

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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Plot No.149, Pokhariput BHUBANESWAR-751020

Date: 13.10.2020

No. RMP/A/18-ORI/BHU/2020-21

सेवामे

Shri Avin Jain, Legal Heir of Late Shri D C Jain, Dharam Villa, 12-A, Mahatma Gandhi Marg (Ring Road), Lajpat Nagar-IV, New Delhi-110024

विषय:Approval of Review of Mining Plan of Dalpahar Iron & Mn Mine along with Progressive Mine Closure Plan (PMCP), over an area of 89.961 ha in Keonjhar district of Odisha State, submitted by Shri D C Jain under Rule 17 of MCR, 2016.

संदर्भ: - i) Your letter No. Nil dated 21.09.2020 received on 28.09.2020.

ii) This office letter of even no. dated 28.09.2020.

iii) This office letter of even no. dated 28.09.2020 addressed to Director of Mines, Government of Odisha copy endorsed to you.

महोदय,

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 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 1 and submit <a href="https://docs.pitch.com/three">three (3) firm bound and two (2) soft copies of the document text in USB Pendrive/Flash drive 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 USB Pendrive/Flash drive) with financial assurance under Rule 27 of MCDR 2017 of the Review 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 Review 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 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.

(हरकेश मीना)

क्षेत्रीय खान नियंत्रक

Copy for kind information and further necessary action to Shri K Shankar, 49/23, Umapathy Street, West Mambalam, Chennai-600033.

(हरकेश मीना) क्षेत्रीय खान नियंत्रक Scrutiny comment on Review of Mining Plan including PMCP of Dalpahar Iron Mine of Sri Avin Jain, (Legal heir to Late Sri D.C. Jain) over an area of 89.961 Ha in Sundergarh district of Odisha

#### GENERAL:

- 1. The block name of the corresponding area of 89.961 ha out of 101.171 ha should mentioned on coverage and also in all relevant places of the entire document in text as well as plates. Do the needful corrections. Category of the mine should be mentioned on cover page.
- The validity of the lease period as per the lease deed is up to year.2006.the documents in support of subsistence of lease validity has not been submitted along with relevant details issued by state government. The proceedings reference document dated 05.06.84 as furnished in page no. 1 should be enclosed.
- 3. The DGPS coordinates of boundary pillars should be furnished as per the DGPS plan authenticated by State Government in page no.8
- 4. In page no.5 under para (d) mineral which is included in the mining lease deed is furnished as Iron and manganese where as in the mining lease deed enclosed with the document the mineral is mentioned as Iron ore. Clarify the same. If the lease deed is for only Iron ore then proposal should be given accordingly. Changes should be made at relevant places of the entire text and plates.
- Sequence of paragraph, formats and its numbering as per IBM Manual Appraisal MP 2014 has not been covered in text. All the headings, formats as mentioned in the IBM Manual Appraisal MP 2014 should be furnished in all chapters in the text.
- 6. The Qualification of Qualified Person should also be mentioned on cover page. The qualification and experience certificate of QP as per rule 15 of MCR, 2016 should be submitted. The experience certificate has not been enclosed in annexure.
- 7. Name of Nominated Owner (lessee), Address of lessee should be furnished on cover page with contact phone numbers and e-mail. IBM registration number with mine code should be furnished.
- 8. The information furnished under Para 3 should be in Para 3(1). In Para 3.1, the date of approved mining plan/review of mining plan should be given in tabulated format.

SI. No	Mining Plan / Review of Mining Plan etc.	Submitted Under (Rule Reference)	Approval Letter No. & Date	Period	Area in Ha.	Validity

- In Para 3.4, the status of compliance of violations pointed out by IBM should be furnished. The status of conditions imposed by IBM is furnished which should be omitted.
- 10. In the review chapter under para 3.3 exploration proposals has not been quantified.
- All the relevant rules of MCDR,1988 and MCR, 1960 should be replaced by MCDR, 2017 and MCR, 2016

## **GEOLOGY AND EXPLORATION:**

12. In para 1 (a), the topography along with maximum and minimum RL, drainage pattern, vegetation, climate and rainfall data of the mining lease area should only be furnished. In Para 1.e (iii), the summary of total samples collected and analyzed along with justification for 10% of total samples analyzed in accordance to BIS and reports from NABL accredited/other government laboratory have not been furnished. The yearwise drilled boreholes information should be furnished in the following format.

Year of drilling	Exploration Agency	Borehole No	UTM Coordinate			Porobolo	Anglo of	Tupo of drill	No of	No of	
			Northing	Easting	ollar mR	Rottom mR	Borehole Depth		Type of drill hole(Core/RC/DTH)	samples collected	samples analyzed

- 13. Further the drilling has been carried out in the year 2020 where as in the review chapter it is furnished as mine was not in operation due to want of statutory clearances. Clarify the same with supporting documents.
- 14. 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 table given in page no.41. further the same should be reflected in relevant plans and sections 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.
- 15. Expenditure incurred to exploration as furnished in page no.22 should be supported with a document viz., invoice etc.,
- 16. Lateral influence should be rechecked and corrected considering the provision of Part II point no.4 and part III of Minerals (Evidence of Mineral Contents) Rules, 2015 (MEMC Rules, 2015). Justification of recovery factor has not been furnished. In page no. 28 recovery percentage of float type iron ore and in-situ both should be furnished. The reference of Bulk density test report has not been mentioned and should be supported with report from NABL laboratory. Necessary corrections to be made at all relevant places.
- 17. 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 no11, should be converted to G1 level of exploration as per exploration norms specified in Part III of MEMC rules 2015 for both Iron and manganese. 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 proposal for exploration for converting mineralized area to G1 level should be within one year i.e. year2021-22. Necessary changes to be done in exploration proposal.
  - As per MEMC Rules 2015, check analysis of at least 10% of samples may be analyzed from third party NABL accredited/or department of science & technology (DST) / BIS recognized laboratories or government laboratories for assessing the acceptable levels of accuracy. Accordingly, the proposal should be given under future exploration programme.
- 18. Parameters to be consider for resource assessment should be as the points mentioned in IBM appraisal of MP. Need to do necessary correction.
- 19. Reserves and Resources have to be re-estimated as per the provision of MEMC Rules 2015 after complying point no 11. 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 or pits/quarry etc.,. Further, the resource 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. The average grade of reserve and resource under various UNFC categories has not been furnished. The summary of ore and mineral reject along with grade under various level of UNFC should be furnished separately.

#### MINING:

- Justification for area proposed for mining has not been given with respect to exploration, targeted quantity and grade considering mineral conservation and grade.
- 21. Justification of equipment should be based on maximum excavation quantity to be handled in five year excavation proposal. Information of existing and proposed machineries with capacity should be proposed. Necessary correction in the calculation need to be done.
- 22. Conceptual Mine planning should be modified taking into consideration of the revised production from in-situ excavations, 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.

# STACKING OF MINERAL REJECT /SUB GRADE MATERIAL AND DISPOSAL OF WASTE

23. The proposal for dumping may be given in tabulated format as shown below: Further, Build-up of dumps from year to year to be mentioned in text w.r.t. designed capacity of dumps, bottom and top mRL of individual terrace, dump slope, individual terrace height and slope with description of method & manner of disposal of waste should be mentioned. The method of waste dumping should be in

retreating manner. The year wise buildup of dump should be described. The waste dumping should be proposed in non mineralized area only.

	Year	Waste to be dumped (in m3)	Dump No	Location of dumping (coordinates)	Proposed area (m2)	Proposed dumping mRL.	No of terrace proposed.	Individual Terrace height	Slope of the terrace
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24. Existing as well as proposed protective measures like retaining wall, garland drain, check dams etc., should be furnished in tabular format with details of location, length, dimensions etc., a separate table should be given showing the year wise construction of retaining wall, garland drain and settling tank having specific proposal. Details of year wise proposal for construction of retaining wall, garland drain, settling tank etc. to be given with their location. Proposal for protective measures have not been submitted around mineral reject dumps and waste dumps.

#### PROCESSING OF ROM AND MINERAL REJECTS:

25. A material balance chart with a flow sheet or schematic diagram of the processing procedure indicating feed, product, recovery, and its grade at each stage of processing has not been furnished. for manganese ore.

#### OTHERS:

26. Information in respect to the existing and proposed manpower right from management level to unskilled labor both on role and contractual has to be mentioned separately in the text.

# PROGRESSIVE MINE CLOSURE PLAN:

- 27. The air, water and noise monitoring stations and their frequency of monitoring have not been furnished in tabulated format. All water discharge points from lease area to external should be monitored. Accordingly, monitoring proposal to be submitted. Further, Gap plantation along the safety zone should be furnished.
- 28. Copy of bank guarantee as per rule 27 of MCDR, 2017 should be submitted.

## PLATES (GENERAL):

- 1. 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 & 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. 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. The index should be kept same in all the plans and sections.
- All plans and sections should be signed with date by certified Surveyor, Qualified Person, Mine Manager, Mining Engineer and Mining Geologist. The plans should be prepared on latest survey carried out in the field depicting the exact surface features.
- KEY PLAN: The key plan should incorporate all features as mentioned Rule 32 (5) (a) of MCDR 2017. The approach road to the lease area, 5 Km boundary and wind rose diagram etc. has not been shown.
- 4. With reference to **CCOM Circular No 2/2010**, the geo-referenced mining leases map superimposed on latest high-resolution satellite data has not been submitted over the lease area.
- 5. SURFACE PLAN: The index of surface right area shown should be distinct from index of safety zone. The Surface Plan should be prepared to satisfy the provision as laid down rule 32 (1) (a) of MCDR'2017. The DGPS surveyed latitude-longitude and UTM coordinates of all the boundary pillars have not been furnished in tabulated format. The plan should be updated based on the recent survey. Forest area and non-forest area should be demarcated on the plan. Surface right area should be demarcated on the plan.

## 6. GEOLOGICAL PLAN & SECTION:

- (i) The redefined UNFC boundaries to be shown in Geological Plan and sections. The UNFC codes shown in plans and sections are incorrect and should be corrected as per scrutiny point no 13. Cross section lines with nomenclature have not been shown on the geological plan.
- (ii) The Geological Plan should be prepared to satisfy the provision as laid down rule 32 (1) (b),
   (c) and (d) of MCDR'2017.Index of different grade of limestone do not corroborate with the index shown in plan and sections. Need to recheck and correct at relevant places.

- (iii) Proposed boreholes should be shown in plan and sections. The proposed borehole should be shown in dotted lines in geological sections.
- (iv) The borehole log do not corroborate with geological sections. The lithology shown in geological plan do not corroborate with lithology shown in section.
- (v) Scientific correlation of geological section has not been done as per the provision of MEMC, Rules 2015. In Geological plan, some of the areas have been shown as blank. In those areas, geology of the area should be shown.
- (vi) UNFC codes, UPL should be shown in Geological sections.

# 7. DEVELOPMENT PLAN & SECTION:

- (i) Development plan and sections should be revised based on updated geological map and sections. UPL has not been shown on plan and sections. Further sections should be submitted covering the entire area proposed for development
- (ii) The proposed and existing bench mRL to be shown clearly over year wise development plan and sections. Geological information (lithology) has not been furnished on the area proposed for development in year wise development plan and sections. Plan and section should be drawn on same scale on 1: 1000.
- (iii) Existing and proposed protective measures and plantation should be shown in different colors around all waste dumps and mineral reject dumps. Index of safety zone boundary and surface right area should have distinct color.
- (iv) Year-wise development plan and section should be separately submitted on same scale.

## 8. ENVIRONMENT PLAN:

The environment plan has not been prepared as per the provision laid down in rule 32 (5) (b) of MCDR'2017.

# 9. DUMP PLAN AND SETIONS

Grid lines not shown in dump plan. Section line drawn in dump plans in not properly depicting the section view of dump. Section line should be drawn where maximum length is covered.

# 10. RECLAMATION PLAN:

Reclamation plan should be submitted instead of progressive mine closure plan. Existing and proposed protective measures and plantation should be shown in different colors along all waste dumps and mineral reject dumps. Index of safety zone boundary and surface right area should have distinct color.

# 11. FINANCIAL ASSURANCE AREA PLAN:

The existing area and additional area under different heads should be shown properly under different colored hatching.

## ANNEXURES:

- Few photographs showing Land use of the lease area, environmental status of the area have not been shown.
- Identity and address proof of lessee should be furnished. Details of Qualified person like experience and qualification as per provision of rule 15 of MCR 2016 should be furnished.
- 3. Copy of quality of air, water, soil, noise and other environmental a parameters monitoring report of the last year should be enclosed.
- All the annexure to be properly numbered/paged and relevant annexure to be signed by qualified person etc. It is observed that many of the annexures are not legible. A legible copy of same to be enclosed.
- 5. Copy of bank guarantee has not been enclosed. Photographs of boundary pillars should be enclosed.
- 6. NABL accreditation certificate of the laboratory has not been furnished.

(Ramkishan R) Senior Asst. Controller of Mines