



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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No. MS/OTFM/02-ORI/BHU/2018-19

Date: 04.04.2018

सेवामे

✓ मैसर्स माला रॉय, अधिकृत हस्ताक्षरकर्ता
मैसर्स माला रॉय एंड अदर्स,
192- डी, एस.सी. बोस रोड,
कोलकाता -700040

M/s Mala Roy, Authorized Signatory,
M/s Mala Roy & Others,
192 -D, S.C. Bose Road,
Kolkata-700040

विषय : खनिज रियायत नियम 2016 के नियम 17 के अंतर्गत ओडिशा प्रदेश के केंदूझर जिले में स्थित जलहरी लौह और मैंगनीज खान (182.109 हेक्टेयर) की खनन योजना का पुनर्विलोकन सह उत्तरोत्तर खान बंद करने की योजना की प्रस्तुति ।

Sub: Approval of Review of Mining Plan of Jalahuri Iron & Manganese Mine along with Progressive Mine Closure Plan (PMCP), over an area of 182.109 ha in Keonjhar district of Odisha State, submitted by M/s Mala Roy & Others under Rule 17 of MCDR, 1988.

संदर्भ: i) Your letter No. Nil dated 19.03.2018.
ii) This office letter of even no. dated 22.03.2018.
iii) This office letter of even no. dated 22.03.2018 addressed to the Director of Mines, Govt. of Odisha, copy endorsed to you.

महोदय,

यह उपरोक्त पत्रों का विषय के संदर्भ में है। इस संबंध में, खनन योजना का पुनर्विलोकन सह उत्तरोत्तर खान बंद करने की योजना मसौदा का जांच श्री जी सी सेठी, उप खान नियंत्रक और श्री दिलीप जैन, कनिष्ठ खनन भूविज्ञानी के द्वारा दिनांक 19.09.2017 क्षेत्र परिदर्शन के आधार पर किया गया है। देखे गए कमियां संलग्नक I के रूप में इसके साथ संलग्न हैं ।

This has reference to the letter cited above on the subject. The draft of Review of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on earlier site inspection carried out on 19.09.2017 by Shri G C Sethi, Deputy Controller of Mines & Shri Dilip Jain, Junior Mining Geologist. The deficiencies observed are enclosed herewith as Annexure I.

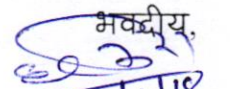
अनुलग्नक - I के अनुसार खनन योजना का पुनर्विलोकन सह उत्तरोत्तर खान बंद करने की योजना मसौदा में आवश्यक संशोधन करने के लिए आपको सलाह दी जाती है । दस्तावेज की तीन (3) फर्म बाउंड प्रतियां और एमएस वर्ड फाइल में सीडी में दस्तावेज पाठ की दो (2) सॉफ्ट प्रतियां (ड्राइंग / प्लेट्स को ऑटो कड संगत प्रारूप या जेपीजी प्रारूप में 100x100 पिक्सेल में जमा करना चाहिए।), इस पत्र जारी करने की तारीख से 15 (पंद्रह) दिनों के भीतर खनन योजना

का पुनर्विलोकन खनिज रियायत नियम 2017 के नियम 27 के तहत वित्तीय आश्वासन के साथ, आगे की आवश्यक कार्रवाई के लिए जमा करें। यदि अनुबंध का कुल पृष्ठ 50 (पचास) से अधिक है तो इसे अलग खंड के रूप में प्रस्तुत किया जाना चाहिए। लेकिन इन अनुबंधों का संदर्भ खनन योजना का पुनर्विलोकन में अवश्य होना चाहिए। प्लेट को अलग खंड में भी जमा करना है।

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 **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 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.

खनन योजना का पुनर्विलोकन की संशोधित प्रतियां अग्रेषित करते समय जिस तरीके से कमियों को पूरा किया गया है, उन्हें दिया जाना चाहिए। यह ध्यान दिया जा सकता है कि कोई भी समय विस्तारित नहीं किया जाएगा और यदि उपर्युक्त नियत तारीख में दस्तावेज नहीं जमा किया गया तो उसे खारिज किया जा सकता है। यह भी ध्यान दिया जा सकता है कि यदि कमियां पूरी तरह से अनुपालन नहीं होता है, तो बिना किसी अन्य पत्राचार खनन योजना का पुनर्विलोकन मसौदा खारिज कर दिया जा सकता है।

The para-wise clarifications and the manner in which the deficiencies are attended should invariably be given while forwarding the modified 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

प्रतिलिपि सादर सूचनार्थ और आवश्यक कार्रवाई हेतु Shri Chandrabhanu Dash, Geo Consultants Pvt. Ltd., 290 A, Ground Floor, (in front of Ekamra Talkies), Cuttack Road, Bomikhal, Bhubaneswar – 751 010.

(हरकेश मीना)

क्षेत्रीय खान नियंत्रक

SCRUTINY COMMENTS ON EXAMINATION OF MODIFICATION OF REVIEW OF MINING PLAN WITH PROGRESSIVE MINE CLOSURE PLAN FOR JALAHURI IRON & MANGANESE MINE OF M/S MALA ROY & OTHERS, OVER AN EXTENT OF 182.109 HECTARES OR 450.00 ACRES, LOCATED IN VILLAGES JALAHURI, KHANDBANDH, BANSPANI & BAITARANI R.F, UNDER JODA P.S OF KEONJHAR DISTRICT OF ODISHA STATE, SUBMITTED UNDER RULE 17(3) OF MCR, 2016.

1. On examination of the front cover, Mining Lease Number/TC Number/Lease Number if any, along with date of lease expiry, e-mail, fax number of the lessee to be furnished on cover page. Further, summary of the proposals to be given before the introduction page. Besides, the validity status of the mining lease also not given. The rule position to be revised as per MCR, 2016 for review of Mining Plan.
2. Page 3&4: Phone number, Fax-number, mobile number (if any), e-mail address in respect of registered office, Branch office and Mines office to be mentioned. Further, reference of the annexure as required as per rule 15(1) of MCR, 2016 to be mentioned.
3. Para 3.1: The details of approved Mining Plan/Scheme of Mining/Modification etc. to be given in tabulated form comprising particulars of MP/SOM, letter number, date of approval, period of proposal, rule position as per MCDR/MCR, approving authority etc.
4. Smt. Mala Roy has been signed the document in her capacity as authorised signatory but a board resolution nominating Smt. Roy to sign the mining plan document has not been submitted.
5. Few pages of the renewed lease deed enclosed as annexure-I is not legible, thereby the same should be replaced by fresh & legible pages. Besides, the lease was renewed for 20 years from 16.05.1993 for 20 years, which expired on 15.05.2013 but the lease extension letter from the state authorities has not been enclosed.
6. The copy of the ID & address proof of the applicant enclosed as annexure-IV is not legible; thereby, fresh legible copies for the same should be submitted.
7. At place it is mentioned that there are 15 nos. of quarries in the lease area, however, at page 39 details about 17 quarries has been furnished. Further, at many places proposed period is mentioned as 2017-18 (text and plates), which has already lapsed. Further, the orientation of the benches mentioned at different places of the text to be revised. Check and rectify accordingly.
8. **Geology and Exploration:** The locations (in UTM) of all quarries given in the table presented on page number 16 to be check and corrected. Further, at places the top and bottom mRL for the quarries as mentioned in the table are also not matching with the mRL shown on the surface plan. Verify and rectify. Further, Ore zone information along with its grade as per form K and number of samples analysed BH wise to be mentioned in table presented on page number 17 and 18.
9. Page 16: It is mentioned that samples have been drawn from the quarries, however, details like location, UTM coordinate, and nature of sample, grade of samples etc. have not been furnished.
10. On verification of some of the Geo section (BH30/13, BH17/13 and BH18/13 etc.), it is observed that Geo section have not been prepared considering drilled data. Entire geo section to be prepared considering Surface Geology, Drilled BH data and structural information. Check and rectify.
11. The proposal of all exploration needs to be given in the first year of the review period. Accordingly modify the proposal. Further, from geological sections and bore hole log it is observed that few BH have been closed in the mineralized zone only, hence proposal of exploration upto the end of mineralization to be given.
12. Para I: As per rule entire potentially mineralized zone to be explored under G1 level of exploration, however, it is observed that the proposed exploration programme is inadequate to explore entire area under G1 level of the exploration. Hence, proposal of the exploration to be given in accordance to the Minerals (Evidence of Mineral Contents) Rules, 2015 to explore entire mineralized zone under G1 level

of exploration. Further, details of exploration to be given as per following format:

Sl.No	Year	BH No	Northing	Easting	Collar RL	Core/RC/DTH	Metage	Inclination	Forest/Non-Forest/ diverted Forest	Surface Right/ Non-Surface	Purpose of BH
1	2018-19	PBH 01									
2	2018-19	PBH02									
Total			-			Total BH	Total mts	-			

At

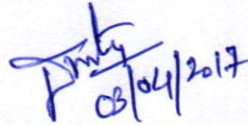
the end of the table cumulative number of proposed BH in forest area, non-forest area, diverted forest area, Surface right area and non -surface right area to be given. Same to be depicted on the Geological plan.

13. It is observed that the resource have not been estimated as per the Minerals (Evidence of Mineral Contents) Rules, 2015. In view of the mentioned rules resource estimation needs to be revised as a whole. On verification of the few of the BH data on geological section, it is observed that the correlation of the different litho has not carried out properly. Hence, considering all the available information, entire sections to be recast.
14. The recovery and bulk density considered for different category of ore to be justified with documentary evidence.
15. Page 29: The area for level of exploration furnished under table at page 29 is not as per MEMC, rule 2015. G2 level of exploration has been considered without adequate exploration details. Same need to be rectified and should be as per M(EMC) rule 2015. Accordingly table presented on page 29 needs to be modified. Number of BH considered for resource estimation also to be revised. The area under different category of exploration to be depicted on geological plan and section.
16. It is observed that resource have been estimated for three different blocks on the basis of the forest clearances/tree felling permission. All the blocks to be marked property on the plan and section for better understanding.
17. Different UNFC category to be justified properly. Justification to be given to kept reserve under 111 category, even after the mine is under suspension for want of statutory clearances. Accordingly UNFC category to be revised and justify properly.
18. Many tables have been furnished in text without any proper heading, which creates confusion to understand the data. Verify and rectify.
19. **MINING:** The proposal of development has not given in systematic and regular manner. Development proposal should be given considering the layout/inline of the existing benches and should be in regular manner. The proposal should be given in lateral extension of the pit instead of given depth wise. Further, It is mentioned that (page 41) "in quarry 6 the benches will move SE to NW and the orientation of the benches will be SW-NE", however, from development plan it is observed that there is no proposal of development in quarry 6. Check and rectify at relevant places.
20. The year wise grid location for proposed excavation to be given. Further, 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 and same needs to be depicted on development plan.
21. The excavation planning for the year 2018-19 and 2019-20 has been furnished but the achievements in production, waste handing for the period from 2013-14 to 2016-17 should also be furnished and the para may be revised accordingly. [Para 2.0(A)(a)].
22. The stripping ration mentioned in table presented on page 43 seems to be incorrect. Check and rectify.
23. Page 45 & 47: The information in respect of ROM production, Saleable Ore, Sub-grade Ore, waste generation etc. to be mentioned in table presented on page. The production level is mentioned as 0.60 million tonnes, however, from proposal it is observed that the production of Iron ore is proposed to around 0.75 million tonnes per year. Check and rectify.

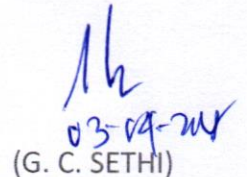
24. The bulk density of the iron ore is considered as 3.5t/m³ & 2.5t/m³ respectively and the recovery is considered as 100% but the bulk density test report and recovery test report from Govt./NABL accredited laboratory has not been enclosed, which should be submitted for ease in monitoring.
25. It is observed that proposed area of the waste dumping is having some stacks. The proposal of removal/handling of same to be given. Further, it is observed that there are number of scattered stacks in lease area, the details of same to be given and proposal of centralised stack yard to be given. Further, in general the coordinates mentioned in text for various proposals and existing feature are not matching with the plan. Same needs to be check invariably and rectify.
26. The conceptual planning should be upto the end of lease period. In Conceptual Mine planning the details about total excavation, Disposal of waste, Sub-grade generation and its beneficiation/utilization, mine development, manpower and equipment requirement, land degradation, waste required and its availability for back filling the ultimate pit details, depth of the back filling, reclamation and rehabilitation of pit and waste dump, Proposal of any expansion, etc. showing on a plan with few relevant sections to be given for conceptual period. Accordingly conceptual plan and section along with text to be revised.
27. **Mine Drainage:** Para (C) Details in respect of quality and quantity of water likely to be encounter, the pumping arrangement, and place final discharge to be discussed. Para (D) Information about catchment area and likely quantity of rain water to flow through the lease area and arrangement for arresting solid wash to be furnished.
28. It is observed that a substantial amount of rain water supposed to be passed from the lease area. Hence, mine drainage plan to be submitted showing flow direction of the water, location final discharge, arrangement of arresting of solid waste etc. Further, the details of water drawn from external source and arrangement of its recycling may be given for domestic and industrial purpose.
29. **Stacking of Mineral Reject/Sub-grade Material and Disposal of Waste:** Page 64- In Mining chapter waste is proposed to be disposed over existing waste dump 6, however, same is proposed over waste dump 7. Further, the mRL mention in text and plan for proposed waste dump terrace is not matching with each other. Check and rectify. Further, Location of Mineral reject stacking to be given and same needs to be depicted on relevant plans
30. The details of all existing dumps to be given. The details of all existing protective measures carried out in lease area like retaining wall, garland drain, check dam, settling pond etc. to be given with their location and dimensions. Accordingly, the protective measured to be proposed for remaining features like waste dump, stacks etc.
31. **Use of Mineral and Mineral reject:** It is mentioned that a MoU has been signed with Govt. of Odisha for set up a steel plan having capacity 0.25 MTPA. The copy of same has not been enclosed.
32. **Processing of ROM and Mineral Reject:** Material balance chart to be given for proposed processing indication feed quantity and quality, product quantity and quality, recovery at each stage, etc.
33. **Others:** Indicate the number of labour/unskilled manpower requirement.
34. **Progressive Mine closure Plan:** The status of existing base line information/data to be submitted based on the monitoring parameter assessed during previous year. From table presented on page 87 and 88 it is came to know that no proposal of progressive reclamation has been envisaged. Planation over existing waste dump, retaining wall and garland drain, Check dam and settling tank, fencing of non-working quarry etc. to be proposed. As per the guidelines, the plate for Reclamation plan is required to be submitted.

35. **Plates:** All the plan & sections submitted along with the Review of mining plan should be certified by the Qualified Person indicating that, **the plans and sections are prepared based on the basis lease map authenticated by the State Govt. of Odisha and found to be correct.**
36. Plate-I (Key Plan): Most of the features given for index are not clearly legible, thereby the same should be marked clearly both in index as well as on the plan portion of the plate. The prominent wind direction to be shown with wind rose diagrammed.
37. Plate No-2A (DGPS Map): Signature of ORSAC authority is missing on the plan. Besides, the extent of lease area also not furnished. Moreover, the plate has not been authenticated by the competent authority of State Govt. of Odisha, thereby not accept in its present form.
38. Plate-III (Surface Plan): (i) few of the quarry has been named with prefix Quarry and few are named with prefix Q. The prefix should be same in all the cases. (ii) Few small scattered existing dumps are also not named /numbered/depicted on the plan as per the index. (iii) The index reference given for existing mineral stack yard & existing ROM /S.G stack yard is not matching with that of the plan portion of the plate. Besides, the index reference given for power lines, magazine, retaining wall, garland drain, check dam, mobile crusher & dump rehabilitation etc. also not matching with the plan. (iv) Surveyor's signature missing, which should be signed by a competent surveyor. (v) Atleast three permanent ground control points beyond the lease area have not been selected, which should be done and latitude & longitude of those ground control points should be furnished. The ground control points need to be linked with boundary pillars. (vi) Information as mentioned on page number 5 for waste land, Agriculture land and Road has not been depicted on surface plan. (vii) The coordinates of entire boundary pillars to be mentioned in text as well on surface plan as per Joint DGPS map.
39. The index reference given for the features are not matching with the plan portion of the plates.
40. Plate IV and IV A (Geological plan and Section): Surface geological feature to be highlighted in geo plan. Geo structural information has not been furnished on the geological plan. Geological section should be right-angle to the strike of the ore body. As mentioned a total of 59 BH have been drilled, however, only 58 BH have been reflected on the geo plan. Similarly, less BH have been reflected on the Geo Sections. Geological x-section have been prepared in two different direction, same needs to be justified. All the proposed BH needs to show along with proposed Depth. At places the depth of the drilled BH are not matching with information given in the text. Direction of the sections to be depicted on geological section along which the sections have been drawn. Instead of different grade wise correlation in section, correlation of Ore body may be done for Saleable Ore and Sub-grade ore.
41. Plate-V (Development, dump plan & Sections): (i) The excavation, dumping & stacking etc. has not been clearly depicted on the plan. (ii) The lithology depicted on the development sections are also not matching with that of the plan. In the light of the above, all other relevant plans & sections submitted along with the document may also be revised accordingly.
42. Plate-VI (Environment Plan): All the existing features available within 500m radius of the lease area has not been marked, which should be depicted and the plate may be revised accordingly.
43. Plate-VII (Reclamation Plan): Many of the proposed features given in the index is not matching with the plan portion of the plate, thereby the plate should be revised in such a way that, the features given in the index will match with the plan portion of the plate. Accordingly, the plates submitted for progressive mine closure plan may also be revised.
44. **Annexures:** The number of annexure mentioned in text and index does not match with other. All the annexure to be properly numbered /paged and relevant annexure to be signed by Geologist /surveyor /

- RQP etc. It is observed that many of the annexures are not legible. A legible copy of same to be enclosed.
45. The forest diversion letter of MoEF, FC Division dated 21.01.1999 over an area of 111.58 Ha to be enclosed.
 46. Copy of form J and K as per MCDR, 1988 for the BH drilled in the year 2009 to 2012 to be enclosed. Further, The chemical analysis report of iron ore & manganese samples from Mitra S.K Private Ltd has been enclosed as annexure-XI but the analysis reports are very old, analysed during June & July 2013, which is not acceptable, instead fresh analysis report should be obtained either from a NABL accredited laboratory or from a Govt. laboratory & enclose along with the document for more informative.
 47. The latest (at least for last one year and quarter wise) copies of base line data for Jalahuri iron & manganese mine to be enclosed as enclosed reports are very old.
 48. The consent order from State Pollution Control Board, Odisha has not been enclosed; thereby a valid consent for the same should be submitted and information of same to be reflect in text part of the document.
 49. Few photographs in support of the quarry /dump /stack /reclamation & rehabilitation /afforestation etc. to be enclosed along with the document, which should be submitted for more informative.
 50. Page1: The approval status of the mining plan/scheme of mining in different occasions have been furnished but the copies of such approval letters has not been enclosed.
 51. The valid bank guarantee matching to the extent of area put to use in different counts during the review of mining plan period has not been enclosed.


03/04/2017

(DILIP JAIN)
Junior Mining Geologist


03-04-2017

(G. C. SETHI)
Deputy Controller of Mines