

General

1. As state govt has added two survey no-849 for area 34.27 Acres and survey no-850 for 233.22 Acres totaling to 268.09 Acres in the lease vide G.O.Ms.No-76 Dated 25.08.2017, modified mining plan needs to be submitted.
2. Name of the nominated owner be mentioned in the space provided for name of the lease holder. Also board resolution or appointment of the nominated owner be submitted along with the list of board of Directors be submitted.
3. The survey nos mentioned G.O.Ms.No-76 Dated 26.08.2017 and lease sketch authenticated by the ADMG-Miryalguda enclosed with the submitted draft mining plan document are not matching with each other. Further the Geo-coordinates of deleted area 100 Acres & 16.67 Acres which are not part of the mining lease has not been mentioned in the lease sketch authenticated by the ADMG-Miryalguda. Thus the lease sketch authenticated by the State DMG be submitted and all the plans be prepared based on authenticated lease sketch.
4. Status of extension of lease period for a period of 50 years or upto 31.03.2030 whichever is later along with the status of supplementary lease deed execution be submitted.
5. Submit the details of last 5 approved mining plan / scheme of mining / review of mining.
6. All the Ground Control Points be shown in the surface plan along with geo co-ordinates. Further date of survey be mentioned in the surface plan. All the plans and sections be prepared as per rule 34(2) of MCDR-2017.
7. Details of the company registration be furnished.
8. During inspection it was observed that M/s Zuari Cement Limited is part of Heidelberg Cement Group and as per the lessee's representatives there is no change in respect of M/s Zuari Cement Limited. In this regard documentary evidence be submitted.
9. The installed cement plant capacity is a vis environmental clearance (EC) and limestone requirement from both the mines be discussed with proper justification.
10. The details of environmental clearance (EC) of plant and mine have not been furnished. Details of CFE and CFO should also be furnished in the introduction chapter.
11. Annexures are not numbered correctly.

Review

12. As per annual return for the year 2017-18, 13 nos bore holes have been drilled for a total meterage of 610m but in the review of mining plan only 7 nos of core bore holes for a total drilling meterage of 334 m is mentioned. As per the annual return submitted to this office for the year 2016-17 no exploratory bore hole has been done but in the review 6 nos of core bore hole for a total drilling meterage of 254m has been submitted. The deviation observed be clarified and reason for short fall in exploratory drilling be mentioned.
13. As per annual return, the Production is 1024090 tonnes in 2017-18, but as per submitted document it is 1005000 tonnes. The deviation observed be clarified. Further Reasons for short fall in Limestone production be mentioned.
14. In the production and Exploration review for the year 2018-19 be submitted upto 30.09.2018.
15. As per annual return and plantation register the number of trees planted during the year 2017-18 is 2740 but in the draft submission it is submitted as 5630. The deviation observed be clarified.
16. Review of environmental monitoring be submitted year wise, location wise for air, noise, water. Also the review of topsoil generation and environmental protection measures be submitted.

17. Source of rain fall, temperature data be submitted.
18. Table No-6 be submitted with total drilling meterage.
19. In the local geology the local lithological succession has not been discussed with average grade of different type of limestone occurring within the lease. Thus the local lithological succession be established on the basis of exploratory drilled BHs. Further average grade of different type of limestone occurring within the mining lease be submitted and chemical analysis report be submitted thereof.
20. During inspection it was observed that the bore hole location and collar level has been taken by using GPS. As GPS is having +/-3 to 5 m accuracy. The bore hole points be surveyed by total station and BH co-ordinates and collar levels be submitted. Details like Co-ordinates, Collar level, Depth of all the drilled bore holes along with summarized litho logs be submitted.
21. Bore hole wise exploratory samples details along with sample analysed by NABL accredited lab be submitted for last 2 years and the current year in tabular form. 10% of the check samples should be analysed by NABL accredited laboratory. The NABL accredited lab analysis report towards exploratory sample analysis along with NABL accreditation certificate be submitted.
22. Exploration proposal be submitted to explore the entire mineralised area in G1 level of exploration as per rule 12(4) of MCDR-2017.
23. All the bore hole lithologs be signed by the Geologist Incharge for the exploratory operation.
24. Cut off grade of limestone has been submitted as CaO% of 45% and SiO₂% of 10%, whereas as per the exploration done there exists limestone of CaO% of 40% and even upto the threshold value. Thus the sub grade/mineral reject generation, its stacking and utilization / blending be proposed year wise.
25. The level wise explored area be shown in the Surface Geological plan.
26. The UNFC axis wise justification be furnished as per the guidelines of UNFC.
27. In the Geological axis justification level of exploration be submitted by mentioning the grid spacing, no of bore holes falling in each level with bore hole type and drilling meterage.
28. In the feasibility axis justification the economic viability, Environmental issues be addressed.
29. Table no -18 and 19 provided for level wise explored area along with reserves/resources is different for each other. Thus it should be correctly submitted.
30. In the reserves/resources table weighted average grade be submitted.
31. Strike and dip direction, dip angle be measured at different locations within the mining lease and demarcated in the Geological plan.
32. Meter wise CaO% be submitted for each of the bore hole.
33. In the PCD-1 lithologs the respective TCO3% of meter wise sample and CaO% submitted for composite samples are not in consonance with each other.
34. The geological sections are not drawn correctly. In the mines the BC soil is not available every where but shown in all the sections. The lithologs, Geological plans and sections should match. The sections need to be updated as per the drilled bore holes and shown in the geological sections. The year wise Production and development sections be prepared as per the corrected geological section.
35. The reserves/resources have been estimated in excess thus its should be estimated considering the depth of exploration, grade, statutory restrictions, feasibility.
36. The UPL decided be justified with exploration and pit slope.
37. The mineral resource/reserves need to be assessed/estimated and categorized correctly as per the MEMC Rules-2015. The grade range and the weighted average grade of different litho units and the deposit need to be established correctly.

Mining

38. Submit the plant capacity and the limestone requirement for the plant. The maximum approved capacity of the feeding mines as per mining plan and the proposal during the next five years from feeding mines. The production capacity should match with the plant capacity and accordingly the limestone supply from both the mines be submitted.

39. The area of mining from 1st Oct 2018 to 31st March 2019 be demarcated in the surface plan and in the geological and year wise production and development sections. The proposed production quantity be mentioned in the text.
40. The justification for requirement of mining machineries be justified more elaborately. Further the drilling machine requirement be calculated on the maximum quantity of production proposed.
41. Proper justification be submitted for enhancing the production from 16 Lakhs tonne on an average (2018-19 to 2021-22) of the plan period to 20 Lakhs tonne in the year 2022-23. The enhancement in production be submitted progressively instead of sudden.
42. The Section wise, bench wise weighted average grade of proposed mining block for each year needs to be furnished and the mechanism for the grade control for optimum utilization of mineral along with blending techniques needs to be furnished. Bench parameters needs to be mentioned.
43. In the year wise production development plan the area to be mined be shown by colourful lines and arrows showing direction of bench movement with mentioning RL (from-to) to be mined.
44. The Year wise Production and development section be drawn on the same section line as in the case of the geological section. Further the year wise working sections to be mined be mentioned correctly in the year wise development tables. Further year wise Development section be furnished.
45. In the year wise development plan the approach road to year wise bench development be shown and the area to be developed year wise be marked mentioning the year and from (mRL) - to (mRL).
46. Year wise Fencing surrounding the working pits where further mining is not possible and at other places surrounding the mining pit where required be proposed.
47. In the conceptual mine plan chapter under sub heading post mining land use pattern the land use for water body is submitted as 14.9 Ha where as the mineral will continue beneath after the expiry of the lease period i.e 23.04.2024. Thus the proposal submitted is against the conservation of mineral be justified.
48. Proposal for year wise generation of top soil and its stacking, disposal be submitted.

Mine Drainage

49. Environmental protection measures to control surface run off within the lease and surface run off into the working pit be proposed and shown in the reclamation plan.
50. Year wise sump planning be proposed as per the requirement of water for dust suppression and development of green belt with co-ordinates, dimension, capacity has not been furnished in text and shown in plan.
51. Rain water harvesting structure be proposed.
52. Basis of marking the boundary of HFL line be submitted. Further the authenticated meteorological data be furnished for HFL level.
53. The information pertaining to water table be supported with documentary evidence.
54. Hydro Geological study be proposed to be carried out in respect of the mine.

PMCP

55. Base line environmental information be submitted as submitted in the application for environmental clearance.
56. Plantation be proposed in the safety zone area surrounding pit-1 and also perpendicular to the prevailing wind direction and the proposal be marked in the reclamation plan.
57. Ambient Air quality, water and noise monitoring station be shown correctly in the key plan as proposed in the text.
58. Last quarter environmental monitoring report be submitted.
59. The land use pattern submitted in the draft document is on lower side even to that of details submitted the annual return (H-8) for the year 2017-18. The cement plant area has not been taken into consideration while calculating the financial assurance. The net area considered for calculation of financial assurance/bank

guarantee amount is less than the actual. Thus additional bank guarantee be submitted.

Plans

60. Existing features located within 500m from the lease boundary be shown in the environmental plan.

61. The UPL be marked in the surface and geological plan.

62. The surface plan and Geological plan, Geological sections submitted in the draft document is not upto dated and the date of survey is 07.07.2018. During inspection it was observed that the latest survey has been done on 07.10.2018, thus all the plans and section be prepared based on survey dated 07.10.2018.
