SCRUTINY COMMENTS ON DRAFT REVIEW OF MINING PLAN IN RESPECT OF BANDOBAR BAUXITE MINE (20.69 HA) LOCATED IN VILLAGE-BANDOBAR, DISTRICT-LOHARDAGA, STATE JHARKHAND OF MRS. DIPALI PANDEY & MRS. PUNITA PANDEY, LEGAL REPRESENTATIVE OF LATE LEELA DEVI, LESSEE SUBMITTED UNDER RULE- 17(2) OF MCR, 2016.

TEXT:

1. Cover page:

- i) Under lease particular, period of lease executed on 25/04/1990 has not been mentioned on the cover page.
- ii) Plot numbers 191, 3219, 200, 3225 & 3226 mentioned on the cover page are not matching with the land schedule given in the Part I of the lease deed.
- iii) Mining lease expired on 24/04/2010. Date of expiry of lease mentioned as 24/04/2040. As per Section 8A (6) of MMDR Act, Amended on 2015, the period of extension of lease period should be mentioned. Document in support of extension of lease period up to 24/04/2040 needs to be submitted.

2. Introduction:

The previous mining plan was approved vide letter dated 05/09/2011by the Regional Controller of Mines, Kolkata under rule 24A of MCR, 1960. It is mentioned that the mining plan approved by 'Controller of Mines, RCOM, Kolkata' needs to be corrected.

3. General:

i) Information under item c) and e) of the format not furnished.

4. Location and Accessibility:

- i) Details of applied area should be furnished in a tabular format as per guideline.
- ii) Latitude and Longitude of all corner boundary pillars not furnished. In all the plans submitted with the document, the numbering of boundary pillars are given as X, Y, Z etc. The boundary pillars should be numbered as BP 1, BP 2, BP 3 etc. with Latitude and Longitude.
- iii) Plot numbers are not matching with the land schedule given in the Part I of the lease deed.
- iv. Date and reference of earlier approved MP/SOM:

The previous mining plan was approved vide letter dated 05/09/2011by the Regional Controller of Mines, Kolkata under rule 24A of MCR, 1960. It is mentioned that the mining plan approved by 'Controller of Mines, Indian Bureau of Mines, RCOM, Ranchi' needs to be corrected.

- v) Mine development: Actual achievement against the proposed production for the year 2010-11 and 2011-12 are not matching with the figures furnished in the annual report. May be verified.
- vi). Status of compliance of violations pointed out by IBM:

It is mentioned that there is no violation issued by IBM. It was observed from the office record that Violation letter, Show cause notice has been issued by IBM, Ranchi during the last five years. Compliance position should be furnished giving details in the following table.

Sl.	Letter reference with type of correspondence	Violation of	Reply status
no	like Violation letter / Show cause Notice	rule/rules pointed out	

vii) Details of suspension / closure/ prohibitory order issued:

Suspension order of mining operation was issued by IBM, Ranchi vide letter no. BIH/LOH/BX/232/RRO dated 11/08/2015. Same has to be mentioned with present status.

vii) Afforestation Programme:

Table no. 5: Reason for not achieving the proposed afforestation programme may be corrected.

7. Geology and Exploration:

i) Local Geology: Name of the Bagru bauxite mine has been mentioned in this chapter. The text of the local geology should be written afresh.

- ii) No. of boreholes: It is mentioned that 13 nos. of DTH have been made at 100m x 100m grid interval. Copy of the notice of sinking boreholes in form J has not been enclosed in the document. The type of boreholes coring /non coring should also be mentioned.
- iii) The location of boreholes DTH 7 & DTH 8 are not matching with the location shown in the geological plan. Location given in the table may be corrected.
- iii) Litho log of boreholes drilled has not been enclosed in the document.
- iv) The year of drilling boreholes has not been mentioned.
- v) In the table 'No of trial pit' mentioned in the column.
- vi) Details of sample analysis: Table 8: Analysis report from Govt. lab, Hazaribagh has been submitted for samples collected from the DTH and enclosed as annexure VI but in the text same has been mentioned as enclosed as annexure XII. Same should be corrected. A fresh analysis report of bauxite ore from a NABL accredited laboratory should be enclosed in the document.
- vii) Future programme of exploration: It is mentioned that it is proposed to put 3 numbers of core drills during the year 2017-18 whereas in table no. 9, no. of proposed boreholes mentioned as 9 and no. of proposed core drill as 10. Same may be corrected.
- viii) Reserve and Resources as per UNFC: Four quarries have been developed and 13 no. of DTH also made in the lease area. The quarry exposure and DTH have been proved for bauxite deposit. On the geological plan the G1 and G2 level of exploration have not been marked and geological reserve considered under the category 122. In view of the above reserve / resource for G1 and G2 category should be assessed separately and the Geology and Exploration chapter may be modified as per guidelines of IBM manual on appraisal of mining plan, 2014.
- ix) It is mentioned that the feasibility report has been enclosed in annexure XVI. No feasibility report has been has been submitted along with the document.

8. Mining:

Mining method: i) On the cover page, category of mining has been mentioned as semi-mechanised, A-OTFM whereas under the chapter manual method of mining has been proposed. The mining chapter should be modified incorporating the semi-mechanised method of mining

- ii) List of machineries may be given as per proposed method of mining.
- iii) Details of existing quarries, existing status of dumps, production summery, year wise In-situ tentative excavation and dump rehandling proposal etc. may be modified suitably.
- iv) Development proposal should be confined within the area considered for G1 category of reserve only.
- v) Individual year wise development plans and sections: In view of the above, year wise development proposal should be modified giving details such as location of the pits proposed for development, dimension of benches, RL of benches, year wise proposed excavation, removal of OB etc. Information given under table no. 25 to 27 for year wise development proposal may be modified accordingly.
- vi) Salient features of the proposed method of working: In view of the above observation para should be modified.
- vii) Conceptual mine planning up to the end of lease period: Details given under this item such as table no. 28 to table no. 32 should be modified.

9. Mine drainage:

Information furnished under this chapter such as minimum and maximum depth of water table, maximum and minimum depth of working, quality and quantity of water and regional and local drainage pattern etc. may be modified.

10. Stacking of mineral reject / sub grade material and disposal of waste:

- i) Since the method of mining has to be changed from manual to A-OTFM and modification in year wise development proposal, the information furnished under this chapter such as nature and quantity of top soil, OB / waste and mineral rejects to be disposed off during the proposed plan period may be modified accordingly.
- ii) A Waste dump and a stock yard of bauxite located on the North West side of quarry no. 1 have not been shown on the plan. Location and dimension of the waste dump may be shown on the plan. The existing stock of bauxite ore may be shown on the plan and its quantity may be assessed and be given in the text.
- iii) No waste dump has been shown on the surface plan. During the year 2017-18, one waste dump has been shown in the SE corner of the lease. During the year 2018-19, one more waste dump has been shown in the SE corner of the quarry no. III. Nothing has been discussed in the text regarding yearly generation of waste, dimension of proposed waste dump, slope of dumping and method of dumping etc.
- iv) No backfilling proposal has been given during the plan period.
- v) There is no generation of sub grade mineral during the plan period but a sub grade dump has been shown on the development plan, reclamation and rehabilitation plan, progressive mine closure plan and conceptual plan. Should be explained.

11. Use of mineral and mineral reject:

- i) It is mentioned that the high grade bauxite will be used in our own industry. Same to be corrected.
- ii) There is mention about old ore dump. The existing ore dump of bauxite may be assessed and be given in the text.

12. Others:

- i) Employment potential should be recalculated considering the change in proposed method of mining.
- ii) Since the mining operation is to be carried out by A-OTFM method, a whole-time mining engineer and a whole-time geologist required to be employed as per MCDR, 2017.

13. PMCP:

- i) Existing land use pattern: Figures indicating existing land use pattern in Table no. 35 are not correct. Area given for utilization of land under different heads should be furnished correctly.
- ii) Water regime: Para has to be modified.
- iii) Quality of water: Water analysis report from a NABL accredited laboratory has to be enclosed in the document.
- iv) Flora and Fauna: Para required to be modified.
- v) Human settlement: There is mention about village Bagru. Para required to be modified.
- vi) Impact assessment: Land degraded due to quarrying, dumping, roads etc. are not correct. Area given for land degraded under different heads should be furnished correctly.
- vii) Air quality: There is mentioned about manual mining. Para required to be modified. Ambient air quality analysis report from a NABL accredited laboratory has to be enclosed in the document.
- viii) Mined out land: Table no. 38: Proposal for reclamation and rehabilitation of mined out land given for two years i.e from 2017 to 2018-19. Information for the year 2019-1-20 not given.
- ix) Year wise proposal of afforestation, location, area to be covered under afforestation, species to be planted etc. during the plan period are not discussed in the text of the document.

14. Financial Assurance:

The calculation of Financial Assurance is not correct. Net area considered for calculation in table no. 39 is 10.5108 ha, but financial assurance calculated is Rs. 11,703/- for area over 0.7802 ha at the rate of Rs15000/- per hectare. Financial Assurance should be calculated afresh considering the change in category of the mine and method of working. The financial assurance calculation should be as per MCDR, 2017.

A copy of the Bank guarantee as per revised calculation under financial assurance has to be submitted for period of the review of mining. The financial assurance submitted earlier if any should also be mentioned in the text.

PLATES

- 1) The DGPS surveyed map / report has not been submitted along with the document in compliance to CCOMs circular No.2/2010 and its addendum dated 21/09/2011 and 11/06/2014 regarding georeferenced cadastral map.
- 2) The lease area plan of Bandobar lease submitted along with the document has not been authenticated by the competent authority of State DMG.

3) Surface Plan:

- i) A waste dump and a stock of bauxite ore are located on the North West side of quarry no. 1 have not been shown on the surface plan. Location of the waste dump and stock of bauxite ore may be shown on the plan.
- ii) The boundary pillars have been marked as A, B, C, D etc. The boundary pillars should be marked as BP 1, BP 2, BP 3 etc. giving the co-ordinates of all the boundary pillars. New updated surface plan as per the revised boundary pillar giving co-ordinates of all the boundary pillars should be submitted.

Similarly all the plans submitted along with the document should be modified.

4) Geological Plan:

i) On the geological plan, the area explored under G1 and G2 level of exploration has not been marked. Geological reserve has been considered under the category 122. Reserve / resource for G1 and G2 category should be assessed separately and marked on the geological plan as per guidelines of IBM manual on appraisal of mining plan, 2014. In view of the above, reserve / resource may be estimated afresh.

5) Geological Cross section:

- i) UNFC code (111, 122 etc.) for area considered for G1 and G2 level of reserve / resource estimation should be marked on the geological cross sections and reserve / resource may be estimated accordingly.
- ii) RL of benches, road, safety barrier etc. is not given in some of the cross-sections. Should be marked on the sections.

6) Year wise development plan and section:

- i) As development proposal has to be confined within the area considered for G1 category of reserve only, year wise development plans are to be modified accordingly.
- ii) Colour of the waste dump shown on the development plan and section for the year 2018-19 and 2019-20 are not matching with the index.
- iii) Section along the dump has to be drawn from the lease boundary and year of dumping should be mentioned on the plan and section.
- iv) RL of the benches not mentioned in the sections.

7) Conceptual plan:

- i) No proposal for reclamation of mined out areas by backfilling and rehabilitation has been given in the text whereas plantation at conceptual stage has been shown on the plan. Same may be explained.
- 8) Progressive mine closure plan: a) Colour code used on the plan is not matching with the Index.