



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. FMCP/FM/11-ORI/BHU/2018-19

Date: 26.04.2018

To

✓ Shri Haridrumat Behera, Head Mine Planning,
M/s Tata Steel Ltd,
At/P.o- Kalarangiatta, Dist- Jajpur,
Odisha-755028

Sub: Approval of Final Mine Closure Plan of Sukinda Chromite Mine over an area of 406.00 ha in Jajpur district of Odisha State, submitted by M/s Tata Steel Ltd under Rule 24 of MCDR, 2017.

Ref: - i) Your letter No. SCM/MPP/36/18 dated 28.03.2017.
ii) This office letter of even no. dated 03.04.2018.
iii) This office letter of even no. dated 03.04.2018 addressed to Director of Mines, Government of Odisha copy endorsed to you.

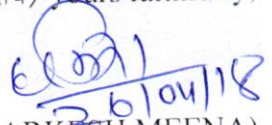
Sir,

This has reference to the letter cited above on the subject. The draft of Final Mine Closure Plan (FMCP) has been examined in this office based on site inspection carried out on 12.04.2018 by Shri G C Sethi, Deputy Controller of Mine. The deficiencies observed are enclosed herewith as Annexure I.

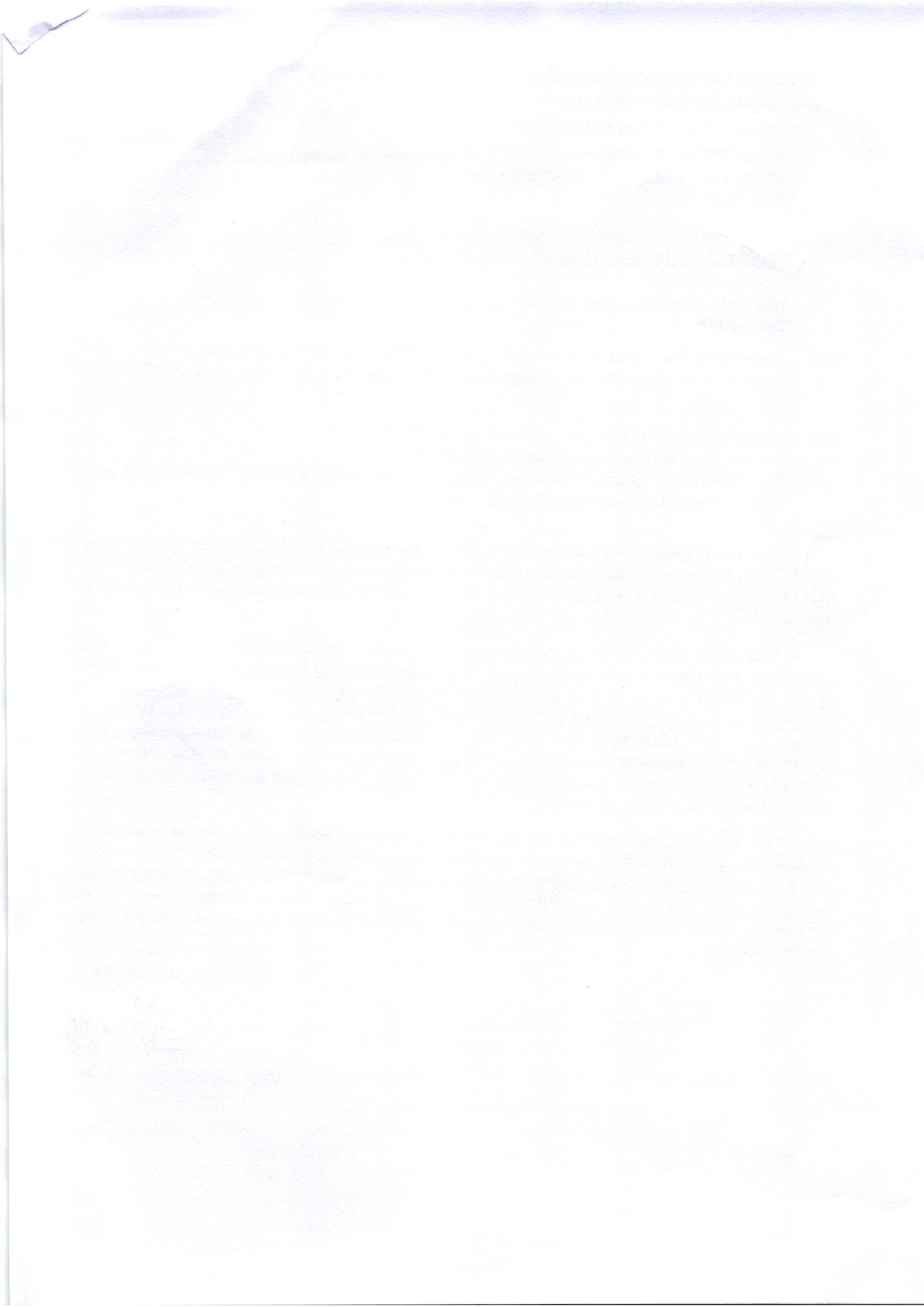
You are advised to carry out the necessary modifications in the draft Final Mine Closure Plan in the light of the contents vide Annexure I and submit **three (3) firm bound and two (2) soft copies of the document text in CD in a single MS Word file (the drawing/plates in Auto CAD compatible format or JPG format in resolution of 100x100 pixels on same CD)** of the Final Mine Closure 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 Final Mine Closure 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 Final Mine Closure Plan. It may be noted that no extension of time in this regard will be entertained and the Final Mine Closure 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



SCRUTINY COMMENTS ON EXAMINATION OF FINAL MINE CLOSURE PLAN WITH LEASE EXPIRING 31.03.2020 IN RESPECT OF SUKINDA CHROMITE MINE OF M/S TATA STEEL LTD., OVER AN EXTENT OF 406 HECTARES, LOCATED IN KALARANGITTA, KALIAPANI, MAHULKHAL VILLAGES & FOREST BLOCK NO. 27 OF JAJPUR DISTRICT OF ODISHA STATE, SUBMITTED UNDER RULE 24(1) OF MCDR, 2017.

- (1) On examination of contents of FMCP, it is found that, the name of the chapters are not mentioned properly as per the requirements of the guide lines, thereby the same should be checked and corrected accordingly.
- (2) The copy of the list of board of directors has been enclosed as annexure-4 but the phone/fax/e-mail ID for none of the directors has been furnished.
- (3) The environmental monitoring report for ambient air, water, noise etc. for the period from April 2017 to March 2018 has been enclosed as annexure- 18, 19 & 20 but the same have not been analysed through the NABL accredited/Govt. laboratory, which should be done for its authenticity.
- (4) The chemical analysis report in support of the grades of chromite ore has not been submitted, thereby the chemical analysis report all the excavation pits/quarries from Govt. /NABL accredited laboratory should be submitted.
- (5) The analysis reports for grade of the dumps from NABL accredited laboratory/Govt. laboratory also be submitted.
- (6) The compliance of conditions imposed while execution of lease deed, approval of mining plan, MOEF, SPCB may be submitted with remarks, if any deficiency is observed. The relevant document may be attached as annexure top the FMCP.
- (7) The grade of ROM, clean/saleable ore and mineral reject & waste should be furnished in remarks column. Besides, the proposal furnished in table for handling of waste, extent of area utilization, stacking and environmental protective measures should be in line with the latest approved document. (Page No. 5-7)
- (8) The balance reserve/resources as on 01/04/2018 have not been furnished separately for forest and non-forest area as per guidelines. (Page No. 9)
- (9) The co-ordinates of corner boundary pillars should be furnished in terms of latitude and longitude with UTM co-ordinates. (Page No. 21)
- (10) All the achievement as furnished against the proposals should updated as on 01/04/2018. (Para 5.0)
- (11) The updated information of the exploration as on 01/04/2018 for the year 2017-18 to be furnished with intimation of Form-I under rule 47 of MCDR2017. (Para 5.1 & page No.31)
- (12) Quantity of overburden/waste backfilled, dumped as per guideline in terms has not been furnished in the remarks column.(Para 5.5).
- (13) Quantity of mineral reject generation not furnished in terms of mineral reject generated, utilized and stacked. (Para No. 5.7)
- (14) Physiography has not been dealt with highest and lowest contour above MSL in the lease area. (Para 6.1.1)
- (15) The direction of flow of Damsal nala, ground water table and their seasonal fluctuation, existence of perennial water course from the lease area, relative humidity, prominent wind direction should be furnished in relevant para. (Para No. 6.1.2)
- (16) As per new guidelines para-6.6.2, 6.6.3 & 6.6.5 are omitted and para-6.6.4 is modified. Therefore information should be furnished accordingly as per new guidelines as below:

Sr no.	Modifying factor	Brief details of the applicable factors causing blockage of resources	Blocked resources (in T)	UNFC category
1	Technical factors			
2	Statutory factors			
3	Market or economy related factors			
4	Others			
Total Blocked Resources (in T)				

(17) Para- 6.9 are omitted as per new guidelines and reserve and resources to be shown separately for forest and non-forest area.

(18) The future exploration program if any should be proposed as per provision of rule 12(4)(A) of MCDR 2017. A bar chart indicating timeline for implementation of proposed exploration activities should be enclosed.

(19) Brief details regarding preservation of cores obtain while exploration within the lease area should be given. No cores should be destroyed without the permission of Chief Controller of mines. As per rule 63(4) of MCDR 2017, the cores should be stored serially with suitable indexing and cataloguing and shall insure submission of cores as per the manual issued by GSI from time to time.

(20) Para-9.1, table no.9.3, details of top soil and waste/OB/MR disposal manner during the closure period of two years should be furnished in revised format as below:

Year	Top soil (cu.m)		OB/Waste (cu.m)	
	Top soil reuse	Top soil storage	Backfilling	Dumped
I				
II				
Total				

(21) Briefly describe the proposed dumping ground within lease area be proved for presence or absence of mineral with reference of bore holes data. (Para No. 9.2)

(23) Baseline information about the area should be described on the basis of information incorporated in first approved mining plan at the time of grant of ML (Para 11.0)

(24) The quarry wise backfilling proposal should be furnished. Besides, details of the reclamation/rehabilitation programme during the final closure to be submitted. The proposals may be supported with yearly plans and sections depicting yearly progress in the activities for land restoration/ reclamation/rehabilitation, afforestation etc. called "Reclamation Plan". Sequence of filing should be same as per original sequence of the litho units occurring in the lease area. (Para No. 11.2.1)

(25) Describe the proposals to be implemented for securing the excavation /pits /mineralized dump or mineral rejects stacks/fine stacks by means of fencing etc. Explain the safety measures implemented to prevent access to surface openings, excavations etc. The lessee should ensure fencing of any excavation endangering fall of persons/cattle etc. in terms of rule 26 of MCDR2017. The proposal may be supported with yearly plans and sections depicting yearly progress in the activities for protective measures like fencing etc. called "Reclamation Plan". (Para No.11.2.2)

(26) All the active dumps should be proposed with extension of retaining wall and garland with settling tanks with proper terracing and stabilization of slope. The dead dumps should be proposed for fully rehabilitation by plantation and with gap plantation if necessary. The proposed and existing retaining wall, garland drain and settling tanks should be clearly marked year wise on reclamation plan. (Para No.11.2.7)

(27) The details of existing infrastructure available in the lease area should be furnished in tabular form and their present value after depreciation. Further their future utilization should be evaluated on case to case basis. The decommissioning cost and final value of the decommissioned infrastructural facilities if any may be furnished. Accordingly, in para-11.2.12, decommissioning of mining machineries and their possibility of post mining utilization if any may be described. (Para No.11.2.11)

(28) The economic repercussions due to closure of mine have not been explained properly. Envisaged repercussions on the expectation of the society due to closure of mine. Number of local residents employed in the mine, compensation, satellite occupations should be describe considering the impact of closure of mines. (Para-11.2.14)

(29) Time scheduling for abandonment of mines considering the activity like waste dump management (Garland drain, retaining wall, settling tanks plantation), safety and security (fencing of pits, dumps etc.), Disposal of machineries, reclamation & rehabilitation, infrastructure, protective measures of environment should be supplemented by PERT or Bar chart and these activities should be clearly shown on reclamation plan. (Para No.11.2.15)

(30) Abandonment cost as furnished in tabular form has not includes the safety measures implemented to prevent access to surface openings, excavations etc. The cost of maintenance, security and supervision has also been not included. (Para No. 11.2.16)

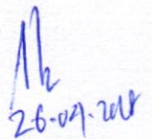
(31) The information on protective measures has not been furnished as per format prescribed in guidelines with break-up of forest non-forest area. Para-12.0 may be omitted as per new guidelines. (Para-11.3)

(32) DRG No. FMCP/05 (Surface Plan): An updated surface plan with latitude, longitude of all corner pillars should be furnished. Few pillars may be correlated with some permanent ground features giving distance and direction.

(33) DRG No. FMCP/07 (Geological Plan): An updated Geological plan and sections considering the exploration carried out in proposed period plan upto 01/04/2018 should be furnished.

(34) DRG No. FMCP/08 (Longitudinal vertical sections): The mineralised area should be shown distinctly on geological plan and sections. Different level of exploration like G1, G2, G3 etc. in line with MEMC rule 2015 to be depicted on geological plan and UNFC codes should clearly furnished in sections.

(35) DRG No. FMCP/13 (Environment Plan): All existing features available within 500m radius of the lease area should be clearly marked on this plan.


26-09-2018

(G. C. SETHI)

Deputy Controller of Mines

