

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
Tele Fax: 0674-2352490
E-mail: ro.bhubaneshwar@ibm.gov.in

Plot No.149, Pokhariput BHUBANESWAR-751020

Date: 25.10.2019

No. RMP/A/18-ORI/BHU/2019-20

सेवामे

Narendran, Managing Director & Nominated Owner,

M/s Tata Steel Ltd,

At/P.o- Jamsedpur,

Dist - East Singbhum,

Jharkhand - 831001

विषय: Approval of Review of Mining Plan of Tringipahar Iron & Mn Mine along with Progressive Mine Closure Plan (PMCP), over an area of 643.710 ha in Keonjhar district of Odisha State, submitted by M/s Tata Steel Ltd under Rule 17 of MCR, 2016.

संदर्भ: - i) Your letter No. MGM/P&E/706/19 dated 27.09.2019.

ii) This office letter of even no. dated 30.09.2019.

iii) This office letter of even no. dated 30.09.2019 addressed to Director of Mines, Government of Odisha copy endorsed to you.

महोदय,

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 2310.2019 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 https://docs.org/line.com/html. In the light of the contents vide Annexure 1 and submit https://docs.org/line.com/html. If 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.

क्षेत्रीय खान नियंत्रक

Copy for kind information and further necessary action to Shri Sabyasachi Mishra, M/s Tata Steel Ltd, At/PO- Bichakundi, Dist- Keonjhar , Odisha-758034.

(हरकेश मीना) क्षेत्रीय खान नियंत्रक

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SCRUTINY COMMENTS ON EXAMINATION OF REVIEW OF MINING PLAN & PROGRESSIVE FOR TIRINGPAHAR IRON & MANGANESE MINE OF M/S TATA STEEL LTD., OVER AN EXTENT OF 643.710 HECTARES, LOCATED IN GURUDA, PALASA(KHA), KHANDABANDH & JARIBAHAL 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 front cover of the review of mining plan, the extent of lease area for which the document has been submitted has not been clearly indicated, which should be mentioned for more informative.
- (2) On examination of the contents for list drawings, it is found that, separate drawings for iron ore stacking, backfilling, mineral reject stacking etc. are submitted, instead the proposals for the same should be incorporated in the drawings submitted for development plans & sections, reclamation plans and other relevant plates submitted along with the document. It is not necessary to submit so many plates, rather minimum number of drawings as required in the prescribed format for preparation of review of mining plan/modification of the mining plan should be submitted.
- (3) There are two volumes of the list of annexure are submitted along with the review of mining plan but numbering of any of annexure is not done, there all should be serially numbered for their ease references in the document.
- (4) On examination of the copy of the resolution of the board of directors enclosed as annexure-1, it is found that, Shri T.V. Narendran is appointed as Occupier of so many companies under Factories Act, 1948 but he has not been nominated as Owner of the mines under Mines Act. No such mention is found in the enclosed board resolution. Moreover, the list of Board of Directors of M/s TATA Steel, dated 18.04.2019 has been enclosed as annexure-4 but the resolution of the board of directors passed on 22.10.2013 has been enclosed, which is not proper.
- (5) The copy of the surveyor's certificate in favour of Shri Jagabandhu Sahoo has been enclosed as annexure-6 but his employment status in Tiringpahar Iron & Manganese mine has not been submitted.
- (6) The copy of the authenticated land schedule only or Guruda block has been submitted as annexure-13; instead the same for other lease blocks may also be submitted.
- (7) The ambient Air quality, water quality & noise level analysis report has been enclosed as annexure-20,21 & 22 but the report pertains to last four seasons ended by September 2019 has not been submitted.
- (8) The explosive procurement license issued for Joda West Manganese Mine has been enclosed as annexure-26, instead the same for Tiring Pahar Manganese Mine should be submitted.
- (9) The copy of the typical analysis of ore and dump done in house has been enclosed as annexure-32, instead the analysis of the same from 3rd party NABL should be obtained and submitted for more informative.
- (10) Details of borehole logs are enclosed as annexure-33 but it is not known from where such borehole logs are procured, which should be mentioned. It is also not known when such bore holes were drilled. Sufficient evidence to be established that, these boreholes are drilled in Tirigpahar manganese mine of M/s TATA Steel Ltd., during so and so period along with the Form J & K in support of such drilled boreholes. Simply enclosing the bore hole data/logs without any other details will not been entertained. Moreover, authenticated analysis report for such logs has not been enclosed.. Besides, atleast 10% of the analysis of such n boreholes should be done by third party NABL/Govt. Lab. and the same also not been done.
- (11) Analysis report for grade of iron ore and sub-grade iron ore has been enclosed as annexure-34, which is not necessary as reserves/resources of iron ore have not been estimated and no production planning for the same envisaged in the review of mining plan.

- (12) Form J for few already drilled boreholes are enclosed as annexure-39 but authenticated chemical analysis report for the same has not been submitted. Besides, atleast 10% of the analysis of such n boreholes should be done by third party NABL/Govt. Lab. and the same also not been done.
- (13) The exploration details as on 01.04.2018 is stated to have been enclosed as annexure-41, instead the same as on 01.04.2019 should be furnished.
- (14) The summery of exploration proposal for the review of mining plan has been furnished in the enclosed annexure-42 but it is found the entire lease area has not been covered under the proposed exploration schedule; thereby the exploration proposal should be revised accordingly.
- (15) The extent of potential area of mineralised zone is furnished in the annexure-43 but it is suspected that, the entire lease area has not been explored so far but the basis on which the potentially mineralised area has been decided is not known, which should be discussed.
- (16) The feasibility report is enclosed as annexure-44 but it is not known whether, it is for the entire lease area of 643.710 ha or intended retained area of 169ha should be specified. It is to mention that, the surrender portion of the lease area has not been accepted by the State Govt. till date but everywhere in this document it is mention as original lease area & retained area, instead the retained area should be mention as intended to retain area. Accordingly, necessary corrections may also be made at all the places of the document including the drawing submitted along with the document. The feasibility report should cover the entire leased out area as you consider as original lease area.
- (17) The copy of the Hydrogeolocal study report from S.S Environnics (India) Pvt. Ltd has been enclosed as annexure-45 but the copy of the NABL Accreditation certificate in favour of the aforesaid Laboratory has not been submitted.
- (18) Few photographs enclosed as annexure-46 are examined and found that many of the photographs are taken during 2015, which is not acceptable. Therefore, few fresh photographs of the quarry, dump, stack, plantation, reclamation, rehabilitation, exploration & boundary pillars should be submitted.
- (19) 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.
- (20) The authenticated land schedule over an extent of 474.710ha furnished in the table under reference has not been furnished, whereas the land classification of the aforesaid area cannot be considered as its legal status, thereby the terminology legal status of the area mentioned with reference to FMCP to be re-checked. [Table 2.1(B)]
- (21) Why the review of mining pan is confined to the Guruda block along is not correct. In any case, the land status and all existing details for the entire leased out area, which was granted originally to be furnished in addition to the Guruda block. [Table 2.2)
- (22) During the period from 2020-21 to 2022-23, there are 68 nos. of core/RC/DTH holes are proposed, instead the numbers for core, RC & DTH should be specified. 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 1st three years of the review of mining plan period. Accordingly, necessary modifications/incorporations may also be made in connected paras in the text with proper plate reference. (Table-1.3)

- (23) 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. 30 to 35)
- (24) The reserves/resources have been updated as on 01.08.2019 only by depleting production achieved during the previous years but a good number of boreholes were drilled during 2018-19 and the enhancement of reserves/resources due to the recent exploration data has not been incorporated. Therefore, the reserves/ resources should be re-estimated considering the inputs reported from all such drilled boreholes. Accordingly, the plates submitted for geological plans & sections and other relevant plates may also be revised accordingly in addition to the relevant text part of the document. (Tables 1.9a to 1.9d)
- (25) 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 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)]
- (26) In the table 2.7 furnished, under the heading Insitu Tentative Excavation, the following observations are made: (i) During the years 2020-21 & 2024-25, the excavation planning for 2nos. of manganese quarries such as Guruda-A & Guruda-B are proposed under excavation:(i) 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. (ii) The recovery percentage of the manganese & 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. (iv) The grades of manganese ore & mineral reject may also be furnished supported by authenticated chemical analysis report. (v) The bulk density manganese has been considered as 2.5 cum/t and the same for overburden is considered as 2 tonnes/cum & for iron 2.7cum/tonne but the authenticated bulk density test report has not been submitted. Therefore, corresponding incorporations / modifications may also be made in connected paras in the text & relevant plates. [Para 2.0(b), page No. 44]
- (27) There is no existing iron ore quarry in Guruda block A and authenticated chemical analysis report for occurrence of iron ore has not been submitted, thereby the excavation planning should be restricted to manganese portion only. Accordingly, the entire excavation planning including all the plans & sections should be revised. (Table No. 2.10)
- (28) DRG No. 1(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 separate 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.
- (29) Plate No. 3A (Digitized Lease Map): The plate submitted for lease plan is not clearly legible and the same should be replaced by a fresh and legible copy for ease in monitoring.

- (30) DRG No. 5A (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. (II) All existing features such as existing bore holes and other prominent features have not been depicted. Accordingly, necessary corrections/ modifications may also be made in other relevant plates.
- (31) DRG No. 7A(Geological Plan): (i) As per the 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) The exploration proposal covering the entire lease area to the G2 level of exploration should be proposed and the same should be completed within the next three years period. Accordingly, necessary modifications/incorporations may also be made in Geology and Exploration chapter. (iii) Many of the geological features & its lithology have not been depicted. The existing lithology given in the already drilled boreholes are not correctly marked on the geological plan. The plate may be revised suitably. Accordingly, the drawings submitted for geological sections and other relevant plate should also be revised.
- (32) DRG No. 8(Geological sections): (i) None of the geological sections are matching with the features shown on the geological plan. (ii) Many of the litho units depicted on the plan are found to be not correct as per their locations. The plates may be revised suitably.
- (33) DRG. 9A & 9B (Excavation Plan): It is found that, common boundary working with Bamenari Manganese mine has been proposed, which is not acceptable as Tiringpahar block, Joruri block and part of the Guruda block of the Tiringpahar mining lease area has been applied for surrender and the same has not been accepted by the State Govt. so far. Moreover, no clarity on demarcation of part lease block on the ground. Therefore, the excavation planning should be revised suitably. Accordingly, corresponding modifications/corrections may also be made in connected paras in the text and relevant plates.
- (34) DRG No. 14A (Environment Plan): All existing features available within 500m radius of the lease area should be depicted & the plate may be revised accordingly.
- (35) The geo- referenced map of the lease has not been enclosed and the same should be submitted.