SCRUTINY COMMENTS ON EXAMINATION OF MINING PLAN OF **NEW AMTIPANI BAUXITE MINE** OF SHRI AWADHESH KUMAR SINGH OVER AN EXTENT OF **49.069 HECTARES**, LOCATED IN VILLAGE AMPTIPANI, UNDER BISHNUPUR P.S OF GUMLA DISTRICT OF JHARKHAND STATE, SUBMITTED UNDER **RULE 17(2) OF MCR, 2016.**

- 1. Any documental evidence of extension of Mining Lease period is to be attached.
- 2. As per office records submission of document for approval was due 01/12/2014 containing the proposals from 2015-16 to 2019-2020 and the year 2015-16 has already lapsed now the document for approval must contain actual work done of the lapsed period and proposal for the remaining period.
- 3. In the review part and as per office record it is mentioned that there has been production of Bauxite from the mines but activities such as development of green belt during the plan period could not be achieved due to pendency of EC & consent to operate, but plantation done has been reported in the office.
- 4. 36.64 Ha. of land is Rayati Land (Private land of the Local People) and 3.064 Ha of land is GM land, which has to be transferred from the local people (land owners) before the mining activity is started. Any documental evidence for the transfer of land is to be attached for the land within the lease area in which the proposals for mining are proposed.
- 5. On Inspection it was found that point (x) of last approved Mining Plan letter dated 22/03/2013 regardingCCOM'S Circular No. 2/2010 of Geo-referenced cadastral map has not been complied.
- 6. According to point (xiii) of last approved Mining Plan letter dated 22/03/2013 a copy of EIA-EMP as approved by MoEF shall be submitted to IBM immediately after approval by MoEF which has not been done till date.
- 7. As per office record the total overburden removed in the year 2014-15 was 56000 tonnes but in pg. 9 it is mentioned as 9164 tonnes, further a Remarks is also mentioned the lessee could not achieve the development of quarry and ob removal as per schedule scheme of mining due to pendency of EC & consent to operate.
- 8. Pg. 18 Complete chemical analysis for entire strata for all radicals maybe undertaken for selected samples from a NABL accredited Laboratory or Governmentlaboratory 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). This has not been placed in the document.

9. Reserves and Resources for Bauxite –(Quantity in MT)

Classification	Code	As on 1/04/2011 (As per approved Mining Plan)	As mentioned in pg. 21	As mentioned in pg 25 – Reserves and Resources for Bauxite as on 01/04/2016	As per Annual Return as per annual return Submitted by Lessee (2015-16)
Proved Mineral Reserve	111	1895983	1349028	507939	1823332
Proved Mineral Reserve	122	133826	149138	993571	133826
Feasibility Mineral Resources	211	77019			
Prefeasibility Mineral	221			88441	
Resources	222	17202		228994	17202

Now as per Pg. 22 and Annual Return submitted in this office the total production for Bauxite form 2011-12 to 2015-16 is only 92561 Tonnes. There is a huge difference while depleting the reserves as on 01/04/2011 to reserves as per 01/04/2016 (138804 tonnes) but the Returns has been submitted showing total production of Bauxite of 92561 tonnes. Also the reserve figures does not match with the annual return submitted by the Lessee. Further grade of the mineral reserve is also not indicated.

- 10. Feasibility Mineral Resources (211) does not show any reserves which cannot be NIL as it is that part of Measured Mineral Resources, which after feasibility study has found to be economically not mineable. Till 01/04/2011 there has been resources reported as per office records.
- 11. The ambient air quality, flue gas, effluent, soil, surface water, noise level monitoring reports in respect of New Amptipani Bauxite mine has not been enclosed, which should be submitted.
- 12. In case of individual or partner, a declaration/affidavit should be submitted to know whether he is working in other firms/company/organization etc.
- 13. Few pages of the copy of the lease deed enclosed as annexure-4 is not clearly legible; thereby a fresh copy of the same should be submitted replacing the enclosed one for clarity.

- 14. On examination of the copy of the voter ID of the applicant enclosed as annexure-5, it is found that, the photo pasted is not clearly legible; thereby a fresh copy of the same should be submitted for clarity.
- 15. Litho logs for the already drilled boreholes are enclosed as annexure-10 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.
- 16. The calculations for resources & reserves has been enclosed as annexure-11 and on examination of the same, it is found that, the reported recovery of bauxite is considered as 80% but the basis on which such recovery is considered has not been mentioned, which should be discussed.
- 17. The excavation planning for the period from 2016-17 to 2020-21 has been computed & enclosed as annexure-12 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. Besides, the excavation proposal should be restricted to four years from 2016-17 to 2019-20. Accordingly, necessary corrections / modifications may also be made in connected paras in the text relevant plates.
- 18. A valid consent to operate the mine 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. The consent to operate enclosed as annexure-15 has already lapsed & cannot be considered.
- 19. An agreement has been made with 2nd 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-18 but the copy of the explosive procurement license issued by the competent authority in favour of the 2nd party has not been enclosed, which should be submitted. Besides, a copy of the valid blasters license also not enclosed for carrying out blasting operations in the mine.
- 20. The chemical analysis report of bauxite samples from TCRC has been enclosed as annexure-19 but the report is very old analysed on 23.01.2013, which is not acceptable, thereby a fresh report to that effect should be submitted. Besides, the valid NABL accreditation certificate issued in favour of TCRC may also be submitted for its authenticity.
- 21. Few photographs in support of the existing quarry(s),dump & boundary pillars has been enclosed as annexure-21 but the name of the quarry(s) & their location co-ordinates is missing, which should be furnished. Besides, few photographs in support of existing stack(s), reclamation, rehabilitation, exploration & afforestation may also be submitted for more informative.

- 22. In item No.(i), under the heading **As proposed in the scheme of mining**, a mention has been made that, the proposed production per month is for 25145 tonnes, which appears to be not correct, thereby the figures should be checked and corrected.
- 23. The achievements on account of exploration, development, production, reclamation, rehabilitation and afforestation during the year 2015-16 is missing, which should be furnished and the para may be revised accordingly. (Para 3.3)
- 24. In all the tables furnished in the page under reference, the unit of production & waste handling is missing, which should be furnished for ease in monitoring. (Page No.8 to 10)
- 25. (15) In 1st para of the page under reference, a mention has been made about the three temporary waste dumps but nothing has been given about the size/capacity and location of such dumps, which should be furnished and the para may be revised accordingly. (Page No.11)
- 26. In 2nd table given in the page under reference, the location co-ordinates of plantation is missing, which should be furnished by adding one more column right to the table for ease in monitoring. (Page No. 11)
- 27. The average rainfall data from January to December has been furnished in tabular form in the page under reference but the data pertains to which calendar year has not been specified.(Page No.15)
- 28. 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)]
- 29. Details of the existing quarries available in the lease area have been furnished but the location co-ordinates of such quarries is missing, which should be furnished for more informative. (Page No.17)
- 30. The cut-off grade of the bauxite is missing in the table given in the page under reference and the same should be furnished. (Page No.18)
- 31. 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(B)(I)]
- 32. 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. In the light of the above, the information furnished in para 2.0(e) may also be revised. [Para 2.0(d)]
- 33. The para is meant for conceptual mine planning, whereas, no information regarding the same has been furnished. Therefore, the excavation planning beyond the ensuing mining plan 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 factualinformation 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)]

- 34. The land use after the plan period has been furnished in 3rd table given in the page under reference, instead the same by end of each year of the ensuing mining plan period is required to be given in separate tables and the para may be revised accordingly. (Page No.42)
- 35. The proposed plantation schedule for each year of the ensuing mining plan period has been furnished in tabular form and the plantation has been proposed on the periphery of the reclaimed area, instead the same should be proposed in the backfilled area and location coordinates of such plantation may also be furnished by adding more columns in the table. (Page No. 43)
- 36. The minimum & maximum depth of water table in the **plateau area** has not been given and the same should be furnished and the para may be revised accordingly. [Para 3.0(a)]
- 37. The quality of water encountered in the area is required to be furnished and the para may be revised accordingly. [Para 3.0(b)]
- 38. The quantities of OB/SB/IB proposed to be generated in each year of the ensuing mining plan period has been furnished in the 1st table given in the para under reference but the location coordinates /cross sections considered for the purpose is missing, which should be furnished by adding more columns in the table. [Para 4.0(a)]
- 39. The location co-ordinates of proposed reclamation is missing in the table furnished in the page under reference, which should be furnished by adding one more column right to the table for ease in monitoring. (Page No.49)
- 40. Under the heading **Manpower deployment**, a full time Mining Engineer holding degree in mining engineering as required under Rule 42 of MCDR, 1988, which should be done and the para may be revised accordingly. (Page No. 52)
- 41. Quarry wise extent of area proposed to be degraded in each year of the ensuing mining plan 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 for quarry-4 has not been furnished in 3rd row of the table given, which should be furnished. (Para 8.3.5)

PLANS & SECTIONS

- 43. Plate No.1 (Key Plan): The index reference given for metal road is not to be seen on the plan portion of the plate. Besides, direction of flow of nala is missing on the plan portion of the plate and the plate may be revised accordingly.
- 44. 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.
- 45. Plate No. 3 (Surface Plan): (i) The land classification given in front cover of the document on account of GM land &Raiyati land have not been marked with different colour codes, which should be done. (ii) The boundary pillars BP-7,BP-8 & BP-9 has been considered as the ground control points, which is not acceptable, instead atleast three permanent ground control points situated outside the lease area should be selected and latitude & longitude of these ground control points may also be furnished. Besides, these ground control stations need to be linked with the boundary pillars. (iii) Moreover, Surveyors signature is missing on the plate, which should be signed by a competent surveyor. In the light of the above, all other relevant plates may also be revised.

- 46. Plate No.5A (Development Section 2016-17): Different litho units depicted on the sections are not matching with that of the plan, thereby necessary modifications may be made in all other development plan & sections submitted along with the document.
- 47. Dip Strike, UNFC code is to be mentioned in Geological Plan & Sections.
- 48. In all the sections compared to respective plans the color coding for laterite and jungle jhari area are same, which should be different.
- 49. In all the development plans Bauxite is not shown.
- 50. Section in between 500E to 600E, 800E to 900E, and the section cutting along quarry marked Q1 from lease boundary to lease boundary covering all the prominent features should also be drawn so as to get the maximum exposure.
- 51. Plate 4 A in section A6-B6 clay is exposed but in Geological plan it is missing, further junglejhari area is not shown in respective sections.
- 52. In the Environment plan the color coding of Jungle Jhari / Forest area is shown, is the area being handed over to Department of Forest or the Plantation work will be done adjacent to the forest land after the mineral is mined out if so, different color coding easily demarcated the afforested land and the Forest Land.
