

Scrutiny Comments on examination of the Review of Mining Plan with Progressive Mine Closure Plan for Marwar Mundwa Limestone mine (ML no. 111/2007)over an area 699.9ha located near village – Rupasar, Inana, Mundwa and Bhadana, Tehsil – Mundwa, District – Nagaur of M/s Ambuja Cement Limited submitted under rule17(2) of MCR 2016 and rule 23 of MCDR 2017.

1. This review of mining plan may be submitted under **rule17 (2) of MCR 2016 and rule 23 of MCDR 2017, May be corrected in all the relevant places.**
2. A khasra map authenticated with State officials showing all khasra details with lease demarcation in different colour should be enclosed with the documents.
3. Copy of rider agreement after extention of lease period is not found enclosed.
4. Copy of EC should be submitted along with the documents.
5. Copy of order from State Govt. regarding status of Mining Lease in view of the State Govt. order dated 15.06.2015 should be submitted, as the said order dated 15.06.2015 clearly mentioned cancellation of mining lease if cement plant is not commenced by 31.12.2016.
6. Geology and Exploration-
 - (i) The Updated UNFC table may be supported with data how it arrives. Parameter considers for the estimation of category wise reserve and resources under UNFC has to be explained in detailed like strike length, width and depth of ore body is considered for different category. The various UNFC codifications are also not given in geological sections and on surface geological plan. The various UNFC codifications may also be given in geological sections and on surface geological plan.
 - (ii) Subheading (i): Under the heading Future exploration programme, **the programme for exploration of the whole area up to G1 level as per the rule 12(4) of MCDR, 2017**, should be given. The year-wise programme of exploration should be given as per the Mineral (Evidence of Mineral Content) Rule, 2015 in the following format:

Name of prospecting /exploration agency-	
i) Address-	
ii) E mails-	
iii) Phone /fax etc-	

		FUTURE EXPLORATION PROGRAMME				
Year	UNFC axis	Area covered	No. of boreholes (Core/RC/DTH)	Grid interval	Depth(mRL/Level)	Total meterage
	G1					
	G2					
	G3					
	G4					

(iii) Subheading (j): Under the heading Reserve & Resources as per UNFC, the following information should also be given:

Geological Axis :--	Depth (mRL/Level)	Area	Resource (Million Tonne)	Grade
For G1 - Detailed exploration				
For G2 - General Exploration				
For G3 – Prospecting				
For G4- Reconnaissance				

FEASIBILITY AXIS :--	
Feasibility of mining	
Area considered non mineable under various items	
Mineral Reserves/ Resources Blocked /Non Mineable Category	
In G1 category in tonnes	
In G2 Category in tonnes	
In G3 category in tonnes	
In G4Category in tonnes	
Enclosed feasibility report	

ECONOMICAL AXIS	
Cost of production per tonnes of mineral estimated	
Average Ex- mine price for last three year period	
Comment on Economic viability	

(iv) Subheading (k): under this sub-heading the following information should also be given:

- (i) The reserves depleted during the last 5 years
- (ii) The reserve added after exploration during the last 5 years
- (iii) The final reserve & resources figure as per the table given below:

	UNFC Code	Quantity in million tonnes	Grade
A. Total Mineral Reserve			
Proved Mineral Reserve 111	111		
Probable mineral Reserve	121 and 122		
B. Total Remaining Resources			
Feasibility mineral Resource	211		
Prefeasibility mineral resource	221 and 222		
Measured mineral resource	331		
Indicated mineral resource	332		
Inferred mineral resource	333		
Reconnaissance mineral resource	334		
Total Reserves + Resources			

(v) Table regarding Mineral Resources: (Mineral resources may be estimated purely based on level of exploration) has not given.

Level of Exploration	Area in hectare	Resources in million tons	Grade	Remarks
G1 - Detailed exploration				
G2 - General Exploration				
G3 – Prospecting				
G4- Reconnaissance				

7. Para 5.1 Mining –the calculation for excavation pit wise and bench wise is not given. The details of development and excavation programme in details may also be given in text also. In method of mining method of drilling and blasting is not discussed in details.
8. Broad blasting parameters (Blasting pattern, charge per hole, charge per delay, maximum holes to be blasted per delay and manner and sequence of blasting) have not been given in details. Powder factor in ore and overburden have not been given. **Details about storage of explosive have not been furnished.** Location and size of magazine with licences no should also be given.
9. Para 7.0 The production is proposed to commence from the year 2019-20, but requirement of skilled and unskilled labor, technical supervisor, mining engineer and geologist as per norm is not given. It should be given. OMS is also not discussed.
10. Under human settlement the demographic pattern of the area nearby villages is not given.
11. Para 8.4 - Name of persons, designation with address and phone along with respective responsibilities should be detailed under disaster management para.

12. The date of collection of sample is not mention in any of report. The environment monitoring report is submitted is more than five year old, This is being A category mining lease (Mining plan) afresh EIA baseline data have to be furnished.
13. The post monsoon and pre monsoon water table is not discussed. The use water collected in excavated area during rainy seasons is also not discussed.
14. Para 8.6 of PMCP. As per provision of Rule 27(1) of MCDR 2017, the financial assurance co-terminus with mining plan period in favour of Regional Controller of Mines, IBM, Ajmer should be submitted in Original with a copy annexed in the documents.

Plans & Sections

15. North-south direction and prominent wind direction may be shown on all the plates and sections as advised.
16. Surface Plan. All the prominent present surface features are to be given on surface plan future planning need not to be given on surface plan. boundary pillar is not given.
17. **Surface Geological Plan and section :-**
The UNFC code is not shown , Block wise UPL Not given, Assay value of all the bore holes for limestone is also not mentioned. Block wise different zone of proved , probable reserve and other resources have not been marked on plan based on exploration so far carried out as per UNFC norm. The lateral and depth wise extension taken for marking such zone of mineral may be detailed text part also. Location of proposed hole may be revised as per revised exploration programme as suggested above.
- 18 Both longitudinal and transverse section should be provided to assess the actual status of geological strata and reserves.
- 19 In working plan index is incomplete location of different dumps is not given. It is not clear that area is proven barren where infrastructure will be develop, may be described in text.
- 20 Conceptual Plan plate no 6. Distinct outline for consecutive five years period upto lease period have not been incorporated in conceptual mining plan. The water reservoir not protected by fencing for safety purpose.
20. Environment Plan- plate no 8.. The environment control monitoring station not shown on the plates.. Hence the Environment plan should be prepare as per rule.
21. Each & every page of documents including annexure should be signed.
22. All the above maps/plate will be properly colour index & duly attested and authenticated with date of survey.