



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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BHUBANESWAR-751020

No. BBS/SNG/IRON-MN/2167/MP/2022-23

Date: 18.04.2022

To

Shri Navnath Laxman Vhatte, Nominated Owner,  
M/s ESL Steel Ltd,  
Siyaljori, P.o – Jogidih,  
O.P. Bangaria, Bokaro,  
Jharkhand – 828303

Sub: Approval of Mining Plan of Nadidih Iron Ore Mine along with Progressive Mine Closure Plan (PMCP), over an area of 74.50 ha in Sundargarh district of Odisha State, submitted by M/s ESL Steel Ltd under Rule 16 of MCR, 2016.

Ref: - i) Your letter No. ESL/TSD/2021-22/NI-10 dated 10.03.2022 received on 01.04.2022.

Sir,

This has reference to the letter cited above on the subject. The draft Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on site inspection carried out on 10.04.2022 by Shri Sanjib Kumar Mahapatra, Senior Mining Geologist and Shri Sanjay Kumar Mahapatra, Assistant Mining Engineer. The deficiencies observed are enclosed herewith as Annexure-I.

You are advised to carry out the necessary modifications in the draft Mining Plan in the light of the contents vide Annexure-I and submit:-

- (i) Three (3) firm bound copies of text (A4 size printable paper), annexure and plate/plan in hard copy. The consents and certificates by the Lease holders/Qualified Person shall be attached in hard copy of document.
- (ii) Two (2) soft copies of the document in USB Pendrive. The text of document should be in excel and word format. The plates/plans are to be submitted in .kml/.kmz/.shp and .dwg format . All the annexures shall be submitted in soft copy.

The aforesaid final copies of the document will be submitted within 07 (seven) days from the date of issue of this letter, for further necessary action.

The para-wise clarifications and the manner in which the deficiencies are attended should invariably be given while forwarding the final copies of the Mining Plan. It may be noted that no extension of time in this regard will be entertained and the 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.

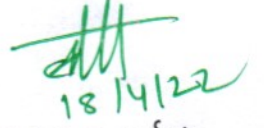
भवदीय

(बाबुलाल गुर्जर)  
क्षेत्रीय खान नियंत्रक

Copy for kind information to:

(i) Shri Chandrabhanu Das, Geo Consultants Pvt. Ltd, 853, Gobind Prasad (Medical Lane), Mahavir Nagar, Laxmisagar, Bhubaneswar - 751006 by email-consultants\_geo@yahoo.co.in.

(ii) The Controller of Mines (EZ), Indian Bureau of Mines, CP-13, Sector V, Salt Lake City, Kolkatta- 700 091.

  
18/4/22

(बाबुलाल गुर्जर)

क्षेत्रीय खान नियंत्रक

**Scrutiny comments of Mining Plan along with Progressive Mine Closure Plan in respect of Nadidih Iron Ore Mine, over an area of 74.50 Ha. in Koira Tahsil, Sundargarh District of Odisha State of M/s. ESL Steel Ltd.**

**PART-A**

**CHAPTER-1: GENERAL INFORMATION**

1. The document should be prepared as per the mining plan template format provided in CCOM circular No.01/2021 dated 07.06.2021. No alteration/deletion/change in format of the mining plan template is allowed. Any additional information may be submitted as annexure only if required.
2. An introduction with a brief history of the mining lease area indicating all instances till date of submission of mining plan to be given. Further the plan period and proposal period also needs to be furnished.
3. In introduction, synopsis of the feasibility study report specifically with reference to economic viability of the project is to be discussed in terms of profit or loss. Similarly production and dispatch as per MDPA is to be also discussed.
4. As per Rule 34(A) of MCDR amendment Rule 2021; All the preferred bidders who are issued with a letter of intent for grant of a mining lease shall carry out a drone survey of the mining block granted through auction and up-to hundred meters outside the block boundary and submit the processed output (digital elevation model and orthomosaic image) along with the final copies of the mining plan.
5. The information furnished under para 1.3.4.3, i.e. details of forest clearance is not correct. The same needs to be reviewed and rectified properly.
6. The information furnished under para 1.3.4.4, i.e. details of land acquisition details is not correct. The same needs to be reviewed and rectified properly.

**CHAPTER-2: GEOLOGY AND EXPLORATION:**

7. The detailed information under para 2.1.1 i.e. Topography is not correct, the same needs to be rectified as per the actual field ground position.
8. The detailed information under para 2.1.2 i.e. Physiography and infrastructure available in and around the lease area needs to be reviewed and reproduced properly as per the ground field condition.
9. The detailed information under para 2.2.1.7.1 i.e. Exploratory drilling; copies of the log sheets of bore holes needs to be furnished in csv./xls format files.
10. The detailed information under para 2.2.1.9 & 2.2.1.10 are not furnished properly. The details of sample id of the borehole samples need to reviewed and reproduced properly.
11. The information furnished under para 2.2.1.13 i.e. Method adopted for calculating bulk density needs to be furnished. Analysis report from NABL i.r.o. bulk density study needs to be furnished.
12. The information furnished under para 2.2.4.2. i.e. Resources calculation of Iron ore and Mn. needs to be furnished as per the geological report provided by the State Govt. during the auction of the mining block. The calculation table furnished in the text is not correct. Hence the resource calculation table needs to be rectified and reproduced properly.
13. The detailed information under para 2.2.4.3 to 2.2.4.10 has not been furnished viz., threshold value and cut off parameters, mining factors, UNFC justification under classification, etc.,. The same needs to be furnished. Proper UNFC codes should be assigned for reserves/resources.
14. The details furnished under para 2.2.4.11, blocked resources calculation table needs to be reproduced in line to the comments furnished for modifying factors for conversion of mineral reserve.

15. The details furnished under para 2.2.4.12, reserve calculation table needs to be reproduced in line to the comments furnished for resource calculation table. The same needs to be rectified & reproduced properly.
16. Proposal for a petrology & mineralogical study of the lease during the mining plan period needs to be proposed under para 2.2.6.8.

### **CHAPTER-3: MINERAL PROCESSING**

17. The information furnished under para 3.1 are needs to be furnished with relevant supporting documents.
18. The information furnished under para 3.2 are needs to be furnished with relevant supporting documents.
19. The information furnished under para 3.9: Overall water requirement of mining and mineral processing: The water balance chart needs to be reproduced as per the discussion during field inspection.
20. The information furnished under para 3.10; regarding material balance chart/ flow diagram of mineral beneficiation/processing plants needs to be reproduced as per the discussion during field inspection. The location of the mineral beneficiation/processing plants needs shown in respective plans.

### **CHAPTER-4: MINING OPERATIONS**

21. The information under para 4.2.1.2 dump details; location of the dump furnished with the document needs to be reviewed and furnished properly.
22. The information under para 4.2.2.1: Bench Parameter: as the year 2021-22 has already been lapsed, no proposal to be envisaged for 2021-22. The same may be removed from all instances from the entire document and the same may be furnished as actual achieved during 2021-22. The depth of water table may be furnished in terms of mRL.
23. The information under para 4.2.2.2: Year wise opencast Development; calculation of ROM, saleable and mineral reject are not correct. The same to be reviewed and rectified correctly. Accordingly the ore to OB ratio needs to be reviewed. The year wise, section wise calculation of Ore and OB to be submitted in annexure.
24. Under para 4.3.1, the blast vibration study report, bulk density study report and recovery study report and also any other related study reports should be proposed afresh.
25. Under para 4.3.2, the details furnished for insitu mining table are not correct. The entire table needs to be reproduced properly. Accordingly table furnished under para 4.3.4 calculation summary needs to be rectified and reproduced. The quantity furnished under dump handling needs to be removed.
26. The details furnished under para 4.4 to 4.4.5.3 details of machinery calculation are not correct. The same needs to be reproduced inline to the comments furnished under production calculation summary.
27. The details furnished under para 4.5.2 blasting & explosive requirement are not correct. The same needs to be reviewed and rectified properly.
28. The details furnished under para 4.5. details of type of explosive to be used needs to be furnished properly.
29. The details furnished under para 4.7.1. details of existing dump has not been furnished. The same needs to be recast properly. Under para 4.7.2. location of new dump needs to be furnished.
30. The details furnished under para 4.7.3. & 4.7.4. details of existing & new stack needs to be furnished along with its location.
31. The details furnished under Para 4.9: Use of Minerals: complete details needs to be furnished as per the prescribed format.

#### **CHAPTER-5: SUSTAINABLE MINING:**

32. Para-5.2: In year wise CSR initiatives, Year wise proposal to be given in all aspects for development of community around the lease area. The cumulative work done / measures taken furnished is to be checked as most of them are left blank in the format.

#### **CHAPTER-6: PROGRESSIVE MINE CLOSURE PLAN**

33. Para 6.2.2.2.1, the fencing proposal has not been furnished. The year wise fencing proposal in view of ML boundary, proposed pit etc. are to be proposed. The protective measures i.e. maintenance of retaining wall and garland drain to be proposed.
34. Under para 6.2.3.1 year wise proposals of green belt development needs to be proposed excluding FY2021-22.
35. Under para 6.2.10 year wise proposals of tailing dam management needs to be reviewed and reproduced properly.
36. Para-6.2.11, Land use of lease area at the expiry of lease period (CONCEPTUAL STAGE) should be furnished in pursuant to the order dated 14.01.2020 passed by MOM, GOI, consequent up on the order dated 08.01.2020 of the Hon'ble Apex Court passed in W.P.(C) No. 114/2014, the lessee shall carryout "re-grassing in mining area after closure of mines".

#### **CHAPTER-7: FINANCIAL ASSURANCE/PERFORMANCE SECURITY**

37. Copy of existing performance security needs to be submitted as annexure with the document.

#### **CHAPTER-9: IMPACT ASSESSMENT**

38. All the para-wise information under Impact Assessment needs to be furnished in the text along with supporting documents as required.

#### **PART-B**

##### **ANNEXURES TO BE GIVEN**

39. Copy of list of board of directors along with address.
40. Calculation sheet of insitu tentative excavation year wise considering the cross-sections, Bench RL etc. should be furnished.
41. The Geological report along with all plans provided by the State Govt. needs to be furnished in a separate volume as annexure.
42. Feasibility report is to be submitted with the content of feasibility report and analysis of economic viability of the project is to be described in detailed as per rule 16 and Part-V of MEMC Rule 2015. The economic viability of the project should be supported with IRR by cash flow chart with total investment, operational cost, final price offer etc.

#### **PART-C**

##### **PLANS AND SECTIONS**

43. All the plans and sections needs to be captioned with Mining Plan and period of mining plan needs to be furnished.
44. All plans and sections should be signed with date by Qualified Person. All the plans should be submitted as hard copies and also soft copies in KML/KMZ/SHP/.DWG as prescribed in the templates. All the plans and sections are needs to be prepared on UTM grid.
45. Copy of the auctioned lease area map authenticated by competent authority needs to be submitted.
46. Key Plan: The key plan should incorporate all features as mentioned Rule 32(5)(a) of MCDR 2017. The approach road to the lease area should be shown and co-ordinates of the extent of the lease area need to be furnished.
47. Surface Plan: (i) Contours and existing benches are shown in similar colour codes.  
(ii) All features shown in the surface plan needs to be properly indexed.

