



REGD. AD

E- mail: ro.bhubaneswar@ibm.gov.in

भारत सरकार
खान मंत्रालय
भारतीय खान ब्यूरो
क्षेत्रीय खान नियंत्रक का कार्यालय

No. MSM/FM/01-ORI/BHU/2016-17 **1534**

Plot No.149, Pokhariput,
Bhubaneswar,
Odisha-751 020.
दिनांक / Date: **03**06.2016

To

Shri R. H. Rao
Nominated Owner
M/s Mideast Integrated Steels Limited
MESCO Tower, 3915, Lewish Road,
Kedargauri Squar, Bhubaneswar – 751 004.

Sub: Approval of Modification of Approved Scheme of Mining of Roida - I Iron Ore Mines over an area of 104.680 Ha in Keonjhar district of Odisha of M/s Mideast Integrated Steels Limited submitted under Rule-10 of MCDR'1988.

Ref: - i) Your letter no. MISL/BBSR-16/Roida-1 30.04.2016.
ii) This office letter of even no. dated 06.05.2016.
iii) This office letter of even no. dated 23.05.2016 addressed to the Director of Mines, Govt. of Odisha, copy endorsed to you.

Sir,

This has reference to the letter cited above on the subject. The draft Modification of Approved Scheme of Mining along with Progressive Mine Closure Plan has been examined in this office based on inspection carried out by Shri Dilip Jain, Junior Mining Geologist on 16.05.2016. The deficiencies observed are enclosed herewith as Annexure-I.

You are therefore advised to carry out the necessary modifications in the draft Modification of Approved Scheme of Mining in the light of the comments vide Annexure-I and submit **two (2) firm bound copies 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)** within 30 (thirty) 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 Approved Scheme of Mining 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 Approved Scheme of Mining. It may be noted that no further extension of time in this regard will be entertained and the Modification of Approved Scheme of Mining 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.

The document should be prepared as per "IBM manual on appraisal of Mining Plan – 2014" available on the IBM website at www.ibm.gov.in.

भवदीय / yours faithfully,

BIC

(M BISWAS)

क्षेत्रीय खान नियंत्रक / Regional Controller of Mines

1 sent
6.6.16

Scrutiny comment on Modification to the approved Modification of Scheme of Mining including PMCP in respect of ROIDA-I Iron Ore Mine of M/s Mideast Integrated Steels Limited over an area of 104.68 Hectare in Keonjhar district of Odisha State.

Date of Inspection: 16.05.2016

GENERAL:

- (1) The document to be prepared by qualified person as defined in rule 15 of Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rule, 2016. Accordingly certificates required to be submitted.
- (2) It is observed from approved Scheme of Mining dated 05.02.2015 that a PL for Limestone and Dolomite over an area of 1671.512 Ha was granted/applied. The details of same have not given in instant document.
- (3) Name of the Lessee to be mentioned in para 1.a. further, the status of the lessee, whether, private company, public limited company, partnership firm etc. to be mentioned in para 1.b.
- (4) Lease range may also be mentioned in Latitude and Longitude i.e. degree, minute, second.
- (5) The extent and nature of surface right being held by the Lessee to carry out various mining activities be indicated with documentary evidence.
- (6) Grammatical mistakes are found to exist at many places, which need to be corrected.

GEOLOGY & RESERVES:

- (7) The details of all the BH drill to be submitted in form J and K as prescribed in MCDR, 1988. The same should be signed by the Geologist appointed under Rule 42 of MCDR, 1988.
- (8) Depth continuity of mineralisation should be considered upto the depth of direct evidence of mineralisation. As per Minerals (Evidence of Mineral Content) Rule, 2015 dated 17/04/2015, no extrapolation is allowed in depth ward direction. Hence, in view of the Minerals (Evidence of Mineral Contents) rules, 2015, reserve and resource estimation may be revised and detail section wise estimation calculation of reserve and resource may be given. Accordingly, area mentioned for G1 and G2 level of exploration in table presented on page 22 to be revised.
- (9) It is observed that 10% of the core samples is analyzed from NABL accredited lab, however, BH wise sample details and interpretation of same has not given.
- (10) The recovery of 85% of ROM ore from total ore zone excavation to be justified with documentary evidence. The recovery should be based on the time series data.
- (11) Para 1.2: The email address and phone number of the exploration agency to be mentioned.
- (12) On examination of geological plan & section, it is observed that many exploratory BH were closed in the Iron Ore and were not drilled up to the depth of the mineralization. Hence, to explore the lease area depthward infill exploratory drilling may be proposed up to the ultimate depth of the mineralisation.

MINING:

- (13) The length, width, coordinate range etc. mentioned for existing quarry in table presented on page 34 does not match with the surface plan. Verify and rectify.
- (14) In instant document a screen and crushing plant having capacity of 600 TPH is proposed to install, however, date of commencement and location of same is not mentioned in text as well in development plan.
- (15) In the interest of safe and scientific mining proposed location of mine office needs to be located away from the mine pit.

- (16) Conceptual Mine plan should be upto the end of life of mine taking into consideration of the available reserve and resources describing the total excavation, Disposal of waste, Sub-grade generation 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, reclamation and rehabilitation, Proposal of any expansion, etc. showing on a plan with few relevant sections.
- (17) **Mine Drainage:** A drainage plan may be submitted showing the drainage pattern of the lease area, catchment area and final discharge point of surface water during rainy season.

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

- (18) Around 1512723 CuM of waste quantity is estimated, which may be accommodated in waste dump-1. The detail calculation of this quantity may be given.
- (19) The proposal given for construction of retaining wall, garland drain around waste dump-1 seems to be insufficient in view of proposed spread of the waste dump. Hence, may be verified and revised proposal to be given.
- (20) Method of waste dumping should be in retreating method instead of advancing in view of protection of the environment. Further, the dumping area shall be brought into use after the site preparation is complete. Dump site preparation proposal may be given accordingly.
- (21) It is observed that proposed waste dump area is not explored. Such area should be brought into the use after proving about mineralization. (to be mentioned in text part of the document).

PROCESSING OF ROM AND MINERAL REJECT:

- (22) Give a material balance chart with a flow sheet or schematic diagram of the ore processing procedure indicating feed, product, recovery, and its grade at each stage of processing.

PROGRESSIVE MINE CLOSURE PLAN

- (23) Financial assurance may be revised as discussed during field visit.

FEASIBILITY STUDY REPORT:

- (24) Proposed and actual capital expenditure to be given in separate table. Further, exploration cost to be incorporated in calculation of cost of production of Iron Ore.
- (25) The market assessment has not carried out properly; it should include demand and supply, consumption trend and factor likely to affect the demand and supply into the future. Further, feasibility study report should be prepared taking into consideration of reclamation/rehabilitation cost, closure cost and other important parameters as per UNFC guidelines.
- (26) A Clear statement to be given, whether the Mineral Resources reported are additional to, or inclusive of, the Mineral Reserves.

PLATES:

- (27) **General:** All plans and sections should be signed with date by certified Surveyor, RQP, Mine Manager, Mining Engineer and Mining Geologist as per provisions of Rule 30 of MCDR, 1988 and Rule 66 of MMR, 1961.
- (28) **Surface Plan:** Information of surface drainage system may be furnished on surface plan/geological plan etc. Along with UTM coordinates, Latitude and longitude of all ML boundary points should be mentioned on surface plan as well in the text.
- (29) **Geological Plan & Section:** Are explored under G1, G2 etc. level is not properly visible in plan. Direction along which geological section have been drawn to be depicted on the sections. The color code/hatching used to display various lithology are not distinguishable, need to be reviewed.

- (30) Data related to strike, dip, dip-direction etc. shown on the geological plans are inadequate. Some more data may be shown to understand the geology of the area.
- (31) **Development plan:** In the development plan for the year 2017-18, color code given for forest area and development is same. Different color code may be given for development proposal.
- (32) From development plan of year 2016-17, it is observed that mine working has been proposed near crushing and screen plant-2 , however, same has not shown in the development sections.
- (33) Existing bench mRL to be mentioned in the development sections. Further, it is observed that width of the benches are proposed more than the height, whereas, from section it is observed that width and height of benches are same. Verify and rectify.
- (34) Proposal of settling tank around waste dump-1 as given in text has not shown in dump plan and other plans.

ENCLOSURE

- (35) Lease Renewal application in form J and its receipt in form D, to be submitted.
- (36) Photo id proof submitted of nominated owner is obscure, a legible copy of same to be submitted.
- (37) Copy of surveyor certificate may be enclosed.

-----X-----X-----X-----