

भारत सरकार GOVERNMENT OF INDIA खान मंत्रालय MINISTRY OF MINES भारतीय खान ब्यूरो INDIAN BUREAU OF MINES क्षेत्रीय खान नियंत्रक के कार्यालय OFFICE OF THE REGIONAL CONTROLLER OF MINES



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दिनांक / Date: 07.09.2018

No MSM/FM/26-ORI/BHU/2018-19

Seraj Yusha,
Joint Managing Partner,
M/s Serajuddin & Co.,
At/Post-Balda, P.S-Bamebari,
Via-Joda, Dist-Keonjhar, Odisha.

Sub: Approval of Modification of Review of Mining Plan of Balda Block Iron Mines over an area of 335.594 ha in Keonjhar district of Odisha of M/s Serajuddin & Co. submitted under Rule-17 (3) of MCR, 2016 and Rule 12 (4A) of Mineral Conservation and Development (Amendment) Rules, 2018.

Ref: - i) Your letter no. BBIM/233&234/2018-19 dated 23.08.2018 received on 28.08.2018.

- ii) This office letter of even no. dated 28.08.2018.
- iii) This office letter of even no. dated 28.08.2018 addressed to the Director of Mines, Govt. of Odisha, copy endorsed to you.

Sir,

To

This has reference to the letters cited above on the subject. The draft Modification of Review of Mining Plan along with Progressive Mine Closure Plan has been examined in this office based on earlier site inspection carried out on 18.04.2018 by Shri Sudip Ranjan Mazumdar, Senior Mining Geologist. The deficiencies observed are enclosed herewith as *Annexure-I*.

You are advised to carry out the necessary modifications in the draft Modification of Review of Mining Plan in the light of the contents vide <u>Annexure-I</u> and submit <u>three (3) firm bound and two (2) soft copies of the document text in CD in a single MS Word file (the drawing/plates should be submitted in Auto CAD compatible format and JPG format in resolution of 100x100 pixels on same CD) with financial assurance under Rule 27 of MCDR' 2017 within 10 (ten) days from the date of issue of this letter for further necessary action. If the total page of annexures exceeds 50 (Fifty) then it should be submitted as separate volume. But reference of these annexures must appear in the Modification of Review of Mining Plan document. The plates are also to be submitted in separate volume.</u>

The para-wise clarifications and the manner in which the deficiencies are attended should invariably be given while forwarding the modified copies of the Modification of Review of Mining Plan. It may be noted that no extension of time in this regard will be entertained and the Modification of 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 / yours faithfully,

(HARKESH MEENA)

क्षेत्रीय खान नियंत्रक / Regional Controller of Mines

Scrutiny comments on examination of Modification in Review of Mining Plan of Balda Block Iron Mine335.594 Ha in Keonjhar district of Odisha State of M/s Serajuddin & Co

General:

- 1. Sequence of Para and its numbering as per IBM Manual appraisal MP 2014 has not been covered in text. All the annexure and text have not been properly indexed/ numbered/ paged and signed by qualified person. All the certificates/annexures should bear dated signature.
- 2. The term 'subgrade ore" may be replaced with "Mineral Rejects" at all relevant places text, tables and from plates.
- 3. Under Para 3.6.1, the reference of Rule 12 (4A) has not been mentioned correctly.

Chapter 4: Geology and Exploration

- 4. Structural features such as joints, folds, faults and their attitudes and delineation of mineralized/ore zones with definite demarcation have not been marked on Geological plan.
- 5. Para 1 (a) Rainfall data of the mining lease area has not been furnished. Para 1(b), the local stratigraphic sequence w.r.t to Lower shale and BHJ/BHQ may be rechecked & corrected. In page 20, in the table the reference of Block B is not mentioned. Need to do necessary corrections.
- 6. Para 1 (e.i), the dimension of all the quarries as on date of survey has not been mentioned. Para 1 (e.ii), summarized statement of boreholes drilled during 2005-07 in tabular format has not been furnished. Para 1 (e.iil), Details of samples analysis indicating type of sample (surface/sub-surface from pits/trenches/borehole etc.) for complete chemical analysis for entire strata for all radicals may be undertaken for selected samples from a NABL accredited Laboratory or Government laboratory or equivalent has not been furnished in tabular format.

7. Status of lease area explored as per UNFC may be furnished in following additional format.

Name of Mine	Name of Lessee	Mineral				Area (in Ha) explored under G1 and G2 as per UNFC as on date									
			Forest	Non Forest	Total lease area	Forest G1	Non Forest	Forest	Non Forest	No of boreholes in Forest area	Total meterage in forest area			Total No of bore holes	Total Meterage

- 8. Under para i, the future exploration program to be modified incorporating the followings.
 - (a) The proposal of drilling is not adequate to meet the requirement of "G2" level of exploration as per UNFC as specified in MEMC Rules 2015. Also at places boreholes have not been proposed over unexplored area. Need to propose new boreholes where existing boreholes have been closed in ore zone or closed prematurely. Few boreholes have to be proposed over area proposed for backfilling and fresh proposal of waste dumping for proving its barrenness before commencement of backfilling and waste dumping. Necessary corrections to be done.
 - (b) The calculation of proposed drilling meterage should be done considering average depth of exploratory boreholes to be 300m or till the discontinuance of ore body, whichever is earlier. Necessary corrections to be done at all places of the text and plates.
 - (c) Proposal for at least 10% of total samples to be analyzed in accordance to BIS and reports form NABL accredited/Government Laboratory has not been given.
- In page 31, the parameter considered for indicated resource is incorrect. Necessary corrections to be done as per the provision of MEMC Rules, 2015. In page 32, in the last para the reference of two number of RC drilling carried out in 2017-18 is not mentioned.
 Necessary corrections to be done.
- 10. UNFC boundaries have not been drawn as per provision of MEMC Rules 2015. Therefore, lease area explored as per UNFC has to be corrected in the table in page 26. Reserves and resources under different categories of UNFC have to be reestimated as per redefined UNFC boundaries. Proper justification should be submitted for considering recovery factor during Geological reserve & resource estimation based on field test. Parameter considered for reserve estimation should also include UPL, cutoff grade etc. Necessary corrections to be done.
- 11. In page 46, in the table grade wise reserve and resources of saleable ore and mineral reject separately under different categories of UNFC has not been shown. In page 47, in the table showing tonnage of subgrade dump does not have information on volume, bulk density considered and tonnage as on date. Justification of UNFC is inadequate and incorrect w.r.t to depth considered for resource estimation, borehole spacing, lateral influence consider etc. as per the provision of MEMEC Rules 2015. Also, justification under "222" category has not been furnished. Need to do necessary corrections at all places.

Chapter 2: MINING

- 12. Under Para 2.0.4 & 2.0.5, date of survey, volume and BD considered should be shown in tabular format.
- 13. Details of existing fines stack, lump stack, and mineral reject stacks etc. such as location, quantity in tones, grade etc. has not been furnished. Need to furnish the same.
- 14. Year wise insitu tentative excavation figs are more than the approved EC quantity. Need to recheck and correct.
- 15. In page 64, in the table showing year wise production of ROM, MR and waste, the period of proposal for the year 2018-19 has not been mentioned.
- 16. Drilling and blasting in waste zone with blasthole parameter has not been described.
- 17. Proper justification with plan and section should be furnished showing the area to be barren for proposing new area for waste dumping and backfilling. The area proposed for waste dumping should be outside the UPL. Necessary justification to be submitted accordingly.
- 18. In page 79, the time frame proposed for completion of boreholes is incorrect. The proposed exploration program should be completed by 2018-19. Necessary corrections to be done.
- 19. Refer Plate No. BBIM/MP/8A showing development proposal for the year 2018-19, Handling of temporary ore stacks and waste dump-3 surrounding the development proposed in Block -F1 has not been proposed. Similarly, in Kalimati Block, development has been shown extended to waste dump-1 but its handling has not been proposed. Also, no proposal has been submitted for

ANNEXURES

- i) Photo Identity Card of Lessee with permanent address proof submitted is not legible.
- ii) All the previously drilled borehole logs should be enclosed in relevant format with the document.
- iii) Copies of entire amount of bank guarantee for Rs 54491700 has not been submitted.
- iv) Certificate from both the Qualified Persons have not been enclosed.
- v) Copies of the Education Qualification of the Qualified Persons have not been enclosed.

PLATES (General):

- i) All plan and sections should show a scale of the plan at least twenty-five centimeters long and suitably sub-divided;
- ii) show the true north or the magnetic meridian and the date of the later;
- iii) The conventions provided under the Metalliferous Mines Regulations, 1961, shall be used in preparing all plans and sections. All the plates have not been indexed/ numbered etc.
- iv) All plans and sections should comply with the provisions of Rule 32 of MCDR 2017.
- v) The plans and sections submitted should bear the certificate that -the plans and sections are prepared based on the lease map authenticated by the state government.
- vi) The UPL has to be redrawn based on provision of UNFC boundaries as per MEMC Rules 2015 and should be shown in red color in all relevant plans and sections.

Key Plan:

- i) Predominant wind direction should be corrected w.r.t wind rose diagram.
- ii) Approach road to lease area should be shown in key plan.

Surface Plan:

- i) Few pillars may be correlated with some permanent ground features giving distance and bearing/direction.
- ii) UTM coordinates and latitude-longitude of the boundary pillars should be provided in tabulated format.
- iii) Different types of forest land should be shown in contrasting colors and may be filled with light color shade. Diverted forest land has not been shown. Area inside/within forest and surface right should be shown in arrow mark.
- iv) The working between 2420453N to 2420653N & 334380E to 334680E has not been nomenclatured.
- v) The UPL has not been marked over the plan and not shown in index.

Geological Plan & Section:

- i) Geological Plan to be updated with revised boreholes proposal as mentioned under future exploration program.
- ii) UNFC boundaries to be drawn in both Geological Plan and Sections as per MEMC Rules, 2015. The redefined UNFC boundaries and UPL along with UNFC code to be shown in Geological Plan and sections and also in index. Plate 4A to be revised accordingly. Necessary corrections to be done.
- iii) The proposed boreholes to be plotted in dotted lines in Geological sections along with Collar Id, RL and with proposed closing depth mentioned at the bottom of the borehole.
- iv) UPL should be omitted from the sections where exploration or sub surface information is not available.
- v) Grade wise reserve and resource estimated should be shown in geological section along with ore types.

Development plan & Section:

- The cross-section number considered for development has not been submitted in year wise development plan & section. Development sections for the area proposed for year wise development has not been furnished.
- ii) The lithology of the area proposed for development should be shown development plan and sections.
- iii) Each year development proposal for different blocks should be shown separately in different color. The UPL may be redefined and benching pattern to be made in all development plans and sections. The UPL should be shown in Red color which should contrast to the year wise development proposal color shown in development plan and sections.
- iv) The RL of the benches should be clearly shown in year wise development plan and sections.
- In the development sections the UNFC codes should be mentioned.
- vi) Year wise development plan and sections is not shown for lease boundary to lease boundary along with section numbers mentioned in the plan.

Dump plan & section:

i) Dump plan and sections to be modified as mentioned in point no. 20 and 21. Boreholes have not been shown in dump sections.

Environment plan:

- i) The Environment Plan as prepared should be satisfy the provision as laid down rule 32(5) (b) of MCDR2017.
- The adjoining area within 60m of boundary of the lease area to be plotted. The particulars with regard to items (ii), (iv) and (v) of Rule 32(5) (b) shall be applicable only up to sixty meters beyond the boundary of lease area. The same should be demarcated in Environment plan. The same should be corrected. Contours values are not legible and contours have not been shown all along up to 60meter from lease boundary.
- iii) Predominant wind direction should be checked and corrected.

Reclamation Plan:

- i. Reclamation Plan has not been submitted. Reclamation plan should be prepared as per guidelines mentioned in point no 8.3.1 of PMCP as mentioned in proposed universal format for mining plan /scheme of mining including progressive mine closure plan.
- ii. Proposal for stabilizing is the dump is inadequate Hence, proper terracing, coir matting and plantation has not been proposed over the entire existing and proposed waste dump/ mineral reject dumps. Length of retaining wall and garland drain around the dumps is inadequate.

Conceptual plan:

i) Conceptual plan and section has not been prepared up to 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 etc. Hence, necessary correction should be done in conceptual plan and sections.

Financial Assurance Plan:

i. The FA table submitted in the FA plan (Plate No-14) does not match with the FA table submitted in the test under para 8.6