

Scrutiny comments on examination of draft Review of Mining Plan submitted under Rule 17(2) of MCR' 2016 in respect of Belgundi Aluminous Laterite Mine (M.L.No. 2431) of M/s. Belgaum Minerals, over an extent of 90.36 Ha, situated in Belgundi Village, Belgaum Taluka, Belgaum District of Karnataka State for the period from 2018-19 to 2022-23.

- 1) **General:-i)** On the cover page the title of the document should be mentioned as Review and updation of mining plan and rule should be corrected as 17(2) of MCR-2016. Further PMCP should be submitted under rule 23 of MCDR-2017. ii) In consent /undertaking letters rules should be mentioned as per MCR-2016 and MCDR 2017.iii) In the introduction chapter details of mining lease, ownership and statutory clearances obtained to carryout mining operation need to be discussed. iv) Last approved mining plan /scheme and any modifications should be discussed at para 3.1 only. At para 3.2 Modification if any for last approved document should be discussed. v) Under reclamation area proposed for reclamation and area reclaimed and deviations if any and reason for deviation needs to be discussed properly. vi) Annexure numbers are not properly indicated in text and all annexures are not enclosed. vii) The qualification and experience certificates of the qualified person who prepared the document need to enclose.

- 2) **Geology and exploration:-i)** Topography of the lease area is not properly discussed. Topography of the lease area and highest and lowest elevations mentioned in the text are not matching with the surface plan. ii) Vegetation, drainage pattern and rainfall data given at page number 9 needs to be corrected. iii) Regional geology with reference to location of the lease area and geology of the lease area are not properly discussed. iv) Not necessary to give geological age of the formation in the table. v) Under details of sample analysis, number of core samples, pit samples, trench samples analyzed so far needs to be discussed. Further at page no 13 it is mentioned that analysis reports are enclosed as annexure-III, whereas annexure III is not enclosed. vi) Latest analysis report for the important radicals analyzed from NABL approved laboratory needs to be enclosed. vii) Entire mineralized area should be explored under G-1 level of exploration. Accordingly exploration proposals should be given. viii) At page number 14, the table given for exploration is incorrect. Area explored under G-I, G-2 and G-3 level with type of exploration and numbers are not mentioned nil and details are shown under unexplored area. ix) Rules under which plans and sections prepared need to be mentioned as per MCDR-2017. Plans and sections are prepared on 1:2000 scale, but in text and on plates scale is mentioned as 1:1000. x) Feasibility report should be given as per IBM manual for appraisal of mining plan-2014. xi) The recovery and bulk density should be taken based on the test conducted. The recovery factor taken for reserve estimation appears to be more this needs to be rechecked and reserves/resources need to be re-estimated by taking correct bulk density and recovery factor. xii) At page number 17, 18 for reserve estimation, bulk density etc., mineral is shown as Lime stone. This needs to be corrected in all the pages where mineral is mentioned as limestone instead of aluminous laterite.

xiii) Justification given for estimation of reserves/resources and type of deposit mentioned in the text are incorrect. xiv) Method of reserve estimation and detailed calculation for reserves/resources estimated as per UNFC classification is not given. xv) Reserves which are blocking in the 50mtr safety zone from nallah and electrical line should be estimated under remaining resources. xvi) At page number 30 reserves are estimated under G-2 level and remaining resources under G-1 level this needs to be justified. xvii) Reserves/resources shown under different UNFC codes/classifications given in the table at page no-30 and 31 are mismatching. xviii) The date of reserves/resources estimation should be as on 01.04.2018.

3) **Mining:-**i) Existing method of mining and existing pits with all design parameters need to be discussed. ii) Proposed method of mining with all design parameters to be discussed properly. Number pits proposed with locations and proposed working RL's should be shown clearly. iii) The working proposals should be changed as per the discussion during field visit after plotting pits properly as per the recent survey. iv) Proposed RL's should be mentioned in the table given at page no-33, 34 and 38.v) Recovery factor and bulk density should be taken based on the test conducted. vi) Cubic meter and tonnages are mismatching. This needs to be rechecked and corrected. vii) Ore to OB ratio needs to be corrected. viii) Under conceptual plan working proposals, dumping and reclamation proposals for the next block period up to life of the mine need to be shown with table showing land use details of present, five year plan period and conceptual period. ix) Under mine drainage regional and local drainage pattern, annual rainfall, catchment area and arrangement for arresting wash off etc should be discussed. x) In previous chapters it is stated that no topsoil will be generated in the plan period and at para 4.0 it is mentioned that about 12422.84Cum topsoil will be generated in the plan period this need to be verified. Details of topsoil generation, utilization and storage with location should discuss year wise. xi) Area already reclaimed and area to be reclaimed with dimension needs to be discussed properly. xii) Lessee is using dry crushing and screening plant for processing of ore same should be discussed under processing of ROM.

4) **Progressive Mine Closure Plan:-** i) Rule under which PMCP submitted is need to be corrected as rule 23 of MCDR-2017. ii) The present land use pattern given in the table need to be updated. The details given in the table are not matching with the field observations. Details of backfilled area are not mentioned in the table and area under mining etc is incorrect. iii) Category of the mine mentioned at page no-49 need to be corrected. iv) The details of flora and fauna should be corrected. v) Details of climatic conditions need to be rechecked and corrected and average rain fall of the area which is mentioned as 600mm is incorrect. vi) The land use table given in all the pages should be corrected as per the scrutiny comments. vii) Summary of the year wise proposals of reclamation and rehabilitation with area available for backfilling in terms of length, width and depth, quantity of waste proposed for backfilling, proposed plantation details and proposed protective measures is not discussed as per the table. viii) Since aluminous laterite is declared as minor mineral what type of mechanism available with State

Government for proper implementation of the progressive mine closure plan contained in the mining plan other than bank guarantee needs to be discussed. ix) The area which is proposed to be reclaimed in the plan period should not be taken as fully reclaimed area for calculating area for bank guarantee. The total area considered for financial assurance to be updated as per the scrutiny on land use pattern.

5) Plates:-

(i) General:- i) DGPS survey plan and Cartosat Satellite imaginary plan with co-ordinates as per CCOM circular 02/2010 authenticated by the state Government is not enclosed. ii) Except key plan and environment plan all the plans are prepared on 1:2000 scale but on plates and in the text scale is mentioned as 1:1000. iii) On key plan details of population should be as per latest census.

(ii) Surface plan:- i) Pits are not properly updated based on recent survey and area backfilled is not shown. ii) Signature of the surveyor is not there on surface plan.

(iii) Geological plan and cross sections:- i) Area explored under different level of exploration is not marked on plan and reserves/resources estimated under different UNFC codes are not marked on sections. ii) UPL is not marked on plan and sections. iii) Index which is not applicable may be removed

(iv) Production and development plan and sections:- i) Year wise proposals should be modified as per the scrutiny comments given in the mining chapter. ii) Proposed RLs should be shown on plan and sections.

(v) Conceptual plan and sections:- i) On conceptual plan and sections proposed method for reclamation and rehabilitation of the mined out area need to be shown. ii) Pit position at the conceptual stage should be shown on plan and sections. iii) Land use details of present, after 5 year plan period, ten year plan period and at the end of the life of the mine to be given in the table.

(vi) Environment plan:- i) The environment plan should be prepared incorporating all the points mentioned under Rule 32(5)(b) of MCDR 2017.

(vii) Reclamation plan:- i) Year wise plantation proposals are not properly shown on Reclamation plan. ii) The backfilling proposals should be rechecked and corrected. In text backfilling is shown from the first year and on plan backfilling proposals are shown from second year onwards.

(viii) Financial assurance plan:- i) Not necessary to enclose Financial assurance plan if bank guarantee is not given as per scrutiny comments on financial assurance given in PMCP chapter. If bank guarantee is given then plan showing area utilized for different activities which are considered for financial assurance should be shown by different colors and same should be shown in index. ii) Table showing area considered for financial assurance should be added on plan.