

Inspection Report cum Scrutiny comments on the Review of Mining Plan for Amti Moulding Sand Mine over an extent of 4.047 Hectors in Amti Village, Durg, Tehsil, Durg District of Shri Bimal Kumar Seksaria.

1. Since lease is expired on 02.04.2015 and period is extended under Amended MMDR 2015. The document should have been modification of Mining Plan instead review of Mining Plan under rule 17(3) of MCR 2016.
2. The document is prepared for moulding sand and ordinary sand whereas lease has only grant for moulding sand and ordinary sand is minor mineral and not comes under the perview of MCDR,1988. The proposal only should be given for moulding sand.
3. The document is prepare in old format, it should be prepared as per new universal format given in the website www.ibm.gov.in. In new format blasting & environment Management plan chapter not exist. The correction to be done accordingly.
4. **Introduction:** In the given Para it is said that 2nd scheme of Mining which was approved on 03.01.2013 is valid till 31.03.2016. the 2nd scheme of Mining was approved for the period 2010-11 to 2014-15 with proposal 2012-13 to 2014-15. The correction to be done accordingly.
5. **Review of Approved Mining Plan/Scheme of Mining:** In the given Para the yearwise proposal given in the approved mining plan/SOM and against that the achievement to be mentioned for mining and allied activities in a tabular form. if any deviation is there it should be properly discussed with the reason.

Para 1.2 details of earlier approved mining plan, scheme of mining should have been given in tabulated form with following column					
Sr.no	Type of document & rule under	approval letter no & date	Lease area in ha	Proposal from –to	

6.

Review of last approved mining plan proposals are not carried out. Against the proposals, actual achievement activities wise should have been quantified for each items and deviation if any should be justified in next column as per table given below.			
items	Proposals	Actual work done	Reasons for deviations
Exploration for Geological axis 1 or 2. Bore holes – Trail pits& Trenches-			
Number of bore holes			
Number of pits proposed for production			
Location of Development			
Total Quantity of topsoil removed, used and stacked in five years period in m3			
Quantity of overburden m3			
1 st year (2010-11)			
2 nd Year(2011-12)			
3 rd Year			
4 th year			
5 th year			
Total			
Production of Mineral tonnes			

	1 st year			
	2 nd Year			
	3 rd Year			
	4 th year			
	5 th year			
	Total			

	Total Quantity of sub-grade mineral stacked in tonnes			
	Stripping ratio or ore to OB ratio in five years period .			
	Height of benches in pits (mts)			
	Location of OB & mineral reject dumps			
	Length of Retaining wall or garland drain all along dump.			
	Area under backfilling of mined out area			
	Plantation / A forestation in nos. & area in Hect.			

	Area proposed for put to use in last MP/SOM as per Financial assurance at end of five year period-			
	Item details	Proposed area in last document.(ha)	Actual area as on date (ha)	Remark
	i) Area under mining			
	ii) Storage for top soil			
	iii)Waste dump site			
	iv) Mineral storage			
	v) Infrastructure – workshop, administrative building etc.			
	vi) Roads			
	vii) Railways			
	viii)Tailing pond			
	ix) Effluent Treatment Plant			
	x) Mineral Separation Plant			
	xi) Township area			
	xii) Others (to specify)			
	xiii) Total in ha			

	a) Details of earlier Financial assurance submitted-	
	b) Amount of Financial Assurance	
	c) Validity of Financial Assurance-	

	Give status of compliance of violations pointed out by IBM along with Monthly and annual returns.			
Sr no	Date of inspection	Violation date	Rule violated	Compliance status
i)				
ii)				

iii)	Monthly and Annual return submission status during last three years--	
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- 7. Geological Reserves:** The reserves are not furnished according to proper UNFC codification thereby mentioning cut off grades and threshold values considered for the estimation. For the purpose of ascertaining the UNFC code following procedure may be adopted –
- (i) Identify the category of your deposit as per UNFC guidelines (out of category I to IV)
 - (ii) Classify status of exploration based upon the parameters furnished under the specified table for Geological Axis i.e. G1, G2, G3, G4 etc. and also mark it on relevant plan & sections.
 - (iii) Now based on the stage of your study identify status of Feasibility Axis as per the relevant table i.e. F1, F2 or F3.
 - (iv) Based on the information contained in Prefeasibility or Feasibility study, furnish the cost benefit analysis for Economic Viability i.e. E1, E2 or E3.
 - (v) Combining EFG axis will give the relevant UNFC code for reserve and resources.
 - (vi) Few vital parameters such as depth consideration, bulk density, recovery and geological axis have not been discussed in para.
- 8.** The reserves should be calculated as per mineral content and mineral evidence Rule, 2015. There is no feasibility/prefeasibility report enclosed and reserves has been given in 111, the same should be clarified. In the given Para it is said that there will be no depletion of reserve of moulding sand as the excavated area will be refilled during subsequent rainy season but as per actual ground condition it was not happen which was observe during mine visit therefore as per actual ground condition the reserve should be calculated.
- 9. Mining:** The proposal of production should be given in G1& G2 area as per UNFC. The proposal should given developed the benches scientifically as mentioned with maximum 2 meter height. The stripping ratio should be included in the proposed table.
- 10. Conceptual Mining Plan:** A proper conceptual plan based on the long term design parameters of the mine covering all the mining and allied activities has not been furnished. All the activities should be furnished with extent of area and quantity involved in the form of 5 yearly blocks up to the lease period. The plate to be revised accordingly.
- 11. Employment Potential:** As per Rule 42 of MCDR,1988 Mining Engineer and geologist should be proposed.
- 12. Disaster Management plan:** A proper Disaster Management Plan based on the risk assessment and clearly indicating the chain of activities along with the name and designation of key persons with infrastructure(**hospital**, fire station, police station, etc. should be furnished. The contact no. of the responsible person to be given.

Plates:

- 13. Plat no.1 (key plan):** The details of the deficiencies found on the plate are as follows
- (i) The road to be marked with different colour line differentiating whether it is village, public road, highway, etc and also it should marked properly in index.
 - (ii) Contours should be clearly visible at not more than 20 meter intervals and should be index.
 - (iii) Co-ordinates of extremities of lease area are not shown in the plan.

- (iv) The forest area, govt. land, agriculture land, etc should be marked in the plate and also in index.
- (v) The plate to be indexed properly, different colour code should used for showing different features.
- (vi) Approach road for ML area and wind direction is not shown.
- (vii) Population of the villages falling within 5 km radius to be furnished in tabular form.

The plate should be revised.

14. Surface Plan: During the inspection it was observed that the area was not surveyed properly and some of the pits and dumps not shown as per actual position and all the area shown nearly same RL which is not correct, the area to be resurveyed and according correction to be done. The date of survey, is missing in the plate.(Plate 4)

15. Geological Plan: In geological plan the lithology should be shown and same should be indexed properly. In geological plan G1, G2, G3 and G4 scale exploration area should be marked properly as per UNFC and Minerals (Evidence and Mineral contents) Rules,2015.

The ore body zone should be marked on the plan.

The sample collection point to be mark in the plate and the same along with the location and co-ordinate to be enclosed in the text and also by whom and the manner in which the representative samples have been drawn and prepared in the prescribed manner for analysis by an accredited laboratory has to be furnished in the text. (Plate IV)

16. All the plates should be index properly as the features shown in the plan with the same colour code for clarity and signed with date. In development plant some area is shown as plantation but the same is not index.

17. All the plans and sections enclosed with the modified mining plan should be certified by Qualified person that the plans and sections are prepared based on the lease map authenticated by the state Government.

18. As per Rule 15 of MCR, 2016 qualified person should have a degree in mining engineering or post-graduate degree in Geology and professional experience of five year in supervisory capacity. The document in support of above mentioned should be enclosed.

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