



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



Phone: 0674-2352463;  
Tele Fax: 0674-2352490;  
eMail:  
ro.bhubaneswar@ibm.gov.in  
Plot No.149, Pokhariput  
BHUBANESWAR-751020

No MS/FM/13-ORI/BHU/2018-19

दिनांक / Date: 13.06.2018

To

Mala Roy, Authorised Signatory,  
Mala Roy and Others,  
192 D. N. S. C. Bose Road,  
Kolkata-700040.

Sub: Approval of Review of Mining Plan of Jalahuri Iron and Manganese Mines over an area of 182.109 ha in Keonjhar district of Odisha of Mala Roy and Others submitted under Rule-17 (2) of Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016.

Ref: - i) Your letter no. nil dated 25.05.2018 received on 28.05.2018.  
ii) This office letter of even no. dated 28.05.2018.  
iii) This office letter of even no. dated 28.05.2018 addressed to the Director of Mines, Govt. of Odisha, copy endorsed to you.

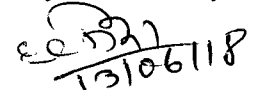
Sir,

This has reference to the letters cited above on the subject. The draft Review of Mining Plan along with Progressive Mine Closure Plan has been examined in this office based on site inspection carried out on 09.06.2018 by Shri Dilip Jain, Junior Mining Geologist and Shri Ashok Kumar Pany, Asst. Mining Engineer. 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 **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 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 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 / yours faithfully,



(HARKESH MEENA)

क्षेत्रीय खान नियंत्रक / Regional Controller of Mines

Copy for kind information and necessary action to:

1. Shri Chandrabhanu Dash, Qualified Person, Geo Consultants Private Limited, Plot No-853, Gobind Prasad (Medical Lane), Mahavir Nagar (Infront of Radhika Complex/Reliance Fresh), Laxmisagar, Bhubaneswar-751006, Odisha.

(HARKESH MEENA)  
क्षेत्रीय खान नियंत्रक / Regional Controller of Mines

**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. As per executed renewal lease deed, 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.
2. The status of forest area remaining for diversion to be indicated along with the documentary evidence.
3. **Geology and Exploration:** On page 18, it is mentioned that there are 17 quarries in the lease area. However, details of only 9 quarries have been furnished on page number 19. The locations (in UTM) of all quarries given in the table presented on page number 19 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. Check and rectify.
4. 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.
5. The details of the proposed 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 and sections.

6. The recovery of Iron Ore has not been justified. Further, 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.
7. To comply with the provisions of the rule 12(4A) of MCDR, 2017, the depth of exploration to be proposed for open cast mining shall be up to 300 meters or up to discontinuance of ore body, whichever is earlier. Accordingly, proposal of exploration to be revised.
8. Page 25 and 32: The areas for level of exploration furnished under table at pages are 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 tables presented on mentioned pages 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.
9. An area of 1.86 Ha has been shown under the explored and non-mineralised. The same need to be shown on the geological plan along with the level of the exploration.
10. Different UNFC category to be justified properly. Justification to be given to kept reserve under 111 categories, even after the mine is under suspension for want of statutory clearances. Accordingly, UNFC category to be revised and justify properly. Justification of each UNFC code to be given in line of the MEMC rule 2015.
11. Many tables have been furnished in text without any proper heading, which creates confusion to understand the data. Verify and rectify.
12. **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. Check and rectify at relevant places.

13. Page 45: The development period mentioned is 2017-18, which is already lapsed. The grid reference and other information to be furnished for the proposed period. The section wise, bench wise excavation calculation is not given for proposed plan period. Same to be submitted.
14. 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.
15. The recovery of iron ore is considered as 100%, however, justification to be submitted along with documentary evidence.
16. 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.
17. In Conceptual Mine plan the details about total excavation, Quantity of waste generation and its disposal, total generation of Sub-graded and its beneficiation/utilization, mine development, manpower and equipment requirement, conceptual exploration, 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.
18. **Mine Drainage:** Para (C) Details in respect of quality and quantity of water likely to be encounter and place for 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.
19. 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.
20. **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, Grid reference of Mineral reject stacking to be given and same needs to be depicted on relevant plans.
21. 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 all remaining features like waste dump, stacks etc.
22. Page 68: As per information furnished in Mining Chapter, ROM proposed to produce is around 0.6 million tonnes. However, on page the quantity of same is mentioned is 0.628 million tonnes. Check and rectify.
23. **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 ach stage, etc.
24. Para (g): Indicate quantity (cum per day) of water required for mining and processing along with sources of supply of water, disposal of water and extent of recycling. Water balance chart may be given.
25. **Progressive Mine Closure Plan:** The lease is expiring in 31st March 2020, there for PMCP submitted in instant document should in line with the FMCP. Baseline information of the lease area should be described on the basis of information incorporated in first approved mining plan at the time of grant of ML. The environment monitoring data of last one year to be enclosed for ready reference. Further, base line information to be furnished for surrounding 500 meter form lease boundary
26. The proposal of fencing should be given for entire Excavations/ pits endangering fall of persons/cattle etc. Proposal of geo-textile/coir matting with plantation to be given for matured slop of the proposed

dump. If the Sub-grade material is not utilized fully by the end of 31/03/2020, proposal of coir matting over such dumps to be given in the interest of protection of environment. Garland drain and retaining wall to be proposed along the proposed sub-grade stack. Accordingly progressive mine closure plan to be revised.

27. Time scheduling for proposed activity like waste dump management (Garland drain, retaining wall, settling tanks, plantation), safety and security (fencing of pits, dumps etc), disposal of machineries, reclamation & re-habilitation, infrastructure, protective measures of environment should be supplemented by PERT (programme evaluation review technique) or Bar chart and these activities should be clearly shown on reclamation plan.
28. Provision of sump to be given and as far as possible all the rain water of catchment area to be diverted to that sump. The location and schedule of environment protective measure to be given in text.
29. **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.
30. As discussed during the field visit, broken up area map along with the report to be enclosed.
31. **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.
32. **Plate-III (Surface Plan):** (i) 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. (ii) Surveyor's signature missing, which should be signed by a competent surveyor. Information as mentioned on page number 8 i.r.o. waste land, Agriculture land and Road has not been depicted on surface plan.
33. **Plate IV and IV A (Geological plan and Section):** Instead of geological feature surface features like contour, quarries etc. have been highlighted on the 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 has been prepared in two different direction, same needs to be justified.
34. **Plate-V (Development, dump plan & Sections):** (i) The main haul road to be shown on the plan showing the loading and un-loading point. The existing and proposed dump mRL to be mentioned in the plan. 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.
35. **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.
36. **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.
37. **FA Plan:** During inspection it is observed that part of the mining lease area near to boundary pillar 60,61 etc. has not been considered for the FA calculation. Financial assurance and FA plan to be revised.
38. **Annexures:** The copy of the lease deed in favour of the Mrs Sabita Roy to be enclosed. Copy of lease deed of first renewal also to be enclosed. (Refer page 3).
39. Legible copy of the qualification certificated to be enclosed in respect of the QP along with photo id proof.

40. The copy of the ID & address proof of the applicant enclosed as annexure-XII is not legible; thereby, fresh legible copies for the same should be submitted.
41. As per executed lease deed dated 20 September 1999, the name of the lessee/successor has been mentioned as Smt. Mala Ray, Sri Indrajit Ray and Shri Premjit Ray. However, as per partnership deed submitted vide annexure IX, the name of the partners mentioned are Smt. Mala Roy, Sri Indrajit Roy and Shri Premjit Roy, which is different than that of the Lease deed. The change in the name of lessee/partners to be justified with documentary evidence.
42. Smt. Mala Roy (ray) 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.
43. 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.
44. The forest diversion letter of MoEF, FC Division dated 21.01.1999 over an area of 111.58 Ha to be enclosed.
45. The latest copies of base line data for Jalahuri iron & manganese mine quarter wise to be enclosed.
46. 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.
47. 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.

(DILIP JAIN)  
Junior Mining Geologist