Site inspection report cum scrutiny comments on examination of Mining plan including PMCP of Sonadih Limestone Mine over an area of 19.219 Hectors in village-Khapri, Tehsil-Baloda Bazar, District-Baloda Bazart submitted under rule 16(1) of MOAHEM Concession Rule 2016 and 23(B) of MCDR, 1988 on behalf of M/S Lafarge India Pvt.Ltd.. The area was inspected by shri R.K.Das Sr ACOM and Shri R.N.Mishra, SMG on 20/01/2017.

- 1. Para 2.5 and 2.7 phone /faxes/ emails have not been furnished.
- 2. Para 2.11- The experience of Qualified person enclosed is not complete five years period.
- 3. Para 2.13- Map with khasara details The area 64.815 ha proposed for grant of mining lease is not properly marked. The lease area map furnished has not been surveyed and demarcated by Total station & DGPS as required under Rule 12(6) of MOAHEM Concession Rule 2016
- 4. Para 3.10 all corner points of lease area boundary are not given name and Coordinates of all corner pillars are to be given after survey as per Rule 12(6) of MOAHEM Concession Rule 2016 duly authenticated by state government.
- 5. <u>Geology and exploration:</u> Complete chemical analysis for entire strata for all radicals may be undertaken for selected samples from a NABL accredited Laboratory or Government laboratory or equivalent. Entire mineralized area may be analyzed meter wise with 10% of check samples. (At least for 10% of total samples may be analyzed in accordance to BIS and reports from NABL accredited/other government laboratory).
- 6. Area of G1 & G2 exploration block on the surface Geological Plan as per Mineral evidence Rule, 2015 have not been marked. Accordingly the reserve/recourse should be established.
- 7. Typing error on Page no 26, total Area covered mentioned 29.219 instead of 19.219.
- Future programme of Proposed Bore hole planned to be drilled upto 30m depth (Page No.36) it should be drilled minimum 50m because Bore hole no EM-1 (CaO % 35.5), CN-2 (CaO % 40.28) , CN-6 (CaO % 37.13) and CN-7 (CaO % 35.97) closed in mineralised zone at the depth of 30m.
- 9. The limestone mineral resources estimated in mining plan is of 11.2 million tonnes where as in prospecting scheme 3.825 million tonnes. The justification for enhancement of limestone reserve not furnished.
- 10. Mining In the given Para it is said that surface level varies from 236-242 but for mining point a level of 239 m has been considered but in table for five year tentative proposed production working level considered 238. The same should be clarified.
- 11. The dump design should be discussed with the individual terrace height, the catch drain of individual terrace, garland drain, etc. The dumping proposed in large area to be optimised.
- 12. Processing of ROM & Mineral Reject-_The information furnished in the given Para is in vague state. The limestone is for captive use therefore it should be clearly mentioned whether crushing and screening is required or not and if required flow sheet or schematic diagram of the crushing /screening unit with capacity should be enclosed.
- 13 key plan: The details of the deficiencies found on the plate are as follows
 - (i) The village population of buffer zone to be shown in tabular form.
 - (ii) The forest area, govt. land, agriculture land, etc should be marked in the plate with different colour code and also in index.
 - (iii) The monitoring station in the buffer zone for air, water, noise to be shown.
 - (iv) There are many features existing in area but are not shown in plan, i.e. railway line along the lease boundary, nala, etc.

- (v) Co-ordinates of extremities of lease area are not shown in the plan.
- (vi) The plate to be indexed properly, different colour code should used for showing different features.
- 14. <u>Lease Sketch Map:</u> A lease sketch with complete demarcation report should be enclosed. The precise area demarcation plan or the lease plan furnished is does not show proper lease boundary. The lease area map furnished has not been surveyed and demarcated by Total station & DGPS as required under Rule 12(6) of MOAHE Concession Rule 2016
- 15. <u>Surface Geological Plan:</u> In the given plate the surface exposure of limestone to be shown as per actual ground condition. The dip strike direction has not been shown in the plate.
- 16 <u>Surface Plan: i)</u> all corner points of lease area boundary are not given name and Co-ordinates of all corner pillars are to be given
- ii) Boundary pillars nomenclature of some corner boundary pillars is missing from the plate and features shown are not indexed properly.
- ii)During inspection it was observed and discussed some of surface features such as fencing in plantation area missing. The same should be shown in the plan.
- iii) A seasonal water course(Nala) & Railway line is shown in the Environment plan plate. Buffer zone from Nala inside lease area should be marked in the plate and no mining activities should be proposed in that area.
- 17 <u>Development and Production Plan:</u> The production and development planning should be shown with the proper bench advancement with the top and bottom RL of the bench, Haul road RL should be mentioned and also dump yerwise progress(lateral and vertical.In the text it is said that to bench is 5 meter height(238-233) but second bench proposal given only for 3 meter height(233-230). The same should be clarified keeping in view scientific and systematic mining with the use of 3.5 cu.m shovel and deep hole drilling and blasting.
- 18 yearwise production section is not prepared.
- 19. All the plates should be index properly as the features shown in the plan with the same colour code for clarity and signed with date.
- 20. Pre-feasibility report: There is a typographical error mentioning the chronology of PLs & ML in mentioning the area of lease. Needs to be corrected.
