



No. RMP/A/27-ORI/BHU/2021-22

Date: 08.11.2021

To

Shri Seraj Yusha, Joint Managing Partner,
M/s Serajuddin & Co.
At/Po- Balda, P.S-Bamebari,
Dist- Keonjhar, Odisha-758034

Sub: Approval of Review of Mining Plan of Guruda Manganese Mine along with Progressive Mine Closure Plan (PMCP), over an area of 40.064 ha in Keonjhar district of Odisha State, submitted by M/s Serajuddin & Co. under Rule 17 of MCR, 2016.

Ref: - i) Your letter No. S&Co/461-A/2021-22 dated 15.10.2021 received on 05.10.2021.
ii) This office letter of even no. dated 25.10.2021.
iii) This office letter of even no. dated 25.10.2021 addressed to Director of Mines, Government of Odisha copy endorsed to you.

Sir,

This has reference to the letter cited above on the subject. The draft Review of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on site inspection carried out on 03.11.2021 by Shri Ramkishan R, Senior Assistant Controller of Mines. The deficiencies observed are enclosed herewith as Annexure I.

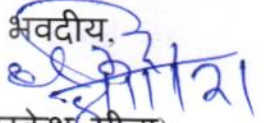
You are advised to carry out the necessary modifications in the draft Review of Mining Plan in the light of the contents vide Annexure I and submit:-

- (i) Three (3) firm bound copies of text in A4 size printable paper and plate/plan in hard copy. The consents and certificates by the Lease holders/Qualified Person and copy of bank Guarantee shall be attached in hard copy of document.
- (ii) Two (2) soft copies of the document in USB Pendrive. The soft copies of the document shall be digitally signed by the Qualified Person and Nominated owner. The text of document should be in excel(.xls) and word format. The plates/plans are to be submitted in .kml/.kmz/.shp format. A few sections may be submitted in .pdf format as indicated in the CCOM Circular 1/2021. All the annexures shall be submitted in soft copy.
- (iii) Financial assurance under Rule 27 of Mineral Conservation and Development (Amendment) Rules, 2021.

The aforesaid final copies of document will be submitted within **15 (Fifteen)** days from the date of issue of this letter, for further necessary action.

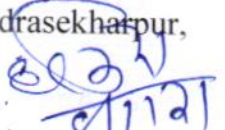
The para-wise clarifications and the manner in which the deficiencies are attended should invariably be given while forwarding the final copies of the Review of Mining Plan.

It may be noted that no extension of time in this regard will be entertained and the Review of Mining Plan will be considered for rejection if not submitted within above due date. It may also be noted that if the deficiencies are not attended completely, the submission would be liable for rejection without further correspondence.

भवदीय,

(हरकेश मीना)

क्षेत्रीय खान नियंत्रक

Copy for kind information and further necessary action to Shri Prava Ranjan Mishra, Earth & Environment, S - 27, Chandralok Market Complex, Niladri Vihar, Chandrasekharpur, Bhubaneswar - 751021.


(हरकेश मीना)

क्षेत्रीय खान नियंत्रक

PART-A

CHAPTER-1: GENERAL INFORMATION

1. The document should be prepared as per the mining plan template format provided in CCOM circular No.01/2021 dated 07.06.2021. No alteration/deletion/change in format of the mining plan template is allowed. Any additional information may be submitted as annexure only if required.
2. Registration details of the firm should be enclosed annexure with a GST certificate. As per partnership deed both two are nominated as authorized signatories. So the document should be signed by both wherever applicable.
3. All the information in the various table columns of different chapters as per the prescribed format in the template should be furnished. No column/rows should be left blank.
4. No information should be furnished other than required, as per the format of mining plan and also no descriptive information other than required as per the format should be furnished. Under some paras the information should be furnished from the drop down menu available information only as applicable. Necessary changes should be made in entire document.
5. Under para 1.1.1 the grant details should be rechecked and rectified. Under para 1.1.2 the reasons for modification and the period should be rechecked and rectified as discussed during the field inspection.
6. The final copies of the document should be digitally signed by QPs and Nominated Owner.
7. State government had lapsed the ML w.e.f. 01.12.2011 vide letter dated 22.08.2015, The present validity status of the ML is to be furnished with documentary evidence. The document should only be considered for the proposed period, if the subsistence of lease period confirmed by competent authority of State Govt. of Odisha.
8. Under para 1.1 the type of lease should be furnished whether it is fresh grant or existing lease. Rectify the same. Also type of working should be furnished whether opencast, underground etc., also nature of use whter captive/non –captive and category as per rule 55 of MCDR, 2017.
9. The document should be submitted as Modification of Mining plan for the block period 2020-21 to 2024-25 and the proposal period from 2021-22 to 2024-25 as the financial year 2020-21 has been already lapsed. Necessary corrections should be in the entire document and plates wherever applicable. Also wherever year-1, year-2 etc., mentioned should be rectified as respective financial year viz., 2021-22, 2022-23 etc.,
10. List of plates and annexures should be properly indexed with page nos. and in case of plates the scale should also be mentioned.
11. Under para 1.2 land ownership details, details regarding the nature of land, etc., should be furnished. The details should be in accordance with the land schedule authenticated by competent authority of State Govt. of odisha.
12. Under para 1.3.1 the period of approved mining plans should be furnished as exact dates viz., DD/MM/YEAR. Necessary changes should be made.
13. Under para 1.3.4. all the details furnished should be rechecked and rectified as discussed during the field inspection. Under para 1.3.6 the details regarding the nominated owner should be furnished as per the field discussion

CHAPTER-2: GEOLOGY AND EXPLORATION:

14. The information furnished under para 2.1.1 should be rectified as per the field discussion.
15. Strike and Dip direction of the orebody furnished under para 2.1.4.8 needs to be reviewed and rectified properly. All the applicable information should be furnished.
16. The information furnished under para 2.1.4.6, should be rectified as per the discussion held during the field inspection.
17. The information furnished from para 2.2 should be for exploration work carried out if any during the last mining plan period should only furnished. Recheck and rectify the same.

18. The details of information regarding sampling and analysis under para 2.2.2.9 and 2.2.1.10 has not been furnished. The same should be furnished as per the prescribed format in template with enclosures.
19. The information furnished under para 2.2.2.14 needs to be rechecked and rectified as per the field discussion. As discussed during field inspection, the lease area explored under different category of UNFC norms is incorrect and should be recalculated as per the provision of Part II point no.4 and part III of Minerals (Evidence of Mineral Contents) Rules, 2015 (MEMC Rules, 21015) and should be furnished in the format tabulated below. The justification for area considered for G1/G2/G3 etc. have not been furnished as per the provision of MEMC Rules'2015. Necessary corrections to be done at all relevant places of the document and resource estimation.
20. The relevant information regarding ore body geometry etc., under para 2.2.3 has not been furnished. The same should be furnished.
21. The details of 10% of the sample analysis reports carried out for boreholes drilled should be furnished along with enclosures.
22. Reserves and Resources have to be re-estimated as per the provision of MEMC Rules 2015 after complying point no 21. As per the provision of Part II point no.4 of MEMC Rules, 2015, the depth ward projection of ore body should be limited up to the depth up to which direct evidence of mineralization has been proved through borehole. Further, the reserves and resources estimation has to be done based on latest updated survey. Detail calculation of section wise reserves and resources based on latest updated survey and updating the borehole information by cross sectional method for various categories of UNFC should be furnished showing cross-sectional area, length of influence, volume, bulk density and tonnage. Further, the boreholes whose chemical analysis results and borehole logs are not available should be omitted from plan and section and subsequently from resource estimation.
23. Further in the calculation of reserves and resources the ore and Mineral reject/Subgrade (between threshold value and cut off grade) to be furnished separately. As per MEMC Rules 2015, For General (G2) and detailed (G1) stages of exploration, the lateral extension of the ore to be considered for resource assessment shall depend on geological considerations supplemented by geological continuity by mapping or by other means and in any case shall not be more than 50% of the grid spacing of the probe points. Therefore, the projection of resources in the sections should not be more than 50% of the grid spacing. Hence, geological sections have to be modified and section wise resources and reserves have to be re-estimated and new UPL has to be drawn. Accordingly, the resources and reserves are to be updated in all relevant places in the text and in tables.
24. The demarcation of mineralized and non-mineralized area in Geological plan is incorrect as per the borehole information furnished. Need to rectify the same.
25. Recovery test reports enclosed as annexure-VIII which is claimed to be under accreditation of NABL is not acceptable as the conducting recovery test is not included in their scope of work.
26. All the information under para 2.2.4.2 needs to be furnished after attending to the points 24,25 as per the prescribed format of the template for resource calculation, the level of exploration furnished needs to be rectified. The detailed information under para 2.2.4.3 to 2.2.4.13 has not been furnished viz., threshold value and cut off parameters, mining factors, UNFC justification under classification, etc.,. The same needs to be furnished. Proper UNFC codes should be assigned for reserves/resources.
27. Under para 2.2.4.13 the reserves/resources estimated date as on should be as per the last field survey date. Recheck and rectify the same. The reserves and resources between threshold value and cut off grade to be furnished separately.
28. Future exploration proposal should be modified to the extent that area that falls under G2 and G3 UNFC category and unexplored area after complying the point no10, should be converted to G1 level of exploration as per exploration norms specified in Part III of MEMC rules 2015. The depth of proposed boreholes should be up to 300 meters or up to discontinuance of ore body, whichever is earlier. In the table under proposed exploration program, a column should be inserted showing the purpose of borehole (for lateral extension or depth ward) conversion of G2,G3 or unexplored area area to G1. The entire proposal for exploration should be given in year 2022-23 only. Necessary changes to be done in exploration proposal. Within the G1 explored areas, proposal should be

furnished to intersect ore body at depth, if any considering the continuity of boreholes in adjacent sections. The depth of the boreholes proposed should be considered considering the lateral and depth wise continuity of ore body in geological cross-sections and till the end of mineralization intersecting the ore body at depth. The grid spacing for G1 level of exploration for manganese ore should be as per the exploration norms defined in Part III of MEMC Rules 2015. Need to do necessary corrections at all relevant places and modify exploration proposal accordingly.

CHAPTER-3: MINERAL PROCESSING

29. Under para 3.1 the details regarding the valuable mineral name and mineral percentage furnished needs to be rechecked and rectified. Analysis report in support of the same carried out in NABL accredited laboratory/Government laboratory should be enclosed as annexure.
30. Under para 3.2 complete chemical analysis of ROM for all radicals should be furnished with supportive document annexure of analysis carried out in NABL accredited laboratory.
31. Overall water requirement water balance diagram for mining and processing should be enclosed annexure under para 3.9
32. The information furnished under para 3.5.3 is not relevant so it should be omitted.
33. Material balance chart of mineral processing should be enclosed annexure under para 3.10

CHAPTER-4: MINING OPERATIONS

34. The information furnished under para 4.1.1 and 4.1.2 should be rechecked and rectified as per the field discussion.
35. Under para 4.2.2.1 instead of year1 and year 2 mentioned the corresponding FY details should be furnished.
36. Under para 4.2..2.2 the details should be furnished pit wise and FY wise separately. Accordingly the information should be rectified as per the filed discussion. The ROM quantities should also be furnished as per the field discussion wherever applicable in the document.
37. The information furnished under para 4.2.2.3 should be only for transportation and hauling equipment only accordingly it should be modified.
38. Ore to OB ratio furnished under para 4.2.2.2 should be rechecked and rectified. The supporting document for justification of recovery viz., recovery test report should be enclosed.
39. The details furnished under para 4.3.2 and 4.3.4 should be rechecked and rectified as per the field discussion.
40. In machinery calculations provisions for standby equipment should be proposed.
41. The dump workings details under para 4.3.3 are not relevant so should be omitted.
42. Details furnished under 4.4.2 should be rechecked.
43. Under para 4.4.5.1 to 4.4.5.3 the details regarding the capacity, manufacturer details should be furnished. Under para 4.5.1, 4.5.2 the details furnished under powder factor should be rechecked. It has not been furnished. It should be furnished. type of explosive should be furnished like emulsion, slurry etc.,
44. The information furnished under 4.6.1 to 4.6.8 should be rechecked and rectified. All the information should be furnished shift wise as prescribed in the format.
45. Under para 4.6.2 the details furnished should be rechecked as per statutory guidelines. Under para 4.7.3 the details regarding the existing stacks only should be furnished.
46. Under para 4.7.2 the waste quantities furnished should be rechecked as per the proposed quantities during the plan period.
47. Backup calculation table for production like section wise calculation details should be enclosed as annexure.

CHAPTER-5: SUSTAINABLE MINING:

48. SDF at mine level should be descriptive under para 5.1. Accordingly details should be furnished.
49. Under para 5.2 all the cumulative work done details till date should be furnished. The information furnished should be rechecked and rectified. Also the year wise proposals from para 5.2.1.1 to 5.3 should be furnished. They should not be kept as Nil which not acceptable. Proposal must be furnished.

CHAPTER-6: PROGRESSIVE MINE CLOSURE PLAN

50. The details furnished under para 6.1 should be rechecked and rectified. Also the details of stabilized dumps information furnished is contradicting with the information furnished under para 4.2.1.3. need to rectify the same.
51. Under para 6.2.1 the details furnished regarding the waste quantities and top soil quantities should be rechecked and rectified. The estimated expenditure if any needs to be furnished.
52. All the proposals under para 6.2.2 to 6.2.8 should be furnished. It is furnished as Nil which is not acceptable.
53. Under para 6.2.6 the proposals regarding the recreational facility needs to be furnished.
54. Estimated expenditure wherever asked in the proposed PMCP measures should be furnished. It should not be kept as Nil.
55. The coordinates furnished should be rechecked and rectified. the coordinates point should be combination of latitude and longitude.
56. The details furnished under para 6.2.11 regarding the land use at the expiry of the lease period should be rechecked.

CHAPTER-7: FINANCIAL ASSURANCE/PERFORMANCE SECURITY

57. Under para 7.1 the details furnished in the table should be rechecked and rectified. The area degraded due to mining and allied activity to be considered in FA calculation.
58. Additional area requirement proposed for waste dumps should be rechecked
59. The details regarding the BG amount and information as per the Mineral Conservation and Development (Amendment) Rules, 2021 under para 7.2 should be furnished.

CHAPTER-8: REVIEW OF PREVIOUS PROPOSALS

60. The details furnished under para 8.1.1 regarding lease area utilization needs to be reviewed and rectified properly. Further reasons for deviation if any should be furnished.
61. The proposals and achievement furnished under para 8.1.2 regarding SDF and CSR expenditure needs to be reviewed and rectified properly.
62. The details have not been furnished under para 8.2.6.1, 8.2.6.2, 8.2.8.1, 8.2.8.2 and 8.2.8.3 and also the reasons for deviation is not furnished. Recheck and rectify.
63. The details of information under para 8.3.2 have not been furnished. Need to furnish the same.
64. All the information under para 8.3.3.1 to 8.3.3.5 have not been furnished. Need to furnish the same.
65. Wherever the deviations are observed regarding the proposals vs actual achievements the reasons for deviation should be furnished.

PART-B

ANNEXURES

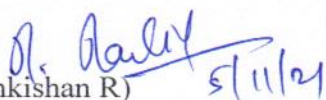
66. The form I and J as per MCDR,2017 for the boreholes drilled should be enclosed.
67. Chemical and mineralogical analysis reports.
68. Environmental monitoring reports should be submitted.
69. Qualification and experience of QPs as per rule 15 of MCR, 2016.
70. Surveyor certificate should be enclosed.
71. All the study reports should be enclosed as per para 4.3.1 should be enclosed.
72. Pre-Feasibility/Feasibility report should be enclosed.
73. All the lithologs with chemical analysis of the all the exploration work carried out till date should be submitted.
74. Any other annexures as referred in the text should be submitted.
75. Copy of surface right granted letter.
76. Registration details of the firm with GST certificate should be enclosed.
77. Land schedule details from the competent authority should be enclosed.

PART-C

PLANS AND SECTIONS

78. Magnetic Meridian and date of observation should be given on all relevant plans. Date of survey should be given on all plans and sections and signature should bear date of signature. All plans and sections should be signed with date by certified Surveyor, Qualified Person, Mine Manager, Mining

- Engineer and Mining Geologist as per provisions of MCDR, 2017 and MMR, 1961. All plans & sections prepared should follow the conventions mentioned under MMR 1961. All plans and sections shall show a scale a scale of the plan at least twenty five centimeters long and suitably subdivided.
79. All plans and sections should be prepared on UTM grid. All plans and sections should be prepared on same scale. Development plans and sections should be submitted on 1:1000 scale.
 80. All the plans should be submitted as hard copies and also soft copy of all plans and sections in KML/KMZ/SHP should also be submitted which were geo-referenced.
 81. Progressive Mine closure plan and sections should be submitted.
 82. Key Plan: the key plan has not been submitted so the same should be submitted. The key plan should incorporate all features as mentioned Rule 32 5 (a) of MCDR 2017. The prominent wind direction to be shown by rose diagram in key plan and other relevant plans. The approach road to the lease area should be shown with Co-ordinates of extremity of lease area.
 83. Surface Plan: all the old lessee mineral stacks details should be clearly demarcated on the plan as observed during field inspection. All the boundary pillar coordinates to be given UTM too. All the updated boundaries of Fines stack, Waste dump, Mineral reject dumps to be shown on the plan. Surface right area to be shown on the plan with different type of land schedules. All the features have not been shown in the index. Pit Id names should be clearly demarcated on the plan with distinctive boundary. Common boundary with other lessees if any should be shown on the plan. The Surface Plan should be prepared to satisfy the provision as laid down rule 32 (1) (a) of MCDR'2017.
 84. Geological Plan & Section: (i) geological plan and sections should be prepared on same scale (ii) Geo structural information has not been furnished adequately. (iii) Limit of estimation should be as per MEMC rule 2015. (iv) The redefined UNFC boundaries and UPL to be shown in Geological Plan and sections. (v) All the geological information to be furnished on geological plan and section based on drilled BH, exposed pit, trial pits etc with their configuration profile (dimensions) like depth. Section lines with nomenclature should be highlighted on the plan. The litho sequence should be shown as per the borehole logs data in the sections. The sections should be prepared on the same scale as prepared for plan. Proposed boreholes should be shown in dotted line. Mineralized area and non-mineralized area should be demarcated The Geological Plan should be prepared to satisfy the provision as laid down rule 32 (1) (b), (c) and (d) of MCDR'2017.
 85. Development plan & Section: (i) present pit profile configuration of benches with UPL to be shown with red color and proposed development benches of each year with some other color. All development section to be submitted for which development is proposed. The proposed yearwise development area boundaries should be clearly depicted. (ii) The layout of the haul road for present and future excavation proposal should be properly addressed in line with safe movement of fleet of the machinery.(iii) The proposed and existing bench mRL to be shown clearly over year wise development plan and sections. (iv)Geological information to be furnished on development plan and sections like litho units. v) Year wise mining plan proposals should be submitted in softy copy in the format of .kml or .shp file along with document. Need to do necessary corrections.
 86. Progressive Mine Closure plan and sections: All revised year wise proposals as per comments in PMCP chapter to be depicted on the plan and sections.
 87. Conceptual plan and sections: the plan and sections should be prepared taking into consideration of the production from in-situ excavations, available reserves and resources describing the excavation, , Disposal of waste, backfilling of voids, reclamation and rehabilitation measures, end of lease period etc.
 88. Environment plan: The Environment Plan as prepared should be satisfy the provision as laid down rule 32 (5) (b) of MCDR'2017. Wind rose diagram should be depicted.
 89. Financial Assurance Area Plan: The existing and additional area requirement should be separately hatched on the plan with FA table.


(Ramkishan R) 5/11/24
Senior Asst. Controller of Mines

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