

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

No. MS/OTFM/18-ORI/BHU/2016-17

Plot No. 149, Pokhariput  
Bhubaneswar – 751 020

Date: 20.02.2017

To

✓ Shri Prashanta Kumar Nayak, Nominated Owner,  
M/s Industrial Development Corporation of Odisha Ltd  
IDCOL House, Ashok Nagar, Unit-II,  
Bhubaneswar-751009

Sub: Approval of Review of Mining Plan of Talangi Chromite Mine along with Progressive Mine Closure Plan (PMCP), over an area of 65.683 ha in Jajpur district of Odisha State, submitted by M/s Industrial Development Corporation of Odisha Ltd under Rule 17 of MCR, 2016.

Ref: - i) Your letter No. 222 dated 18.01.2017 received on 09.02.2017.  
ii) This office letter of even no. dated 09.02.2017.

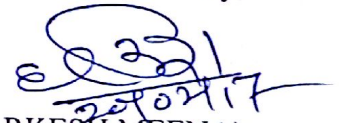
Sir,

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 based on site inspection carried out on 16.02.2017 by Shri Ram Kishan 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 **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 23 F of MCDR 1988 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 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.

Yours faithfully,



(HARKESH MEENA)  
Regional controller of Mines

**Scrutiny comments in respect of Review of Mining Plan of Talangi  
Chromite Mine, M/s IDCOL in district Jajpur of Odisha**

**Text:**

**GENERAL**

1. Proofs of documents submitted in regard of lessee are not legible, proper documents may be submitted.
2. All annexures & chapters shall be properly indexed.
3. In the review of earlier mining scheme, proper justification for deviation of all proposed programmes viz., exploration, production, back filling, dump re-handling etc.
4. Photographs regarding achievement in afforestation, dump handling etc. shall be annexed. Concerned reports regarding the environment monitoring shall be annexed.

**GEOLOGY AND RESERVE**

5. Documentary evidence shall be given in form J & K for the exploration work carried out in the year 2011-12. An ore sample from the present working ore bench shall be analysed at NABL accredited Laboratory or Government laboratory or equivalent and the report shall be enclosed.

**MINING**

6. No of benches to be worked out in the ore and waste is to be mentioned in the proposed working quarry-2.
7. It was observed that during the inspection of the mine that mine workings have been reached up to the lease boundary near boundary pillar 51 (Sections E,D,C,B). Further proposal of mining has been given beyond the lease boundary which is not allowed. Please modify the development plan accordingly with leaving a safety zone barrier of 7.5 m from the lease boundary.
8. Ultimate pit depth is to be mentioned in all the working areas. Pit wise detailed break up of ROM produced for the proposed period shall be given. Grid location of proposed working areas to be given for the proposed period.
9. Section wise details of excavation ore, subgrade and waste shall be furnished.
10. During field inspection it is observed that near boundary pillar no 51 safety zone was encroached, which has not been on plan correctly.

**Mine Drainage**

11. Considering the topography of the area elaborate the mine drainage pattern during monsoon season regarding the direction of water flow and amount of accumulation. The chapter shall also deal with existing and proposed dumps effect on mine drainage. The accumulation of water in the working / non working quarries shall also be considered for dewatering arrangements with

adequate pumping capacity. Flow chart diagram of ETP functioning may be furnished. Water balance chart shall be furnished.

### **HANDLING OF MINERALS REJECT/ SUB-GRADE AND DISPOSAL OF WASTE**

12. Overall height of sub grade dumps with their slop angles, no of terraces shall be mentioned. Stabilised dump in the western side of the lease area near boundary pillar no 18 & 19 is almost submerged with pillars, the area between boundary pillars 3 and 16 also the stabilised dump was observed. the same shall be shown on relevant plans.
13. Details of tailings disposal area shall be furnished with protective measures. The protective measures adopted regarding the water management from material stockyards shall be elaborated.

### **PROGRESSIVE MINE CLOSURE PLAN**

14. The area matured for back filling & reclamation during the plan period shall be given.
15. The back filling quarry-1 area near boundary pillar 66 & 65 is out of the lease boundary area, the same shall be shown on relevant plans.

#### **Others**

16. Details of contractual manpower and manpower on company role shall be furnished.

### **FEASIBILITY STUDY REPORT**

17. Capital cost, Cash-flow forecast, Investment cost, Inflation forecast, Operating cost, Sensitivity studies, RR, IRR, NPV for the project life, cost of operation, Closure cost and Rehabilitation cost etc.

#### **Plates:-**

##### **General:**

18. All plans and sections should be signed with date by certified Surveyor, Qualified Person, Mine Manager, Mining Engineer and Mining Geologist as per provisions of Rule 30 of MCDR, 1988 and Rule 66 of MMR, 1961. All plans & sections prepared shall follow the conventions mentioned under MMR 1961.
19. All plans and sections shall show a scale a scale of the plan at least twenty five centimeters long and suitably subdivided. The scale of the plans and sections shall be as per guidelines of MCDR, 1988.

20. Wind direction may be shown through wind rose diagram at the top right corner of the relevant plans.
21. Access routes to the lease area on topographical map shall be shown.
22. True and magnetic north shall be depicted in all plans with date and variation
23. All the plans and sections shall be prepared on a scale of 1:2000 or 1:1000 if not, permission obtained from Chief controller of Mines, IBM shall be annexed for preparing the plans and sections on different scale.
24. Forest area, Non Forest area, Surface right acquired area etc. should be marked clearly over all Map/Plan & Surface plan.
25. Authenticated lease plan is not legible, properly legible plan needs to be submitted.

**Surface Plan:**

26. Forest/non-forest/private land to be shown clearly. Proposed, three year excavation block to be depicted on surface plan. Some of the labels shown in the plan are not indexed.
27. Surface right area not shown on surface plan. Boreholes drilled and power transmission lines to be shown in the plan. All boundary pillars coordinates in UTM, Latitude and longitude to be shown in tabulated form on surface plan. Few pillars may be correlated with some permanent ground feature giving distance and direction.
28. During field inspection it is observed that ROM stockyards, processed ore stock yards, subgrade stack yards are there, which shall be shown on the plan with distinct area demarcation
29. Surface plan shall be updated with latest survey data and the Safety barrier Zone of 7.5 m shall be marked all along the lease boundary.
30. During inspection Infrastructure like workshop was observed behind the boundary pillar no 51 outside of lease are in the southern side, the same shall be shown on the plan.

**Geological Plan & Section:**

31. Structural details like strike, dip amount and direction of ore body to be shown in the plan. Boreholes, Collar RL of boreholes shall be shown on geological plan and sections. Direction along which geological section have been drawn to be depicted on the sections.
32. The exploration carried out as per UNFC guidelines of different categories of reserves / resources to be shown in the plan. All the lithological units shall be

clearly marked with visible distinction. The index labels are not matching with the labels shown on the plan, rectify the same.

**Development plans and Sections:**

33. Benches configuration of year wise development shall needs to be shown on development plan as per sections.

34. Conceptual plan shall illustrate the mine development works till the end of the conceptual period.

**Progressive Mine Closure plan**

35. Spot mRL to be mentioned in backfilled area.

36. Land use pattern of the area shall be recalculated as per field conditions

**Environment plan**

37. The proposed and existing environment protective measures to be shown in environment plan. The drainage pattern of the lease area also to be shown on the plan.

**Financial Assurance plan**

38. FA plan shall be recalculated after updated survey data.

39. Area categorised under FA shall be colour coded distinctly in FA plan

**Key Plan**

40. Co-ordinates of extremity of lease area shall be shown on key plan. Radius of 500 m radius was shown shall be corrected as 5 km radius, Population density of villages shall be shown on the plan.

**ENCLOSURE:**

41. Few photograph of the Boundary pillars, present land use to be attached.

42. Details like Name, residential and correspondence address, email address, contact number etc. of all the Directors of the company to be submitted.

43. Certificate of registration of company with memorandum of association is to be given.

44. Proper indexing of annexures needs to be done.

*A. J. J. J.*  
12/2 (12)