

Scrutiny comments on Review of Mining Plan including Progressive Mine Closure Plan in respect of Papra Iron ore mine (ML No 06/05) over an area of 4.20 hectares near village- Papra, Tehsil- Udaipurwati, District- Jhunjhunu submitted by Shri Deepak Singh under rule 17(2) of MCR 2016 & 23 of MCDR 2017

- 1 IBM registration no. given on cover page is not valid now, hence registration no. in the name of present lessee should be given on cover page.
- 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 The annexed chemical analysis report is very old i.e of 2008; hence latest mineral analysis report of ROM, saleable ore, rejects etc. from NABL Laboratory should be enclosed.
- 4 Para 3.0(General-Review of earlier approved Scheme/Mining Plan)
 - i Para 3.1 -Details of earlier approved mining plan/ scheme of mining should have been given in tabulated form with column as i)MP/SOM, ii)approval letter no iii) Validity period
 - ii Para 3.3 Development- The number of pit with location and their size and number of benches proposed in approved plan and actual ground position at present with size of pit and number of benches is not given.
 - iii In excavation table under column production achieved during the 2014-15 and 2015-16 a 25088 tonnes and nil is mentioned but as per office records based on returns it is 24000 tonnes in 2014-15 and during 2015 it is reported as 8423.39 tonnes .The variation need to be clarified with documentary evidence.
 - iii Year wise review for, OB, Top soil etc should be given in tabular forms with proposal, achievement and remark column. The comments in remark column in case of any deviation should also be given.
 - iv Land use table & financial assurance proposal of last PMCP has not been reviewed along with financial assurance given.

5 Geology and reserves

i During the last plan period there is no exploration work is carried out, in absence of exploration work the ground of remarkable increase in reserves and resources is not justified.

ii The justification of parameter like strike length, width and depth of mineral magnesite has not been considered as per norm, needs to be clarified. The assessments of reserve/resources in the lease area need to be done on verifiable parameters. The reserves are to be re-calculated on the basis of parameters to be taken for categorization of reserves under UNFC norms. Iron as reported in the area is in lenticular/lenses form hence the influence of iron ore may not be taken more than 25mts from exposed or explored pit/boreholes. Similarly the depth extension may not be taken more than 5mts for each category i.e (Probable and possible) from exposed level.

iii As per Notification dated 25th April, 2018

a All resources shall be assessed up to the threshold value and the resources between the threshold value and the cut-off grade shall be reported separately. There will however be no restrictions in estimating resources below the threshold value if there is a ready market of such mineral/ore either directly or after beneficiation.

b. The non-saleable/un-usable minerals/ ores above the limit prescribed in the threshold value and below the cut off grade shall be stacked separately in an area earmarked for the purpose.

c. The cut- off grade of Iron ore should be defined and reserves/resources above cutoff grade should be given in the mining plan.

D The reserve/resources of the mineral between thresh hold value and cut-off grade should be given in the document. Further, the mineral reject may be defined and generation of sub-grade mineral may be calculated in the submitted document.

iv 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. As per MEMC Rule 2015 in lenticular body for Iron ore the Bore-hole spacing along strike may be kept 50-25m or closer interval and the depth of bore hole may be kept till Iron ore encountered, hence 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-
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	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					

Under the heading Reserve & Resources as per UNFC, the following information should also be given:

Geological Axis :--	Depth (mRL/Level)	Area	Resource (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	

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 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			

6 Under Mining Chapter:

- a) The details of all the existing pit with dimension may be given here to know and easy for fresh development proposals.
- b) The year wise layout of mine workings should also be given in brief indicating year wise working, excavation, development direction, indicating pit no. and supported with grid pattern.
- c) The proposed production is very high in comparison to the production achieved during last plan period may be reconcile and correlate to the revised reserves and resources as suggested in above para item no 5.

- d) The Sp. Gravity/BD considered for ROM, waste is not clear. How the calculation is arrived is also not clear.
- 7 In conceptual the ultimate length of pit is mention as 200mts which is not possible as after statutory boundary there is no space is available to develop the pit length upto 200 mts. Hence the length and width of pit may be checked in view of size of ore body , dump area and lease area size.
- 8 Stacking of mineral reject/sub-grade materials.. The location of dumps may be supported with grid pattern. The Waste generation given as 156560 tonnes or 60215 CuM. (considering BD 2.6) as per mining plan chapter. These waste quantity cannot be dumped in 0.15hact with 8 mts height with two stage of 4mts. It may be rechecked and correct in all the appropriate para including FA table.
- 9 Waste dump is proposed to dump along slop of the mound, but proposals for preventing or securing the waste to roll down along slope is not given.
- 10 The telephone no. and e-mail address of responsible persons for Disaster management is not given.
- 11 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 afresh as per new MCDR 2017 in Original with a copy annexed in the documents.

Plates:

- 12 Surface Plan:
- (i) The co ordinates (Latitude & Longitude) of all boundary pillars should be shown in plan. Various type of land may be clearly marked on plate.
- 13 Surface Geological plan –
- A Plan may be revised in view of revised exploration, revised reserves etc with different zone of reserves etc.
- B UNFC code is not marked on plan and section.
- C Section A-A is not matching with plan features.
- 14 Development Plan:
- The area for Year wise proposed dump should be reconciled. The proposal may be revised if the production proposal revised in text.

- 15 **Plate no. 6-** Reclamation plan The area for waste dump may be revised as 0.15 hact area is very less for waste proposal as given in mining plan chapter.
- 16 **Financial Area Assurance Plan-** In the financial assurance table given on plan the area in hact shown against word total lease area is not correct.
- 17 Each & every page of documents including annexure should be signed.
- 18 All the above maps/plate will be properly colour index & duly attested and authenticated with date of survey. Chapter no. and paragraph no. may also be checked and corrected.
