

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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दिनांक / Date: 25.11.2019

No FMCP/A/03-ORI/BHU/2019-20

To

Shri Dilip Kumar Agrawal, Mining Lessee, Agrawal Graphite Industries, Shanti Kunj, Farm Road, Sambalpur, Pin-768002, Odisha.

Sub: Final Mine Closure Plan of Kirikita Graphite Ore Mine over an area of 31.808 ha in Nuapada district of Odisha of Shri Dilip Kumar Agrawal submitted under Rule-24 of Mineral Conservation and Development Rules, 2017.

Ref: - i) Your letter no. nil dated 18.10.2019 received on 04.11.2019.

- ii) This office letter of even no. dated 04.11.2019.
- iii) This office letter of even no. dated 04.11.2019 addressed to the Director of Mines, Govt. of Odisha, copy endorsed to you.

Sir,

This has reference to the letters cited above on the subject. The draft Final Mine Closure Plan (FMCP) has been examined in this office based on site inspection carried out on 22.11.2019 by Shri Sudip Ranjan Mazumdar, Senior Mining Geologist. The deficiencies observed are enclosed herewith as *Annexure-I*.

You are advised to carry out the necessary modifications in the draft Final Mine Closure Plan in the light of the contents vide <u>Annexure-I</u> and submit <u>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 and JPG format in resolution of 100x100 pixels on same CD) 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 Final Mine Closure Plan document. The plates are also to be submitted in separate volume.</u>

The para-wise clarifications and the manner in which the deficiencies are attended should invariably be given while forwarding the modified copies of the Final Mine Closure Plan. It may be noted that no extension of time in this regard will be entertained and the Final Mine Closure 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/ yours faithfully,

(HARKESH MEENA)

क्षेत्रीय खान नियंत्रक / Regional Controller of Mines

Copy for kind information and necessary action to:

1. Shri S. C. Nayak, Qualified Person, M/s Minesketch Consultants (P) Limited, Flat No-205, Bhagwan Tower, Cuttack Road, Bhubaneswar-751006.

(HARKESH MEENA) क्षेत्रीय खान नियंत्रक / Regional Controller of Mines Scrutiny comments on examination of FMCP over entire area of mining lease (31.808 Ha) of Kirikita Graphite Ore mine of Shri Dilip Kumar Agrawal Ltd in village Kirikita, Nuapada district of Odisha

GENERAL:

1. Sequence of para and its numbering as per IBM Manual appraisal MP 2014 has not been covered in text. All the annexure and text have not been properly indexed/ numbered/ paged and signed by qualified person.

2. The information furnished in tabular format does not have table name and table no. Suitable

numbering and indexing of all tables should be done.

FMCP TEXT:

3. In page 3, details of mining carried so far, the pit dug in which year etc. has not been described in details pertaining to uneconomic operation. Need to describe in detail.

4. In page 4, it has been mentioned that entire mining lease area is located in non-forest land but in the land schedule shown in table it has been indicated 4.779 Ha of Gramya Jungle Jogya land. Need to recheck and clarify whether the land classified as "gramya jungle jogya" is a forest land non-forest land with due justification.

5. The details of present land use pattern do not match with actual field position as there is no top soil, mineral stored etc. Further, it has been mentioned that mine is non-working since 2017-18 whereas production figures during 2017-18 has been furnished in subsequent tables. Need to

recheck and rectify at all relevant places.

6. During field inspection it was explained the lack demand along with uneconomic operation which led to lower production and subsequent closure application for the mines is not reflected in the reason for closure. Further, the reason furnished as permission for production of graphite and uneconomic operation has not been not clearly defined and justified. Need to justify the reason for closure with details such that the working of the deposit will not be economically feasible with necessary supporting documents.

In para 1.2, the compliance position mentioned in that table is incorrect and should be rechecked and corrected. For example in first point, it has been mentioned that this FMCP has been prepared for reclamation of the mined out land whereas there is no such proposal for reclamation in text and reclamation plate and it is claimed that the pits have been naturally reclaimed. Need

to recheck all points and rectify.

3. In para 1.3, the content in the first para mentioned is not relevant and should be omitted.

9. In para 1.3.2, the reference of RQP certificate should be omitted. The email id furnished is incorrect and should be corrected.

10. In para 1.3.3, the implementation part should be rechecked and corrected as there is no proposal

furnished in FMCP. Need to do necessary correction.

11. In para 2.1.1, under vegetation it has been mentioned that over 2.027 Ha have been degraded should be recheck and corrected. Further, the nala present in the lease area has not been mentioned and also not depicted in the surface plan and other relevant plans. Need to do needful.

12. In para 2.1.2, the exposure of rock types mentioned is incorrect as not evident in field. Further, the dip and strike shown in soil in geological plan is incorrect. Need to do necessary corrections

at all relevant places.

13. In para 2.2, it has been mentioned that no exploration has been carried out during the approved mining scheme period bit it table in page 13, exploration carried out in 2017-18 has been mentioned. Need to do necessary correction.

- 14. In para 2.4, the details of the beneficiation of ROM produced in the mine has not been described. Need to specify the quantity of ROM beneficiated in the current scheme period with reasons for deviations if any. Further, if beneficiated then discharge details of tailings and their disposal have not been described. Need to do necessary correction.
- 15. In para 3, review of year 2018-19, pertaining to exploration, pits for production, overburden generation, production of ROM, Mineral reject, protective measures etc. has not been submitted. Utilization of 128 m3 of waste generated should be rechecked. In the last approved scheme of mining, it has been mentioned that graphite ore considering +5% F.C is considered as beneficiable ore and remaining graphite ore between 3-5% F.C as subgrade. However, in the review part the grade of ROM mentioned is +3% F.C whereas mineral reject generation has been shown as nil. Need to recheck and rectify. In the table for review of protective measures to be taken, it has been mentioned that the waste materials will be utilized for backfilling of existing trail pits whereas no such proposal under reclamation has been proposed. Need to recheck the reasons for deviations properly and rectify. In the afforestation compliance it has been shown as nil whereas plantation is observed in virgin area as per reclamation proposal. Need to recheck and rectify.
- 16. In para 4.2.1, the details of existing nala passing through the lease area should be addressed.
- 17. In para 4.4, it has been mentioned that waste dump is spread during rain but it was told during inspection that the waste generation has been utilized in road maintenance. Need to recheck and rectify.
- 18. Financial assurance table should be rechecked as per field position.
- 19. Fresh feasibility study to be carried out. Exploitation cost & sale value of mineral should be clarified and Cost-Benefit analysis and financial appraisal to be carried out based on real time cost involved. The uneconomic operation of the deposit should be justified by feasibility study. Necessary corrections and relevant documents to be submitted.

ANNEXURES:

- i) Few photographs showing land use of the lease area, environmental status of the area should be enclosed in true colour.
- ii) In annexure 18, the unit of measurements of bulk density has not been mentioned. Section reference number should be rechecked and corrected. MLPD No should be clarified.
- iii) The details of boreholes drilled during the current scheme period have not been submitted in Form I as per the format specified in MCDR 2017.

PLATES (GENERAL):

- i) Show a scale of the plan at least twenty-five centimetres long and suitably sub-divided;
- ii) The conventions provided under the Metalliferous Mines Regulations, 1961, shall be used in preparing all plans and sections
- iii) All plans and sections should comply with the provisions of Rule 32 of MCDR 2017.
- iv) The plans and sections submitted do not bear the certificate that -the plans and sections are prepared based on the lease map authenticated by the state government. Need to do necessary corrections.
- v) All plans and sections should be signed by Qualified Persons.
- vi) Date of survey should be given on plan and sections and the same should be signed by with date. Date of observation of Magnetic meridian should be shown in all plans.
- vii) Index of surface features should be same in all plans.

KEY PLAN:

- i) The key plan should incorporate all features as mentioned Rule 32 (5) (a) of MCDR 2017
- ii) Approach road to lease area should be shown in key plan and with its legend in index.
- iii) Predominant wind direction in wind rose diagram has not been shown.

SURFACE PLAN:

- i) Surface plan should comply provisions of rule 32 (1) (a) of MCDR 2017.
- ii) Few pillars have not been correlated with some permanent ground features giving distance and direction.
- iii) Surface plan have not been certified by the certified Surveyor along with date of survey to be mentioned. Certificate of Surveyor should be enclosed.
- iv) The connectivity of the village road shown should be rechecked and corrected.
- v) The natural vegetation cover should be shown in the surface plan.
- vi) Rehabilitation of waste dump site has not been shown.
- vii) The nala present in the lease area have not been shown.
- viii) The trial pit near to pillar A have been filled with water and used as water reservoir. Need to reflect the same in surface plan and all relevant plans and sections.
- ix) The road passing through the lease area connecting Khariar and Sinapali has been indexed as village road. The same should be rechecked and corrected.

GEOLOGICAL PLAN & SECTION:

- i) The surface geological plan should be updated with surface geology as observed during the field inspection. There is no continuous trace of graphite vein as shown in plan. Further, the dip and strike shown in soil is incorrect and should be omitted. The migmatised khondalite has not been shown in plan as mentioned in index. Need to correct the surface geological plan and sections accordingly.
- ii) The redefined UNFC boundaries and UPL along with UNFC code to be shown in Geological Plan and sections.
- iii) The index of Geological features should be same in both Geological Plan and Geological sections.

ENVIRONMENT PLAN:

i) The Environment Plan has not been prepared complying the provision as laid down rule 32 (5) (b) of MCDR'2017. Predominant wind direction in wind rose diagram has not been shown. Environment Plan, showing natural drainage systems such as water course, streams, nalla, river, Forest with tree density, waste land, agricultural land, grazing land etc. have not been submitted. Necessary corrections to be done.

RECLAMATION PLAN:

i) In the reclamation plan, the trail pit near to pillar A has been filled with water and used as water reservoir has not been shown. The nala present in the lease area has not bene shown. The planation carried out as per the PMCP proposal has not been shown. The rehabilitation of water dump and existing trial pits, pits etc. have not been shown. The existing plantation in both sides of the road has not been shown. The details of rehabilitation status of the lease area have not been shown. Need to rectify the reclamation plan as per field position.

(Sudip Ranjan Mazumdar)
Senior Mining Geologist

Page 3 of 3