Scrutiny comments in respect of Lokapur Limestone mine, M.L.No.-2575, over an area of 4.05Ha, non-forest land, A-others category mine, situated in Lokapur-village, Mudhol-Taluka, & Bagalkot-Distt. of Karnataka-State for approval of modification in approved mining Plan under rule 17(3) of MCR,2016 for period 2017-18 to 2021-22 of Shri L.S.Hiremath.

Cover Page- The expiry of lease period should be given 03/2/2058 as per MMDR amendment Act 2015 should be given. The category of mine should be mentioned as A-others, instead of OTFM. The rule under which document is submitted should be 17(3) of MCR, 2016 & Non-forest and survey number should be corrected as per lease deed. It needs correction. The word "technical person" should be replaced as "qualified person".

Certificate/Undertaking- It would be desirable to give single certificate instead of multiple certificates as per IBM manual for appraisal of mining plan 2014. The certificate/undertaking should be bear with date & place.

Annexures-The latest translated copy of annexure-2 (Village account Form-2) in English/Hindi should be enclosed.

Introduction- The brief history of mine should be discussed from first grant of mining lease, and subsequent scheme of mining with supporting documents. The life of mine should be given as per MMDR Amendment Act, 2015. The rule under which document is submitted should be corrected as 17(3) of MCR, 2016 & reason of modification in mining plan should be given.

General- Para-f), The provision & name of QP should be under rule 15(1) of MCR, 2016. It needs correction.

Location & Accessibility:- i) The type of land & ownership details of lease area should be given based on Govt. revenue record. Page-10, The name & contact details of recognised agency, who had conducted the DGPS, is not given in text. The copy of DGPS plan duly submitted to State DMG for authentication should be discussed & given with supporting documents. The location of GCP should be checked.

Details of approved mining plan/scheme of mining-i) Para 3.1, the date of approval of mining plan & subsequent scheme of mining should be discussed & given in the form of annexure. Review of scheme of mining- The year wise production & development quantity should be updated & given till date based on statutory annual/monthly returns submitted to IBM & deviation should be justified. The proposed & achievement should be mentioned as per approved scheme proposal i.e. Latitude & Longitude /RL etc. & actual workings done should be discussed in tabular form with proper justification.

ii) The para-3.4, page-5, The copy of latest violation pointed out & their compliance should be discussed for the change of place of working etc.

The feasibility report should be submitted with suitably linked to the reserves estimated with latest economic parameters and it should be discussed regarding viability of project in conclusion.

Geology & Exploration:- The copy of form J & K should be discussed & submitted in the form of annexure. The contact details of exploratory agency, who has carried out the core drilling should be given in text. The total numbers of DTH/Core bore holes have been done so far should be given in tabular form as per format of appraisal of mining plan 2014. Additional exploratory core boreholes should be proposed in middle of remaining lease area.

Year	No.of Boreholes drilled so far (Core/RC/DTH)	Grid interval	Total Meterage	No.of pits, dimension & vol.	No.of trenches & dimension & vol

The cut-off grade & threshold value of minerals should be discussed as per IBM circular 2009. {Limestone-Cao-35 %(min), Mgo-4%, Sio2-18%, Alkalies-0.5% Max.}. The reserves and resources should be updated as on 01.4.2016 and till date, after depletion of production achieved. The reserves & resources should be modified by leaving the mineral blocked in statutory barriers etc. The ultimate depth of pit & recovery of ore should be given.

Mining: - It was observed during inspection that first bench is mostly intercalated waste/OB only therefore generation of waste should be calculated correctly. The existing pit dimension along with no of benches in limestone/waste, top & bottom RL in tabular form should be given as on 01.4.2016. The mine design parameter should be discussed in brief with all precautionary measures. Instead of referring plan & section plates, is should be discussed in brief in tabular form. The top soil should not be treated as overburden. The proposed production & development table should be given pit wise as per manual of appraisal of mining plan 2014. (Page-33)

Year	Pit No.	Total tentative	Top Soil	OB/SB/IB	R	OM (m3)	ROM/waste
		excavation (m3)	(m3)	(m3)	Ore	Mineral reject	ratio

The proposed production & development quantity should be given in tonnage also. Page-35,39,40,41,43 Para-C, instead of referring in plate no.4A-4E, proposals should be discussed in brief in tabular form with latitude, longitude with top & bottom RL, area etc.

Page-37, The adequacy of mine machinery & their capacity should be discussed as per manual of appraisal of mining plan 2014. The mine machinery should be optimised based upon the haul road, height & width of bench in mine as per MMR, 1961. It should be clarified whether mining machinery/crusher/manpower used is own/purchased/hired/contract etc. secondary boulder blasting should be eliminated, single rock breaker of required capacity may be proposed.

Page-40, The tentative conceptual mine planning should be discussed up to life of lease period. The land use pattern should be mentioned as on 01.4.2016 or till and subsequent plan period up to 2021-22 and conceptual/lease period up to 03.2.2058 by considering five year block period.

Page-40, Dumping inside mine lease area on mineralized ground should be in temporary nature only and dumping outside lease area is not allowed.

Page-47, Use of minerals & Mineral rejects- As per buyer specification, +35 to-42 Cao is not desirable; therefore utilization of mineral rejects/subgrade limestone with quantity & grade should be discussed by suitable blending with high grade & utilizing.

Page-49, It should be discussed the employment potential as required under MMR, 1961. It should be time bound commitment for appointment of mining engineer & Geologist as required under provision of MCDR, 88.

Page-50, PMCP: - Land use pattern should be mentioned as on date or 01.4.2016 and subsequent next plan period up to 31.3.2022 and lease period. Review of PMCP proposals should be as on 01.4.2016 and further next five years proposals. The existing as well as proposed environmental protective measures should also be given in tabular form. (Page-63-65)

Page-69, financial assurance: Land use pattern should be mentioned as on 01.4.2016 and subsequent next plan period up to 31.3.2022. The copy of original valid bank guarantee of for the A-category mine should be submitted in further submission in the form of Annexure. (Minimum 2Lakh Rs.) All plan and section, text & tables should be modified based on above scrutiny.

Plan & sections:

Plates:

- 1. **Key Plan**: Lease area should be bounded by all sides showing latitudes and longitudes of extreme four points. Land use status i.e. Govt. land, private land & forest land, wind rose diagram etc must be shown by different colour code. The index should be updated with different colour code.
- 2. **DGPS plan**: The copy of DGPS plan submitted to state Govt. for authentication should be enclosed in the form of annexure. It should be submitted the soft copy of auto generated files of path row of satellite and date of pass of DGPS survey.
- 3. Surface Plan/ Surface Geological Plan & sections: The surface plan should be signed by a certified surveyor with date. The surface features outside the lease area is not required, it needs correction. The index is not matching with legend.
- 4. Production & Development plan/Conceptual Plan- The location of proposed waste dump should be shown temporary only since it is on mineralised area. The area & location of waste dumping should be shown correctly. The surface features outside the lease area is not required, it needs correction. The year wise proposal should be modified pit wise as per production table in text. The conceptual plan should be updated by showing five year block wise production.
- 5. **Financial Assurance Area Plan-** The land used details should be given specifically as table & text. The surface features outside the lease area is not required, it needs correction. The area shown in plan & table is not matching.

- 6. **Reclamation Plan-** Existing & proposed afforestation is not shown properly in plan. Garland drain, retaining wall, rain water management and mine water discharge system is not shown in this plan.
- 7. **Environment Plan**: The plate is not prepared as per rule 28(5)(b) of MCDR 88 to show other details population, village boundary, types of land, existing lease & features in 60m & 500 area etc.

Annexure:

- 1. All supporting documents of mining plan & subsequent scheme of mining approval letters, state DMG letter for deemed extension of mining lease, if any etc. should be given in the form
- 2. The copy of DGPS plan duly signed by conducting agency, both cartoset image & cadastral plan authenticated by state DMG/inward letter to state DMG for authentication should be enclosed in further submission.
- 3. The chemical analysis report of intercalated waste/mineral rejects etc. should be submitted from an NABL accredited Laboratory.
- 4. Field photographs of corner pillars with number, RL, latitude and longitude marked on it should be submitted.
- 5. Latest quarterly monitoring report on air, water & noise should be enclosed as per category of the mine for last 2-3 quarters.
- 6. The copy of original valid BG of extended period should be submitted in the form of annexure.
- 7. Field photographs of core drilling with copy of form J & K submitted to this office. The enclosed chemical analysis report is incorrect. Same should be replaced.
