

भारत सरकार GOVERNMENT OF INDIA खान मंत्रालय MINISTRY OF MINES भारतीय खान ब्य्रो INDIAN BUREAU OF MINES क्षेत्रीय खान नियंत्रक के कार्यालय OFFICE OF THE REGIONAL CONTROLLER OF MINES



Phone: 0674-2352463 Tele Fax: 0674-2352490 ro.bhubaneshwar@ibm.gov.in Plot No.149, Pokhariput BHUBANESWAR-751020

BY EMAIL

No. MPM/A/16-ORI/BHU/2021-22

To

Shri P L Gupta, Director & Nominated Owner, M/s Prakash Industries Ltd. Plot No-93, First Floor, Kharvela Nagar, Bhubaneswar-751001 sirkaguttumines@prakash.com, pilho@prakash.com

Sub: Approval of modification of Mining Plan of Sirkaguttu Iron & Mn Mine along with Progressive Mine Closure Plan (PMCP), over an area of 19.532 ha in Keonjhar district of Odisha State, submitted by M/s Prakash Industries Ltd under Rule 17(3) of MCR, 2016.

- Ref: i) Your letter No. Nil dated 25.09.2021 received on 05.10.2021.
  - ii) This office letter of even no. dated 05.10.2021.
  - iii) This office letter of even no. dated 05.10.2021 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 modification of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on site inspection carried out on 24.10.2021 by Shri Dayanand Upadhyay, Senior Assistant Controller of Mines & 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 modification of Mining Plan in the light of the contents vide Annexure-I and submit:-

- (i) Three (3) firm bound copies of text in A4 size printable paper and plate/plan in hard copy. The consents and certificates by the Lease holders/Qualified Person and copy of bank Guarantee shall be attached in hard copy of document.
- (ii) Two (2) soft copies of the document in USB Pendrive. The soft copies of the document shall be digitally signed by the Qualified Person and Nominated owner. The text of document should be in excel(.xls) and word format. The plates/plans are to be submitted in .kml/.kmz/.shp format. A few sections may be submitted in .pdf format as indicated in the CCOM Circular 1/2021. All the annexures shall be submitted in soft
- (iii) Financial assurance under Rule 27 of MCDR 2017.

The aforesaid final copies of the 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 modification of Mining Plan. It may be noted that no extension of time in this regard will be entertained and the modification 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.

भवदाय. (हरकेश भीना)

क्षेत्रीय खान नियंत्रक

Copy for kind information and further necessary action to Shri S C Nayak, Qualified Person, mcpl762005@gmail.com

(हरकेश मीना) क्षेत्रीय खान नियंत्रक Scrutiny comments of Modification of Review of Mining Plan of Sirkaguttu Iron & Manganese Mine, Area-19.532ha, Dist- Keonjhar of M/s Prakash Industries Ltd.

#### General

- On cover page and other part of the text, modification of review of mining plan is to be furnished in place of "Modification of Mining Plan". The mine code and IBM registration no. are to be furnished on cover page.
- 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.
- All the information in the various table columns of different chapters as per the prescribed format in the template should be furnished. No column/rows should be left blank. If not applicable, it was written as not applicable.
- 4. The final soft copies of the document shall be digitally signed by the Qualified Person and Nominated
- 5. The document should preferably be submitted in excel(.xls)/word format. The plates/plans are to be submitted in .kml/.kmz/.shp format. A few sections may be submitted in .pdf format as indicated in the CCOM Circular 1/2021. All the annexures shall be submitted in soft copy.
- 6. The final copies of the text document to be submitted in 3 (three) hard bound copies in A4 size printable paper. The consents and certificates by the Lease holders/Qualified Person and shall be attached in hard copy of document. Three hard bound copies of plates/plans are also to be submitted. The plates/plans are to be output of AutoCAD software.
- List of plates and annexures should be properly indexed with page nos. and in case of plates the scale should also be mentioned.

#### CHAPTER-1: GENERAL INFORMATION

- 8. Para-1.1.2, the reason of modification has not been furnished...
- 9. Para-1.3.4.4, in land acquisition details the amount paid (INR) is not correctly furnished.
- 10.Para-1.3.7, the experience of qualified person should be clearly stated in supervisory capacity in the field of mining as per provision of rule 15(b) of Minerals (Other than Atomic and Hydro Carbons of Energy Minerals) Concession Rules, 2016.

## CHAPTER-2: GEOLOGY AND EXPLORATION:

- 11.Para 2.1.1: the details of drainage pattern, Order of Stream and Minimum Distance of Stream from Lease Area (m) are to be furnished under different column in prescribed format/table.
- 12. Para 2.1.2: details are to be furnished correctly in prescribed table.
- 13. Para 2.1.4.1, under local geological set up, under heading laterite information is not furnished correctly.
- 14.Para -2.1.4.2, the structure of the area is to be described with reference to the lease area. The strike of the formation is to be furnished correctly.
- 15.Para- 2.1.4.3, thickness of various litho units as encountered in the bore holes/ lease area is to be furnished i.e minimum and maximum thickness. Para- 2.1.4.4, mode of occurrence and control of mineralisation is not described properly.
- 16.Para- 2.1.4.8, the strike/trend of the ore body is to be furnished correctly.
- 17. Para- 2.2.1.1, year of geological mapping is not furnished correctly. Para- 2.2.1.4 & 2.2.1.5, the information have not been furnished correctly. Para- 2.2.1.7, in details of exploratory drilling in respect of nos. of bore holes drilled during the year 2020-21 are to be furnished properly.
- 18.Para- 2.2.1.10, details of total sample collected from bore holes as analyzed from NABL accredited/Government Laboratory should be attached in separate annexure as per table prescribed along with all radicals.
- 19.Para- 2.2.1.13, the bulk density as furnished in table should be justified with documentary proof with their method. The bulk density of density of OB/waste has not been furnished in the table.

- 20.Para- 2.2.1.14, the area cover under various level of exploration is to be furnished correctly as per provision of MEMC rule 2016 at all relevant places of document.
- 21. Para- 2.2.2.1, in geological mapping the year of mapping is not furnished correctly. It is to be corrected. Para- 2.2.2.4 to 2.2.2.6, the information are to be furnished based on documentary evidence and same are to be enclosed in annexure.
- 22. Para- 2.2.2.9, the details of sample are to be furnished correctly. Para- 2.2.2.10, in chemical analysis of various radicals has not been furnished.
- 23.Para- 2.2.3, in ore body geometry and grade, general strike trend and dip of the mineral and all radical analysed have not been furnished.
- 24.Para-2.2.4.1, the cut- off grade of the mine should be clearly mentioned. Similarly the influence of the ore body is to be mentioned as considered in reserve/resource estimation. Same is to be corrected at all relevant places of the document.
- 25. Para-2.2.4.2, the resource estimation should be revised as discussed during field grade wise i.e 45 to 55% Fe and +55% Fe at all the relevant places of the document. The depth in meter(range), influence of bore holes and level of exploration has not been correctly furnished in prescribed table.
- 26.Para-2.2.4.3 to 2.2.4.10, all the parameters are to be elaborated in details as per Minerals Evidence of Mineral Contents Rules 2015.
- 27. Para-2.2.4.13, the reserve/resources estimation date is not updated. An updated date based on recent survey should be mentioned and all figures should be corrected accordingly.
- 28.Para-2.2.5.8 to 2.2.5.10 the information are not furnished as per prescribed table. Para-2.2.5.11, the resource estimation should be revised as discussed during field grade wise i.e 45 to 55% Fe and +55% Fe
- 29.Para-2.2.6.5.1, The proposed Bore Holes should be furnished in light of provision of Rule 12(4) of MCDR, 2017 to prove the lease area in G1 level. Para-2.2.6.7, sampling of the bore holes is not furnished correctly.

# Chapter-3: Mineral Beneficiation:

- 30.Para-3.2, Complete Chemical Analysis of the ROM Ore/Mineral is to be furnished only based on the mineral beneficiation/processing report. Copy of report is to be enclosed with document as an annexure.
- 31.Para-3.3.1 & 3.3.2, the range of product size are to be furnished. Para-3.5.1, in screening and classification table has not been furnished correctly and some of item has left blank.
- 32.Para-3.3.3, the product quality as furnished in table should be justified with flow chart and with documentary evidence.
- 33. Para-3.7, overall product quality is not furnished correctly. It is to be re-checked and corrected.
- 34.Para-3.9 & 3.10, Overall Water Requirement is to be elaborated and the flow sheet of dry screen plant is to be attached.

## Chapter-4: Mining Operation:

- 35.It is observed that under various para, the items in different prescribed table are not mentioned. All figures should be furnished in prescribed table with their nomenclature.
- 36.Para-4.1.1: Existing features of Method of Mining should be described in brief as in prescribed table.
- 37.Para-4.1.2: Proposed features of Method of Mining should be described in brief in prescribed table. Reason of proposed changes should be furnished as the instant document is submitted for modification of mining plan.
- 38. Para-4.2.1.1: The details of existing pits dimension are not correctly furnished Para-4.2.1.2.1: In dump details, the total quantity of different type of dumps has not been furnished.
- 39.Para-4.2.1.3: All the column/row should be furnished with desired information.
- 40.Para-4.2.2.1, depth of water table has not been furnished correctly. All the bench parameters are to be revised as per the modification proposal. Proposed years should also be revised and specific years should also be mentioned as discussed at all relevant places of the document.

- 41.Para-4.2.2.2, recovery as furnished should be justified with documentary evidence. In column of associated mineral, information is to be furnished. The top soil generation has to be revised in light of proposed modification.
- 42.Para-4.3: In Material Handling Summary, the annexures are enclosed and marked with annexure number and reason of not applicable should be furnished.
- 43.Para-4.4: In Machine Calculation, the parameters of total handling (Ore and OB), bucket capacity, fill factors, swell factor, idle time and standby etc are to be considered. Para-4.4.2, effective shift timing is to be furnished in table.
- 44.Para-4.5.1: Blasting & Explosive Requirement in Waste/Development, the powder factor is not correctly furnished. Para-4.5.2: Blasting & Explosive Requirement in Mineral / Ore, the type of explosive and type of explosive is to be used are not correctly furnished. The figures furnished in table are also miss-matched. It is to be re-checked and corrected.
- 45.Para-4.7: In Waste Management, the information asked in different tables are to be furnished and location should be marked with co-ordinates.

## Chapter 5: SUSTAINABLE MINING:

46.Para-5.2: In year wise CSR initiatives, the specific year wise proposal should be furnished. At the places where proposal is not furnished should be marked nil in place of left blank.

## Chapter 6: PROGRESSIVE MINE CLOSURE PLAN

- 47.All the prescribed tables are to be furnished with desired information otherwise it is clearly mentioned as not applicable.
- 48.Para-6.2.1: In year wise backfilling, the estimated expenditure is not mentioned. The top and bottom RL are to be re-checked from year wise development plan and sections.
- 49.Para 6.2.2.2 & 6.2.2.3: Retaining wall and garland drains proposals are to be revised.
- 50.Para-6.2.11, Land use of lease area at the expiry of lease period (CONCEPTUAL STAGE) are not correctly furnished. It 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 SURETY

- 51.Para-7.1: in year wise table of land use pattern, the area furnished under different heads are also not matched with FA plan. It is to be re-checked and corrected.
- 52. Para-7.3, Performance Security table is not furnished. All the tables are to be re-checked and corrected.

## CHAPTER-8: REVIEW OF PREVIOUS PROPOSALS

53. In review of previous proposals the reason of deviation under different item has not been furnished. All the tables should be filled with desired information.

# CHAPTER-9: IMPACT ASSESSMENT (for fresh grant)

54. The information as furnished in this chapter in not applicable as the instant document is not for fresh grant.

### Annexure

- 1. Singed copy of form-I & J to be submitted
- 2. Environmental monitoring reports should be submitted.
- 3. Copy of surface right granted letter. Surveyor certificate should be enclosed.
- Any other annexures like bulk density and recovery factor etc as referred in the text should be submitted.
- Calculation of insitu tentative excavation year wise considering the cross-sections, Bench RL etc should be furnished.
- Experience & Qualification Details of Qualified Person and Certificate from qualified person regarding authenticity of information submitted is to be attached.

- 7. The content of feasibility/pre-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 and enclosed in annexure. The economic viability of the project should be supported with NPV, IRR, Payback period by cash flow chart with total investment, operational cost etc.
- Copy of lease deed executed, Copy of MDPA, Mineral processing flowsheet with stage wise recovery, Copy of Environment and Forest Clearance, Consent to Establish, Consent to Operate are to be enclosed.
- 9. Few photographs of the lease area along with boundary pillars are to be enclosed.

#### Plates

- 10. Date of survey should be given on all plans and sections and signature should bear date of signature. All plans and sections should be signed with date by certified Surveyor, Qualified Person, Mine Manager, Mining Engineer and Mining Geologist as per provisions of MCDR, 2017 and MMR, 1961. All plans and sections shall show a scale a scale of the plan at least twenty five centimeters long and suitably subdivided.
- 11. All plans and sections should be prepared on UTM grid. The plans and sections submitted bear the certificate that --the plans and sections are prepared based on the lease map authenticated by the state government.
- 12. All the plans should be submitted as hard copies and also soft copy of all plans and sections in KML/KMZ/SHP should also be submitted which were geo-referenced.
- 13. Lease Cadastral Plan and Geo referenced Cadastral Plan authenticated by State govt. should be submitted.
- 14. Key Plan: The key plan should incorporate all features as mentioned Rule 32(5) (a) of MCDR 2017. The prominent wind direction to be shown by rose diagram in key plan and other relevant plans. The approach road to the lease area should be shown with Co-ordinates of extremity of lease area. The adjoining mining leases, roads, villages, reserve forest boundary, predominant wind direction, should be prominently shown.
- 15. Surface Plan: The Surface Plan should be prepared to satisfy the provision as laid down rule 32 (1) (a) of MCDR'2017. All the boundary pillar coordinates to be given in UTM. All the updated features are to be shown on the plan. Surface right area to be shown on the plan.
- 16. Geological Plan & Section: Geo structural information has not been furnished adequately. All the existing and proposed features are to be shown and marked distinctly in geological sections. Area under G1/G2.. should be demarcated and UNFC codes are to be depicted in geological sections correctly as per MEMC rule 2015. Future exploration proposal should be furnished in plan and sections under G1 level of exploration and same are to be shown in index properly..
- 17. Development plan & Section: Development plan sections has not updated considering the previous year development. Before backfilling it is to be ensure that the area should be completely exhausted. Backfilling has not been shown in development sections. The backfilling proposal should be shown in different color year wise in plan and sections. The proposed and existing bench mRL to be shown clearly over year wise development plan and sections. Year wise mining plan proposals should be submitted in softy copy in the format of .kml or .shp file along with document.
- 18. Progressive Mine Closure plan and sections: All revised year wise proposals are to be depicted on the plan and sections.
- 19. Conceptual plan and sections: Conceptual plan may be prepared considering mineralization as revealed from the borehole logs considering the life of mine as guidelines.
- 20. Environment plan: The Environment Plan as prepared should be satisfy the provision as laid down rule 32 (5) (b) of MCDR'2017. Wind rose diagram should be depicted.
- 21. Financial Assurance Area Plan: The existing and additional area requirement year wise as furnished in text should be separately hatched on the plan with FA table.

Leonislau KEWAL KRISHANI RMG (D. Spadhyay) Sr. Acom