Scrutiny comments in respect of Pachhtar Limestone mine, M.L/Sy. 225(new148) over an area of 52.60Ha, non-forest, A-category, situated in Pachhtar-village, Bhanvad-Taluka, Devbhumi Dwarka-Distt. of Gujarat-State for approval of Review of Mining Plan under Rule 17(2) of MCR,2016 for the period of approval 2018-19 to 2022-23 (expiry of Lease period 06.11.2033 as captive use) of M/s Shree Digvijay cement co.Ltd.

Cover page- The name of lessee should be given as per execution/lease deed only, other irrelevant information/company logo should be deleted.

Introduction- Page-3, last scheme of mining was approved from 2013-14 to 2017-18 instead of 2012-13. It needs correction.Page-4, Table-The IBM registration number of outsourcing parties should be given. Page-5, it should be discussed in brief regarding ESZ notification dated 28/4/2017 (zero distance from Barda) from MoEF&CC for Barda wildlife Sanctuary & accordingly correct distance should be given & restriction of working imposed by state Geologist Jamnagar with in 1Km distance of lease from barda wildlife sanctuary is to be ascertained. The EC of Pachhtar mine is common for all the three leases, therefore proposed annual ROM production of all three lease should be discussed & total production should not exceed from EC capacity. The instant lease i.e.52.60Ha.should be highlighted.

Location & Accessibility: - Page-8, the name of nominated owner & other partners with address & contact details in tabular form should be given. The type of land & ownership right should be given as per form-I&IV /Govt. revenue records & should be translated & enclosed in further submission.

Review of mining plan/scheme of mining:-The ROM production, Development, exploration, plantation done etc. should be discussed with location, top & bottom RL, area/tonnage & grade etc. It should also be review the financial year 2017-18 till date. The mine workings have been done with in 7.5m of statutory barrier, seasonal nalla, powerline, structures not belonging to owner. It needs clarification with valid reason.

Para-3.5- It should be discussed in brief regarding MoEF&CC notification dated 28/4/2017 for zero ESZ from Barda wildlife Sanctuary & accordingly restriction of working imposed by state Geologist Jamnagar with in 1Km of barda wildlife sanctuary is no more valid. Further status of revocation should be discussed & updated.

The feasibility report should be discussed with latest economic parameters, IRR; viability of project etc. in present market condition should be concluded.

Geology:- Table-1.6-The depletion of ROM production achieved in plan period should be updated till date. Table-1.8, The reserves & resources is not calculated as per provision of MEMC Rule, 2015. It should be re-estimated as per MEMC Rule, where No extrapolation of extreme borehole/pit is allowed in lateral extent & below pit/hole depth. The cutoff grade & average bulk density should be discussed. The above threshold & below cutoff grade should be considered as mineral rejects. All Geological reserves/ Block able reserves calculation & Year-wise production & development calculation tables should be discussed in tabular form. Page-24, the part of lease area is still devoid of exploration; therefore exploratory core borehole up to depth of mineralization should be proposed in extreme boundary of lease instead of irregularly shown. Entire reserve estimation is incorrect.

The copy of original borehole logs & chemical analysis report of limestone/intercalated waste/mineral rejects etc. should be submitted from an NABL accredited Laboratory only.

Mining- Before making mining proposal, it is essential to ascertain the continuity of restriction imposed by State Govt. If yes than mining proposal is to be modified accordingly. The existing pit dimension with number of pits, top & bottom RL & number of benches in ore & waste should be given in tabular form. The year wise proposed production & development quantity has not been given pit wise, even more that one different pit are available. Page-37, The year wise proposed ROM production table should be given in tonnage also. The I, II, III, IV & V year should be replaced with financial year of plan period. The production & development tables should not be given separately; same should be as per format & manual of appraisal of mining plan 2014. The EC is given for combined three leases; therefore distribution of ROM in instant lease (52.6Ha) should be highlighted & given in tabular form. The total annual ROM should not exceed EC capacity. The adequacy of man & machinery, capacity & Optimization /detailed calculation of targeted production & availability of machines should be discussed & given. It was observed during inspection that few boundary pillars were not available as per statutes in field; therefore field photograph of BP & copy of google image of kml file of lease area

should be enclosed. The mine workings have been done with in 7.5m statutory barrier or appears outside lease in few places should also be discussed with valid reason. The statutory barrier of road/nalla/surface structure/powerline/wild life sanctuary etc. should be discussed & shown on respective plan & section. The five year production proposal should be proposed with in UPL.

The tentative conceptual mining should be modified & discussed in text up to life of mine/lease period. Page-47, the land use pattern should be mentioned as on 01.4.2018/or as on date & and subsequent plan period up to 2022-23 and conceptual/lease period by considering five year block period.

Page-57- The organization chart of manpower mine wise as per provision of MMR, 1961& MCDR, 2017 should be given. PMCP-Page-60-The land use details should be mentioned as on 01.4.2018 or as on date, plan period up to 31.3.2023. The year wise afforestation/plantation as per MOEF&CC, Pollution control, EC guideline should be proposed within 7.5m statutory barrier/non-mineralized zone with suitable protective measures/water arrangement should be proposed. It was observed during inspection that aesthetic beauty of lease area was degraded by various pits/stacks/irregular benches etc. The same should be proposed from one side of lease to other with uniform level.

Page-72, The organization chart for disaster management plan should be given with name, designation & contact numbers of authorized person, their duties and responsibility.

Page-73, financial assurance: Land use pattern should be mentioned as 01.4.2018 or as on date and plan period up to 31.3.2023. Table should be modified/updated till date. The area acquired for plantation, stacking & other uses should be considered. The copy of original valid bank guarantee for extended period for the A-others category mine as per provision of MCDR, 2017 should be submitted to IBM Gandhinagar Regional office. Progressive mine closure plan has been prepared very carelessly. Proposal given are inadequate to mitigate the extent of the degraded land.

During the pendency of approval, if there is any change in the name / address / ownership of mining lease, it should be informed promptly.

All plan and section, text & tables should be modified based on above scrutiny. The plan & section should be modified & updated plates as per above scrutiny & provision of MCDR, 2017 in further submission. The copy of kml file google image should also be enclosed.

- 1. **Key Plan**: Lease area should be bounded by all sides showing latitudes and longitudes of extreme boundary points. Land use status i.e. Govt. land, private land & forest land, wind rose diagram etc. must be shown by different colour code.
- 2. **Surface Plan:** The plan should be updated as above scrutiny. The water nallah, pit benches, mineral stacks i.e.ROM, OB, Mineral rejects etc. should be shown. The statutory barrier of 7.5m, electric power line, public road, nallah etc. should be shown & leaving barrier as per provision of MCR, 1960. The plan should be signed by certified surveyor with date & Place.
- 3. **Surface Geological Plan & sections**: The existing/proposed exploratory core boreholes, mine pits with G1, G2, G3 level of exploration should be modified & judicially shown. All sections should be modified as above scrutiny & show contact with host rock at bottom or maximum possible mineral thickness based on GSI/DMG data.
- 4. **Production & Development plan& sections:** The plan & section should be updated & modified with in revised UPL. The year wise proposal should be shown properly with benches, top & bottom RL & area etc. The protective measures, approach roads to working pits etc. should be proposed & shown properly. The collar RL of borehole logs & mine working level is not matching. Reconcile with original logs & corrected.
- 5. **Conceptual Plan:** The pit position of mine at conceptual stage of tentative mining should modified & shown in conceptual plan with showing plan period & block period of mining with levels as given.
- 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 provision of MCDR, 2017 to show other details population, village boundary, types of land etc.
- 8. **Financial Assurance Area Plan-** The Land use pattern should be mentioned as on 01.4.2018 and subsequent plan period up to 31.3.2023.

Annexure:

- 1. All supporting documents in legible form should be given in chorological order. The other annexure/copy in Gujarati should be translated in either English or Hindi should be enclosed.
- 2. The copy of field photographs of trail pits/original borehole logs etc. with sign of geologist should be given in further submission.
- 3. The few chemical analysis report of ore/mineral rejects etc. should be submitted from an NABL accredited Laboratory.
- 4. The copy of MoEF notification dated 28/4/2017 regarding relaxation of working with in 1km from barda wildlife sanctuary should be enclosed.
- 5. Copy of Field photographs of corner boundary pillars with number, RL, latitude and longitude marked on it etc. should be submitted. (Enclosed photographs are not as per statutes)
- 6. The copy of original valid BG of extended period should be submitted to IBM Gandhinagar in final submission.
- 7. The further submission of document should be properly binding having sufficient strength and the plates are properly folded so that they can be accessed easily.
