) The core zone i.e. 5 km. area adjoining the lease area has not been marked.
 - (c) Flow direction of nalah has not been shown.
 - (d) Predominant wind direction in the index has been shown in Blue colour but on the plan it has been shown in Red colour. May be reconciled.
 - (e) Railway line from Chiria to Manoharpur have been shown, which does not exist as on date.
 - (f) Name of river, nalah has not been given.
4. Surface plan (Drg. No. CET RN 4476 RM7 00 003):
 - (a) North direction not shown
 - (b) Transport road not shown upto the lease boundary
 - (c) Date of survey not given.
 - (d) (i) GCP points have not been indexed. (ii) 3 GCP points though written separately but not shown on the plan i.e. within the lease area or outside lease area. The GCP points should be permanent structure.
 - (e) Flow direction of nala not shown.
 - (f) Geo coordinates of all the boundary pillar not given separately as Annexure.
 - (g) Geo Co ordinates of some of the corner pillars e.g. 15/S, 35/S, 36/S, 57/S, 58/S, 242/S, 455/S not given.
5. Surface Geological Plan (Drg. No. CET RN 4476 RM6 00 004):)(Sheet 1 of 1)
 - (a) PBH 7 has not been shown properly. Its location is not correct.
 - (b) In the table for exploration plan the year wise Bore hole no. should be given as PBH 1 to 17 for 2019-20, PBH 18 to 37 for 2020-21 and so on.
6. Excavation Plan 2019-20 & 2020-21 (Drg. No. CET RN 4476 RM 5 00 006 &007)
 - (a) The retaining wall and garland drain not shown for the existing and proposed dump.
 - (b) The benches have not been proposed correctly. Width of the benches is not kept at 12m as proposed in text.
 - (c) What happened to benches 716m to 722m and 734 m. to 740 m. of the 1st year (2019-20) during the 2nd year (2020-21) is not clear.
 - (d) How the shape of the quarry near Borehole BH_ MC 502 has been arrived during 2020-21 is not clear as compared to the Excavation Plan (2019-20).
 - (e) Haul road not shown up to the quarry faces and dump site.

7. Geological cross section: (Drg. No. CET RN 4476 RM6 00 005)(Sheet 7 of 9)

The retaining wall and garland drain not shown for the fines dump near the broken area demarcation line.

8. Excavation Plan 2023-24. (Drg. No. CET RN 4476 RM5 00 010) & Reclamation plan (Drg. No. CET RN 4476 RM7 00 015)

- (a) The quarry position at the end of 2023-24 not matching.
- (b) The yearwise dump does not show the financial year on the reclamation plan as given in the excavation plan 2023-24.

9. Waste dump plan & section. (Drg. No. CET RN 4476 RM5 00 012)

- (a) In the longitudinal section along A-A' the year have been given as 2014-15 to 2018-19 which is not matching with the dump plan. May be reconciled.
- (b) Colour code for the yearwise waste dump may be given in the index.

10. Environment plan (Drg. No. CET RN 4476 RM7 00 013)

- (a) No. of trees/ha for thick forest, medium thick forest have not been given in the index.
- (b) Flow direction of nala not shown.
- (c) Approach road/haul road not shown beyond 500 m. of the lease area.

11. Conceptual plan (Drg. No. CET RN 4476 RM700 014)

The dump area is not matching with the dump area shown in the excavation plan 2023-24 & Reclamation plan.

D. Annexures:

1. Feasibility Report (Annexure no. 6.5.4.1)

- (a) Page 3, para 5.0: (i) Lease details since inception may be given. (ii) It has been stated that the deposit in banded limonite-goethite-hematite assemblage capping the hills down to 400 m RL but on page 19, para 6.1.1, it has been stated as 480m RL. May be reconciled.
- (b) Instead of scheme period, review of mining plan may be stated.
- (c) Para 5.0 Lease details- Lease details since its inception may be given.
- (d) Page 7, para 14.0- Instead of no increase in lease area of 33.40 ha., No increase in lease area utilization of 33.40 ha. may be written.
- (e) Page 8, para 16.0: (i) The proposed exploration should comply Rule 12(4) of MCDR 2017.
(ii) The proposed exploration does not match with the geological plan.
- (f) Page 9, para 17.0: In the text it has been stated that the ore and subgrade ore during the five year period will be 87% and 13% but in the table for year wise percentage of dispatchable ore, subgrade ore, it is not matching. Even the waste % w.r. to total excavation is not clear.

- (g) Page 8, para 17.0 (Mining): The working face slope has not been written correctly. It should be given in degrees.
 - (h) Page 7, para 14.0: ROM production of 31,81,996.004 tonne during 2008-09 may be checked.
 - (i) para 18.0- The mineral transport may be done during day time as per condition no. (xxxii) of E.C. dated 10/06/2013.
 - (j) Para 24.0: Present land use and future land use during the ensuing 5 year plan period not given.
 - (k) Tribal issues have not been discussed.
 - (l) Page 11, para 28.0, CSR activities: It may be written that condition no. 20 of Forest clearance dated 7/3/2011 may be followed in letter and spirit.
 - (m) Page 11, para 25.0- It has been stated that IISCO is the original mine operator since 1911, is not correct.
 - (n) Page 12, para 30.1: It has been stated that the rated capacity will be achieved in the 2nd full year of operation of the mine but on page 9 the full capacity as per E.C. is proposed to be achieved during the 1st year itself. May be reconciled.
 - (o) The financial analysis like NPV, IRR, Cost benefit analysis have not been discussed.
2. Annexure 14.3.13-1: Financial assurance of Rupees One crore twenty thousand only valid up to 31/03/2024 not submitted.

====***====