

Scrutiny comments in respect of Karlam Manganese Ore Mine of M/S S.K.Sarawagi & Co.Pvt.Ltd. over an extent of 17.63 ha in Sy.Nos. 278, 279 & 281/1 to 8 of Karlam Village, Chipurpalli Mandal, Vizianagaram dist., A.P. submitted under Rule 17(2) of MCR, 2016.

TEXT:

1. The document is submitted as 'Modified Mining Plan' in this regard para 3.6 should be modified furnishing justification with respect to systematic mining, Environment protection and mineral conservation point of view.
2. Color photographs should be enclosed in the document for easy reference pertaining to mining lease boundary pillars, quarries, dump, afforestation, core logs etc.

Review

3. The reasons for not carrying out mining activities since 2012 should be justified.
4. During the last approved plan period, less production is reported due to work in float ore is not in consonance with actual field conditions. Please clarify stating quarry dimension, bench development against approved proposals etc. to justify the same.
5. Year wise review of earlier approved proposals along with lapse period should be furnished. Details of pits and Dump dimensions, its location etc. should also be incorporated for easy reference.
6. Production reported during the last approved plan period is contradictory to the returns submitted to this office.
7. CBH-7 cannot be considered as there is discrepancies in the bore hole logs maintained in the field with that of actual field conditions, hence the sections should be prepared by leaving CBH-7.

Geology and Exploration

8. Reserves and Resources have not been assessed as per MEMC Rules 2015 due to the following reasons;
 - i. The reserves in "Insitue ore zone" are estimated by considering recovery of 60% without any basis.
 - ii. Recovery test conducted in float ore is without any Assay value of ore over which recovery % assessed.
 - iii. Quantity and quality of subgrade ore between 20% of Mn as cut-off and 10% of Mn as threshold to be submitted.
 - iv. Correlation of Trial pits, bore holes drilled and ore occurrence in pits has not been done properly to arrive the reserve/ resources.
 - v. Justification of different UNFC code has not been carried out as per the guidelines.
9. Phase wise exploration carried out in the lease area be furnished in tabular form incorporating year, no. of bore holes drilled, type of drilling, Grid pattern, Area covered under Geological scale, name of exploration agency, be furnished. Further details of all bore holes drilled so far in lease area should be furnished in tabular form incorporating Bore hole no., location (Lat/ Long), collar RL, Depth at which ore encountered/ exhausted from surface etc.. in the text at para 1.e. ii.

10. Geological sections should have been drawn across the strike length of the ore body i.e. NW to SE instead of drawing along Strike line.
11. Page no.14, table no.10: Lithology, ore body occurrence etc. in the trial pits should be submitted properly up to pit depth; in TP-3 (trial pit-3) depth is 4.5 meters but details of lithology furnished is up to 3.0 meters only.
12. Proposed bore holes should be planned in such way that entire potential mineralized area of lease has to be covered under GI scale by 2020-22 as per MCDR, 2017, the exploration proposal be suitably modified.
13. Mineralised area as well as structure of the ore body should be defined as per the exploration carried out so far.
14. Feasibility report should be submitted as per the UNFC guidelines elaborating economic viability of the project.
15. Documentary evidence for expenditure incurred for exploration carried out should be submitted.

MINING :

16. There exist 4 pits in the lease area, present status of the same should be furnished incorporating dimension of quarry, location, top RL, bottom RL, No. of benches in ore & waste.
17. Quarry wise, Bench wise detail be furnished in computation of year wise development proposals.
18. Mine layout detailed is in general and not specific to lease and the same be depicted in development plans.
19. In year wise production proposal, Grade of ROM/ ore should be furnished.

Conceptual plan:

20. The plan has to show the outline of status of mine working of the present plan period as well as at the end of life of the mine. As per the proposal

Mineral Processing

21. Specify the location of Mineral processing Plant (within or outside the lease area).
22. Material balance sheet showing quality & quantity at each stage of processing should be provided.
23. Wet screening is proposed to be installed, details of source of water be furnished.
24. Generated Tailings and Waste should be dumped separately
25. Study carried out for design of flow sheet of this type of ore for the lease, if any be submitted.

Use of mineral:

- Sub grade ore is stated to be generated in the lease area, but in the reserve estimation & year wise proposals, no such generation of sub-grade is reported, needs clarification, refer page 44.
26. The blending schedule to be furnished to achieve the required grade as per end user industry/buyer.

PMCP

27. About 4.42 ha area used for plantation cannot be considered as area put to use for mining and allied activities. FA table should be modified accordingly.

Plans and sections

28. In Index table the following be incorporated: (i) Purpose of the plan (ii) proposed Plan period (iii) Name of the Mine
29. Key Plan, Environment plan, needs to be submitted indicating all the details as per rule 32 of MCDR 2017
30. Surface Plan & Geological Plan should be submitted on 1 :1000 scale for easy reference and incorporating details as per the provision of rule 32(1) (a) & (b) of MCDR, 2017. Further in Surface Plan: Bench Mark established, reference points considered for survey, Name of the surveyor in full with surveyor's certificate no., contour RL's, Date of Survey, Bench RLs and surface features like Dump, Electric power Line, Canal etc. existing in the lease area needs to be incorporated and depicted distinctly.
31. Geological Plan:
 - i. Ore zone, Strike, Dip direction of ore body, UPL, Exploration under Geological axis (G1, G2, G3), any other Geological features be indicated distinctly.
 - ii. Legend should be indicated properly with respect to details to be shown in plans, for trial pits two different symbols are shown, which needs to be corrected
 - iii. Proposed bore holes to be drilled should be indicated.
32. Geological section should have been submitted in 1 :500 scale, as majority of reserves/ resources estimated is from Float ore occurrence up to 4.5 meters only from Surface. So that the ore occurrence can be correlated easily in section with lower scale.
33. Development plans and sections should be submitted in 1 :1000 scale or less to
34. Conceptual plan: The plan has to show the outline of status of mine working of the present plan period as well as at the end of life of the mine. As per the proposal
35. In view of the above relevant para, plans and sections should be modified

Scrutiny comments in respect of Karlam Manganese Ore Mine of M/S S.K.Sarawagi & Co.Pvt.Ltd. over an extent of 17.63 ha in Sy.Nos. 278, 279 & 281/1 to 8 of Karlam Village, Chipurpalli Mandal, Vizianagaram dist., A.P. submitted under Rule 17(2) of MCR, 2016.

TEXT:

36. The document is submitted for enhancement of production up to 40,000 TPA in 2020-21 itself, and life of the mine left is 2 years only after the plan period, No TOR has been obtained to get the EC so far. In this regard considering the minimum time period required for obtaining the statutory clearance, considering proper closure of mine as per guidelines, year wise production proposal be submitted for enhancement of production.
37. Justification in para 3.6 should be modified stating furnished as the document is submitting as 'Modified Mining Plan'. Proper Justification with respect to systematic mining, Environment protection and mineral conservation point of view should be submitted.
38. TOR approved from MOEF for enhancement of production for need of Modified Mining Plan should be submitted.
39. It is reported that Mining operations are not being carried out since 2012, status of lease as per the provision of section 4A of MMDR Act 1957, lapsing of lease, from the State Government, communication received if any, be submitted, and the same be recorded in introduction chapter.
40. Color photographs should be enclosed in the document for easy reference pertaining to boundary pillars, quarry, dump, afforestation, core logs etc.

Review

41. The reasons for not carrying out mining activities since 2012 to till date should be recorded as "due to un-economic operations" as recorded in page no.1
42. During the last approved plan period, less production is reported due to work in float ore is not in consonance with actual field conditions. Please clarify stating quarry dimension, bench development against approved proposals etc. to justify the same.
43. Year wise review of earlier approved proposals as well as during lapse period should be furnished. Details of pits and Dump dimensions, its location etc. should also be incorporated for easy reference.
44. Production reported during the last approved plan period is contradictory to the returns submitted to this office. Further Production registers were not maintained in the field for verification.
In this regard production carried out so far since opening of the mine be furnished with documentary evidence duly signed by Nominated Owner.
45. Exploration done during the year 2018 CBH 1- CBH-7 cannot be considered as there were discrepancies in the bore hole logs maintained in the field with that of actual field condition, hence this may be removed in the document.

Geology and Exploration

46. Reserves and Resources have not been assessed as per MEMC Rules 2015 due to the below mentioned reasons;
 - vi. Collar RI's of Bore holes furnished in text and that in plans are different,
 - vii. Computation of reserves had been done wrongly by considering

Recovery factor with ore of >20% Mn is considered as **60% of ROM** without any basis. The study conducted shows recovery of ore is maximum of 33.9% only

- viii. Recovery test conducted is without any Assay value of ore over which recovery % assessed.
- ix. No recovery of float ore is observed in core bore hole drilled, then considering its continuity is without any basis.
- x. Cut-off grade considered is 20% Mn and threshold value is 10%Mn, the status of ore in between the two is not detailed for mineral conservation point of view.
- xi. Correlation of Trial pits, bore holes drilled and ore occurrence in pits has not been done properly to arrive the reserve/ resources, which needs to be done.
- xii. Justification of different UNFC code has not been carried out as per the guidelines.

Thus in the absence of detailed and systematic approach as per MEMC Rules 2015, the reserves cannot be acceptable. Above points needs to be complied for consideration of the document.

47. On verification of Analysis data of trial pits (float ore) and grade of ore required by the buyers, the following needs to be clarified

- (i) The grade of ore required by the industry is > 28% Mn content and SiO₂ is 20% maximum, whereas the about 80% of float ore mixed with quartz in trial pits is having Mn content < 28% Mn and SiO₂ is more than 24%
In this regard economic viability of float ore to sale in the market needs to be furnished.

48. Reserves and resources should be assessed separately for Insitue ore and Float ore for easy reference

49. Phase wise exploration carried out in the lease area be furnished in tabular form incorporating year, no. of bore holes drilled, type of drilling, Grid pattern, Area covered under Geological scale, name of exploration agency, be furnished. Further details of all bore holes drilled so far in lease area should be furnished in tabular form incorporating Bore hole no., location (Lat/ Long), collar RL, Depth at which ore encountered/ exhausted from surface etc.. in the text at para 1.e. ii.

50. Geological sections should have been drawn across the strike length of the ore body i.e. NW to SE instead of drawing along Strike line. Which is incorrect to assess the reserves/ resources.

51. Page no.14, table no.10: Lithology, ore body occurrence etc. in the trial pits should be submitted properly up to pit depth; in TP-3 (trial pit-3) depth is 4.5 meters but details of lithology furnished is up to 3.0 meters only.

52. Proposed bore holes should be planned in such way that entire potential mineralized of lease has to be covered under GI scale by 2020-22 as per MCDR, 2017, the exploration proposal be suitably modified.

53. Mineralised area as well as structure of the ore body should be defined as per the exploration carried out so far.

54. Feasibility report should be submitted as per the UNFC guidelines elaborating economic viability of the project.

55. Documentary evidence for expenditure incurred for exploration carried out should be submitted.

MINING :

56. There exist 4 pits in the lease area, present status of the same should be furnished incorporating dimension of quarry, location, top RL, bottom RL, No. of benches in ore & waste.
57. Computation of year wise production proposal is contradictory
Recovery factor of 32% of ROM is considered as ore in insitue, whereas while computation of reserves, the same is considered as 60%
58. Quarry wise, Bench wise detail be furnished in computation of year wise development proposals.
59. Mine layout detailed is in general and not specific to lease and the same be depicted in development plans.
60. In year wise production proposal, Grade of ROM/ ore should be furnished.

Conceptual plan:

61. The plan has to show the outline of status of mine working of the present plan period as well as at the end of life of the mine. As per the proposal

Mineral Processing

62. Specify the location of Mineral processing Plant (within or outside the lease area).
63. Material balance sheet showing quality & quantity at each stage of processing should be provided.
64. Wet screening is proposed to be installed, details of source of water be furnished.
65. Generated Tailings is proposed to be dumped at the waste dump within ML area.
Therefore commitment has to be made to maintain the separate registers for the same.
66. Study carried out for design of flow sheet of this type of ore for the lease, if any be submitted.
67. Use of mineral:
Sub grade ore is stated to be generated in the lease area, but in the reserve estimation, year wise proposals no such generation of sub-grade is reported, needs clarification, refer page 44

PMCP

68. About 4.42 ha area is considered as area degraded for plantation, which cannot be acceptable as it is not a mining and allied activities.

Plans and sections

69. In Index table the following be incorporated: (i) Purpose of the plan (ii) proposed Plan period (iii) Name of the Mine
70. Original DGPS survey of lease area authenticated by State Government should be submitted for verification in the office.
71. Key Plan, Environment plan, needs to be submitted indicating all the details as per rule 32 of MCDR 2017
72. All plans & Sections should be prepared as per the Lease sketch authenticated by State Government.
73. Surface Plan & Geological Plan should be submitted on 1 :1000 scale for easy reference and incorporating details as per the provision of rule 32(1) (a) & (b) of MCDR, 2017.
Further in Surface Plan: Bench Mark established, reference points considered for survey, Name of the surveyor in full with surveyor's certificate no., contour RL's, Date of Survey, Bench RLs and surface features like Dump, Electric power Line, Canal etc. existing in the lease area needs to be incorporated and depicted distinctly.
74. Geological Plan:

- iv. Ore zone, Strike, Dip direction of ore body, UPL, Exploration under Geological axis (G1, G2, G3), any other Geological features be indicated distinctly.
- v. Legend should be indicated properly with respect to details to be shown in plans, for trial pits two different symbols are shown, which needs to be corrected
- vi. Proposed bore holes to be drilled should be indicated.

75. Geological section should have been submitted in 1 :500 scale, as majority of reserves/ resources estimated is from Float ore occurrence up to 4.5 meters only from Surface. So that the ore occurrence can be correlated easily in section with lower scale.

76. Development plans and sections should be submitted in 1 :1000 scale or less to

77. Conceptual plan: The plan has to show the outline of status of mine working of the present plan period as well as at the end of life of the mine. As per the proposal

78. In view of the above relevant para, plans and sections should be modified



भारत सरकार/Government of India
खान मंत्रालय/Ministry of Mines
भारतीय खान ब्यूरो/Indian Bureau of Mines
हैदराबाद क्षेत्रीय कार्यालय/Hyderabad Regional Office



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Room No.603, 6th Floor,
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Date. 09.06.2020.

To

Sri Ashok Konda, Nominated Owner,
M/s S.K.Sarwagi & Co Pvt. Limited,
Sarawagi House, Kaspa Street,
Cheepurupalli-532128,
Vizianagaram district, Andhra Pradesh.

Sub: Submission of Draft Review of Mining Plan in respect of Karlam Manganese Ore Mine of M/S S.K.Sarawagi & Co.Pvt.Ltd. over an extent of 17.63 ha in Sy.Nos. 278, 279 & 281/1 to 8 of Karlam Village, Chipurpalli Mandal, Vizianagaram dist., A.P. submitted under Rule 17(2) of MCR, 2016 .

Ref: Your letter no.Nil dated 01.05.2020.

Sir,

With reference to your letter cited above on the subject, the draft Review of Mining Plan has been examined by Sri Ibrahim Sharief, Sr. ACOM. Due to covid-19 lockdown inspection could not be carried out and the table scrutiny comments were prepared and have already been forwarded to you and your Qualified Person on respective e.mail ids i.e., asokkonda@sarawagi.com , mines@sarawagi.com and earth_environment2008@yahoo.com.

02. You are advised to attend these 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 (2Nos.). 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 Prava Ranjan Mishra, Q.P. for information Pand necessary action.

(Shailendra Kumar)
Regional Controller of Mines

मूल पति पर नहींकध.

खान नियंत्रक (द), भारतीय खान ब्यूरो, बेंगलुरु।

(कुमार शैलेन्द्र)
क्षेत्रीय खान नियंत्रक