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. BBS/SNG/IRON/2177/RMP/2022-23

Date: 02.08.2022

To

Shri Prahlad Roy Goenka, Managing Director & Nominated Owner, M/s Korp Resources Pvt Ltd, 161, Rabindra Sarani, Kolkata-700007, Email-korpresources@gmail.com

Sub: Approval of Review of Mining Plan of Tantra Iron Ore Mine along with Progressive Mine Closure Plan (PMCP), over an area of 72.56 ha in Sundargarh district of Odisha State, submitted by M/s Korp Resources Pvt Ltd under Rule 17 of MCR, 2016.

Ref: - Your letter No. Nil dated 05.07.2022 received on 12.07.2022.

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 earlier site inspection carried out on 09.07.2022 by Shri Kewal Krishan, Regional Mining Geologist. 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 I and submit:-

- (i) Three (3) firm bound copies of text (A4 size printable paper), plate/plan and Annexure 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(.xls) 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.
- (iii)Financial assurance under Rule 27 of Mineral Conservation and Development (Amendment) Rules, 2021 shall be submitted.
- (iv) It is also advised to submit all details of mining plan online on https://miningplan.ibm.gov.in simultaneously for processing.

The aforesaid final copies of document will be submitted within 15 (Fifteen) 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 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.

(बाबयोग गर्न

क्षेत्रीय खान नियंत्रक

Copy for kind information to:-

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

(ii) Shri S.C. Nayak, M/s MINESKETCH Consultants (P) Ltd, Flat No-205, Bhagwan Tower, Cuttack Road, Bhubaneswar-751006.

(बाबुलाल गुर्जर) क्षेत्रीय खान नियंत्रक Scrutiny comments on examination of in Review of Mining Plan in respect of Tantra Iron Ore mine, over an area of 72.560Ha, Sundergarh District, Odisha, of M/s. Korp resources Pvt Ltd. Based on site inspection on 9/7/2022

GENERAL INFORMATION

- 1) Complete Review of Mining Plan is to be submitted on online mode also.
- 2) The rule mentioned on the cover page is to be corrected as 17(1) instead of 17(2). Similarly category of mine is to be corrected as A category instead of A (OTFM). Need corrections at all the places of the document accordingly
- 3) At glance information with respect to the document submitted are to be furnished as per the annexure enclosed before the general information chapter.
- 4) Since the mine has common boundary with PTA and JSPL, Keeping in view the conservation of mineral , the common working proposal are to mentioned in the text and are to be shown on the development plan and sections. The total length of different leases area having common boundaries is to be discussed in the introduction part also and the same is to distinctly marked on the common joint working plans. Similarly co-ordinates of the common corner boundaries are to be furnished and same are to be shown on the plans also. All statutory permissions from government authorities for under taking mining over the safety zone area having common boundaries are to enclosed as an annexure. Copies of MOU signed with other two lessee is to be enclosed with the document.
- 5) It is mentioned in the introduction chapter under page no 5, that the party is in process to obtain the EC for production of Iron ore of 0.24MTPA. Hence the production should be enhanced only after getting the desired EC from competent authority. The same should to be also mentioned in the introduction.
- 6) Para 1.3.5.1, Co-ordinates of all the boundary pillars as per DGPS plan, certified by the Government agency are to be furnished.

GEOLOGY AND EXPLORATION:

- 7) Para 2.1.2 details of physiographic features and infrastructures in and around the lease area such as power transmission line within the lease and outside the lease, within 5 km from lease area are to be furnished.
- 8) Para- 2.1.4.1 , local Geology, thickness of various litho units (minimum and maximum) as encountered in the bore holes drilled are to be furnished.
- 9) Para 2.1.4.1, it is mentioned that iron ore zone is spread over an area of 10.080 ha length with width of 200m to 504m. The ore zone as mentioned is to be justified/discussed, based on numbers of the boreholes intersection of ore zone in detail. The same is to be also shown/mark on the geological plan.
- 10) Para 2.1.4.2 local Structure of the lease area /block is to be described properly.
- 11) Para 2.1.4.5, Extent of weathering is to be discussed on the basis of boreholes data. Similarly under para 2.1.4.6 nature /form of mineral is to be discussed properly.
- 12) Para 2.1.4.8, Type of deposit as per MEMC rule is to be specified.
- 13) Para 2.2.1.17, boreholes drilled during the year 2020-21 & 2021-22 are to be enclosed as an separate annexure along (Form I & Form J) with their analysis from NABL lab.
- 14) Para 2.2.13, method adopted for calculating the bulk density of ore etc. are to be discussed in brief.
- 15) Para 2.2.1.14, area covered under different levels of exploration is to be rechecked and furnished again. The same is not correct.
- 16) Para 2.2.2.9 and 2.2.1.19, 309 nos core of samples are mentioned in both the Paras. Need clarification/correction.
- 17) Para 2.2.4.1, It is mentioned that the cutoff grade by the lessee for usable/sale able Iron ore is +50% Fe and below 50 to 45% Fe is consider as subgrade. Based on this the resources are estimated ie +50%Fe and 45 to 50% Fe. But from the analysis, it is obvious that the maximum percentage of Fe is 65.95%. Hence the resources/ reserves are to be estimated from 45 to 50%Fe ,50 to 55% Fe and +55% Fe. Need correction accordingly at all the places of documents in the text and on the plates accordingly. Average grade needs to be given also.

- 18) Para2.2.4.5, under heading ROM processing it is mentioned that iron ore occurs at depth of 62m from surface level , the statement is contrary to the statement given on page no 13 under para 2.1.4.1. Need correction/clarification.
- 19) Para 2.2.5.5, exploratory drilling proposal is to be furnished as per the specified format. The entire area should be explored as per rule 12(4) of MCDR 2017. Need correction accordingly on the text and plates.

BENEFICIATION

- 20) Para 3.2 Complete chemical analysis of ROM/mineral is to be enclosed with the document as an annexure.
- 21) Para 3.5 and 3.6, dry and wet processing details are to be furnished in all the relevant tables with reference the processing methods implemented in the lease area.
- 22) Para 3.10, material balance chart of the mineral processing in case of dry processing and wet processing, proper feed size with grade and output product with quantity and quality with percentage are to be furnished. Annexure no 13 is to be revised accordingly.

MINING OPERATIONS

- 23) The width and height of the benches proposed is 6m x6m. Since the said mine is Mechanized A category. Hence proper justification for keeping the bench parameters considering the configuration of deposit and nature of ore are to be justified /discussed in the proposed methods of mining on page no 45.
- 24) Para 4.2.1.2.2, total stack quantity mentioned is not correct. Need correction at all the relevant places of the document.
- 25) Para 4.2.1.3 , it is mentioned on the table that 01 no of dump is stabilized . During the inspection carried out on 9/7/2022 it is noticed that no dump in the lease area have been stabilized yet. Need correction on the table and at all other relevant places of the document.
- 26) Para 4.2.2.2, year –wise opencast development, table is to be revised with reference to ROM volume of different grades and subgrade, along with ROM quantity and recovery percentage. Similarly coordinates with reference to the location of advancement are not correct. They are to be rechecked based on plans and to be furnished again.
- 27) Para 4.7.3, existing stacks, total quantity furnished is not correct.

SUSTAINABLE MINING:

28) The details furnished under para 5.2.1 to 5.2.5.14 needs to be reviewed and rectified properly as per the discussion held with mine management during the site inspection on 9//7/2022.

PROGRESSIVE MINE CLOSURE PLAN

- 29) Para 6.1, status of land, the details given under stabilized waste dump and virgin area under green belt are to be rechecked and furnished again.
 - 30) Under para 6.2.2.1, proposal for ground water recharging is to be given.
- 31) Para 6.2.2.2, protective measures, Retaining along with garland drain all along the waste dumps is to be proposed. Similarly, retaining wall is to be proposed all along the stack yard to avoid the slippage of ore. Need correction in the text and on the plates.

FINANCIAL ASSURANCE/PERFORMANCE SECURITY

- 32) Under para 7.1 Under Para 7.1, Area put to use at the start of the year in the text and on FA plan are not matching. The entire area put to use under different activities at the start of year and additional area required are to be rechecked and mentioned correctly.
 - 33) The FA is to be submitted based on the MCDR 2017, amended on 3/11/2021.

REVIEW OF PREVIOUS PROPOSALS:

34) The details of the plan period for which the review is carried out is to be mentioned as remarks. All the details shown in the review of mining plan should incorporate with the annual return submitted, wherever required.

PLANS AND SECTIONS

- 35) All the plans should be submitted properly in hard copies along with their soft copies in KML/KMZ/SHP file (Geo-referenced), except sections in Pdf/.dwg format.
- 36) DGPS map submitted with the document should be authenticated by the state government.
- 37) Key Plan: The location of lease map mark on the top sheet is not correct. Location of lease map is to be marked based on the DGPS .The plan should incorporate all features as mentioned in Rule 32 (5)(a) of MCDR 2017.
- 38) Lease map of the area is to be enclosed with the document.
- 39)Surface plan: haulage road in between pillar no C1 and C2 is shown in the safety zone is not justified, existing sub grade stacks, area proposed for stacking etc are to be furnished as per text/FA table. Forest and non- forest area is to be marked distinctly. The entire features on the plan are not shown as per index. All the features shown on the surface plan and on the index should be properly matched. The surface plan is to be prepared as per rule 32(1)(a) of MCDR 2017.
- 40) Geological Plan: Boreholes drilled earlier and year –wise future exploration proposal are to be shown properly in index and on the plan. The exploration proposal is to revised keeping in view the MEMC rule2015. Area shown under G-1 level in-between KBH-16 and BH-12 is not correct. Hence entire area under G1/G2/G3/, unexplored are to marked based on the boreholes data. All the features/ lithology shown on the plan is to be clearly shown in the index also.
- 41) Geological sections: Cross sections are to be prepared on the scale 1:1000. Color codes for different grades as per the estimation of reserves/resources are to be shown on the plan and index. Ore body projections are to be justified properly based on the boreholes logs/analysis. UNFC codes are to be mentioned.
- 42) Development plan & Section: The layout of the haul road for excavation proposal should be shown properly. Year-wise development plans and sections are to enclosed with the document. In all the Development plans, Coordinates along with Northing and easting Line are to be furnished/mentioned with reference to the development proposed for the particular year. Color code in production and development sections and Geological section should be kept same.

Location of development shown in text under para 4.2.2.2 is not matching with plan enclosed. All the coordinates with reference to location of development are to be rechecked and furnished again.

- 43) Environment plan: Environment monitoring stations are to be marked distinctly as per norms properly. The Environment Plan is to prepared as per the provision as laid down rule 32 (5) (b) of MCDR'2017.
- 44) On the PMCP plan, activities related PMCP are to be shown only. Need correction.
- 45) Financial Assurance plan , area put to use under different activities is to be rechecked and furnished as per the text. Need correction.
- 46) All required features /codes as shown on the plans, are to be only shown in the index only. The other feature/codes shown on the index are to be deleted. Need corrections at all the plans and sections accordingly.
- 47) The following discrepancies have been found in the kml file submitted;
- In all kml files, Attribute data, symbology, projection should be proper..
- Same color code should be used in .dwg and .kml plan for proper identification of mining activity .
- .dwg file of all the sections are not submitted .
- Kml file of environment Plan is prepared properly.

Surface Plan:-

- Outer part of mining activity like quarry, dump, stockyard, afforestation should be in form of closed polyline.
- A haul road encroach 7.5 mtr safety zone in between BP no-C1 & C2 near about 70 mtr linear length.
- Forest area non forest area not marked in KML file of surface plan

Development Plan:-

Year-wise kml of development are not submitted. Existing quarry & dump should be depicted along with the
proposal of each year in KML file of development plan with different color code & also should be in form of
closed polyline.. It should be rectify accordingly.

Geological Plan:-

Lithology not shown in kml file. G1,G2 etc areas are not demarcate in KML/shp file..

Drone data

- 1 DTM data in form of geo tiff not submitted by lessee.
- 2.Annexure –I, logsheet ,meta data ,RMSE report not submitted.
- 3.Shape file of actual excavation, mineral storage, subgrade dump ,waste dump, afforestation, not submitted.

ANNEXURE

- 48) Proper legible copy of all the annexures are to be enclosed.
- 49) The final soft copy of the document should be digitally signed by QP.
- 50) All the text, tables and annexures should be properly indexed/ numbered/ paged and signed by qualified person. Correct table reference number to be mentioned at all relevant places. All the certificates/annexures should bear dated signature.
- 51) The photographs of the boundary pillars are to be enclosed with the document.
- 52) Legible copy of ID & Address Proof of Owner/ Nominated Owner is to be enclosed.

2/8/22

Annexure

| AT A GLANCE I | NFORMATION |
|---|------------|
| Name of the Applicant /lessee | |
| IBM Registration no | |
| Address of Applicant | |
| Name of Mine | |
| Minecode | |
| Lease area in hects. | |
| Forest area | |
| Name of Mineral | |
| Lease period from to | |
| Plan proposal period- | |
| Mineral Reserve (111& 121/122) in tonnes | |
| Mineral Resources (211, 221,222, 331, 332, 333&334) in tonnes | |
| Production proposal (1 st yr) in tonnes 2023-24 (Mineral Name) | |
| Production proposal (2 nd yr) in tonnes2024-25 | |
| Production proposal (3 rd yr) in tonnes2025-26 | |
| Production proposal (4 th yr in tonnes2026-27 | |
| Production proposal (5 th yr) in tonnes2027-28 | |
| (include only saleble/ usable & sub grade | |
| mineral) | |
| | |
| OB/Waste handling proposal 1 st yr CUM | |
| OB/Waste handling proposal 2nd yr CUM | |
| OB/Waste handling proposal 3rd yr CUM | |
| OB/Waste handling proposal 4th yr CUM | |
| OB/Waste handling proposal 5th yr CUM | |
| Present EC permission in tonnes(Mineral or ROM) | |
| Plantation proposal in five years in numbers | |
| Plantation area proposal in five year(ha). | |
| Back filling proposal in hects in five years | |
| Check Dams numbers in five year | |
| | |

| Garland drain in meters five years | |
|---|--|
| Settling ponds (Numbers) | |
| Area put to use at end of five year in ha | |
| Bank Guarantee Amount Rs | |
| Validity of BG upto | |
| Any other important information | |
| Percentage of revenue sharing bid in case of auction grant of block | |
| Amount of performance security and details if | |
| any | |