



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, 6<sup>th</sup> Floor,  
CGO Towers, Kavadiguda,  
Secunderabad – 500 080  
Date. 02.09.2020.

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 Modified 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., Andhra Pradesh, submitted under Rule 17(3) of MCR, 2016 .

Ref: Your letter no.Nil dated 04.08.2020.  
Sir,

With reference to your letter cited above on the subject, the draft Modified Mining Plan has been examined by Sri S.K.Muduli, JMG. 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](mailto:asokkonda@sarawagi.com) , [mines@sarawagi.com](mailto:mines@sarawagi.com) and [earth\\_environment2008@yahoo.com](mailto: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 (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,

*Shilendra Kumar*  
2/9/2020

(Shailendra Kumar)

Regional Controller of Mines

Copy to Sri Prava Ranjan Mishra, Q.P. for information Pand necessary action.

*Shilendra Kumar*  
2/9/2020

(Shailendra Kumar)

Regional Controller of Mines

मूल पति पर नहींकध.

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

*Shilendra Kumar*  
2/9/2020  
(शैलेन्द्र कुमार)  
क्षेत्रीय खान नियंत्रक



**Scrutiny comments in respect of Modification of Mining Plan 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, Cheepurupalli Mandal, Vizianagaram dist., Andhra Pradesh submitted under Rule 17(2) of MCR, 2016.**

**General**

- 1) As Progressive Mine Closure Plan is part of Mining Plan document, only the Rule position under which the mining plan document has been submitted should be mentioned.
- 2) The Modification of Mining Plan needs to be prepared as per the format of IBM Manual on appraisal of Mining Plan-2014. Introduction is not required.
- 3) Category of land with extent, Lease period, expiry date and Category of mine needs to be mentioned in the cover page.
- 4) Documents like List of members of Board of Directors duly signed by the appointed company secretary, Certificate of registration of the company and memorandum of the association needs to be submitted.
- 5) At 1(a) the nominated owner address should be submitted as per the address proof.
- 6) Mine Code needs to be submitted correctly.
- 7) Period, date of execution and expiry of the mining lease needs to be submitted correctly at para 1(e) of General Chapter.
- 8) In chapter 2 (Location and Accessibility) the lat/long of boundary pillar no-6 should be submitted correctly. In 2(b) details of lease area with location map-Khasra no wise extent should be submitted, Revised Toposheet No. with latitude & longitude of all corner boundary point/pillar should be submitted.

**Details of approved mining plan / scheme of mining (if any)**

- 9) Under 3.3 (review of earlier approved proposal),
  - a) The existing pits dimension should be removed from the review chapter and to be submitted correctly in consonance with the surface plan in the mining chapter.
  - b) Review submitted in respect of Manganese Production for 2007-08 is not in consonance with the production details submitted in the Annual returns for the year 2007-08. Necessary justification needs to be submitted.
  - c) Review submitted for over burden/waste generation for 2007-08 is Nil where as in the Annual return it has been submitted as 83975 Ft<sup>3</sup>, the discrepancy observed needs to be clarified and submitted accordingly.
- 10) Under 3.6, Extension of lease period upto 50 years period, should be substantiated with documents/letter from state Govt. The reason for modification has been submitted for facilitating increase in production capacity hence Board of Director's resolution regarding the same in this regard should be submitted. The reason submitted at (iii), (iv), (v) needs to be justified for how it full fills the interest of safe and scientific mining.

**Geology and Exploration:**

- 11) The insitu Ore body should be demarcated correctly in the Geological Plan based on exploratory data. The Geological Cross section prepared should be in consonance with the Bore hole and trial pit data/lithologs/records. Basis for applying recovery factor while estimating reserves/resources should be submitted. In view of the points and the enclosed Annexure-1, the detailed three-dimensional delineation the ore body should be carried out such that size, shape, structure, grade, and other relevant characteristics of the deposit are established with a high degree of accuracy and the reserves/resources estimation should be carried out as per MEMC Rules-2015.

**Mining**

- 12) Sub Grade ore generation should be proposed in the year wise production proposal for Manganese Ore having Manganese Content between 10% to 15%.
- 13) As mining has been proposed maximum upto 28m and the water table varies from 15.5m to 19.5m below ground level, therefore in absence of permission from SGWB/APWALTA, proposal for mining upto 15m will only be accepted.
- 14) Hitherto, you have not initiated the process of getting Environmental clearance from MOEF and foreseeing time frame of atleast one year to acquire it, the proposal for mining during 2020-21 should be Nil.
- 15) Mining Proposal needs to be modified as per the comments of Geology and Exploration chapter.
- 16) Year wise proposed Ore production grade needs to be submitted, the mechanism for the grade control for optimum utilization of mineral along with blending techniques needs to be furnished.
- 17) In the year wise development section for the year 2020-21 the proposed area of mining needs to be demarcated with proper identifiable colour.
- 18) Mine layout detailed is in general and not specific to lease and the same be depicted in development plans.
- 19) Justification for man power for mining, segregation, washing needs to be submitted.
- 20) Proposal has been submitted in insitu manganese ore but requirement of drilling machine, blasting has not been discussed. The bench parameters and blast hole drilling parameters to be submitted.
- 21) 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. Conceptual Plantation all along the safety zone of the lease boundary needs to be proposed.

#### **Mine Drainage**

- 22) It has been submitted water table varies from 15.5m to 19.5m of depth from surface, the same should be substantiated with documents and Annexure.
- 23) Proposal for carrying out Hydro-Geological study needs to be submitted if any.

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

- 24) The existing dump details like No, Dimension, Volume and whether waste or mineral dump needs to be submitted.
- 25) As the proposed dumping area is not proved for non-mineralisation, it should be proposed as temporary dump.
- 26) Mineral reject and sub grade dumping should be proposed separately.

#### **Use of Mineral and Mineral Reject**

- 27) Give details of processes adopted to upgrade the ROM to suit the user requirements. The blending details needs to be furnished to achieve the required grade as per end user industry/buyer.

#### **Processing of ROM and Mineral Reject**

- 28) In the mining chapter both segregation and washing of ROM has been proposed but in the Processing Chapter only segregation has been proposed, which are contradictory. Material balance sheet showing quality & quantity at segregation stage and washing stage of processing should be provided. Quantity, quality and disposal of tailings needs to be discussed.

#### **Progressive Mine Closure Plan**

- 29) Area utilised for exploratory trial pits, roads, environmental protection measures etc have not been considered for computation of Bank Guarantee amount. Financial assurance in the form of

Bank gurantee has been submitted for Part of the area of the net area proposed to be put to use for mining and allied activities. Hence the land use table submitted in the text and FMCP plan needs to be modified. Bank gurantee needs to be submitted as per the modified PMCP Plan.

**Plans and Sections**

- 30) All the plans and sections should be prepared and 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.
  - 31) Certificate of correctness need to be submitted in all the plans and sections.
  - 32) The Surface Plan and Surface Geological Plan should be prepared as per rule 32(1)(a) & (b).
  - 33) The Key Plan and Environmental Plan needs to be prepared as per rule 32(5)(a) and 32(5)(b) of MCDR-2017 respectively.
- .....



## Annexure

- I. Under (Geology and Exploration) at 1(a) the topography submitted in text should be in consonance with the Surface Plan submitted. Regional drainage pattern, Season wise climate information, Source of climate and rainfall data needs to be submitted.
- II. Under (Geology and Exploration) at 1(c)
  - a) the extent of mineralised zone, non-mineralised zone and unexplored zone needs to be submitted.
  - b) Trends, shape and size of the ore deposit
  - c) disposition of various litho-units indicating structural features if any
  - d) control of mineralisation
- III. Under (Geology and Exploration) at 1(d) the phone no of exploration agency needs to be submitted.
- IV. Under (Geology and Exploration) at 1(e)
  - a) At point (i) Number of trial pits and trenches indicating dimensions, spacing needs to be submitted.
  - b) At point (ii) year wise number of boreholes drilled indicating type (Core/RC/DTH), diameter, spacing, inclination, co-ordinates, Collar level and depth needs to be submitted. As per the Review of Exploration for 2018-19, 7nos of bore holes and 6 nos of DTH bore holes were drilled, but the same has not been depicted in the Geological Plan, Geological Sections and also details thereof should be submitted. Bore Hole lithologs of all the BHs drilled during 2018-19 should be annexed. Notice of Sinking of all the Core and DTH BHs and Trial Pits needs to be annexed and also should be submitted to this office separately through a letter. Summarized bore hole lithologs needs to be submitted.
  - c) At point (iii) at least for 10% of total samples should be analyzed by NABL Laboratory and reports from NABL accredited laboratory should be annexed.
  - d) All the Bore holes and Trial Pits lithologs need to be signed by the Geologist appointed under MCDR Rule in the mine mentioning True Copy.
  - e) Documentary evidence for expenditure incurred for exploration carried out should be submitted.
  - f) Coloured Photographs of Bore hole wise core boxes and trial pits needs to be submitted.
- V. Under (Geology and Exploration) at 1(g)
  - a) the insitu ore body continuity should be depicted in the Geological plan upto which there is evidence of mineralization as manganese occurs as lensoidal bodies within the lease. With only one single bore hole (CBH-20) the ore body has been extended in SE direction from BB' section to middle of section CC' and DD'. Exploratory input is not sufficient enough to demarcate the ore body as depicted in the Geological Plan.
  - b) As per the last scrutiny comment issued the 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.
  - c) Ultimate pit limit should be depicted correctly in the Geological Plan based on extent of ore body.
  - d) Geological plan and Geological Cross Section needs to be signed by the Geologist appointed in the mine.
- VI. Under (Geology and Exploration) at 1(h)

- a) Some of the bore holes depths, Mineralised zone and non mineralised zone as intersected by some of the bore holes like CBH-21, CBH-12, CBH-18, CBH-17, CBH-16 should be depicted correctly in the Geological cross section.
- b) Entire float Manganese Ore Zone thickness should be depicted correctly in the geological cross sections.
- c) The trial pit depths and float ore zone should be depicted correctly.
- d) Dip direction of the ore body as depicted in the Geological Plan and as obtained by plotting the bore holes, should be in consonance with each other.
- e) Projected Bore holes should not hang above the ground profile and at places ground profile has been shown above the Bore hole.
- f) The UNFC code for area considered for different categories of reserve/resources estimation needs to be mentioned and marked correctly on geological cross sections.
- g) Insitu Manganese Ore body continuity has not been proved by exploratory evidence as plotted in BB' and CC' section where ore body has been depicted on the basis of one core bore hole each.
- h) Ultimate pit limit should be depicted correctly based on extent of ore body depicted in the Geological Plan.
- i) Also Geological section on same scale of Geological plan needs to be submitted.

VII. Under (Geology and Exploration) at 1(i) the future programme of exploration with due justification should be demarcated on Geological plan year wise in different colours. Exploration should be proposed to explore the entire mineralised area under G1 level.

VIII. Under (Geology and Exploration) at 1(j)

- a) Area explored under different level of exploration needs to be marked on the Geological plan and to be submitted in the text along with resources and grade.
- b) UNFC code for area considered for different categories of reserve/resources estimation may also be marked on geological cross sections. Basis of applying recovery factor should be submitted for estimating the insitu Manganese ore reserves/resources.
- c) The float Manganese ore reserves/resources will be accepted only after submitting the basis of applying the recovery factor during reserves/resources estimation. Recovery study in the float Manganese ore zone should be proposed in future before start of mining operation and reports thereof should be submitted to this office.
- d) The recovery test of Manganese Ore body has been carried out for the already delineated Manganese Ore Zone. Clarity should be submitted regarding whether the sample has been analysed for the entire sample width or selective analysis has been carried out only for Manganese band of the entire sample width. Accordingly the index of Geological Cross section, Geological Plan and Reserves/Resources estimation table should be modified eliminating any discrepancy about occurrence of **“ore zone”** or **“ore vein in the ore zone”** having distinguished nomenclature and index for them.
- e) The reserves/resources should be estimated upto the threshold value for both insitu Manganese Ore and Float Manganese Ore.
- f) UNFC justification for Geological axis, Feasibility axis and Economic axis needs to be submitted as per the UNFC guidelines. Economic viability needs to be justified.
- g) Feasibility report should be submitted as per the UNFC guidelines elaborating economic viability of the project.
- h) The reserves/resources needs to be estimated considering the blocking of mineral resources below ground water table.



IX. Under (Geology and Exploration) at 1(k)

- a) Influence width considered for section BB' for insitu ore reserves estimation is considered in excess. So the influence width needs to be modified accordingly.
- b) Section wise reserves/resources grade needs to be furnished.
- c) Blocked resources under different heads need to be submitted section wise.

X. Under (Geology and Exploration) at 1(l)

- a) Factors like mining losses, ore blocked dues to various reason (benches, barriers, pillars, and other statutory barriers etc) applied for estimating Resources and Reserves needs to be discussed.
- b) UNFC category wise Reserves/resources table -15 should be submitted with Grade.

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