



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



REGD WITH A/D  
Phone: 0674-2352463  
TeleFax: 0674-2352490  
E-mail: ro.bhubaneshwar@ibm.gov.in  
Plot No.149, Pokhariput  
BHUBANESWAR-751020

No. MPM/FM/05-ORI/BHU/2019-20

Date: 19.08.2019

सेवामे

✓  
Shri M D. Rustagi,  
Director & Nominated Owner  
M/s Rungta Sons (P) Ltd  
Rungta Office, Main Road,  
Barbil, Keonjhar, Odisha – 758035

विषय: Approval of modification of Mining Plan of Sanindpur Iron & Bauxite Mine along with Progressive Mine Closure Plan (PMCP), over an area of 147.10 ha in Sundargarh district of Odisha State, submitted by M/s Rungta Sons (P) Ltd under Rule 17 of MCDR, 2017.

- संदर्भ: - i) Your letter No. RSPL/ED/GEO/2019-20/456 dated 27.07.2019.  
ii) This office letter of even no. dated 02.08.2019.  
iii) This office letter of even no. dated 02.08.2019 addressed to the Director of Mines, Govt. of Odisha, copy endorsed to you.

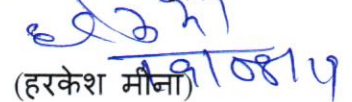
महोदय,

This has reference to the letter cited above on the subject. The draft modification of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on site inspection carried out on 12.08.2019 by Shri Dayanand Upadhyay, Sr. 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 modification of Mining Plan in the light of the contents vide Annexure 1 and submit **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 or JPG format in resolution of 100x100 pixels on same CD )** with financial assurance under Rule 27 of MCDR 2017 of the Modification of Mining Plan within 15 (Fifteen) 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 Mining Plan document. The plates are also to be submitted in separate volume.

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 Mining Plan. It may be noted that no extension of time in this regard will be entertained and the modification 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.

Yours faithfully,

  
(हरकेश मीना)

क्षेत्रीय खान नियंत्रक

Copy for kind information and further necessary action to Shri Abhijit Sen, Shri Himansu Sekhar Biswal & Shri Sangram Kishori Garnaik, M/s Rungta Sons (P) Ltd, Main Road, Barbil, Dist- Keonjhar, Odisha - 758035.

(हरकेश मीना)

क्षेत्रीय खान नियंत्रक

**Scrutiny comment on Modification of approved Modified Mining Plan including PMCP in respect of Sanindpur Iron and Bauxite mines, 174.10 of M/s Rungta Sons (P) Ltd. in Sundargarh district of Odisha State.**

**GENERAL:**

- I. "Modification of approved Modified Mining plan" submitted under rule 17(3) of MCR 2016 should be furnished on cover page, certificates and other parts of text. The lease no., e-mail, phone & fax no. of lessee have not been furnished on cover page. Period of proposal as furnished on cover page should be prospective.
- II. Page no.-4,5,6 & 11, reason of modification as furnished in text is same as furnished in earlier approved modification of mining plan dated 18/07/2018. The specific reason of modification should be furnished.
- III. Para-2(b), it is mention that after approval of present modification lessee will proceed for environmental clearance however it has been observed that for the same reason earlier modification of mining plan has been approved by this office. It may be re-checked and corrected. Details of surface right obtained should be furnished in tabular form.
- IV. Chpeter-3, page-11, date and reference of earlier approved MP/RMP/MMP in chronical order and reason of modification should be furnished under para-3.1& 3.2. In review of approved proposal the deviation furnished for the current year 2019-20 as on date should be rechecked and corrected. Under para-(D), the stacking/disposal of mineral reject should be furnished in quantified form with grade in terms of generation and its utilization by blending and processing and re-handling of low grade ore from dump. Details of plantation carried out, area covered, rate of survival and location of retaining wall/garland drain constructed in 2018-19 should be furnished.
- V. In different parts of text and plates it is mention that "area applied for surrender". Since the proposal is submitted for entire lease area therefore it should be corrected.
- VI. The experience certificate of all qualified person should be as per provision of rule 15(1)(b) of MCR 1960.
- VII. Recent photographs of pits, dumps, afforestation and reclamation and rehabilitation carried out should be enclosed.
- VIII. All the annexure to be properly indexed/ numbered/ paged and signed by qualified person. All the certificates should bear dated signature.

**GEOLOGY:**

- I. The structural information like strike, dip, dip-direction etc have not been shown. All these information should be reflected on geological plan and section. Further, Ore zone and litho units should be depicted on plan and section based on surface exposure, bore hole logs and threshold value.
- II. Page-23, Para-(c ), the geological succession of bauxite ore in the lease area has not been described. The existence of lateritic iron ore and float ore in western part of lease area are not considered in reserve/resources estimation. The coordinate of patches of lateritic iron ore as furnished in text should be depicted in geological plan.
- III. Page-31, Para-iv, expenditure incurred in exploration is not updated considering the bore drilled in 2018-19 and not considered in updation of reserve/resources as furnished in table-1.3.
- IV. Page-32, Para-(g), the surface samples collected from virgin area of western part of the lease should be marked in text with their analysis report in annexure.
- V. Page-34 Para-(i), the backlog of 36 bore holes of 2018-19 should be incorporated in current year proposal. The relevant forms for intimation of borehole and borehole logs to be submitted as annexures. All the drilled and proposed BH to be depicted on the Geological section along with mRL and its actual and proposed depth for better referencing. At the end of the table cumulative number of proposed BH in



forest area, non-forest area, diverted forest area, Surface right area and non -surface right area to be given.

- VI. The quantity of different ore types and its proportion in lease area as shown in geological plan and section to be given.
- VII. The UNFC codes and limit of reserves and resources have not been marked correctly in geological sections with reference to the UPL. The UPL is not correctly drawn in light of mineralization occurrence in depth. Therefore quantum of reserves and resources calculated is not justifiable. The Geological boundaries of exploration limit i.e. G1/G2/G3 etc. are not marked as per Minerals Evidence of Mineral Contents Rules 2015.
- VIII. Litho units as depicted in of geological sections are not matched with the geological plan and as per bore hole data. In geological section mineral reject should be replaced with lateritic iron ore as discussed in field. All the geological sections should re-check and corrected.
- IX. The calculation of reserve and resources as furnished is not as per guide lines of Minerals (Evidence of Mineral Contents) Rules, 2015. The patches of lateritic iron ore and float ore as shown in geological plan and section have not considered in resource estimation and not justified under UNFC. The shape of the ore body as shown in plan and section is correctly drawn considering the lateral and depthward extension of mineralization.
- X. The resources of bauxite under 333 category as furnished in table-1.22 is not described in text and section wise estimation of bauxite resources is not furnished. Page-48, the resources available in the dumps have not been updated after re-handling of dump for the year 2018-19 & 2019-20 (as on date).

#### MINING:

- I. Page-55, the details of existing dumps as furnished in table-2.2 should be clarified with waste/mineral reject dumps. Page-56, the details of existing stacks of lumps/fines as furnished gradewise in table-2.4 should be updated with data furnished in last monthly returns.
- II. Page-57, it is mentioned that installation of another 250TPH wet beneficiation plant is under proposal. However during field discussion it is observed that there is no as such proposal in financial year 2019-20. Therefore it may be corrected from different parts of the text as mentioned.
- III. Page-59, Table-2.5, the insitu tentative excavation and dump handling should be prospective in nature. Total production carried out as on date should be furnished under table with bullet notes.
- IV. Page-60, Table-2.7, re-handling of old dumps should be furnished with total quantity of low grade, quantity to be re-handle, percentage recovery of saleable and non saleable material with grade. Table-2.8, quantity of re-handling and quantity of saleable and mineral reject is correctly furnished considering the bulk density of saleable ore and mineral reject respectively.
- V. Page-64, the cut-off grade of mines and grade of saleable ore is considered 55% Fe and above however in processing of ore the grade of mineral is taken 58% Fe and same grade is furnished in wet beneficiation which is contradictory to each other.
- VI. The quantity of 0.096 million tonnes to be processed from existing stock should be described with location and shown in development plan. The location of dumps-A, B & C to be re-handle shown in development plan and dump plan.
- VII. UPL shown in development sections are not correct prevailing the mineralization of the lease area. Different type of ore as furnished in plan is not matched with section.
- VIII. In conceptual mining plan, cumulative waste generation and and protective measures should be furnished properly. Restoration of safety zone, stabilization of dead dump and slope of the dump may describe properly.

### **STACKING OF MINERAL REJECT/SUB GRADE AND DISPOSAL OF WASTE:**

- I. The location of dumping proposal of mineral reject generated during mining has not been described in plan and not marked in text. A permanent/centralized location of mineral reject dump should be proposed and scattered mineral reject dump should be re-handled.
- II. It has been observed during inspection that some of the dumps are lying within the UPL. Therefore a proposal should be furnished to re-handle the dumps lying within ultimate pit limit.
- III. Give the details of the existing dumps (top soil, waste dump, mineral reject dump) within the lease area in tabulated form comprising dump number, designed capacity, present quantity, bottom RL and top RL.
- IV. The details of mineral reject dumps and waste dump analysis to be given to assess the quality and quantity of all dumps for their future use.
- V. Details Existing and proposed retaining wall, garland drain, settling tank etc. to be given yearwise with their location. Location of sub-grade storage along with year to year development of the SG dumps to be given.

### **PROCESSING OF ROM AND MINERAL REJECT:**

- I. Page-101, Para-6.2, In material balance chart at some place grade of saleable ore is mentioned +58% Fe and at some place +55% Fe. It should be corrected on basis of cut-off considered for the mines.
- II. Page-104, Para-6.3, second line of wet beneficiation as mentioned is not in proposal therefore it may be corrected. Annual feed, output and quantity of tailings generation with grade should be furnished.
- III. Details of products generated in the beneficiation plant (250TPH) as furnished in Table-1 are not correctly specified in terms of quantity of feed, product from jigging, ball mill and tailing generation with specific size and quantity. Different sizes of output generated through different process are considered in concentrate which is not correct.
- IV. Table-6.2, the list of equipment installed in 1<sup>st</sup> phase of proposed beneficiation plant should be corrected as it is already installed. Page-105, product of secondary jig is mentioned +2 to -8mm while in flow chart it is shown +3mm to -8mm.
- V. Water requirement of beneficiation plant is not correctly furnished. It should be in tabular form with total requirement of water for mine and their consumption in different heads alongwith beneficiation plant (250TPH). Source of water, permission form concern department, recycle of water and water balance chat should be described in details.
- VI. Page-106, it is mentioned that "tailing pond will be constructed in approximately 5.92 ha area" which is not shown in development plan. The existing tailing pond with their location, shape and size, capacity, safety measures taken and manner of tailing disposal alongwith proposed tailing ponds if any should described and study report from reputed institution should be enclosed in annexure. The capacity of proposed tailing pond mentioned 200890 cu.m while generation of tailings for the year 2019-20 is furnished 238387 cu.m. It should be rechecked and corrected accordingly.
- VII. Page-108, in flow chart of beneficiation plant product size of jig-2 and size of final product from ball mill should be correctly furnished alongwith recovery and grade..

### **PROGRESSIVE MINE CLOSURE PLAN:**

- I. Page-111, Para-8.1, describe a brief notes on environment base line information on the basis of EIA and EMP submitted to MOEF.
- II. Page-121 & 122, air, water and noise monitoring station should be in text alongwith their location. Page-123, Table-8.11, present utilization of water in beneficiation plant is furnished nil while a beneficiation plant of 250 TPH is working in nature. It may be rechecked and corrected.
- III. Updated air, water, noise, ground vibration and soil data with analysis from laboratory done at specified periodicity for last one year to be enclosed.

- IV. Page-125, year wise plantation covering number of saplings to be planted, location and area covered may be furnished. Proposal of coir matting/geo textile and area covered etc may be furnished.
- V. Para-8.3.2, top soil management has not been described correctly. Total quantity of top soil generated in 2019-20 and their utilization should be furnished. It should also be reflected in tentative excavation of mining chapter.
- VI. Page-126, Para-8.3.3, The details of existing and proposed tailing pond described with their location, shape and size, capacity, safety measures taken alongwith study report from reputed institution.
- VII. All the active dumps should be proposed with extension of retaining wall and garland with settling tanks with proper terracing and stabilization of slope. The dead dumps should be proposed for fully rehabilitation by plantation and with gap plantation if necessary. The proposed and existing retaining wall, garland drain and settling tanks should be clearly marked yearwise on reclamation plan.

**PLATES (General):**

- I. All plans and sections shall show a scale of the plan at least twenty five centimeters long and suitably subdivided. All plans & sections prepared shall follow the sign conventions under MMR 1961.
- II. Wind direction may show through wind rose diagram in key plan and environmental plan.
- III. All plans and sections should be signed with date by certified Surveyor, Qualified Person, Mine Manager and Mining Geologist. Magnetic Meridian and date of observation of should be furnished on all relevant plans.
- IV. Approach road to the mines to be shown in key plan. DGPS plan with satellite imaginary authenticated by State Govt. to be submitted The UPL should be shown in red colour in all relevant plans and sections. The updated plans and section should be submitted.

**Surface Plan:** Applied surrender area as demarcated in surface plan should be omitted. Few pillars may be correlated with some permanent ground features giving distance and direction. Different land use may be shown with colour codes. Information of boundary pillars in UTM coordinates as well as in Latitude and longitude of all ML boundary points should be depicted in tabulated form on surface plan. Virgin area to be shown by contours and spot RL in surface plan. Forest & Non forest area, Surface right acquired area etc. should be marked clearly.

**Geological Plan & Section:** Data related to strike, dip, dip-direction etc. shown on the geological plans are inadequate and not legible. Some more data may be shown to understand the geology of the area. The mineral reject as shown in different type of ores encountered in plan and section should be replaced with lateritic iron ore. In sections UNFC codes have not been furnished as per Minerals Evidence of Mineral Contents Rules 2015. Resources of bauxite ore and lateritic iron ore not furnished with UNFC codes. Different types of ore encountered through bore holes should be reflected as per bore holes log. Geological Plan and Geological section not matched each other and geological section not synchronized with geological plan. In the Geological Plan UNFC boundaries of G1, G2 .. area has not been furnished as per Minerals Evidence of Mineral Contents Rules 2015. The Proposed bore holes should be revised considering the backlog and shown in plan and section. The UPL as shown in plan & sections are not correct. The shape of the ore body as depicted in plan and section should be modified as per actual influence of ore. Zone.

**Development plan & Section:** The UPL is not correctly drawn in plan & sections considering the lateral as well as depth ward extension of the ore zone. The RL of proposed and existing benches not marked clearly. The proposed tailing pond to be shown in development plan. Re-handling of dumps should marked in development plan & section. Development plan has not been furnished with existing benches.

**Environment plan:** The Environment Plan as prepared should be satisfy the provision as laid down rule 32(5) (b) of MCDR2017. Environment Plan, natural drainage systems such as water course, streams, nallah, river, Forest with tree density, waste land, agricultural land, grazing land and surface features of 500 buffer zone should be shown.

**Conceptual plan & section:** Conceptual plan may be prepared considering mineralization as revealed from the borehole logs. Direction of run off from the area based on surface contours may be shown on the plan and the sections.