SCRUTINY COMMENTS ON EXAMINATION OF MODIFICATION IN THE APPROVED MINING PLAN OF NARMA BAUXITE MINE OF SHRI MADAN MOHAN PRASAD SINGH OVER AN EXTENT OF 21.00 HECTARES, LOCATED IN VILLAGE NARMA, UNDER BISHNUPUR P.S. OF GUMLA DISTRICT OF JHARKHAND STATE, SUBMITTED UNER RULE 17 (3) OF MCR, 2016.

- As per approval of Mining Plan letter no. RAN/GML/BX/MP-05/2013-14 dated 30/10/2014, a copy of EIA-EMP report as approved by MoEF should be submitted to this office immediately after approval, which has not been done till date.
- While inspection of the proposed area the latitude of BP.22 does not match as mentioned in Pg. 4 and with the GPS Data on verification.
- Pg. 9 as per the Annual Return 2014-15, 2015-16 no production has been reported but under heading Exploitation in the year 2014-15 & 2015-16, 33448 & 41500 tonnes of Bauxite along with the soil, hard murum and laterite has been produced simultaneously.
- 4. Proposals for concurrent backfilling in the mined out area is to be incorporated in the document instead of dumping of overburden on un-mined area. If concurrent backfilling is not proposed then the ground selected for dumping of overburden, waste material, the subgrade or nonsalable ores/minerals shall be away from working pit. It shall be proved for absence or presence of underlying mineral deposits before it is brought into use for dumping as per Rule 16(2) of MCDR 1988.
- Ultimate Pit Limit has been proposed in the plates but reserve has not been calculated keeping in views of Ultimate Pit Limit.
- Pg. 13 under point 3.5 mention the reasons for closure of mines or any prohibitory order issued by any Govt. Agency, if no such orders are issued then why the mines was not in a working state and the mines has been reported for Non-Working.
- 7. In Pg. 18 it is mentioned that no detailed prospecting and exploration has been carried out in the leasehold areas except 8 nos. of quarries but further in Pg. No. 20 it is mentioned that during 2015-16 lessee drilled 27 no. of coring bore holes in a grid of 15X15 mts. which contradicts each other, further as enclosed Annexure 16 of lithologs does not contain grade of Bauxite which is to be analyzed in NABL accredited Lab or any other Govt. Lab.
- As mentioned earlier in 2015-16, 27 no. of bore holes drilled and the average grade
  of the deposit is mentioned. But as per Annexure 14 attached, the analysis report is
  of year 2012 which also contradicts the previous statement.
- In Pg. 22 the grade of Al<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub> for G1 and G2 category is mentioned but grade analysis report is not attached.
- 10. In Pg. 27 Feasibility Mineral Resources (211), mineral is not present under this category but Feasibility Report has been attached with the document which contradicts the Reserve and Resources estimated as on 01.04.2016.
- 11. As per annexure 21 validity of Mining Mate Certificate has already expired on 03.08.2016, copy of renewed certificate is to be attached for further processing.

- 12. In the front cover and other places of the document, it is found that, the modification in the approved mining plan has been submitted under Rule 17(3) of MCR, 2016, instead Review of Mining Plan should be submitted under Rule 17(2) of MCR, 2016. Accordingly, the Consent letter from the applicant, certificates & undertakings submitted along with the document should be revised accordingly.
- 13. At all the places in the document, Shri P.K. Sen has been signed in his capacity as RQP, instead he should signed as the qualified person only.
- 14. The DGPS surveyed map/plan in compliance to CCOMs circular No.2/2010 and its addendum dated 21.09.2011 & 11.06.2014 regarding geo-reference cadastral map has not been submitted. Moreover, the undertaking submitted in compliance to the CCOM's circular No. 2/2010 is not acceptable at present.
- 15. Place & date is missing in the consent letter, certificates & undertakings from the applicant, which should be done and revised accordingly.
- 16. In case of individual or partner, a declaration/affidavit should be submitted to know whether he is working in other firms/company/organization etc.
- 17. The previous production details from 1990-91 to 2012-13 has been enclosed as annexure-11, instead the same should be furnished upto the year 2015-16.
- 18. The Chemical analysis report indicating the grade of the bauxite in respect of Narma Bauxite mine has been enclosed as annexure-14 but the report is very old, analysed on 18.06.2012, which is not acceptable, instead a fresh report on the above account should be submitted replacing the old one for clarity.
- 19. Litho logs for the already drilled boreholes are enclosed as annexure-16 but the holes are coring or non-coring type has not been mentioned. Moreover, no photograph of the borehole logs has been enclosed, which should be submitted.
- 20. The excavation planning for the period from 2016-17 to 2020-21 has been computed & enclosed as annexure-19 and on examination of the same it is found that, the recovery of bauxite is considered as 80% but the basis on which such recovery is considered has not been mentioned. So, also the grade of the recoverable bauxite may be furnished supported by authenticated chemical analysis report. Likewise, the waste generation is indicated to be 20% but the basis for such generation may also be furnished indicating the grade of such waste material. Accordingly, necessary corrections / modifications may also be made in connected paras in the text relevant plates.
- 21. An agreement has been made with 2<sup>nd</sup> party M/s Hiralal Agencies Pvt. Ltd., for carrying out blasting operations in the mine and a copy of the agreement has been enclosed as annexure-20 but the copy of the explosive procurement license issued by the competent authority in favour of the 2<sup>nd</sup> party has not been enclosed, which should be submitted.
- 22. The copy of the RQP certificate enclosed as annexure-22 is not legible; thereby a fresh copy of the same should be submitted by replacing the enclosed one for clarity.

- 23. Few photographs in support of the existing quarry(s) and plantation has been enclosed as annexure-23 but the name of the quarry(s) & their location co-ordinates is missing, which should be furnished. Besides, few photographs in support of existing dump(s), stack(s), reclamation, rehabilitation, exploration & lease boundary pillars may also be submitted for more informative.
- 24. An extended bank guarantee with validity period from 31.05.2015 to 30.05.2020 has been annexed to the enclosed annexure-24, whereas, the document has been submitted for the period from 2016-17 to 2020-21, thereby a valid bank guarantee matching to the ensuing five year period should be submitted.
- 25. A consent to operate from Jharkhand State Pollution Control Board has not been enclosed along with the document, which should be obtain and enclosed along with the document for ease in monitoring.
- 26. The ambient air quality, flue gas, effluent, soil, surface water, noise level monitoring reports in respect of Narma Bauxite mine has not been enclosed, which should be submitted.
- 27. In last para of the introduction chapter, the modification in the approved mining plan has been submitted under Rule 17(3) of MCR, 2016, instead the document should be submitted under Rule 17(2) of MCR, 2016. Accordingly, necessary corrections/modifications may also be made at all the places in the document. (Page No.1)
- 28. The topography, drainage, vegetation & climatic condition of the unspecified area has been furnished, which is not proper, instead the name of the lease area indicating the location of the bauxite plateau should be clearly indicated. Accordingly, the same may also be furnished in connected paras in the text for more informative. [Para 1.0(a)]
- Under the heading of the para, local geology of the unspecified area has been furnished; instead, the name of the area should be specified. [Para 1.0(c)]
- 30. Details of the existing quarries available in the lease area have been furnished in tabular form but the location co-ordinates of the same is missing, which should be furnished by adding one more column right to the table for more informative. (Page No.19 & 20)
- 31. The cut-off grade of the bauxite is missing in the 2<sup>nd</sup> table given in the page under reference and the same should be furnished. (Page No.20)
- 32. Under the heading Insitu Tentative Excavation, the proposed quantities of Soil/OB/SB/IB/ROM ore has been furnished in tabular form but the bench/RL of the excavation planning for each year has not been given, which should also be furnished by adding one more column in the table. Besides, the recovery percentage of bauxite is missing, which may also be furnished by adding one more column in the table. [Para 2.0(C)(I)]
- 33. The name of the quarry(s) / location co-ordinates of the proposed workings should be furnished indicating the direction of advancement of quarry faces. Besides, the tentative dimension of the benches proposed to be made in topsoil, morrum & bauxite ore zone may also be specified. All should be presented in tabular form. In the light of the above, the information furnished in para 2.0(e) may also be revised. Besides, it is found that, on an average 41000 tonnes of bauxite has been proposed to be produced in each year of the ensuing mining plan period by purely manual means, which is not acceptable. Therefore, the level of mechanization should be upgraded at least to category-A (OTFM) and the excavation planning, bench design as well as drilling & blasting proposed in the document should be revised accordingly. [Para 2.0(d)]

- 34. The para is meant for conceptual mine planning, whereas, no information regarding the same has been furnished. Therefore, the excavation planning beyond the ensuing five year period should be furnished on account of development, production, dumping, reclamation, rehabilitation & afforestation up to the end of the lease period. It is also found that, the occurrence of bauxite is found below the lairs of topsoil, morrum but the same has not been discussed in the refer para. Therefore, the factual information about the topsoil & morrum is required to be furnished indicating, the quantities of topsoil & morrum proposed to be generated by end of the conceptual period supported by calculations for more informative. [Para 2.0(f)]
- 35. Existing land use has been furnished in  $1^{st} \& 2^{nd}$  table of the page under reference and surprisingly, the data furnished in both the tables are not matching with one another. Moreover, the proposed land degradation status in each year of the ensuing five year period is missing, which should be furnished in tabular form restricting the proposed degradation status in the non-forest area only. (Page No. 38)
- 36. The minimum & maximum depth of the water table in the area is missing, which should
- 37. The quality of water encountered in the area is missing, which should also be furnished
- 38. The average rainfall data for the period of 10 years has been furnished in tabular form but the data pertains to which specific calendar years have not been indicated. (Page No.41)
- 39. The quantities of topsoil proposed to be generated in each year of the ensuing five year period has been furnished in 1st table given in the para under reference but the location co-ordinates/cross sections considered for the purpose is missing, which should be furnished by adding one more column right to the table. (Para 4.0)
- 40. Nothing has been given about the proposed generation status of sub-grade materials, which should be specified and the para may be revised accordingly. (Para 5.0)
- 41. Quarry wise extent of area proposed to be degraded in each year of the ensuing five year period should be furnished. Besides, quarry wise reclamation, rehabilitation, restoration & afforestation etc. for each year may also be furnished. All should be furnished in tabular form and rest of the things should be erased. (Para 8.3.1)
- 42. Dimension (L x B x D) of the void available for backfilling should be furnished, quarry wise in 3<sup>rd</sup> row of the table furnished for the year 2016-17 in the page under reference. Accordingly, the information furnished for the years 2017-18 to 2020-21 in page No. 63 to 66 may also be revised. (Page No. 62)
- 43. Updated status of bank guarantee should be furnished under the heading Computation of financial assurance and necessary corrections may also be made accordingly. (Page No.

## Plan & Sections.

- 44. Plate No. 1 (Key Plan): The details of the deficiencies found on the plate are as follows:
  - (i) The index reference given for core zone is suspected to be for lease area.
  - (ii) The index reference given for metal road is not to be seen on the plan portion of the plate.
  - (iii) Direction of flow of nalla has not been marked on the plan, which should be depicted.
  - (iv) the moterable road is shown within the mining lease boundary but in all the other plates it is outside the lease boundary which contradicts the Key plan.
- 45. Plate No. 2 (Area Plan): The area plan submitted along with the document has not been authenticated by the State DMG, therefore, not acceptable in this form. Besides, a plate enclosed as plate No. 15 showing the area of Narma bauxite mine also not authenticated by the competent authority rather it is attested by a gazetted officer.
- 46. Plate-3 (Surface Plan): There are three Permanent ground control points (GCP-1 to GCP-3) have been selected and the boundary pillar BP3, BP21 & BP22 are considered as the GCP-1, GCP-2 & GCP-3 respectively, which is not proper, instead, atleast three permanent ground control points situated outside the lease area should selected and latitude & longitude of these ground control points may be furnished. Besides, these ground control stations need to be linked with the boundary pillars. Moreover, Surveyors signature is missing on the plate, which should be signed by a competent surveyor.
- 47. Plate-5 (Development Plan & Section 2016-17): Different litho units depicted on the sections are not matching with that of the plan. Besides, it is found that, the mining operations are proposed by category-B manual means, whereas, separate plates for development plan & section for each year has been submitted, instead of a composite development plan & sections should be submitted.
- 48. 7.5 m. Barrier is not shown in respective Plans.
- 49. UNFC code is to be mentioned in Geological Plan & Sections.

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