SCRUTINY COMMENTS ON EXAMINATION OF MODIFICATION IN THE APPROVED MINING PLAN FOR KUJAM BAUXITE MINE OF SHRI GYANCHAND PRASAD AGARWAL, OVER AN EXTENT OF 76.40 HECTARES, LOCATED IN KUJAM VILLAGE/MOUZA, UNDER BISHUNPUR P.S OF GUMLA DISTRICT OF JHARKHAND STATE, SUBMITTED UNDER RULE 22(6) OF MCR,1960.

TEXT:

- 1. The Mining lease showing all Khasra numbers/Survey number on a Cadastral map (Khasra Plan) on original Plan(not the photocopy) duly certified by the State Govt. on prescribed scale, has not been submitted along with the document. As per requirement, the access route to the area under reference has not been shown in the submitted Area plan (Plate no. 2).
- 2. Cover page: The heading of the document may be revised as "MODIFICATION IN APPROVED MINING PLAN WITH SUBSEQUENT PLAN PERIOD PROPOSAL". The lease period and expiry of lease period have not been mentioned on the cover page as per requirement. Present status of grant of extension of lease may be spelt in context to MMDR amendment 2015 with supporting document.
- 2. CHAPTER- II- LOCATION & ACCESSIBILITY:
- i) Period/Expiry Date: Present status may be given in context to MMDR amendment 2015 with supporting document.
- ii) Details of applied/lease area: Under sub heading "Types of land", the total area calculated does not match with lease area given on the cover page of the document. Further, the break up of land given in Annexure-6 does not match with the area furnished on cover page. There is variation of 0.085 hect.
- iii) Information on details of applied/lease area should be furnished as per format circulated through proposed Universal format for Mining Plan/Sheme of Mining. The Jungle-Jhari area has not been shown in the Plan.(Area Plan, Surface Plan, Geological Plan, Development Plan, Environment Plan etc.).
- iii) Existence of public Road: a) The first para needs to recasted. The road distance from Lohardaga to Netarhat, Netarhat to Tutua more and Tutua more to the lease area along with type of road should be given. The State Highway number should also be mentioned in the para if it is there. Further, the distance of railway station and nearest air port from the lease area should also be given.
- iv) The distance of Public Road from the lease area may be mentioned.
- v) The nearest distance of electric line/grid available from the lease area may be given.
- vi)The distance of water body from the lease area, if any, should also be mentioned.
- vii) The Topo sheet no. along with the Latitude and Longitude of all corner boundary point/pillars shouldbe furnishedin the para as required in the guideline. All the boundary pillars as shown in the Surface Plan, Geological Plan etc. are physically not available in the field. Hence those boundary pillars which are existing in the field only should be shown and shall be numbered accordingly.
- (c) General location map: As stated at item no. 1 above.
- 4. Chapter-III- DETAILS OF APPROVED MINING PLAN/SCHEME OF MINING:
- Para 3.3. Review of earlier approved proposal (if any) in respect of exploration, excavation, reclamation etc.:-
- i. Exploration: Page no. 5- The reason for not carrying exploration in the form of 11 boreholes during the year 2012-13 has not been explained as the mine was in operation during the year 2012-13.
- ii. Excavation: Page no. 6- (a) Against the planned development program during the year 2012-13 and 2014-15, which area was worked should also be spelt clearly with grid reference of Geological plan (Plate no. 4).
- Para 3.4. Review of compliance of violations:- The information furnished regarding compliance status is not correct. The same needs to be reconciled properly with correct position. Giving a reply letter only does not mean that the violation has been complied. The file no. mentioned should also be corrected. Further the Rules pointed out should also be mentioned in the table.

PART-A: 1.0 GEOLOGY AND EXPLORATION:

c) Detailed description of Geology of the lease area: The average general section of lease area given under sub-heading "Local Geology" needs to be rectified as The Base is still unknown neither the same has been established in the enclosed 31 B.H data.On the basis of available Geological map and B.H data, approximate size of the ore body with structural features if any in the area may also be spelt in the para. The lithological section as measured in different pits and quarries(last line of subpara "Local Geology") as mentioned, has not been given. The type of Bauxite ore has to be mentioned.

e) Details of prospecting/exploration already carried out: The para needs to be re-casted as per format circulated in new guideline.

Under the sub-head "DTH exploration already carried out" (Page no. 19), photographs of DTH boring along with average depth of DTH shall also be given. Copy of Form-J has not been incorporated along with the document. Mention the period/year of DTH given.

Under the sub-head "Sampling & Analysis" (Page no. 19), the basis for calculation of weighted average may be explained. The figure furnished in the table on page no. 20 does not match with figures of Annexure-8 (Certificate of Analysis).

Expenditure incurred in various prospecting operation should also be submitted as per format.

- f) Surface Plan: The Surface plan does not show location of borehole as per requirement of Rule-28(1)(a) of MCDR, 1988.Boundary pillar co-ordinate for BP-157 has not been furnished. The Ground Control Points have not been shown as per existing instruction. The Front bearing and back bearing of GCP need to be corrected. The TBM should be established in the field. All the boundary pillars as shown in the plan are not present in the field.
- g) Geological Plan: The Plan does not show the required three ground control points. The Bench Mark as shown in the Plan(Plate no. 4) has not been established in the field properly. Some boreholes have been proposed within the Proved zone, the reason for the same may be clarified. The GPS co-ordinates of Proposed boreholes and few of already given DTH need to be furnished in the relevant para.
- i) Broadly indicate future programme of exploration: The required tabular format as given in new guideline has not been incorporated in the para. Year wise proposed Borehole should be shown with different colour scheme in the Geological Plan(Plate no. 4). The necessity of Proposed Borehole(PBH)- 1, 11, 16, 18 & 19 require to be justified.
- j) Reserve and Resource as per UNFC: Area explored under different level of exploration viz. G1, G2, G3 etc may be marked on the Geological Plan and area considered for different categories of reserve/resource estimation may also be marked on the Geological Cross Section.
- k) Detail calculation of reserve/resource: In the first line the "Scheme of Mining" should be replaced with "Mining Plan". The table bearing "Depletion in Mineable Reserve", the depletion figure needs to be reconciled properly from the Annual return submitted by the party. Subsequently correction in balance reserve and the para of Anticipated life of mine" may be made. The last line of para "Anticipated life of Mine" is not complete.
- 1) Mineral Reserve/Resource: Para may be recasted as per guideline.

2.0 MINING:

a) Existing as well as proposed methodof excavation: Existing method of mining- The date of commencement of mining operation needs to be corrected.

Proposed method of mining- The para needs to be recasted as there is duplicacy in sequence. When the loading of Bauxite into truck is by manual means then the category of submitted document should be changed.

How Forked Shovels will be used to recover smaller pieces of Bauxite to minimize mining loss may explained with photographs of the same. The Machinery list does not include the Forked Shovel, the same may be corrected.

The name of place of stockyard and railway siding may be spelt along with distance of Railway siding from mine.

Mining Strategy- The dia of drill may be corrected.

- **b)** Year wise tentative excavation:
- I. InsituTentavive Excavation- The chemical analysis of Mineral Reject portion has to be submitted for confirmation of the part to be treated as "Mineral Reject" furnished in the table. For calculation of ROM/Waste ratio, quantity of Soil should not be taken into consideration. As a consequence the table needs to be modified.
- II. Dump handling: The furnished table may be kept after due modification in Dump no., Dump name, Surface area, Height of dump and Volume of dump. Further, the required table according to the format given in the guideline should also be incorporated. A dump section may also be incorporated, both longitudinal and transverse, for better understanding.
- c) Individual year wise development plans/sections: The development sections need to be reconciled properly with the respective year wise development plan as lot of mismatch have been noticed. The irrelevant sections may be avoided, both longitudinal and transverse sections of only developmental portion should be given. Top and bottom RL of every surface features should be shown in the sections. Both ends of section line should be calibrated for ease of work.

Instead of proposing development in three different quarries in each year, proposal may be given for single quarry in each year and after exhaustion of the ore in the quarry next quarry may be proposed for more systematic mining.

Bench wise Development over the next five years- Top and bottom RL of each bench should be mentioned in every year. Proposal has been given around PBH-3 during the year 2015-16 whereas PBH-3 has been proposed in 2016-17. The same may be explained. Location of temporary Soil dump for first year has to be mentioned since during first year it has to be kept somewhere for spreading over backfilled area in subsequent years. The approximate dimension of quarry ($1 \times b \times h$) during end of each year may be given along with bench dimension ($1 \times w \times h$).

During 2016-17, the proposal for re-handling of dump on southern portion of quarry no. 4 is not feasible as per field observation and ground reality. The same may be modified. Any other dump re-handling if any may be mentioned in the para.

f) Conceptual Mine Planning: The ultimate size of the mine working with its quarry area, area of water reservoir, backfilled area, area covered under road etc. are to be discussed in the para in detail along with the information furnished.

Extent of mechanization: The distance of stockyard may be reconciled properly with last line of preceding para(Mine Layout).

- 1) Drill machine: a)For OB removal- The type of drill machine to be employed, coring or non-coring type, may be spelt clearly. Meterage required per day and Rate of drilling have to be re-checked. The rate of drilling is on the higher side. Accordingly subsequent calculation should be corrected.
- b) For Raw material production- It should be ROM instead of Raw material. The sub-grade drilling needs to be corrected. Meterage required per day and Rate of drilling have to be re-checked. Accordingly subsequent calculation should be corrected. Requirement of drill machine spelt may be reconciled properly with respect to the requirement mentioned in above para "For OB Removal".

ANTICIPATED LIFE OF THE MINE (Page no. 42): The same has already been furnished at page no. 23. The same need not be repeated here.

ULTIMATE PIT AREA & PIT DEPTH, ULTIMATE GENERATION OF WASTE, FINAL PIT SLOPE AFFORESTATION PROGRAMME Page no. 43-46):

It should not be ultimate pit area/pit depth for Bauxite, the same may be corrected. The figure furnished for Ultimate Generation of Waste as 966763 Cum includes Soil also, the same requires rectification as soil should not be taken into consideration for waste generation. Accordingly, waste generation for conceptual period may also be rectified.

Total Generation of waste during life of the mine(Page no. 43): The table furnished should be re-casted in context to 'Insitu Tentative Excavation' at para 2.(B).I (Page no. 26).

DETAILS OF AFFORESTATION: Location of afforestation should also be given in the table. The statement made about location of plantation does not match with Environment Management Plan. The Same may be corrected. Species of plants to be planted may also be spelt.

3.0 MINE DRAINAGE:

c) Quantity and Quality of water: The para needs to be recasted as there will be accumulation of water within the quarry during monsoon season which is inevitable and can not be avoided. For which arrangement of dewatering pump is required to be made and it should be included in Machinery chapter. The NABL accreditation certificate in respect of "Noida Testing Laboratory", which has carried out Ground water analysis, has not been incorporated.

Annual rainfall data: The source and year of data procured should be mentioned on the top of the table (Page no. 48).

Estimation of run-off using Rational method (Page no. 49): The calculation furnished in the table requires to be corrected. The proposals made in the last part of the para has not been reflected in any of the Plan.

- 4.0 STACKING OF MINERAL REJECT/SUB-GRADE MATERIAL AND DISPOSAL OF WASTE:
- a) Topsoil, Morrum, Overburden & Waste- The furnished table should be corrected at par with the table furnished at page no. 43. The required table as given in the new guideline has not been incorporated. Para (b) and (c) as envisaged in the guideline have also not been incorporated.
- 5.0 USE OF MINERAL AND MINERAL REJECT:

The party to whom Bauxite is supplied should be spelt correctly. Further, this mine is not located near Tori railhead, the information furnished need to be corrected. The table furnishing average production grade of Bauxite(lower limit) should be checked and corrected from Annexure-8. The term weighted average may be corrected. The chapter requires to be re-casted as per guideline.

6.0 PROCESSING OF ROM AND MINERAL REJECT:

Nothing has been spelt about Mineral Reject which are reported to be generated during the course of mining in the plan period 2015-16 to 2019-20 as furnished in chapter 2.0, para-(B) in the table showing "Insitu Tentative Excavation".

7.0 OTHERS:

Site services- First aid center, potable water storage point etc. are not shown in any plan.

Employment potential- There is a mismatch between the statement made in the para and the table following the pararegarding number of employed miners. Further, the prescribed format should be followed for furnishing employment potential.

Chapter 8.0. PMCP:

Human Settlement & Demographic profile- The distance of Kujam Village from lease area has not been given. The percentage of SC/ST of total population of all the villages should also be given. Location of nearest bank if any may also be furnished.

Flora- Whether the Sal trees are within the lease area or outside lease area need to be spelt (Page no. 55). If it is within the lease area the same may be shown in Environment Plan(Plate no. 10). Tree Density of Forest area has not been marked on the Key Plan (Plate no. 1).

Climatic condition- Para may be modified as per para no. 1.0(iv) of Part-A. Recent Meteorological data if possible may be procured and incorporated in the document.

Relative humidity & Rainfall data- Recent data if possible may be provided.

Para 8.2. Impact assessment:

Land environment (Land scape)- The para requires to be re-casted. This is against aesthetic Environment. Aesthetic environment- The sentence is to be Modified.

8.3. PROGRESSIVE RECLAMATION PLAN:

8.3.1. Mined out land- Item no. (iv) shall be replaced with item no. (iii), which states that backfilling will be followed by vegetation. But neither in Reclamation Plan nor in Conceptual Plan plantation has been proposed/shown over backfilled area. The same may be reconciled with plan and text.

Anticipated life of mine- The para may be re-casted in context to Part-A, para 1.0(k) (Detail calculation of reserve/resource). Instead of repetition of entire para, the same may be referred back. Line of page no. 60, before the production table may be corrected.

Para 8.3.5(Page no. 64):

Summary of yearwise proposal for item no. 8.3: Afforestation proposals under Dump management, Reclamation & Rehabilitation by backfilling should be included as per para no. 8.3.1.(iii).

Para no. 1.3 & 1.4 should be corrected as para no. 8.3 & 8.4 respectively.

Part-B.Para 9.0. CERTIFICATES/UNDERTAKINGS/CONSENTS:

The part-B has to be modified as per format given in guideline.

PLATES:

- 1. As per present ground reality, re-survey of the area is necessary.
- 2. The Geo-referenced mining lease map prepared using DGPS shall be superimposed on Geo-referencedvectorised cadastral map shall have to be submitted in compliance to CCOM's circular no. 2/2010, dated 06.04.2010 and its addendum dated 21.09.2011& 11.06.2014. The above map will be base for preparation of all statutory plans as required under Rule-28 of MCDR, 1988.
- 3. Area Plan: The plandoes not show type of land.
- 4. Financial Assurance Plan & Conceptual Plan: Blocked reserve portion should be shown with Suitable colour scheme/code.
- 5. Reclamation & Conceptual Plan: Plantation be shown as per para 8.3.1 of text.
- 6. In all the plans, boundary pillar no. 157 has been wrongly written as 158 in boundary pillar co-ordinate Table. The same may be corrected.
- 7. Environment Plan: The existing Sal plantation have not been shown in the Plan as mentioned in

Chapter 7.0 (Others) above. Reason for showing Water monitoring station near office may be explained.

8. Plate no. 15 has not been numbered properly. However, item no. 1 above may be referred in this Context for rectification.

ANNEXURES:

- 1. Copy of Financial Assurance has not been incorporated.
- 2. Photograph of land use of lease area has not been incorporated as per guideline.

GENERAL:

All the tables furnished should be numbered.

MINING PART

- (1) The name of the applicant indicated on the front cover and other places of the document has not been correctly spelt out as per the lease deed, which should be checked and corrected accordingly.
- (2) The lease sketch attached along with the lease deed enclosed as annexure-2 is missing, which should be submitted.
- (3) The copy of the lease renewal application enclosed as annexure-4 has not been dated with, which should be done.
- (4) The land schedule enclosed as annexure-5 is not matching with that of the land scheduler attached to the lease deed. Besides, the land schedule has not been authenticated by the competent authority.
- (5) The borehole data of 31 nos. of DTH holes are enclosed as annexure-7 to the document but it is not known when such holes were drilled. Besides, no Form-J for drilling such holes are received by this office, thereby authenticity of the data is not known. Moreover, no photographs in support of such exploration has been submitted. Therefore, the above referred annexure should be revised accordingly.
- (6) The chemical analysis report from TCRC enclosed as annexure-8 has not been dated with and it is not known when such analysis was done. It is also found that, the analytical results are pertain to the BH-1 to BH-31, whereas, in anneture-7, the analysis data of 31 nos. of DTH holes are furnished and it is suspected that, hardly there is any boreholes drilled in the lease area. Moreover, the NABL accreditation issued in favour of TCRC has already expired on 17.03.2013 & enclosing the copy of the same along with the document is meaningless.
- (7) The reserves/ resources have been estimated by area method, without considering the location coordinates of the area as indicated in annexure-9, which is not proper, instead the same should be calculated by cross sectional method considering the existing quarries available in the lease area. Moreover, the cut-off grade of the bauxite ore also not furnished. In the light of the above, the reserves/resources estimated in the above referred annexure should be revised.
- (8) On examination of the calculation for the excavation planning for the year 2015-16 enclosed as annexure-10, it is found that (i) There are three quarries such as Q-1,Q-2 & Q-4 are proposed to be developed, which is not permitted, instead only or two quarries should be proposed for scientific and systematic mining as per the convenience. (ii) In quarry-2, the total thickness of the excavation planning is considered to be for 5.85m, out of which the average thickness of soil is 1.3m & thickness of laterite is considered as 2.8m, which implies that, the total thickness of soil & laterite altogether arrived at 4.1m. (iii) Thickness of bauxite is arrived at 1.75m (5.85m-4.1m= 1.75m) but in this case, the thickness of bauxite has been considered as 5.85m, which is not correct. Accordingly, the bauxite thickness considered for excavation planning in quarry-4 & 1 may also be corrected. (iv) The location co-ordinates and cross sections considered for purpose is missing, which should be furnished by adding more columns in the tabular proposal. (v) The recovery of bauxite ore is considered as 80% without any basis & the same should be justified by supported evidence/study report. (vi) Besides, the grade of the recoverable bauxite and cut-off grade thereof may also be furnished supported by authenticated chemical analysis report for clarity. Likewise, the waste generation is indicated to be 20% but the basis for such generation is not known, which should be furnished indicating the grade of such waste material supported by an authenticated analysis report. (vii) In the light of the above, the calculation furnished for excavation planning for the period from 2016-17 to 2019-20 may also be revised based on the facts & figures.

- (9) The NOC from Jharkhand State Pollution Control Board enclosed as annexure-12 to the document has already lapsed, thereby a fresh & valid consent to operate should obtained and submit along with the document for ease in monitoring.
- (10) The ground water analysis report has been enclosed as annexure-14 to the document but the location co-ordinates of the sample station has not been mentioned, which should be furnished and the report may be revised accordingly.
- (11) The ambient air quality analysis report enclosed as annexure-14 is old one, analysed on 18.11.2014, instead a latest report should be submitted, since the mine falls under category A-FM. Likewise, the noise level analysis report enclosed along with the above referred annexure may also be revised suitably.
- (12) The flue gas, effluent, soil & surface water monitoring reports in respect of Kujam bauxite mine of Shri G.C.P. Agrawal has not been enclosed, which should be submitted for more informative.
- (13) A copy of the explosive procurement license has been enclosed as annexure-15 to the document but a copy of the blasters license for carrying out blasting operations has not been enclosed and the same should be submitted.
- (14) Few photographs showing the status of quarry faces, reclamation, dumping & few boundary pillars has been enclosed as annexure-18 but the name of the quarry(s) & its location co-ordinates, name of the dump with its location co-ordinates as well as the location co-ordinates of the backfilled area has not been mentioned supporting the enclosed photographs. Moreover, no photographs in support of existing exploration, afforestation & rehabilitation etc. has been submitted.
- (15) The copy of the Bank Guarantee matching to the excavation planning has not been enclosed along with the document, which should be submitted.
- (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 DGPS surveyed map/plan submitted showing UTM data instead of GPS data in compliance to CCOMs circular No.2/2010 and its addendum dated 21.09.2011 & 11.06.2014 regarding georeference 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.
- (18) Existing method of mining has not been discussed in detail, as per the heading of the para, instead, only the categorisation of the mine has been furnished. Therefore, the existing method of mining should be discussed by furnishing the existing dimension of the quarry(s) indicating the working/non-working status. Moreover, the existing status of dump, reclamation & rehabilitation etc. may also be furnished. [Para 2.0(A)(a)]
- (19) Under the heading Proposed Method of Mining, nothing has been given about the location coordinates/name of the quarry(s) involved excavation planning, which should be furnished. Accordingly, corresponding modifications/ incorporations may also be made in connected paras of the document and also in relevant plates. (Page No.22)
- (20) Under the heading Mining Strategy, it is mentioned that, loading of ore onto the trucks has been proposed by manual means, which is not correct, when, the mining operations have been proposed by fully mechanised method with deep hole drilling & blasting. Therefore, the para may be revised accordingly. Besides, the current strategy of mine working should be discussed in detail including the formation of benches/bench parameters, reclamation & rehabilitation etc. and the para may be revised accordingly. (Page No. 25)
- (21) Under the heading Bench Design and Formation, the exact number of benches proposed in overburden and in ore zone has not been specified, which should be indicated. Besides, the length, width & height of all the proposed benches may also be specified. (Page No. 26)

- (22) (i) Under the heading Insitu Tentative Excavation, more than three quarries are proposed under excavation planning in each year of the ensuing five year period, which is not permitted, instead only one or two quarries should be proposed. Besides, the location co-ordinates of the proposed quarries are missing, which should be furnished. (ii) 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. Moreover, the recovery percentage of bauxite and waste generation has not been furnished, which should also be indicated. Accordingly, corresponding incorporations/modifications may also be made in connected paras in the text & relevant plates. [Para 2.0(B)(I)]
- (23) There are two dumps have been proposed to be re-handled during the years 2015-16 & 2016-17 but the location co-ordinates of such dumps and the cross sections considered for re-handling the same is missing, which should be furnished by adding more columns in the table given in the para under reference. Moreover, nothing has been mentioned about the utility status of the re-handled materials and the same should be clearly indicated with pinpointed information. [Para 2.0(B)(II)]
- (24) The proposed status of the quarries furnished in 2nd table has no relevance with the para under reference and the same should be erased & revised accordingly. [Para 2.0(B)(II)]
- (25) 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, laterite/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. [Para 2.0(d)]
- (26)The mining operations are proposed by fully mechanised mines, whereas, loading of the materials has been proposed by manual means, thereby the page may be revised suitably. (Page No.32)
- (27) In 1st table, the extent of area proposed to be reclaimed and re-habilitated in each year of the ensuing five year period has been furnished but the location co-ordinates and cross sections considered for the purpose is missing, which should be furnished by adding one more column in the table for ease in monitoring. (Page No. 44)
- (28) In 3rd table, the land use status after the five year period has been furnished; instead the same by end of each year of the ensuing five year period should be furnished in separate tables. (Page No.44)
- (29) The plantation schedule for each year of the ensuing five year period has been furnished in tabular form but the location co-ordinates and cross sections considered for such plantation is missing, which should be furnished by adding one more column in the table for more informative. (Page No.46)
- (30) The quantities of topsoil proposed to be generated in each year of the ensuing modification period has been furnished in 2nd column of the first table 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(a)]
- (31) 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 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)
- (32) Dimension (L x B x D) of the void available for backfilling should be furnished, quarry wise in 3^{rd} row of the table furnished in the page under reference. (Page No. 64 to 68)

(33) Plate No. 3 (Surface Plan): There are five permanent ground control points have been selected, out of which the GCP-1 has been taken from the school building located within the lease area and the boundary pillar nos. 35, 36, 37 & 38 are taken as GCP-2 to GCP-5, which is not correct, instead, at least 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. The Surveyors signature is missing on the plate, which should be signed by a competent surveyor. Moreover, the exploration already done in the area has not been marked on this plate, which should be depicted and the plate may be revised accordingly.

(34) Plate No.5 (Development Plan 2015-16): (i) It is found that, the entire leasehold area has been explored by putting a good number of DTH boreholes, whereas, selective mining has been proposed in Q-1,2 & 4, which is not permitted, instead any one of the proposed quarry should be extended followed by concurrent backfilling for sake of systematic & scientific mining. In the light of the above, the excavation planning proposed for the period from 2016-17 to 2019-20 should be revised. Accordingly, the plate submitted for environment management plan, conceptual plan & sections, financial assurance plan and reclamation plan may also be revised with necessary modification/incorporation in the text part of the document.

All the pages of annexures enclosed with the document should be attested by the RQP.
