



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. MS/OTFM/18-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 Joda West Iron & Mn Mine along with Progressive Mine Closure Plan (PMCP), over an area of 1437.719 ha in Keonjhar district of Odisha State, submitted by M/s Tata Steel Ltd under Rule 17 of MCR, 2016.

Ref: - i) Your letter No. SCM/MPP/26/17 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 27.09.2017 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 MEENA)

Regional controller of Mines

SCRUTINY COMMENTS ON EXAMINATION OF REVIEW OF MINING PLAN & PROGRESSIVE FOR JODA WEST IRON & MANGANESE MINE OF M/S TATA STEEL LTD., OVER AN EXTENT OF 1437.719 HECTARES, LOCATED IN JODA, KAMARJODA, BANSPANI, BICHAKUNDI, BHUYAN ROIDA VILLAGES, UNDER CHAMPUA SUB-DIVISION OF KEONJHAR 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 MP/JWMM/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-G but the authenticated land schedule for the lease area of 1437.719ha in favour of Joda west iron & manganese mine has not been submitted. Besides, in the supplementary lease deed there is no mention about the lease status of the foresaid mine, thereby, a copy of the lease deed executed in the last occasion may also be 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 & noise level analysis report has been enclosed as annexure-J, K & L 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 ground vibration etc. may also be enclosed for more informative.
- (6) On examination of summery of exploration carried out, enclosed as annexure-1-A, it is found that, the actual exploration status over an extent of 832.079ha, under UNFC has not been given, which should be furnished and the annexure may be revised accordingly.
- (7) The litho logs of the already drilled bore holes are enclosed as annexure-1B but the authenticated analysis report for such logs has not been enclosed and the same should be submitted. Besides, atleast 10% of the analysis should be done by third party NABL/Govt. Lab. but the same has not been done.
- (8) The NABL Accreditation certificate in favour of TATA Steel Ltd., Mines division has been enclosed as annexure-1-C but the validity for the same has already expired on 09.09.2016.
- (9) The copy of the Hydrogeolocal study report from S.S Environnics (India) Pvt. Ltd has been enclosed as annexure-P but the copy of the NABL Accreditation certificate in favour of the aforesaid Laboratory has not been submitted.
- (10) Not a single photograph of the mine has been enclosed, thereby few photographs in support of quarry/pit, dump, reclamation, rehabilitation, afforestation & boundary pillars etc. should be submitted for more informative.
- (11) The copy of the valid bank guarantee valid bank guarantee matching to the ensuing review of mining plan period for the extent of area put to use in different counts has not been submitted.

(12) The copy of the explosive procurement license issued by the competent authority in favour of Joda west iron & manganese mine of 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.

(13) The approval status of mining plan/scheme of mining has been furnished in the table No. III.1 but a copy of the approval letter for the same has not been enclosed, which should be submitted. (Table No. III.1)

(14) The proposed and actual achievement status of production & overburden generation has been furnished in the referred table but it is not known the same is from iron ore or for manganese has not been specified, which should be indicated. Besides, the actual production & overburden handling for the year 2017-18 should be furnished as on date & the table may be revised accordingly. (Table No. III.5)

(15) The extent of other areas of 832.079ha is considered as non-mineralised based on surface out crops like BHJ, Shale, bore information etc. Instead the said portion of the lease area should be explored during the ensuing review of mining plan period as per the requirement of UNFC. Accordingly, the information furnished in table 1.2A & 1.2B and any other place of the document may also be revised. (Table 1.2)

(16) During the period from 2018-19 to 2022-23, there are 140 nos. of boreholes are proposed to be drilled but level of exploration & the location co-ordinates of such holes are missing, which should be furnished. Besides, the extent of area proposed to be explored in each year should also be furnished in the refer table. Moreover, **the balance un-explored area should be explored by drilling core boreholes atleast G2 level and exploration proposal should be restricted to the ensuing five year period.** Accordingly, necessary modifications/incorporations may also be made in connected paras in the text with proper plate reference. (Table-1.3)

(17) The classification for different grades of manganese & iron ore has been furnished in the page under reference but no authenticated analysis report for the same has been submitted. (Page No. 31 & 32)

(18) Existing method of mining has not been furnished in detail as per the heading of the para, which should be discussed, including the existing status of pits/quarries both for manganese & iron ore, dumps, reclamation, rehabilitation & afforestation etc. for more informative. Besides, nothing has been discussed about the proposed method of mining and the same should also be furnished by giving proposed quarry(s), bench formation status both in overburden & in ore zone, dumping, reclamation & rehabilitation etc. for clarity. If the existing quarries are proposed to be developed /extended, the same may also be furnished. In the light of the above; the entire para may be revised. [Para 2.0(A)(a)]

(19) In the table 2.3A furnished, under the heading **Insitu Tentative Excavation**, the following observations are made: (i) During the years 2018-19 & 2019-20, the excavation planning for 3 nos. of manganese quarries such as D-quarry, H-quarry & I-quarry are proposed under excavation but from the I-quarry, very small quantities of manganese production has been proposed, thereby the production proposed from I-quarry can be adjusted from D & H quarries. Likewise, during the 2020-21, there are 4 nos. quarries such as D,H,I & Gangiagor (a quarry) has been proposed under excavation planning, instead only the D & H quarries can be proposed by adjusting the production proposed from I & Gangiagor (a quarry) for the sake of minimum land degradation & scientific mining. In view of the above, the D & H quarry for manganese production can be proposed during the ensuing review of mining plan period. If all the above proposed quarries are really required, suitable technical reasons for the same may be furnished. (ii) The proposed status of OB/SB generation, production of manganese ore & mineral rejects generation has been furnished in the above referred table 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. (iii) The recovery percentage of the manganese & mineral reject is missing, which should be furnished supported by authenticated recovery test report. (iv) 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 manganese ore & 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 2.0(b), page No. 49]

(20) In the table 2.5 furnished, under the heading **Insitu Tentative Excavation**, the following observations are made: (i) During the years 2020-21 to 2022-23, the excavation planning for 2nos. of iron ore pit such as north pit & south pit are proposed under excavation planning but production proposed from both the pits can be achieved from a single pit, thereby any one of the pit can be proposed to achieve the required production. If it is really necessary to work the iron ore in two locations, the reasons for the same may also be discussed. (ii) The proposed status of OB generation, production of iron ore & mineral rejects (sub-grade + fines) generation has been furnished in the above referred table 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. (iii) The recovery percentage of the iron ore & mineral reject is missing, which should be furnished supported by authenticated recovery test report. (iv) 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 iron ore & 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 2.0(b), page No. 53]

(21) The land use at the end of scheme period has been given in the referred table; instead the table may be re-named as land use at the end of review of mining plan period. The land use at the end of the ensuing five year period has been furnished in column 5 to 7 and a separate table for the land use in different counts by end of the each year from 2018-19 to 2022-23 may also be furnished for ease in monitoring. (Table 2.12)

(22) The proposed generation status of top soil from manganese quarries has been furnished in column 2 in the referred table but no provisions for stacking/ preservation has been made, which should be furnished & the location co-ordinates for stacking the same should be furnished with proper plate reference for more informative. (Table No. 4.1)

(23) The proposed generation status of sub-grade from manganese quarries has been furnished in the referred table but no provisions for stacking/blending has been made, which should be furnished & the location co-ordinates for stacking the same should be furnished for ease in monitoring. (Table No. 4.2)

(24) The proposed generation status of sub-grade from iron ore pits has been furnished in the referred table but no provisions for stacking/blending has been made, which should be furnished & the location co-ordinates for stacking the same should be furnished for ease in monitoring. (Table No. 4.4)

(25) The present status of dumps has been furnished but the location co-ordinates of such dumps are missing, which should be furnished. All should be presented in tabular form. (Page 97 & 98)

(26) Provisions for retaining wall & garland drains for the existing/proposed dumps has not been given, which should be furnished and the table may be revised accordingly. (Table No. 4.6)

(27) The proposed status of dumps for iron ore has been furnished in tabular form in the referred table but the location co-ordinates for such dumps has not been furnished. (Table No. 4.8)

(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)

(28) Year wise dump rehabilitation measures for the period from 2015-16 to 2019-20 has been furnished, instead the same for the period from 2018-19 to 2022-23 should be furnished indicating the name of the dump(s) for ease in monitoring. (Table 4.9)

(29) 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 4.10)

(30) The construction status of proposed retaining wall and garland drains has been furnished but the name of the dump for which such retaining walls and garland drains are required is not mentioned, thereby the name of the dumps should be given by adding one ore column right to the table for ease in monitoring. (Table 4.10)

(31) 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. Accordingly, the information furnished in table 8.9 may also be revised. (Table 8.1)

(32) 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.

(33) DRG No. JWMM/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) No colour codes for the features furnished in the index & on the plan portion of the plate has been given. Besides, 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.

(34) Plate No. MP/ JWMM/1-B/(Digitized Lease Map): The plate has not been authenticated by the competent authority of State Govt.,thereby not acceptable in its present form.


(35) DRG No. MP/JWMM/01-E/17 (Satellite Image showing the lease boundary): (i) The geo-referenced map has been prepared by M/s Visiontek Consultancy Services Pvt. Ltd but not signed by the aforesaid services. Moreover, M/s Visiontek Consultancy Services Pvt. Ltd. is not an empanelled agency of the State Govt. of Odisha for preparation of Geo-reference cadastral map, thereby the same should be prepared & signed by the appropriate empaneled agency only. (ii) The mining lease has been granted and executed over an extent of 1437.719ha but the DGPS /Geo referenced map has been prepared over an extent of 1433.7100ha, 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.

(36) DRG No. MP/JWMM/02-A/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.

(37) DRG No. MP/JWMM/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 within the ensuing five years period. Accordingly, necessary modifications/incorporations may also be made in Geology and Exploration chapter.

(38) DRG No. MP/JWMM/10A/17 (Environment Plan): All existing features available within 500m radius of the lease area should be depicted & the plate may be revised accordingly.

  
23-10-2017

(G. C. SETHI)

Deputy Controller of Mines