## KHUB - 1 LIMESTONE MINE/ MINING PLAN INSPECTION REPORT

Inspected By: S. K. Mohapatra (SMG)

Date of Inspection: - 13.06.2018

## TEXT

- 1.0 As per office record, an approved document of review of mining plan is valid for a period (2015-16 to 2019-20) for both the leases (Khub-I & Khub-II) based on the application for amalgamation of the above two leases. Therefore the submitted document will be a modification of review of mining plan under rule 17(3) of MCR 2016 and the same needs to be rectified in cover page, text, plates etc. & wherever it has mentioned.
- 2.0 Under summary of proposals at a glance; information of proposals (i.e. 2018-19 to 2019-20) need to be furnished, not the carried out period (i.e. 2015-16 to 2017-18).
- 3.0 In the introduction chapter a brief history of the mining lease to be given depicting all the statutory clearances/ court cases (if any) etc. with documentary evidence from the grant of the mining lease to as on date in chronological order.
- 4.0 Under 2.8; copy of educational qualification and professional experience of working of the qualified person needs to be furnished.
- 5.0 Under 3.3; date of execution of lease has been mentioned as 17th January 2015 needs to be rectified.
- 6.0 Under 3.14; No information has been provided regarding location map, which needs to be furnished.
- 7.0 The details of approved mining plan and review of mining plan needs to be furnished in chronological order & in a tabular form with documentary evidences.
- 8.0 Reason for modification under 5.21 has not been furnished & needs to be specified.
- 9.0 In page 9; under physiography (6.1.1), it has mentioned that the highest and lowest contours are passing through 525m & 462m respectively within the ML area, which is not matching with the mRL shown in surface plan and respective plans.
- 10.0 The drainage pattern under 6.1.2; furnished in the text is not matching with as shown in environment plan and respective plans.
- 11.0 Resource/reserve calculation in the draft document needs to be revised as per UNFC norms. The resources figure furnished in 6.5.3 table is not matching with figure furnished in table 6.5.8 under different categories of UNFC, need to be rectified. Further calculation for sandstone reserve/resources needs to be furnished.
- 12.0 Back up calculation along with grade for blocked resources under various modifying factors needs to be provided either in feasibility study report or in text or in both.
- 13.0 Table under 7.2.1 (b), year wise production left blank in the draft document needs to be rectified. Further the figure shown in table 7.2 is not matching with figures shown in 7.2.1 (c) needs to be verified and to be rectified.
- 14.0 The calculation sheet to arrive at the year-wise production quantities to be furnished either in text or enclosed at Annexure.
- 15.0 The details furnished in conceptual mining, life of mines, ultimate pit limit, reclamation and rehabilitation & post mining land use conceptualised need to be recast. (7.20 to 7.25).

16.0 A detail indicating the boundary extents of the ultimate pit limit, slope angle, bottom

pit limit needs to be furnished.

17.0 The details of construction of check dams/ settling tanks etc shall be given along with their design in the chapter on mine drainage. The mode of disposal of surface run-off water shall be discussed indicating the schematic route showing its discharge with proposed provisions of check dams/ settling tanks/ water quality monitoring stations etc. The proposal shall also to be shown in the reclamation plan.

18.0 The existing land use pattern table should be furnished in respect of existing area used under heads of mining & allied activities, according the same needs to be rectified.

- 19.0 No information has been furnished under 14.2 (i) in the draft document. Further, information furnished in 14.2 (ii) to (vi) should be realistic and needs to be rectified accordingly.
- 20.0 No information have been furnished under 14.3.6, 14.3.7, 14.3.10 & 14.3.11 in the draft document.
- 21.0 Information furnished under 14.2.13, financial assurance details is not clear. The information need to be furnished with proper explanation.
- 22.0 A risk assessment report along-with disaster management plan of the mining unit shall be enclosed duly approved by the management of the mine/ competent authority.
- 23.0 An emergency preparedness plan duly approved by the management of the mine/ competent authority to be enclosed.
- 24.0 Original copy of Consent letter/Undertaking/Certificates needs to be furnished.

## ANNEXURE:

1.0 An undertaking from the nominated owner on commencement of mining operations only after getting the permission from all the concerned statutory bodies as well as for carrying out the proposed time bound exploration program.

2.0 Copy of the environment clearance letter.

3.0 Copy of the consent to operate from the state pollution control board.

4.0 Copy of Form-K in respect of the existing boreholes sinked in the mine. All of the same shall be duly countersigned by the geologist of the mine.

5.0 Copy of the magazine licence.

6.0 NABL test reports on quality of limestone.

7.0 Colour photographs of lease boundary pillars showing the co-ordinates.

8.0 Copy of the surveyor's certificate to be enclosed.

## PLATES:

1.0 Key plan:

1.1 Key plan shall be prepared strictly as per the extant provisions specified under rule 32(5)(a) of MCDR 2017.

1.2 Monitoring stations are shown in legend but not in map.

2.0 Authenticated lease plan duly certified by the state government to be enclosed.

3.0 Surface plan:

3.1 The surface plan shall also to be signed by the manager of the mine.

3.2 Spot levels of the left out portion of the existing benches need to be shown.

3.3 Existing features within the lease area like, plantation, mineral storage, waste dump if any needs to be shown. Further a proper colour codification needs to be used for proper visualization. 4.0 Geological plan/ sections:

4.1 The litho units have not shown in geological plan.

- 4.2 UPL and UNFC codes have not shown in geological plan. UPL shown in geological sections are not properly drawn, which needs to be started from the safety zone and resources/reserves may be calculated accordingly as per the UNFC norms.
- 4.3 Indexes of different features shown in geological plan & sections.
- 5.0 Mine development/ production plan & sections/ dump plans & sections/ conceptual plan/ sections:

5.1 Year wise development plans & sections needs to be furnished as per financial years (i.e. 2018-19 & 2019-20) instead of 1<sup>st</sup> year & 2<sup>nd</sup> year.

- 5.2 Scientific & systematic development of the mine i.e. development starting from safety zone from the western part of the lease area reaching the UPL may be proposed, which will create a scope for concurrent reclamation and rehabilitation of the mined out benches
- 5.3 Conceptual plan and sections needs to be prepared i.r.o the geological plan & sections and as per the revised UPL.

6.0 Environment plan:

- 6.1 Environment plan shall be prepared strictly as per the extant provisions specified under rule 32(5) (b) of MCDR 2017.
- 6.2 All existing surface features to be shown in the environment plan.
- 6.3 Existing afforestation & reclamation carried out, if any, shall be shown.
- 6.4 60 mtr radius boundary along with existing features needs to be furnished.

7.0 Reclamation plan/ sections:

- 7.1 No reclamation plan has been submitted. The proposed plantation & reclamation shall be indicated in a tabular form indicating the proposed year of carrying out the above said activity/ area to be covered (ha.)/ no. of saplings to be planted/ species of saplings to be planted along with location of the activity. The table should be given separately for reclamation & afforestation program proposed.
- 7.2 Proposed bench / dump position at the end of 5<sup>th</sup> year to be shown with points of monitoring of AAO parameters.
- 7.3 Existing bench also to be shown in a lighter shade.
- 7.4 The water management plan showing the position of garland drains/ retaining walls/ check dams/ settling pits should be clearly indicated in this plan.
- 7.5 Proposed reclamation program for the review of mining plan period needs to be shown.

8.0 Financial assurance plan:

- 8.1 The existing/ proposed usages under different categories shall be coded in different colours with specific boundaries and reported in index.
- 8.2 Financial assurance table needs to be inserted in the plan.

'n