

SCRUNITY COMMENTS ON THE 2nd MODIFICATION TO THE APPROVED REVIEW AND UPDATION OF MINING PLAN IN RESPECT OF KARADIKOLLA IRON ORE MINE, OVER AN EXTENT OF 103.68 HA, SUBMITTED BY M/S CHOWGULE AND COMPANY PRIVATE LIMITED, SITUATED IN BHAVIHALLI VILLAGE, SANDUR TALUK, BELLARY DISTRICT OF KARNATAKA STATE

The final submission of Text, Annexures and Plates both in soft and hard copies are to be done specifically in accordance with IBM Circular no. 1/2021 and FAQ on the Mining plan template published at IBM website following both in toto. The final copies submitted should be digitally signed by the Qualified person and the Nominated owner.

COVER PAGE (Pg-1)

1. The heading may be corrected as "2nd Modification to the Review and updation of the Mining Plan including progress mine closure plan". The name of the Lessee and Qualified person details may also be mentioned.

INDEX (Pg-2)

2. Part-B with heading "Annexures" should be added and the specific annexure details and page no to be provided. Part-C with heading "Plans & Sections" to be also added and the specific plate no details to be provided.

CHAPTER-1-GENERAL INFORMATION(Pg. 3-8)

3. i) Para-1.1- Lease details-(Pg-3)-Name of the Lessee-The name of the Company is changed from M/s. Chowgule and Company Limited to M/s. Chowgule and Company Private Limited. The existing lease deed enclosed with the document which is valid till 22.09.2023 is in the name of **M/s Chowgule and Company Limited**'. Accordingly, the supporting documents should be furnished for intimation and acceptance of change in name by the State Govt. under Rule 61 of MCR 2016 & Rule 49 of MCDR(Amendment) Rules 2021.
ii) Para 1.1.1-Initial/ Subsequent lease grant details-(Pg. no 3)- All the lease deeds from initial grant to be enclosed as mentioned in the table.
iii) Para 1.1.2: Mining Plan submission criteria details-(Pg-4)- Under type of document "**Modification of Mining Plan**" to be mentioned as per the dropdown options available in the format. There is already modification to the approved Review and updation of Mining Plan approved dated 07.02.2019, the reference of the same should be given instead of mentioning RMP under "Reasons for modification".
iv) Para 1.3.1- Approval of earlier mining plan & its subsequent review (Pg-4)- All IBM approval letters for Mining plan to be enclosed as Annexure and reference to be given under the Para. Under the period column the financial year to be mentioned in "From" and "To" column. The details under 8th Row are not given correctly, the date of approval of modification of mining plan is 07.02.2019 for the period 2018-19(from Jan 2019- Mar 2019) to 2022-23. The other details under this table to be also checked and corrected accordingly.
v) Para 1.3.2- Partial Surrendered Area (Pg-5)- The supporting documents have not been enclosed. The supplementary surrender order of the State Govt. to be enclosed and reference to be given under the para.
vi) Para 1.3.3-Transfer of lease area (Pg-5)- The supporting document as mentioned in the para to be enclosed and reference to be given under this para.
vii) Para 1.3.4.1-Environmental Clearance-(Pg-6)- The details of the CEC permissible annual production limit to be also mentioned in footnote and relevant document may be enclosed as annexure and reference to be given under para.
viii) Para 1.3.4.2-SPCB Approvals-(Pg-6)- The combined consent order no AW-305707 dated 04.04.2018 to be also enclosed in annexure and reference to be given under the para.
ix) Para 1.3.5- Mine Location Details- (Pg. no 6)- 57 A/8 & 57 A/12 to be also mentioned under the table as per key plan (Plate no 1).
x) Para 1.3.5.1- The pillar co-ordinates are not matching with the DGPS Lease sketch as approved by State Govt. (Plate-4). The co-ordinates of pillar A, D, E, G, H-1, H-2, I etc. to be checked. The pillar co-ordinates as given in DGPS Lease sketch in WGS-84 datum and approved by the State Govt to be given under this Para.
xi) Para-1.3.6- Owner/Nominated Owner Details-(Pg. 7)-The updated List of Board of Directors to be furnished and the nominated Owner to be one of the Director of the Company nominated under the Mines Act 1952 /The Occupational safety, health and working conditions code 2020 and Mines and Minerals (development and Regulation) Act 1957 and rules made their in.The copy of PAN of Nominated owner to be also enclosed as annexure and reference to be given under the Para.
xii) Para-1.3.7-Qualified Persons Details-(Pg-8)- The PAN of QP's to be also enclosed as annexure and reference to be given under this Para

CHAPTER-2-GEOLOGY AND EXPLORATION (Pg. 9-52).

4. It was observed during examination of the Geology Chapter that the authentic Geological data have not been provided.**The Geological sections have not been prepared as per the guidelines of the Minerals (Evidence of Minerals Contents) Rules 2015 and the IBM notification no. C-284/3/CMG/2017 dated 25th April, 2018 for threshold value.**
i) For Southern block for Sec 3-3' the borehole KDK-21 ends at 50.10 % Fe at 960 mRL. There is no further drilling data available for below mRL but still ore has been shown below the borehole depth without any exploration data. Similarly, for KDK-11 where borehole ends at 68 % Fe and there is no exploratory data for the BHQ shown below. Sec 4-4' has not supporting borehole data for the lithology shown. At Sec 5-5' borehole KDK-20 ends at 40.50 % Fe and there is no exploratory data for BHQ shown on the section below the hole. Similarly at Sec 7-7' for KDK-51, KDK-19, KDK-22 where borehole ends at the mineralized zone itself at 66.13 % Fe, 46.80 % Fe & 60.70 % Fe. There is no exploratory data available for below mRL. Similar is the case at Sec 8-8' for KDK-24. For Sec 9-9' also KDK-56, KDK-16 & KDK-17 ends at mineralized zone 46.39 % Fe, 41.79 % Fe and 64.82 % Fe. There is no

supporting exploratory data available for BHQ shown on the section and also ore has been shown beyond the depth of borehole. Similar is the case with sec 10-10', 11-1' & 12-12' too.

ii) For Central block also at Sec I-I' the borehole is ending with 44.34 % Fe which is shown as BHQ. For Sec J-J' no supporting boreholes available. For Sec K-K' borehole KDK-81 ends at 47.92 % Fe and below the borehole BHQ is shown without any exploratory data available. For Sec M-M' ore is shown beyond the depth of borehole KDK-1 without any supporting exploratory boreholes. Similar at Sec N-N' for KDK-2. For KDK-82 at Sec O-O' the borehole ends at 42.78 % Fe, there is no exploratory data for BHQ depicted in the section below the borehole. At sec Q-Q' borehole KDK-3 is shown in clay/phyllite/shale whereas assay file indicates Fe from 60.24 % to 47.93 %. For Sec R-R' borehole KDK-70 ends at mineralized zone with Fe-65.23 %. There is no supporting exploratory data for BHQ depicted in section below the borehole. Similar is the case with KDK-7 too. At Sec S-S' KDK-68 ends at 57.08 % Fe. Similar is the case at Sec T-T' for KDK-68, W-W' for KDK-13, KDK-27, KDK-14 & KDK-15, X-X' for KDK-10, KDK-4, KDK-89, KDK-65, Y-Y' for KDK-12 & KDK-100. At Sec U-U', V-V' & Z-Z' there is no exploratory data available to depict the depth wise parallel band shown.

iii) For Northern block- For Sec C-C' at Borehole KDK-29(Northern portion), the orebody has not completely exhausted but backfilling has been carried out at the portions as shown in the section. Similar is the case at Sec E-E', F-F', H-H'. One of the band presents at the Northern side of the north block has not been completely explored. There is G-2 area still available from Sec A-A' to Sec M-M'. Complete exploration of the area needs to be carried out to upgrade the area to G-1 level and no backfilling should be carried out at these portions. The portions where waste dumping has already been done, the same needs to be considered as temporary dumping and is to be rehandled completely.

iv) It is observed that the exploration has not been done over the entire lease area in accordance with Rule 12(4) of MCDR 2017 to bring the entire potentially mineralized area to detailed G-1 level of exploration. The Lease is expiring on 22.09.2023 and same needs to be done in the current plan period mandatorily. Also, as mentioned above sufficient boreholes have not been drilled to delineate all the ore bands in North, Central and South block. Further at depth also, sufficient boreholes have not been drilled to establish the ore body at depth w.r.t the threshold value notification of IBM i.e., 45 % Fe (Min) for haematitic ore and 35 % Fe (Min) for Haematitic Siliceous ore. As already detailed max boreholes have been stopped at the ore zone itself and further there is no exploratory data for BHQ. In some holes (Annex-15 may be referred) like KDK-15, KDK-16, KDK-19, KDK-20, KDK-21 Fe percentage in BHQ has been shown as 50.10, 59.50, 63.10, 59.70, 58.40 etc. respectively. This indicates that complete estimation for Haematitic ore/Haematitic siliceous ore is not as per the IBM threshold value guidelines. BHQ is to be considered only for Fe < 35 %. All the ore having Fe ≥ 35 % to be considered for Reserve/Resource estimation for Haematitic iron ore & Haematitic siliceous ore as per the IBM threshold value guidelines. Since the ore body is dipping at 50° to 70° deeper intersection of boreholes to be worked out at different sections so that the ore body continuity at depth to be established. The depth of exploration should be up to the discontinuance of the ore body and it shouldn't be stopped at mineralized zone

v) The Geological section should be specifically prepared w.r.t to the borehole logs for the drilled exploratory boreholes. For G-1 stages of exploration the depth continuity of mineralization may be considered limited to the depth up to which direct evidence of mineralization is established and lateral extension to be considered for Resource assessment in any case shall not be more than 50 % of the grid spacing of the probe points in accordance with Minerals (Evidence of Mineral Contents) Rules, 2015. The sections should distinctly show the ML Boundary, 7.5 m safety zone from ML Boundary, Safety Barrier for Nala/Road/Village/Power line if any, UPL (Ultimate pit limit), current pit profile (as per the latest survey) Boreholes as per lithologs etc.

vi) ***Since the Lease is expiring on 22.09.2023 and the Lessee is required to submit the State Government and the Indian Bureau of Mines, a Geological Study Report prepared in the manner specified in the Minerals (Evidence of Mineral Contents) Rules, 2015, within three months after the completion of the exploration works per Rule 12(4B) of Mineral Conservation and Development (Amendment) Rules, 2021, accordingly all the pending exploration required to be completed in the plan period and all the above-mentioned errors in the Geology are to be rectified. The area under different exploration limits to be reviewed both laterally and vertically and the exploratory drilling required to convert the entire potentially mineralized area to G-1 to be worked out and proposed in the balance plan period mandatorily.***

vii) No Backfilling to be carried out in the area where the mineral has not been exhausted completely (i.e., all iron ore zone till Fe ≥ 35 % have been completely extracted) and also where the exploration is pending either for lateral or vertical continuity of the ore bands.

5. i) Para-2.1.4.1- Local Geological Set up-(Pg-12-13)- It is mentioned "The grade of these ore bodies ranges from 45 % to 64 % Fe" which may be corrected as "**35 % to 64 % Fe**".

ii) Para 2.1.4.3-Lithology(Pg-13-15)& Para 2.1.4.4- Mode of Occurrence (Pg-15-16)- The Haematitic Siliceous ore is also found in the Lithologs. Accordingly, the details of the Haematitic Siliceous ore may also be added in the para.

iii) Para-2.1.4.5-Extent of weathering-(Pg-16)- The type and depth of weathering zone if any to be detailed in this Para.

iv) Para-2.1.4.6-Nature/Form of Mineral- (Pg-17)- The details have not been given as per the format. The excel sheet format of FAQ may be referred. All the applicable options to be selected from the available list in dropdown- Lump, fines, friable, platy, fibrous, powdery. **Also, in the foot note the lump is to fines ratio is to be mentioned**

as per the nature of the deposit. The last approved document mentions fines: lumps ratio as 60:40(Pg-35). The supporting document may be enclosed under annexure and reference to be given under para.

v) Para- 2.1.4.7- Extent of Mineralization- (Pg. 17)- It should be mentioned in the text **“All the materials analysing equal or more than 35 % and above have been considered as ore”** as per IBM notification no. C-284/3/CMG/2017 dated 25th April, 2018 for threshold value of Hematitic ore and Hematitic siliceous. The number of ore bands inside the lease area with physical and chemical characteristics details to be also given specifically under the para.

vi) Para-2.1.4.8- Deposit type-(Pg-17-18)- The details have not been given as per the format. The excel sheet format of FAQ may be referred and details may be given in tabular format accordingly. The options available in the dropdown may be checked under the relevant and details regarding strike/trend of ore body etc. may be furnished accordingly.

6. i) Para- 2.2.1.13- Bulk density-(Pg. 20)- The NABL certification of the laboratory along with the scope of test works for the lab, which includes Bulk density testing has to be enclosed as Annexure and reference to be given under this Para. Under Nature of Ore/OB- **“In-situ iron ore/In-situ OB”** to be mentioned. Under the mineral column, for S.I. no 1,2 & 3-waste & for S.I. no 4 to 10-Haematitic ore to be mentioned additionally. Sl. No 11 to be mentioned as Haematitic Siliceous ore **“The average Bulk density for Haematitic ore, Haematitic Siliceous ore & OB to be calculated accordingly and details to be given** in this para. The following table to be included.

Type of ore	Average Bulk density	Nature of Ore/OB considered under Table 2.2.1.13
Haematitic Ore		Sl. No 4,5,6,7,8,9 & 1 of Table 2.2.1.13
Haematitic Siliceous Ore		Sl. No 11 of Table 2.2.1.13
OB		Sl. No 1,2 & 3 of Table 2.2.1.13

7. i) Para-2.2.2.1- Geological Mapping- (Pg-22)-The financial year may be mentioned under the column “Year”.
- ii) Para-2.2.2.7.1- Core/Non-core drilling-(Pg-22-23)-The Litho-log and chemical analysis details of all the previous drilled 101 boreholes as per Form-J format of MCDR 2017 may be enclosed and reference to be given under the para. Annexure-15 has details of only 26 boreholes. The borehole database enclosed as Annexure-14 & 15 to updated/corrected accordingly and as per above scrutiny comment no 4.
- iii) Para-2.2.2.9- Sampling-(Pg-24)-The details under the para have not been given correctly. The sampling details of all the previous drilled exploratory boreholes as per the format like type of sample (Core/Rock chip), No of samples, Location of sample in Latitude and Longitude (Borehole extent location) to be given in the table. The excel sheet format of FAQ may be referred. The reference of Form -J to be given under this Para.
- v) Para-2.2.1.10- Chemical Analysis-(Pg-24)- The sample id's to be given correctly under the Para. The chemical analysis details of Haematitic Siliceous ore to be also included. The chemical analysis report to be added/corrected accordingly. The chemical and Mineralogical analysis report to be enclosed with all additions/corrections as mentioned above, as per the format and reference to be given under para. The NABL accreditation certificate of the lab to be also enclosed and reference to be given under this Para.
- vii) Para-2.2.2.13- Bulk Density-(Pg-24-25)- The corrections to be incorporated as per the above scrutiny comment no 6 for Para 2.2.1.13.
- viii) Para-2.2.2.14- Area Covered under Exploration(Pg-25)-a) The area under different exploration limits have not been provided correctly. Since all the exploration has been carried out till 2017-18 only and the area under different exploration limits at the end of year 2017-18 is 35.112 ha under G-1 category and 1.788 ha under G-2 category as per the last approved document (Pg-37), accordingly under the table same needs to be mentioned.
- b) The entire details under 2nd table of the para are given incorrect. In this table the area upgraded under different exploration limits in percentage in current plan period to be reviewed w.r.t the last plan period. Year 1 to be corrected as 2018-19, Year-2 as 2019-20, Year 3 as 2020-21, Year-4 as 2021-22(till sep-21). Year 5 may be excluded. Since no exploration is carried out in the ongoing plan period from 2018-19 to 2021-22(till Sep-21), accordingly under column “Area converted to G-1 from G-2, G-3 & G-4”, “% increase in G-1 area” will be nil. As mentioned above as on Sep-21, 35.112 ha is in G-1 & 1.788 ha is in G-2. Further this exploration area limits needs to be reviewed thoroughly as major errors are found in the Geology as mentioned above in scrutiny comment no 4 and the balance area under G-2 & G-3 to be calculated in accordance with Minerals (Evidence of Mineral Contents) Rules, 2015.
8. Para 2.2.3- Ore body Geometry & grade (Pg-25)-The complete details have not been provided. The Geological plan/section shows parallel ore bands at each North, Central and South block. The band nomenclature may be provided and same may be shown accordingly on all relevant plan/sections. The details of each band under specific block to be given as per the available exploratory data. There is also presence of Haematitic Siliceous ore accordingly the Min grade % of each band to be given accordingly.

9. i) Para-2.2.4.2- Resource calculation- (Pg-26-29)-a) The Resource calculation is to be done as on 1.04.2021. All the corrections to be incorporated as mentioned above in scrutiny comment no 4.
- b) The Resource calculation is to be done for Haematitic ore & Hematitic Siliceous ore separately considering threshold value of 45 % Fe(min) for Hematitic ore & 35 % Fe(min) for Hematitic siliceous ore in accordance with IBM threshold value notification 2018 and in accordance with Minerals (Evidence of Mineral Contents) Rules, 2015
- c) No exploration is carried out after approval of the last document. Accordingly, the total Resource figure as reported in AR 2020-21 & the last approved document should be in line. The complete table under this Para along with calculations to be corrected accordingly.
- d) The bulk density considered for calculation, the different categorization of ore under Haematitic ore & Haematitic siliceous should be as per the above scrutiny comment no 6 of para 2.2.1.13.
- ii) Para-2.2.4.3- Mineral Resource estimate for conversion to Mineral Reserve- (Pg-30)- It is to be specifically mentioned **"The Mineral reserve are estimated from the geological resources by deducting the blocked resources"**. It is mentioned *"There is no area left out to convert the resource into reserve"* which is not corrected as mentioned above in scrutiny comment no 4 & 7 (viii). This needs to be corrected.
- iii) Para 2.2.4.4- Threshold value & cut off parameters-(Pg-30)- Under this Para it is to be specifically mentioned **"Threshold value for Hematic ore is 45 % Fe (Min) and Hematitic Siliceous ore is 35% Fe (Min)" as per IBM notification no. C-284/3/CMG/2017 dated 25th April, 2018.** There is no point providing separate cut-off grade for laterized/powdery/friable/low-grade ore etc. **The specific Cut-off grade is to be arrived based on the feasibility report and this should be supported with detailed calculation in the feasibility report as per the Minerals (Evidence of Minerals Contents) Rules 2015.** The reference of the feasibility report to be mentioned under the para. The para and related annexures to be corrected accordingly.
- iv) Para 2.2.4.5- Mining Factor or assumptions-(Pg-30-32)- "No write up is required under the para". The recovery factor considered for resource calculation is to be written specifically as taken in calculation under Para 2.2.4.3. No other details are required. The para to be corrected accordingly. The supporting **"Recovery study report"** may be enclosed.
- v) Para 2.2.4.7- Cost & Revenue factors (Pg-32)- All the corrections to be incorporated in the feasibility study as per the above scrutiny comment no 9(iii). There is no detailed costing done w.r.t the cost of production, average sale price, cash inflow & outflow to be done. Cost of production should also include Royalty & taxes (DMF, NMET) etc. The feasibility report should be signed by QP. The corrections to be incorporated under this Para and feasibility study report(Annexure-16) accordingly.
- vi) Para 2.2.4.9- Other modifying factors (Pg-33)- 'No other modifying factors have been considered, accordingly **"NIL"** should be mentioned.
- vii) Para 2.2.4.10- Classification (Pg-33-39)- Irrelevant information are given from Pg-33 to 39, which is not required. Specific information regarding estimation done for Reserve/Resource under different UNFC codew.r.t the geologic, feasibility and economic viability axis as per UNFC & the Minerals (Evidence of Minerals Contents) Rules 2015 to be mentioned under para.
- viii) Para 2.2.4.11- Calculation of blocked resources (Pg-40)- The calculation has been done under UNFC code "333" which is completely incorrect. The reserve blocked below the ultimate pit limit, safety zones or due to economic constraints assigning the relevant UNFC code to be calculated and given under the para. MEMC Rule 2015 may be referred. The calculation of blocked resource under this para to be corrected accordingly. Also, corrections to be incorporated as mentioned in above scrutiny comments of Geology chapter. The calculations to be done separately for Hematitic ore & Hematitic siliceous ore.
- ix) Para 2.2.4.12- Calculation of Reserves(Pg-41-49)- The Reserves have not been given as per the format. **The Reserves/resource estimation to be done as on 1.04.2021.** The excel format in FAQ may be referred. Also as already mentioned in above scrutiny comment the Reserve/Resource estimation to be done for Haematitic ore and Hematitic siliceous ore separately as per the IBM threshold value. No exploration is carried out after approval of the last document. Accordingly, the total Reserve figure as reported in AR 2020-21 & the last approved document should be in line after depletion of the production for subsequent month/years. Under the grade column **average grade** is to be given rather than mentioning the grade range. The complete table under this Para along with calculations to be corrected accordingly.
- x) Para 2.2.4.13-(Pg-50)- All the corrections to be incorporated under tables in this Para as mentioned above. The Reserve & Resource estimation to be given as on 1.04.2021. Separate tables to be given for Haematitic ore and Haematitic siliceous ore with all details as per the format. The Quantity under different UNFC code, avg grade etc. to be corrected as mentioned in above scrutiny comments. The total Reserve & Resource figure in this para should match with the total resource figure given above in para 2.2.4.2. The corrections to be incorporated in related text, annexures, and plates accordingly.
10. Para 2.2.5- Future Exploration Proposal (Pg-50)- It is mentioned "NIL" which is not acceptable due to reasons above in scrutiny comment no 4.
- i) Para 2.2.5.1- Geological Mapping-(Pg-50)- The year 2021-22 to be mentioned- as 2021-22(From Oct-21 to Mar-22). The current plan period is till 2022-23, accordingly year 2023-24 to be removed.
- ii) The Para No under heading Trenching to be corrected as 2.2.5.4 The Sl. no under heading Exploratory drilling to be corrected as 2.2.5.5 and subsequent subheadings as 2.2.5.5.1(Pg-51).
- iii) Under para 2.2.5.5.1- Core/Non-core drilling-(Pg-51)-a) The remaining area under G-2/G-3 as per above scrutiny comment no 7((viii) (a) & (b) for Para 2.2.2.14 needs to be calculated thoroughly. Also, it should be

reviewed w.r.t the above scrutiny comment no 4 where there are number of sections in North block, Central block and South block where the exploration has not been completed laterally and vertically in accordance with Rule 12(4) of MCDR 2017. The complete exploratory proposals to be worked out thoroughly to upgrade the entire potentially mineralized area to G-1 both at lateral and vertical extent in accordance with Minerals (Evidence of Mineral Contents) Rules, 2015. The Exploratory proposals to be worked out so that Haematitic ore, Haematitic siliceous ore, BHQ, complete delineation of all the ore bands in North, central and south block, non-mineralized area etc. are established. Since the ore body is dipping at 50-70 degrees, inclined hole may be worked out rather than vertical holes to target the orebody intersection at required depth. The depth of exploration should be up to the discontinuance of the ore body and no borehole should be stopped at mineralized zone. For the non-mineralized area also, supporting exploratory data is required. The borehole assessment may be done accordingly and the borehole proposals in the balance period is to be proposed accordingly.

b) Tables under Para 2.2.5.5.1 should be corrected accordingly. The corrections to be also incorporated in all related plates and annexures.

iv) Para 2.2.5.7-Sampling-(Pg. 52)- The type of sample, no of sample, area covered details year wise etc., for each year as per the proposed exploratory boreholes in accordance with Minerals (evidence of Mineral contents) Rules 2015 to be calculated and given here after incorporating corrections as mentioned above. The sample location extent may also be given under Latitude and Longitude column of the table.

v) The Sl. No under heading Petrology & Mineralogical studies to be corrected as 2.2.5.8.

CHAPTER-3-MINERAL BENEFICIATION/PROCESSING (Pg. 53-58)

11. i) Para 3.1- Mineralogy of the ROM ore (Pg-53)- Under Gangue Mineral & Gangue Mineral Percentage column "Nil" to be mentioned. Under the approx. mineral % column the average mineral percentage to be mentioned and the chemical analysis report of ROM to be enclosed in annexure and reference to be given under para.

ii) Para 3.2- Complete chemical analysis of ROM (Pg-53)-The details are not given as per the format. It should be given as per the below mentioned table and reference of the chemical analysis report of ROM enclosed as annexure to be given.

S.No.	Radicals	Wt. %
1	Fe	
2	Al ₂ O ₃	
3	SiO ₂	

12. i) Para 3.3.1 & 3.3.2- Primary Crushing-& Secondary crushing (Pg-53)- a) The details as given in this Para and the flowsheet for C&S as attached in Annexure-17 is not matching. There is no secondary crushing shown on the flowsheet. The type, make, capacity & feed and output size of the crusher to be shown on the flowsheet as per the details provided in the para. Product size to be corrected as "0-10 mm & 10-40 mm"

b) The lumps & fines generation ratio may be kept as mentioned above in scrutiny comment no 5(iv). The complete details under this para and Annexure-17 & 18 to be corrected accordingly. The other additional details as; provided in flowsheet are not required and may be deleted.

ii) Para 3.5.1- Screening and Classification-(Pg-55)-a) The screen details under this para to be also corrected as per the above scrutiny comment. The feed size and the product size and the screen aperture size to be mentioned correctly as per the flow sheet (Annexure-18) and incorporating corrections as mentioned above.

iii) Para-3.9-Overall water requirement-(Pg-58)-The quantity of water required in Cum/day for mining & allied activities process like dust suppression, drilling, plantation, domestic purpose like washing, drinking etc. details to be given under this Para. The details regarding disposal of water and chemical analysis of water should also be given under this Para. The Water balance chart to be prepared accordingly and may be added in annexure and reference to be given under this Para. The water requirement should be within the CFO permissible limits. The additional row in the table to be deleted.

iv) Para 3.10- Flow sheets and charts-(Pg-58)- The corrections to be incorporated in Annexure-17 & 18 as mentioned above. The reference of water balance chart & chemical analysis of water enclosed as annexure to be given under the row " Any other data".

CHAPTER-4-MINING OPERATIONS (Pg. 59-74)

13. In accordance with Rule 34(A)(3) of MCDR Amendment Rules, 2021 the lessee is required to submit processed output [digital elevation model (DEM) and Orthomosaic] images obtained from drone survey of the mine lease area and up to hundred metres outside the lease boundary within six months, before submission of any mining plan document. The same may be submitted in accordance with the provision of the above rule.

14. i) Para 4.2.1.1-Pits- (Pg-59)- The surface plan indicates North pit, Central pit and South pit accordingly details to be given only for **North, Central and South pit**. The pits area etc. may be in line with the land-use as reported in AR 2020-21.
15. i) Para 4.2.1.2.1-Dump details-(Pg-59-60)-i) Only the dumps both active/inactive which is inside the lease area details are to be given under the para. The surface plan (Plate no-5) indicates ID-1, ID-2, ID-3, AD-5 & AD-6 within the ML area.
- ii) Para 4.2.1.2.2-Stack details-(Pg-60)- No Stack ID is mentioned under the Para, nor it demarcated on the surface plan (Plate no-5). The Stack-ID should be mentioned and same should be demarcated on the plan and indexed. All the Stack-Id as demarcated in the surface plan should also be mentioned under this para with other relevant details stack id wise, like total stack qty, area covered & Height. Corrections to be incorporated accordingly in text and all related plates.
- iii) Para 4.2.1.3- Details of Stabilized dumps-(Pg-60)- As already mentioned above only the waste dumps inside the lease area details to be given under the para. The Waste dump & surface water management plan as per the approved R&R plan to be enclosed as plates. If all the R&R engineering measures are completed as per the approved R&R plan it is to be mentioned completely stabilized and if the engineering measures are still in process, then it is to be mentioned partially stabilized under the respective dump. The length of Toe wall, garland drain etc as reported under the para should be in line with the Annual PMCP 2020-21 report submitted and should be demarcated on the surface plan & indexed.
- iv) Para 4.2.2.1- Bench Parameters-(Pg-61)-a) **The integrated slope stability report for mine pit and waste dumps to be enclosed based on which the mine design parameters (Bench height, Bench slope angle, overall slope angle etc.) are mentioned.** If the slope stability study for the mine has not been conducted then the same should be initiated from Govt. agencies to assess the overall Geotechnical stability condition for the mine and dumps. In the text it should be mentioned accordingly in remarks that the slope stability study will be conducted at the earliest and the report will be submitted to IBM once the study is complete. The supporting documents in such case regarding initiating of slope stability may also be attached as annexure and reference to be given under the para. Also, the bench height, width, Slope angle of haul roads etc. should be checked w.r.t 106(2)(b) permission of DGMS. The 106(2)(b) permission of DGMS to be also enclosed and reference to be given under this para.
- b) Overall slope of Pit (degree) to be given year-wise as per the year-wise development & production sections.
- c) In AR 2020-21 its already mentioned 4 benches in ore and 2 benches in waste. The no of benches in OB & waste to be given cumulatively for the respective year for the central pit. This is to be checked and corrected in the table.
- d) The above- mentioned corrections to be incorporated in individual Year-wise development & production plan. The individual year-wise separate development & production sections have not been prepared. The same should be prepared and enclosed and plate reference to be given under this para.
- v) Para 4.2.2.2- Year wise opencast development-(Pg-61-63)-a) All corrections in the related calculations, plan sections, annexures to be made as per the above scrutiny comments of the Geology Chapter (1.0).
- b) **The detailed year-wise development and production calculation sheet bench & section wise has not been prepared. The same should be prepared and enclosed as annexure and reference to be given under para.**
- c) The calculations as provided in the table are not correct. For the "bulk density of OB" average bulk density as per scrutiny comment no 6 for para 2.2.1.13 to be mentioned. For the "bulk density of mineral" average bulk density of Haematitic ore and avg bulk density of Haematitic siliceous ore as per para 2.2.1.13 to be mentioned. **The Recovery percentage depends on the cut-off grade arrived as mentioned above in scrutiny comment no 9(iii) for para 2.2.4.4.** If the cut-off grade is 35 % Fe(min) and all the ore is saleable without any Mineral Reject generation, in such case Recovery is 100 % or else if there is no generation of Haematitic siliceous ore in the sections of the central pit where mining proposals are given and cut-off grade in such case is 45 % Fe(min), in such case also recovery percentage is 100 %.
- d) If there is generation of Haematitic Siliceous ore and the recovery is 100 %, the individual Haematitic siliceous ore quantity for each year to be given separately in the "production associated" column of the table inserting the heading "Haematitic Siliceous ore".
- e) If there is generation of Haematitic Siliceous ore and is not used by the lessee as per the arrived cut-off grade then same may be included in mineral reject and recovery percentage to be arrived accordingly. In such case detail may be given in subsequent paras as per the format for stacking of mineral reject etc.
- f) The ROM production proposals to be specifically within the CEC permissible Limit of 0.50 million Metric Tonne per Annum (MMTPA). As mentioned above if there is generation of Haematitic siliceous ore the production of the same is to be calculated separately as per the respective bulk density.

- g) The top Bench mRL and Bottom bench mRL for the respective working year to be mentioned under the column "Benches" as per the respective year development & production plan & section.
- h) The stripping ratio to be calculated" in tons". Under foot Note it may be specifically mentioned that stripping ratio have been calculated "in tons".
- i) The year-wise proposed excavation should be proposed in-line with the conceptual plan.
- j) The **development & production sheet** to be prepared accordingly incorporating all details & corrections as mentioned above. The corrections to be also incorporated in all relevant para of the text, annexures and plates.
- vi) Para 4.2.2.3-Transportation & Hauling Equipment- (Pg-64)- The AR 2020-21 mentions 16 units of 16 tons dumper. The details provided under the table is not as reported in AR 2020-21. Further the Water tanker details also needs to be provided as per the format. The excel sheet format and the dropdown options available under the para may be referred.
16. i) Para 4.3-Material Handling Summary-(Pg-64)-Para-4.3.1-a) The integrated Slope stability report of the mines have not been enclosed, the details of the same should be mentioned under this para as per above scrutiny comment no 15(iv).
- b) The recovery study report as mentioned in above scrutiny comment no 9(iv) may be enclosed.
- c) The corrections/additions to be incorporated in Bulk density study report (Annex-13) as mentioned above in scrutiny comment no 6.
- d) The 106 (2) (b) permission from DGMS as per MMR 1961 should also be enclosed as Annexure and details & annexure reference to be given under "Any other Study Report".
- ii) Para 4.3.2-Insitu Mining-(Pg-65)- The corrections to be incorporated in the table under this Para as per the above scrutiny comment no 15(v) for Para 4.2.2.2. The corrections/additions to be also made in all year-wise production & development plans & sections & Year wise production & development calculation sheet. "2122-23" mentioned in the heading to be corrected as "2022-23".
- iv) Para 4.3.4-Calculation Summary-(Pg-66)- The corrections to be made in the table as mentioned above. Year 5 have not been mentioned correctly in the column. Under Year-5, "2022-23" to be mentioned.
17. Para 4.4-Machine Calculation (Pg-66-69)- i) Para 4.4.1-Machine requirement Summary (Pg-66)-The Effective shift time is taken as 5 hrs. and 300 min whereas in later para it is taken 6 hrs. This may be checked and corrected.
- ii) Para 4.4.2- Shovel/Excavator Requirement (Pg-66-67)-The calculations have not been done correctly. First of all, the shovel bucket capacity to be selected as per the machinery reported in AR 2020-21. For each bucket capacity of shovel, the no of shovels required as per the specific handling material (Haematitic ore/Haematitic siliceous ore/OB) and quantity requirement are to be calculated. Since tonnage factor for Haematitic ore, Haematitic siliceous ore, OB are different, the maximum handling quantity accordingly for the year as per the development & production sheet under each to be given, and no of shovels for each capacity to be calculated. The effective shift time is mentioned as 6 hrs. whereas in the previous para it is mentioned 5.00 hrs. The correct effective shift time to be given under this para. The bucket fill factor, swell factor, tonnage factor etc. have not been taken correctly. The TPH, yearly handling etc. to be calculated incorporating all corrections as mentioned above and no of excavators to be calculated accordingly. The Stand by excavator(L) should be calculated mentioning the availability percentage.
- iii) Para 4.4.3- Dumper Requirement (Pg-68)-. The calculations have not been done correctly. The Effective shift time to be checked as mentioned above. The Stand by dumper(xii) is to be calculated mentioning the availability percentage.
- iv) Para 4.4.4-Drill Machine Requirement(Pg-68)- The calculations under the table have not been done correctly. The no of drills to be calculated separately for Haematitic ore/Haematitic siliceous ore/OB as the bulk density is different. Depth of hole and subgrade drilling break up to be given. The yield per hole to be calculated correctly (Spacing*Burden*Depth of hole* Bulk density). The yield per meter is to be calculated correctly excluding the subgrade drilling meterage i.e., taking the depth of hole only. Annual target to be assumed mentioning the **Percentage of tonnage of material requiring drilling & blasting per annum as per the maximum handling requirement** of Para 4.3.2. The rate of drilling per hours to be corrected and number of drills required to be calculated accordingly. The Stand by drill should be calculated mentioning the availability percentage.
- v) Para 4.4.5-Machine Deployment details (Pg-69)-The details of the machinery (nos. & capacity) given under Para 4.4.5.1; 4.4.5.2 & 4.4.5.3 should match with the details of machineries as reported in AR 2020-21. The excavator capacity etc. as mentioned in the para and as reported in AR 2020-21 is not matching. Under Para 4.4.5.1 the wheel loader to be also included. The corrections to be incorporated in Para 4.4.5.2 & 4.4.5.3 accordingly.
18. Para 4.5-Blasting Requirement(Pg-68-69)- i) Para 4.5.1(Pg-68)- The spacing and burden of holes in this para and as mention in previous para (Para 4.4.4) are not uniform. The same should be corrected as per the field drilling condition and requirement in waste. The other parameters like "Frequency of blasting in a week" and "Explosive requirement per month", Powder factor etc. in table to be checked and corrected accordingly.

- ii) Para 4.5.2-(Pg-69)- Under the column "Total ROM proposed to be handled in Cum/annum" – to be considered, as same as it has been considered for drilling in previous Para 4.4.4. The other parameters like spacing, burden etc. yield/hole(cum) etc. to be calculated correctly accordingly as mentioned above and in previous paras.
19. Para 4.6- Manpower deployment (Pg-70-72): -i) After Para 4.6.5, Para 4.6.6-(Others Specify) to be added as heading. Accordingly, S.I. no of Para 4.6.6 & 4.6.7 to be corrected as 4.6.7& 4.6.8. The excel template as published in FAQ may be referred. The manpower related to "Security" etc. may also be included in Para 4.6.6- Others.
- ii) The no of person engaged per day has not been calculated correctly in Para 4.6.7 (Pg-72). It is to be recalculated incorporating all above corrections. The Material handled per shift to be checked as per previous para 4.4(Scrutiny comment 17).
- iii)Para 4.6.8-Supervision-(Pg-72)- Only Foreman and mining mate details have been given.The complete manpower Requirement to be reviewed w.r.t the in position/Existing strength as per Para 4.6.7 and shortage/Excess if any to be mentioned, and action to be taken if any shortage to be given in remarks column.
20. Para 4.7-Waste Management (Pg-72)- i) Para 4.7.1-Existing Dump (Pg-72)- The details under the para have not been given correctly. The details of all the existing dumps inside the Lease area(ID-1,ID-2,ID-3, AD-5 & AD-6) as per the previous para 4.2.1.2.1 and above scrutiny comment no 15(i) to be given.
- ii) Para 4.7.2-New Dump(Pg.-73)- It should be mentioned under foot note of the table "**There is no waste dumping proposals on new dump for the year 2021-22(Oct-21 to March-22)& 2022-23, however the generated waste for the period will be backfilled and the backfilling proposals are given in Para 6.2.1**".
- iii)Para 4.7.3-Existing Stack (Pg-74)- The details of the existing stacks inside the Lease area as per the previous para 4.2.1.2.1 and above scrutiny comment no 15(ii) to be given.
21. Para 4.9-Use of Minerals-(Pg-74)- There is no beneficiation carried out, accordingly the options "Direct Selling" to be mentioned as per the format under the column "Proposed use of mineral". Under the physical specification specifically size may be mentioned and under chemical specification, the respective chemical specification.
- CHAPTER-5-SUSTAINABLE MINING (Pg. 75-79)**
22. i)Para 5.1- Sustainable Mining and SDF Implementations in compliance of Rule 35 of MCDR 2017(Pg-75)-a)It should be specifically mentioned under this Para "*Sustainable Mining and SDF implementations during the plan period 2021-22(Oct 21 to Mar-22) to 2022-23 will be carried out in accordance with Rule 35 of MCDR 2017*".
- b)Compliance of Vishakha Committee Guidelines- The Company guidelines for prevention of women harassment at work place to be detailed here and supporting document may be added in annexure and reference to be given under the para.
- ii)Para 5.2- CSR Initiatives (Pg-75-79)- i) Para 5.2.1- a) The details have not been given as per the format. The details have been given for the year 2018-19,2019-20,2020-21 which is not required. The SDF proposals needs to be given separately for the year 2021-22(From Oct-21 to Marc-22) & 2022-23 as per the format. For the year 2021-22 (From Oct-21 to Mar-22), proposals to be given as per the format and under cumulative work done for this year, it should be mentioned nil since there are no prior approved SDF proposals.
- b)Para 5.2.2, 5.2.3-,5.2.4,5.2.5- The para needs to be added as per the format and the details for the Year 2022-23to be given as per the format. Under cumulative column, year on year proposals to be added taking 2021-22(From Oct-21 to March-22) as the base year.
- CHAPTER-6- PROGRESSIVE MINE CLOSURE PLAN (Pg. 81-87)**
23. ***Since the Lease is expiring on 22.09.2023 and FMCP proposals will be commenced 2 years prior, all the Reclamation & Rehabilitation measures needs to be completed in systematic manner in balance plan period. All the pending Reclamation & Rehabilitation measures as per the approved R& R plan, EC & FC specific conditions needs to be implemented and completed.***
24. i)Para 6.1-Status of Land-(Pg.81)- a) The "**Area under Mining operations**" is mentioned as 53.115 ha" which is not correct. The Area under mining operations comes to 23.072 ha as reported in AR 2020-21 and also as mentioned in the previous para 4.2.1.1(8.522 ha+7.34 ha+6.09 ha+1.12 ha=23.072 ha). The "**Mined out area**" is the area available for backfilling and the details to be given accordingly.
- b)Out of the available backfilled area, the portion of area which is backfilled and reclaimed till the date of survey(1.10.2021), the details of the same is to be given under the column "**Mined out area reclaimed but not rehabilitated**".
- c) The details under the above para should be in line with the land use data as reported in AR 2020-21 and the annual PMCP report submitted for the year 2020-21.
- ii)Para 6.2.1- Backfilling-(Pg-81)- a)The backfilling extent and quantity may be thoroughly checked w.r.t the scrutiny comment no 4 of Geology chapter and Scrutiny comment no 15 & 16 of Mining chapter and corrections to be incorporated in all related text, annexures and plates.
- b) For the year 2021-22 the top and bottom RL is given 915 and 910 mRL and for year 2022-23, the top and bottom mRL is given as 935 and 925 mRL. The backfilling at 925 MRL can't happen without backfilling the portion

between 925 and 915 mRL. The complete backfilling proposals to be planned systematically in 10 m stages lift wise so as to avoid creation of any void due to which there may be effect on the stability.

c) No Backfilling to be carried out in the area where the mineral has not been exhausted completely (i.e., all iron ore zone till $Fe \geq 35\%$ have been completely extracted) and also where the exploration is pending either for lateral or vertical continuity of the ore bands

iii) Para 6.2.2.1-Preparations for Ground water Recharging-(Pg-82)-The details as mentioned under the para "Please specify, if others" may be deleted as in the para only proposals need to be given. If there are no related proposals for the period "NIL" may be mentioned.

iv) Para 6.2.2.2.1-Fencing-(Pg-82)-The fencing all around the mine Lease boundary needs to be completed before 22.09.2023 to prevent endangering fall of persons/cattle, unauthorized entry etc. This should be checked and if at any portion, the fencing is pending, the same may be proposed within this plan period as mentioned above. The Grid reference for the fencing to be mentioned in this para and also, the same should be demarcated on the PMCP plan with index.

v) Para 6.2.2.2.2-(Retaining wall) & Para 6.2.2.2.3 (Garland drain)- (Pg-83)-Since the Lease is expiring on 22.09.2023, all the PMCP measures needs to be completed. All the Protective measures (Retaining wall, garland drain etc) should be reviewed w.r.t the approved R&R plan and incomplete portion to be proposed. The above PMCP measures to be demarcated distinctly on the PMCP plan & also on year-wise production and development plan. The dump management plan and surface water management plan as per the approved R&R plan to be enclosed in list of plates and reference to be given under the para. Also, it may be reviewed w.r.t the specific conditions (A) of EC and pending Engineering measures to be proposed.

vi) Para 6.2.3.1-Cumulative work done-(Pg-83)- The cumulative figures to be as per the figures reported in Annual PMCP report 2020-21. A copy of the report may be enclosed as Annexure and reference to be given under para.

vii) Para 6.2.3.2- Year wise proposal-(Pg-83)- The Land use under the previous para mentions 4.22 ha under "Green belt". Under Para 6.2.3.1 it is mentioned only 4.0486 ha green belt plantation is carried out. For the balance area also, plantation is to be proposed as per the specific conditions A(x) of EC. The density of trees should be proposed 2500 plants per hectare as per the EC condition. Further the area under all the dumps to be also reviewed w.r.t the specific conditions of EC & approved R&R plan and the balance plantation to be proposed in this plan period. The Year-wise proposal for the plan period to be given accordingly and should be clearly demarcated on the PMCP plan & also year-wise production and development plan

viii) Para 6.2.7-Dump area stabilization & Development-(Pg-85)- Details regarding toe wall, garland drain etc. year-wise for all the dumps to be reviewed and given under this para as per above scrutiny comment no (v), of the previous para 6.2.2.2.2.

ix) Para 6.2.8.2- Year wise proposal-(Pg-86)-The other form of reclamation like Geotextile etc for the dumps may be reviewed w.r.t the approved R&R plan and specific condition (iii) of EC and year-wise proposals may be given accordingly.

x) Para 6.2.11- (Conceptual stage)- (Pg-87)-a)The "Mined out Area in the Lease" should also include the backfilled area. Since the area is not completely Reclaimed & Rehabilitated the backfilled area is to be included in the Area degraded under column 'Mined out area in the Lease'. The Land-use may be checked w.r.t the above scrutiny comments for Geology(2) & Mining chapter(4) & corrections if any to be incorporated. The "area under utility services" is given as "11.235 ha" whereas "Rehabilitated area under utility services" is given as "NIL" in conceptual stage which is not correct. At conceptual stage the area under infrastructure like workshop, building, etc needs to be dismantled & Rehabilitation measures(Grassing/Plantation) on such area to be implemented, accordingly such area needs to be calculated and proposed under "Rehabilitated area under utility services".

b) The conceptual plan should include undertaking of re-grassing of the mining area and any other area which may have been disturbed due to mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. in accordance with the order of Hon'ble Supreme Court dated 08.01.2020. The portion of the area which is backfilled and has reached its ground level and further there will no advancement such sections if any may be identified, the dismantled/decommissioned infrastructure area, area under dumps, etc. to be reviewed and plantation & re-grassing may be proposed in such area as per above.

c) The conceptual plan may also be checked w.r.t the approved R&R plan and to be planned accordingly. All the above corrections should be incorporated in the text and Conceptual plan & Section.

CHAPTER-7- FINANCIAL ASSURANCE/PERFORMANCE SURETY (Pg. 88-90)

25. i) Para 7.1-(Pg-88-89)-The table in this para for each year of the plan period regarding "area put to use at start of year", "additional requirement" and "total" to be checked & recalculated after incorporating all corrections for Geology & Exploration chapter (2), Mineral processing (3), Mining operations (4), & Progressive Mine Closure Plan Chapter (6). Also as mentioned above in scrutiny comment no 24(x) for Para 6.2.11, the backfilled area (Reclaimed area) to be included as "**Area under Mining**". Under the "**Others to specify**" heading Greenbelt & Engineering measures only to be included.

ii) Para 7.2-Financial assurance-(Pg-89-90)- Two tables are given under the para which is not required as per format. Only one table for Category-A mining Lease as per the format needs to be given and the "total area proposed to be put to use in hectares" as arrived at the end of the final year of plan period(2022-23) should be calculated after incorporating all above corrections and the amount of bank guarantee to be calculated in accordance with Rule 27 of **Mineral Conservation and Development (Amendment) Rules, 2021**. The bank guarantee validity should be till the end of plan period. Copies of the bank guarantee to be enclosed. The table under this Para and Annexure-20 to be added/corrected accordingly.

CHAPTER-8- REVIEW OF PREVIOUS PROPOSALS (Pg. 91-100)

26. For all the paras under this chapter the deviation may be calculated in percentage taking the figures for proposed and the achieved.

27. i) Para 8.1.1-Lease area utilization (Pg-91)- a) The Land use review have not been carried out in accordance with the last approved document financial assurance table (Pg-181).The "Area at beginning of the proposal period" should be exactly similar as mentioned in "Area put on use at start of plan" of last approved document. There is no Mineral beneficiation plant inside the lease area,accordingly this may be mentioned as "**mineral separation plant**" as per the last approved document. There is no waste dump reclaimed area of 7.63 ha mentioned in last approved document, accordingly it may be removed.

b) Under "Area proposed under activity" the area mentioned under "Area as at the end of plan period" as per the last approved document to be given. For e.g., in case of Mining – "23.072(18.822+4.250) ha" may be mentioned instead of -3.478 ha. For OB/Waste dump-15.42 ha and so on in other headings also.The actual area is to be given as per "Area put to use at start of year" in the financial assurance chapter (7.0) for the year 2021-22(Oct-21 to March-22) of plan period. The deviation may be calculated in **percentage** accordingly and reasons may be specified.

ii) Para 8.1.2-SDF and CSR Expenditures-(Pg-92)- Since the last approved document didn't have SDF proposals, accordingly it should be mentioned "Not applicable" under this para.

ii) Para 8.2.2.1-(Pg-93-95)-a) The unit to be also mentioned (tons/cum etc).All the IBM Violation letters for the period 2018-19,2019-20 & 2020-21 to be enclosed as Annexure and reference to be given. The actual figures should be as reported in Annual return and Monthly Return of the corresponding year/period.

b) *Under the Row "**Dumping Site for Surface-** The area proposed for OB dump/Surface dumping for the year 2018-19&2019-20as per the last approved document (Pg-105) may be mentioned and actual area to be reviewed as per the land use reported in respective AR.

iii) Para 8.2.2.2-Excavation-(Pg. 93-95)-For the vertical extent proposed mRL and actual mRL attained to be mentioned.

iv) Para 8.2.3-Dump Mining-(Pg-95)-It is to be mentioned under the foot note "*The dump no ID-1 which is located at north block, was to be rehandled for developing the benches for mining of ore. Around 30,000 tons of waste handling was proposed for the year 2019-20. Dump handling is only for advancing the mine benches and not for any recovery of ore mineral. The above dump rehandled quantity to be disposed in surface Dump-AD-6*" as per (Pg-85) of the last approved document.

v) Para 8.2.5- Backfilling (Pg-96-97)- The details under the para should be inline with the figures as reported in the Annual PMCP & Annual return of the respective years.

vi) Para 8.2.6-Production of Minerals-(Pg-97-98)- The unit(tons) to be mentioned under each row.The cleaned ore achievement figures are not given correctly. **For the Cleaned ore also Year-wise opencast (ROM) quantity is be given.** Total quantity will be equal to the opencast (ROM) quantity. The total quantity under "achievement" column to be corrected accordingly.

vii) Para 8.2.8-Environmental Compliances-(Pg. 98-99)- The table under the para is not as per format. The Excel sheet of FAQ may be referred. Under the Year row, the year to be mentioned 2018-19, 2019-20,2020-21,2021-22(till sep-21) &the afforestation proposals & achieved figures to be given correctly as per the previous/last approved document and as reported in respective year Annual Return.Also, the proposed figures for Retaining Wall and Garland drain have not been mentioned correctly. The last approved document mentions total 433 m & 168 m toe wall proposed for the year 2018-19 & 2019-20 & garland drain 289 m & 168 m proposed for the year 2019-20(Pg-173). Accordingly, it should be reviewed year-wise and the actual figures in this para should be as reported in Annual PMCP report for the respective year. The latest environmental monitoring report to be enclosed in annexure and reference to be given under this Para.

viii) Para 8.3-Socio Economic Review-(Pg-99-100)- Since there were no proposals in the last approved plan period under Socio-Economic, accordingly under para 8.3.1, 8.3.2, 8.3.3.1, 8.3.3.2, 8.3.3.3, 8.3.3.4 & 8.3.3.5 it should be mentioned "NIL".

28. **CONSENT LETTER/UNDERTAKING/CERTIFICATE FROM THE APPLICANT**

i) Consent letter /undertaking/certificate from the applicant- The Consent letter is to be enclosed with the "Text" and should be digitally signed by the Nominated Owner. The contents of the letter may be kept as per the earlier format.

ii) Certificate from QP- The Certificate from QP is also to be enclosed with the "Text" and should be digitally signed by the Qualified Person. The contents of the letter may be kept as per the earlier format.

29. **PART-C, PLANS & SECTIONS:**

a) ***It is observed that the plans have not been prepared keeping the North and the Lease orientation as per the State Govt. approved lease sketch (Plate no 4). All the plans are to be prepared maintaining the same North and Lease orientation with boundary pillar nomenclatures and co-ordinates as per the State Govt. approved DGPS Lease sketch. The corrections to be incorporated in all related plates.***

b) **All hard copy plan submission should be output of Auto-cad and soft copies submission should be output of KML/KMZ/SHP format. The soft copy of the auto-cad plans (dwg. file), to be also submitted. All sections submission should be in dwg. Format (Auto-cad output). The boundary pillars have not been demarcated in SHP files. The SHP. files to be also prepared correctly as per format and mine lease boundary with all pillars and 7.5 m safety zone all along the lease boundary is to be specifically demarcated in all SHP plans also. The grid lines to be also demarcated on the SHP Plan. For all the SHP Plans respective KML Plan with all details as mentioned above may also be prepared and submitted in soft copy for ready reference. The individual KML & SHP files to be prepared Layer wise as per the respective plan requirement and as detailed under the "List of plates" in excel format of FAQ.**

c) It should be ensured that all attached plans & sections are prepared as per the content & scale specifications, of Rule 31 (General requirement about Plan & Sections) of MCDR 2017 & IBM Circular no. 1/2021. All plans and sections should be signed with date by certified surveyor, Qualified Person, Geologist, Mining Engineer as per provisions of MCDR 2017. **The plate number has not been maintained as per format. The same has to be maintained as per the format.**

d) Surface Plan (Plate No-5): The surface plan to be corrected as mentioned above in points (a), (b) & (c), and the scrutiny comments of Mining operations Chapter (4). Also as mentioned above in scrutiny comment no 3(x), the boundary pillar co-ordinates are not as per the State Govt approved DGPS Lease sketch. The KML/SHP file of surface plan to be also prepared accordingly after incorporating all corrections. The colour codes for different features to be followed as per the format.

e) Geological Plan (Plate no.-6): 1) The plates should be checked and all corrections to be specifically incorporated as per the aforementioned scrutiny comments of Geology and Exploration chapter (2) & as mentioned above in points (a), (b), (c) & (d). The plate should incorporate all lithological units in the area, already drilled boreholes, proposed boreholes for the plan period, the area covered under different explorations limits G1, G2, G3 to be clearly demarcated and area to be mentioned in plate. The Plan should be submitted showing different colour codes for i) Lithological/Geological occurrence ii) Area under G1, G2, G3 and other features as per format. The KML/SHP files of Geological plan to be also corrected accordingly.

2) Geological Section (Plate No. 6A-6E & 7)-The plate should be checked and all corrections to be specifically incorporated as per the aforementioned scrutiny comments of Geology and Exploration chapter (2) and as mentioned above in points (a), (b), (c), (d) & (e). The existing pit profile should be in line with the surface plan and also indexed. The section should be submitted with different colour code depicting all the features as shown in surface geological plan.

f) Production & Development Plan (Plate No. 8 & 8A): These plates should be corrected as per the aforementioned scrutiny comments for Geology & Exploration (2), Mining operations (4), Progressive Mine Closure plan (6) & Financial Assurance/Performance security (7) chapters. The Year-wise production and development plan should be as per the Year-wise development and production sheet as mentioned above in scrutiny comment no 15(v)(b).

ii) The lithology as given in the geological plan should also be depicted in all the production & Development plans with index.

iii) The proposal of bench development systematically mRL wise & connecting with the old benches as per bench mRL may be worked out. Also, the ramps/haul road for access to the mine pit and waste dump have to be demarcated on each year production & development plan.

iv) The environmental protective work proposed year wise should also be demarcated year-wise along with index as per the PMCP chapter (6).

v) The KML/SHP files of each year production and development plan to be also corrected accordingly. The colour codes for different features to be followed as per the format.

g) Production & Development section (Plate No. 8B)-Individual year wise section as per the respective production & development plan have not been prepared. The same should be prepared. The corrections should be incorporated in the individual year section as per the respective production & development plan as mentioned above in scrutiny comment no (f). The demarcated existing pit profile should be in line with the surface plan

and also to be mentioned in index. **The year-wise excavation and backfilling proposals with different colour depicting all the features as shown in respective P&D plan to be demarcated as per format.**

- h) Progressive mine closure plan (Plate no 10): All corrections to be incorporated as per the PMCP Chapter (6.0) and related scrutiny comments of other chapters and above. The year-wise proposed PMCP measures for the plan period should be demarcated with different color code as per the format. The KML/SHP files of PMCP plan to be also corrected accordingly.
- i) Progressive mine Closure sections -The PMCP section (Plate no-7) has not been prepared. The same should be prepared as per the format after incorporating all corrections in Progressive mine closure plan.
- j) Conceptual Plan (Plate No 11)-i) All the corrections to be incorporated as per the above scrutiny comment no24(x) for Para 6.2.11. The benches developments as proposed in the individual year-wise production and development plan should be in line with the benches development proposed till conceptual stage in the conceptual plan. The KML/SHP files of conceptual plan to be also corrected accordingly. The status of land use shall be depicted by different colour code as per the format.
ii) **Conceptual Sections have not been prepared. The conceptual section should depict sections along the North block, Central block, South block, Waste dumps (AD-5, AD-6) etc. at conceptual stage as per the conceptual plan. The sections to be prepared accordingly and furnished separately.**
- k) Ge Referenced Cadastral Plan (Plate no 10)- Geo referenced cadastral plan duly certified by the State Govt. to be also enclosed as per format.
- l) Environment Plan (Plate No9): -The corrections to be incorporated as mentioned above and as mentioned in scrutiny comments of different chapters. The KML/SHP file of Environment plan to be also corrected accordingly.
- m) Financial Area Assurance Plan: The plate has not been prepared. The same should be prepared incorporating comments for Financial Assurance/Performance Surety Chapter (7) (Scrutiny comment no 25). The Financial assurance table may also be given in plate accordingly and all the area shown in the table should be distinctly demarcated on plate and indexed.
- n) The dump management plan & surface water management plan as per approved R&R to be also attached.
- o) **All the Plans & Sections should be placed serially in a proper bound folder with heading "Part-C" as per the format. The list of plates should be mentioned accordingly in the text and the cover page of the folder maintaining the numbering & sequence specifically as per format. The excel template as published in FAQ may be referred**

30. PART- B, ANNEXURE:

- a) **The annexure number to be specifically maintained as per the format. The excel template as published in FAQ may be referred**
- b) All the annexures as mentioned in above scrutiny comments of different chapters to be enclosed. Also, corrections in the annexures, as mentioned above in scrutiny comments of different chapters to be incorporated.
- c) The supporting documents under Rule 61 of MCR 2016 & Rule 49 of MCDR (Amendment) Rules 2021 for change in name of the company to be enclosed.
- d) Annexure-2- All the lease deeds from initial grant to be enclosed as mentioned above in scrutiny comment 3(ii).
- e) The CEC approval letter for permissible annual production should be enclosed.
- f) The updated List of Board of Directors to be also enclosed as per above scrutiny comment no 3(xi).
- g) Annexure-5- The combined consent orders no AW-305707 dated 04.04.2018 to be also enclosed.
- h) Annexure-13-Study Reports- The corrections/additions to be incorporated as mentioned above in scrutiny comment no 16(i) for Para 4.3.1.
- i) Annexure-16-Feasibility Report- The corrections to be incorporated as mentioned above in scrutiny comment no. 9(iii), 9(iv) & 9(v).
- j) Annexure-14-Exploration details- The corrections & additions to be incorporated as per above scrutiny comments of Geology & Exploration chapter (2)
- k) Annexure-15-Chemical & Mineralogical Analysis report-The corrections/additions to be incorporated as per above scrutiny comments of Geology & Exploration chapter (2).
- l) Annexure-17 & 18- Mineral Processing flow sheet- The corrections to be incorporated as per above scrutiny comments of Mineral Beneficiation/Processing chapter (3).
- m) Annexure-20- The copies of Bank Guarantee to be submitted as per above scrutiny comment no 25(ii).
- n) The year-wise detailed production and development calculation sheet to be enclosed.
- o) **All the annexure to be properly numbered/paged and relevant annexure to be signed by QP. The Page no range should be accordingly given in Part-B Annexures in text. All the annexures should be legible.**
