

## भारतः 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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Plot No.149, Pokhariput BHUBANESWAR-751020

No. FMCP/FM/09-ORI/BHU/2018-19

Date: 23.04.2018

To

Shri Arjun Kumar Choudhury, AGM, M/s Khatau Narbheram & Co. N V Ram Complex, Near Barbil Cinema Hall, Barbil, Keonjhar, Odisha- 758035

Sub: Approval of Final Mine Closure Plan of Roida –II Iron Ore Mine over an area of 74.867 ha in Keonjhar district of Odisha State, submitted by M/s Khatau Narbheram & Co. under Rule 24 of MCDR, 2017.

Ref: - i) Your letter No. Nil dated 28.03.2018.

ii) This office letter of even no. dated 03.04.2018.

iii) This office letter of even no. dated 03.04.2018 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 of Final Mine Closure Plan (FMCP) has been examined in this office based on site inspection carried out on 17.04.2018 by Shri Dayanand Upadhyay, Sr. Assistant Controller of Mines. 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 Annexure I and submit three (3) firm bound and two (2) soft copies of the document text in CD in a single MS Word file (the drawing/plates in Auto CAD compatible format or JPG format in resolution of 100x100 pixels on same CD) of the Final Mine Closure 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 Final Mine Closure 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 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

# Scrutiny comments on examination of FMCP (lease expiring on 31/03/2020) of Roida-II Iron ore Mine, 74.867 ha of M/s Khatu Narbheram & Co.

#### **GENERAL:**

- 1. Lease number, registration no. allocated by IBM, lease period, category of mine, phone, fax and e-mail of lessee should be covered on cover page.
- 2. The compliance of conditions imposed while execution of lease deed approval of mining plan, MOEF, SPCB may be submitted with remarks if any deficiency observed. The relevant document may be attached as annexure.
- 3. All the annexure to be properly numbered/paged and signed by the QP.
- 4. Recent photographs of pits, dumps, afforestation and reclamation and rehabilitation carried out should be enclosed.

#### Text:

- 5. Page1-4, the summary of proposal at a glance should be furnished for 2018-19 and 2019-20. Further the proposal furnished in table i.e handling of waste, area utilization, stacking and environmental protective measures should be in line with the latest approved document.
- 6. Page-4&5, the balance reserve/resources as on 01/0402018 has not been furnished separately for forest and non-forest area as per guidelines.
- 7. Page-9&10, the fax and e-mail of Partners have not been furnished. The experience of qualified persons as mentioned should be marked with annexure. Para 3.0, the lease period and their subsequent renewal is not furnished in correct order.
- 8. Para 5.3, all the achievement as furnished against the proposals should updated as on 01/04/2018.Para-5.5, quantity of overburden/waste is not furnished as per guideline in terms of OB/waste excavated, backfilled, dumped.
- 9. Para-5.7, quantity of mineral reject is not furnished as per guideline in terms of mineral reject generated, utilized and stacked.
- 10. Para-5.20, backfilling of mined out area has not been furnished yearwise with breakup of volume and area in ha. Para-5.22, grid value of settlings ponds is not furnished. Para-5.28, area proposed to use and actual has not been furnished with breakup of forest and non-forest land as per guidelines.
- 11. Para-6.5.2, the updated number of bore holes have not been furnished with scale of exploration G1/G2.
- 12. Para-6.5.5, total lease area explored under different categories is not furnished in forest and non-forest.
- 13. As per new guidelines para-6.6.2, 6.6.3 & 6.6.5 are omitted and para-6.6.4 is modified. Therefore information should be furnished accordingly as per new guidelines as below:

Sr	Modifying factor	Brief details of the	Blocked	UNFC category
no.	0.0000000000000000000000000000000000000	applicable factors causing	resources (in T)	
		blockage of resources	**	
1	Technical factors			
2	Statutory factors			
3	Market or economy related factors			
4	Others			
Tota	l Blocked Resources (in T)		•	

- 14. Para-6.8, balance reserves and resources as on 01/04/2018 after deduction of previous year production as furnished is not matched.
- 15. Para- 6.9 are omitted as per new guidelines and reserve and resources to be shown separately for forest and non-forest area.
- 16. Brief details regarding preservation of cores obtain while exploration within the lease area should be given. No cores should be destroyed without the permission of Chief Controller of mines. As per rule 63(4) of MCDR 2017, the cores should be stored serially with suitable indexing and cataloguing and shall insure submission of cores as per the manual issued by GSI from time to time.
- 17. Para-7.2, Sub grade dump re-handling as proposed in approved document has not been furnished. Para-7.3, production at a glance bulk density should be furnished in foot notes. Para-7.5, extent of mechanization has not been furnished as per prescribed table.
- 18. Para-9.1, table no.-3, details of top soil and waste/OB disposal/management during the closure period of two years should be furnished in revised format as below:

Year	Top soil (cu.m)		OB/Waste (cu.m)	
	Top soil reuse	Top soil storage	Backfilling	Dumped
I				
II				
Total				

- 19. Para-9.2. Briefly describe the proposed dumping ground within lease area be proved for presence or absence of mineral with reference of bore holes data.
- 20.Para-10.0, describe the beneficiation process with slurry/tailing dam and their disposal/utilisation practices. A material balance chart should be given mentioning beneficiation process yield at each stage.
- 21. Para-11, baseline information about the area should be described on the basis of information incorporated in first approved mining plan at the time of grant of ML.
- 22. Parall.2.1, the backfilling proposal has not been furnished as per guidelines. Thedetailed reclamation and rehabilitation program of backfilled area should be proposed. The proposals may be supported with yearly plans and sections depicting yearly progress in the activities for land restoration/reclamation/rehabilitation, afforestation etc called "Reclamation Plan". Sequence

of filing should be same as per original sequence of the litho units occurring in the lease area.

- 23. Paral1.2.2, describe the proposals to be implemented for securing the excavation/pits/mineralized dump or mineral rejects stacks/fine stacks by means of fencing etc. Explain the safety measures implemented to prevent access to surface openings, excavations etc. The lessee should ensure fencing of any excavation endangering fall of persons/cattle etc in terms of rule 26 of MCDR2017. The proposal may be supported with yearly plans and sections depicting yearly progress in the activities for protective measures like fencing etc called "Reclamation Plan".
- 24. Parall.2.7, all the active dumps should be proposed with extension of retaining wall and garland with settling tanks with proper terracing and stabilization of slope. The dead dumps should be proposed for fully rehabilitation by plantation and with gap plantation if necessary. The proposed and existing retaining wall, garland drain and settling tanks should be clearly marked yearwise on reclamation plan.
- 25. Para-11.2.11, the details of existing infrastructure available in the lease area should be furnished in tabular form and their present value after depreciation. Further their future utilization should be evaluated on case to case basis. The decommissioning cost and final value of the decommissioned infrastructural facilities if any may be furnished. Para-11.2.12, decommissioning of mining machineries and their possibility of post mining utilization if any may be described.
- 26. Para-11.2.14, the economic repercussions due to closure of mine has not been explained properly. Envisaged repercussions on the expectation of the society due to closure of mine. Number of local residents employed in the mine, compensation, satellite occupations should be describe considering the impact of closure of mines.
- 27. Paral1.2.15, time scheduling for abandonment of mines considering the activity like waste dump management (Garland drain, retaining wall, settling tanks plantation), safety and security (fencing of pits, dumps etc), Disposal of machineries, reclamation & re-habilitation, infrastructure, protective measures of environment should be supplemented by PERT or Bar chart and these activities should be clearly shown on reclamation plan.
- 28. Parall.2.16, abandonment cost as furnished in tabular form has not includes the safety measures implemented to prevent access to surface openings, excavations etc. The cost of maintenance, security and supervision has also been not included.

29. Para-11.3, the information on protective measures has not been furnished as per format prescribed in guidelines with break-up of forest non-forest area. Para-12 may be omitted as per new guidelines.

### Plates:

- 30. An updated surface plan with latitude, longitude of all corner pillars should be furnished. Few pillars may be correlated with some permanent ground features giving distance and direction.
- 31. An updated Geological plan and sections considering the exploration carried out in proposed period plan upto 01/04/2018 should be furnished. The geo-structural information like strike, dip, dip-direction etc to be shown clearly.
- 32. The mineralised area should be shown distinctly on geological plan and sections. Different level of exploration like G1, G2, G3 etc in line with MEMC rule 2015 to be depicted on geological plan and UNFC codes should clearly furnished in sections.
- 33. Proposals of land restoration/reclamation/rehabilitation, afforestation, waste dump management, safety and security etc should be depicted in Reclamation Plan yearwise with different colour codes. The engineering drawing of proposed fencing wall with measurement and sketches of retaining & garland wall, settling pond shoul be furnished.
- 34. Environment Plan, natural drainage systems such as water course, streams, nalla, river, Forest with tree density, waste land, agricultural land, grazing land and surface features of 500 buffer zone should be shown.