



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



BY REGD POST
Phone: 0674-2352463
TeleFax: 0674-2352490
E-mail: ro.bhubaneshwar@ibm.gov.in
Plot No.149, Pokhariput
BHUBANESWAR-751020

No. MS/FM/19-ORI/BHU/2017-18

Date: 23.10.2017

To

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

Sub: Approval of Review of Mining Plan of Sukinda Chromite Mine along with Progressive Mine Closure Plan (PMCP), over an area of 406.00 ha in Jajpur district of Odisha State, submitted by M/s Tata Steel Ltd under Rule 17 of MCR, 2016.

Ref: - i) Your letter No. SCM/MPP/25/17 dated 25.09.2017.
ii) This office letter of even no. dated 27.09.2017.
iii) This office letter of even no. dated 27.09.2017 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 Review of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on site inspection dated 13.10.2017 by Shri G C Sethi, Deputy 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 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.

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

Regional controller of Mines

SCRUTINY COMMENTS ON EXAMINATION OF REVIEW OF MINING PLAN & PROGRESSIVE FOR 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 17(2) OF MCR, 2016 AND & 23 OF MCDR, 2017.

(1) In the consent letter/undertaking/certificate from the applicant, the consent has been given for preparation of the scheme of mining but provisions for scheme of mining is not there in the MCR, 2016 & MCDR,2017,thereby the consent letter/undertaking/certificate from the applicant should be revised accordingly.

(2) On examination of the contents for plates, it is found that, the plate for Reclamation plan has not been submitted and the same may done by depicting the proposed reclamation, rehabilitation & afforestation etc. for ease in monitoring. Besides, the plates has been numbered in the manner like SCM/MP-R1/01/17, instead the plates should be either numbered like 1,2,3 etc. or I,II,III for ease in identification.

(3) The copy of the supplementary lease deed has been enclosed as annexure-6 but the authenticated land schedule for the lease area of 406ha of area has not been submitted.

(4) Shri H. Behera has been signed the document in his capacity as **recognised person**, instead he should have signed as Qualified Person. Moreover, the ID proof & address proof in support of Shri Behera has not been enclosed.

(5) The ambient Air quality & water quality analysis report has been enclosed as annexure-17 & 18 but the reports dose not bear name of the analytical laboratory, which should be indicated. Besides, the copy of the valid NABL accreditation certificate in support of the analytical laboratory, which has analysed the air & water samples, may also be submitted. Moreover, the analysis report for noise level, ground vibration etc. may also be enclosed for more informative.

(6) A copy of the Bank Guarantee is stated to be enclosed as annexure-20 but no such paper is found enclosed, thereby a valid bank guarantee matching to the ensuing review of mining plan period for the extent of area put to use in different counts should be submitted.

(7) A good number of photographs in support of dump rehabilitation measures & plantation etc. has been enclosed as annexure-28 but not a single photograph for boundary pillars, existing pit/quarry & already reclaimed area has been enclosed & the same may be submitted for more informative.

(8) The NABL Accreditation certificate in favour of FAMD Sukinda, M/s TATA Steel has been enclosed as annexure-22 but the validity for the same has already expired on 30.03.2017.

(9) The litho logs of the already drilled bore holes are enclosed as annexure-24 but the authenticated analysis report for such logs has not been enclosed and the same should be submitted.

(10) The copy of the explosive procurement license issued by the competent authority in favour of FAMD Sukinda, M/s TATA Steel Ltd., has not been enclosed. Besides, a copy of the blasters license issued by the competent authority for carrying out blasting operations may also be submitted.

(11) Under the heading Status of Mining Plan, a mention has been made about the approval status of mining plan, under the Rules 22 & 24A of MCR,1960 but a copy of the approval letter for the same has not been enclosed, which should be submitted. (Page No.5)

(12) Band wise grades of chrome ore has been furnished in the para under reference but the chemical analysis report in support of the different grades with different bands has not been furnished, which should be submitted for more informative. [Para 1.0(c)]

(13) During the period from 1990 to 2014-15, there are 627 nos. of bore holes were drilled and the borehole logs for the same has been enclosed as annexure-24 but analysis report in support of such holes has not been enclosed, which should be submitted. Accordingly, necessary modifications/incorporations may also be made in connected paras in the text for ease in monitoring. [Para 1.0(e)(ii)]

(14) An extent of 26.98ha of lease area has been explored upto G1 level but the status of exploration for G2, G3 & G4 has not been furnished, thereby, **the balance un-explored area should be explored by drilling core boreholes atleast G2 level. The exploration proposal should be restricted to the financial year 2018-19.** Accordingly, necessary modifications/incorporations may also be made in connected paras in the text with proper plate reference. (Table 1.2)

(15) There is a mention that, the bore hole samples were stated to be analysed with your own laboratory certified by NABL but the NABL Accreditation certificate enclosed as annexure-22 has already lapsed on 30.03.2017. Besides, atleast 10% of the analysis should be done by third party NABL/Govt. Lab. But the same has not been done. [Para 1.0(e)(iii)]

(16) The summery of Chromite mineral reserves & remaining resources as on 01.01.2016 has been furnished in the above referred table but the same for Pyroxenite has not been given, which should be furnished. (Table 1.3)

(17) In the table furnished, under the heading **Insitu Tentative Excavation:** (i) For the years 2018-19 to 2019-20, the proposed status of OB generation, production of Chrome ore, Pyroxenite ore & mineral rejects generation has been furnished in tabular form but the bench/RL of the excavation planning has not been given, which should also be furnished by adding one more column in the table. (ii) The recovery percentage of the chrome ore, Pyroxenite & mineral reject is missing, which should be furnished supported by authenticated recovery test report. (iii) The location co-ordinates of the excavation planning for each year also not furnished and the same may also be given by adding one more column in the table with proper plate reference. (v) The grades of Chrome ore, Pyroxenite, mineral reject may also be furnished supported by authenticated chemical analysis report. Accordingly, corresponding incorporations /modifications may also be made in connected paras in the text & relevant plates. [Para 1.0(A)(I), page No. 76]

(18) The production planning for OB X quarry has been furnished in two separate tables but it is not known why tables for different production proposals has been furnished should be explained. [Table 2.3(A) & 2.3(C)]

(19) No production planning for OB II quarry has been given but a blank table for the same has been furnished, which is uncalled for. The OB II quarry is proposed to be backfilled during the review of mining plan period but the extent of area proposed to be backfilled in each year and quantities of waste materials required should be furnished. Besides, the height such backfilling & the location co-ordinates for the same may also be furnished. All should be presented in tabular form.[Table 2.3(B)]

(20) The proposals for joint mining with M/s Jindal Stainless Ltd. & M/s FACOR mentioned in the page under reference is beyond the purview of this document, thereby the same should be deleted wherever it is mentioned in the document. (Page No.88)

(21) In last column of the table, it is mentioned that, the reclamation by backfilling is in process; instead the present status of reclamation only need be given for ease in monitoring. [Table 2.6(B)]

(22) The proposed status of underground mine has been furnished but the existing status on the different underground activities has not been given, which should be furnished. Accordingly, proposed method of underground mining needs to be discussed. Besides, the plan & sections linked with the existing underground activities may also be furnished. Accordingly, the relevant chapters of the document may also be revised. (Page No. 95 to 109)

(23) Under the heading **Conceptual Production**, the tentative production planning beyond the lease period has been furnished, instead the same should be restricted to 31.03.2020. Accordingly, necessary incorporations/ modifications may also be made at other relevant places of the document. (Page No. 110)

(24) Under the heading **Conceptual Reclamation**, the reclamation & rehabilitation proposal beyond the lease period is uncalled for, since the extended lease is valid upto 31.03.2020, thereby the proposed reclamation & rehabilitation activities should be upto the lease period, thereby the para may be revised. Accordingly, the drawings submitted for conceptual plans & sections may also be revised. (Page No. 112)

(25) The re-handling of waste dump No.2A has been proposed but the recovery percentage of chromite and the grade of chrome ore has not been given and the same should be furnished supported by authenticated dump recovery test report & chemical analysis report in support of the grades from Govt./NABL Accredited laboratory. (Table 2.15)

(26) Under the heading of Underground Mining, nothing has been given, thereby the status of existing & proposed underground mining method to be furnished. (Para B(III),Page115)

(27) The location co-ordinates of the plantation is missing, which should be furnished by adding one more column in the table. Besides, the proposed survival rate of plantation for each year may also be furnished. (Table 4.8)

(29) The present land use for different counts has been furnished in the referred table but the same by end of each year of the ensuing review of mining plan period is missing, which should be furnished for ease in monitoring. Accordingly, the information furnished in table 8.5 may also be revised. (Table 8.2)

(30) Pit/quarry wise extent of area proposed to be degraded in each year of the ensuing two year period should be furnished. Besides, pit wise extent of area utilized for dumping, reclamation, rehabilitation & afforestation for each year of the aforesaid period may also be furnished. All should be furnished in tabular form and rest of the things should be erased. (Para 8.3.1)

(31) The proposed and actual achievements status in different counts from 2011-18 has been furnished, instead the same by end of each year for the period from 2011-12,2012-13,2013-14,2014-15,2015-16,2016-17 & 2017-18 should be furnished and the table may be revised suitably. (Table 8.9)

(32) In item no.4 of the table, the extent of area proposed to be reclaimed in each year of the ensuing two years period has not been given, which should be furnished. (Table No.8.10)

(33) The name & contact number of the person responsible during the emergency should be furnished. Besides, nearest fire stations, hospitals and police station is required to be mentioned for more informative. (Para 8.4)

(34) The financial assurance in the form of Bank Guarantee is stated to be enclosed as annexure-20 but no such annexure is found enclosed. (Para 8.6)

(35) 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 lease map authenticated by the State Govt. of Odisha and found to be correct.

(36) DRG No. SCM/MP/01/17(Key Plan): The details of the deficiencies found on the plate are as follows: (i) The 5km radius of the lease area has not been marked on the plan and also an index reference for the same not furnished. (ii) The index reference given for many of the features are not matching with that of the plan portion of the plate. (iii) Direction of flow of River/nala is missing on the plan. (iv) No index reference has been given for reserved forest & other types of forest depicted on the plan portion of the plate. (v) Population of the villages falling within 5km radius of the lease area also not furnished.


(37) DRG No. SCM/MP-R1/01B/17(DGPS Survey Map): (i) The covering letter of Geo referenced map certified by ORSAC have not been enclosed. (ii) The mining lease has been granted and executed over an extent of 406ha but the DGPS Survey Map /Geo referenced map has been prepared over an extent of 406.4200ha, which is not matching with the extent of lease area. (iii) Further DGPS survey map of the lease area should be certified by the State Govt. authorities.

(38) DRG No. SCM/MP-R1/02/17 (Surface Plan): (i) The pillar co-ordinates of all the lease boundary pillars have not been furnished. (ii) At least three permanent ground control points beyond the lease area has not been selected, which should be done. Besides latitude and longitude of those ground control points should be furnished and the ground control points need to be linked with boundary pillars.

(39) DRG No. SCM/MP-R1/03/17 (Geological Plan): (i) As per the new Minerals (Evidence of Mineral Contents) Rule,2015, the level of exploration at different stages (G1,G2,G3,G4) and unexplored area should be properly defined in tabular format and the same should be marked on the geological plan. (ii) New exploration proposal covering the entire lease area to the G2 level of exploration should be proposed and the same should be completed before 31.03.2019. Accordingly, necessary modifications/incorporations may also be made in Geology and Exploration chapter.

(40) DRG No. SCM/MP-R1/06/17, Sheet No.2 (Development Plan of OB X Quarry for 2019-20): The index reference given for the proposed quarry profile for the years 2018-19 & 2019-20 are not clearly demarcated on the plan portion of the plate, thereby the development proposed in both the years should be differentiated by separate colour codes for ease in monitoring. Accordingly, the plates submitted showing the development sections and other relevant plates submitted along with the document may also be revised.

(41) DRG No. SCM/MP-R1/08/17(Environment Plan): All existing features available within 500m radius of the lease area should be depicted & the plate may be revised accordingly.


20.10.2017
(G. C. SETHI)

Deputy Controller of Mines