



भारत सरकार GOVERNMENT OF INDIA
खान मंत्रालय MINISTRY OF MINES
भारतीय खान ब्यूरो INDIAN BUREAU OF MINES
क्षेत्रीय खान नियंत्रक के कार्यालय
OFFICE OF THE REGIONAL CONTROLLER OF MINES



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No. MPM/FM/20-ORI/BHU/2017-18

Date: 01.11.2017

To

✓ Shri Birat Chandra Dagara, Mine Owner,
At/P.o- Rairangpur,
Dist- Mayurbhanj,
Odisha-757043

Sub: Approval of Modification of Mining Plan of Sulaipat Iron Ore Mine along with Progressive Mine Closure Plan (PMCP), over an area of 618.00 ha in Mayurbhanj district of Odisha State, submitted by Shri Birat Chandra Dagara under Rule 17 of MCR, 2016.

Ref: - i) Your letter No. BCD/BBS/4331/2017 dated 10.10.2017 received on 17.10.2017.
ii) This office letter of even no. dated 17.10.2017.
iii) This office letter of even no. dated 17.10.2017 addressed to Director of Mines, Government of Odisha copy endorsed to you.

Sir,

This has reference to the letter cited above on the subject. The draft of Modification of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on site inspection carried out on 30.10.2017 by Shri Dilip Jain, Junior Mining Geologist. The deficiencies observed are enclosed herewith as Annexure I.

You are advised to carry out the necessary modifications in the draft Modification of Mining Plan along with Progressive Mine Closure Plan in the light of the contents vide Annexure I and submit **three (3) firm bound and two (2) soft copies of the document text in CD in a single MS Word file (the drawing/plates in Auto CAD compatible format or JPG format in resolution of 100x100 pixels on same CD)** with financial assurance under Rule 23 F of MCDR 1988 of the Modification of Mining Plan within **15 (fifteen) days** from the date of issue of this letter, for further necessary action. If the total page of annexures exceeds 50 (Fifty) then it should be submitted as separate volume. But reference of these annexures must appear in the Modification of Mining Plan document. The plates are also to be submitted in separate volume.

The para-wise clarifications and the manner in which the deficiencies are attended should invariably be given while forwarding the modified copies of the Modification of Mining Plan along with Progressive Mine Closure Plan. It may be noted that no extension of time in this regard will be entertained and the Modification of Mining Plan along with Progressive Mine Closure Plan will be considered for rejection if not submitted within above due date. It may also be noted that if the deficiencies are not attended completely, the submission would be liable for rejection without further correspondence.

भवदीय / yours faithfully,

(HARKESH MEENA)

क्षेत्रीय खान नियंत्रक / Regional controller of Mines

Scrutiny comment on Review of Mining Plan including PMCP in respect of Sulaipat Iron Ore Mine of Sri B.C. Dagara in Mayurbhanj district of Odisha State.

Date of Inspection: 30.10.2017

1. General:

1. On cover page registration as allocated by IBM under rule 45 of MCDR, 2017 needs to be mentioned. Further, summary of the proposals to be given before the introduction page. Further, on cover page rule position mentioned as 6A needs to be verified and rectified. Further, e-mail, phone number, fax number of the lessee may be furnished on cover page.
2. As the ML was expired on 24/10/2005 and renewal of mining lease yet to execute, hence, proper justification along with documentary evidence from statutory authority for consideration of ML as per section 8A of MMDR Amendment, Act 2015 needs to be submitted.
3. Page 6: It is mentioned that mine is operation, however, during inspection it is observed that mine is under suspension since Oct 2015. Verify and rectify.
4. Page 12 and 14: The production figure and waste generation mention under proposed and achieved in the table does not match with the approved document and annual return. Verify and rectify.
5. From available information it is observed that current document to be Review of mining Plan instead of Modification of Mining Plan. Justification for Modification of Mining plan to be given.

2. Geology and Exploration:

6. The position of the dolerite dyke and other features as observed in file during site inspection to be shown on the geological plan. Further, geological features like strike, dip and dip direction etc. have not shown adequately on geological plan.
7. Page 26: The details of the drilled BH to be given in the tabulated form comprising of BH id, Core/non-core, diameter, inclination, Location (UTM), Collar level, depth, mineralized/non-mineralized etc. Further, the details of the of samples analysis indicating type of sample (surface/sub-surface from pits/trenches/borehole etc) to be given BH wise in tabulated form.
8. Para I: The details like potentially mineralized area and its extent (coordinate in WGS 84), potentially mineralized area explored (in forest and non-forest area, Govt. land, Pvt. land etc.), remaining area, proposal of exploration to explore remaining potentially mineralized area to be given with justification of adequacy.
9. Para I: As per rule 21(4) of the MCDR, 2017 entire potentially mineralized zone to be explored under G1 level of exploration, however, it is observed that the proposed exploration programme is inadequate to explore entire potentially mineralized zone under G1 level of the exploration. Hence, proposal of the exploration to be given in accordance to the Minerals (Evidence of Mineral Contents) Rules, 2015 to explore entire mineralized zone under G1 level of exploration. Further, details of exploration to be given accordance to the land schedule i.e. forest/non-forest/diverted forest etc.
10. From geological sections and bore hole log it is observed that few BH have been closed in the mineralized zone only, hence proposal of exploration upto the end of mineralization to be given. Further, the details like BH id, Section line, location (UTM), depth, inclination, Grid interval, BH type (Core/non-core) to be given in tabulated form for the proposed exploratory BH.

11. Documentary evidence in respect of the expenditure occurs for the exploration to be enclosed.
12. The justification of different UNFC categories have not been carried out as per guideline, hence, same to be revised. Further, on page 29 it is mentioned that probable reserve has been estimated below the proved zone. As per Minerals (Evidence of Mineral Contents) Rules, 2015, reserve to be restricted to direct evidence of the mineralization. Accordingly, estimation of resource may be revised in line with Minerals (Evidence of Mineral Contents) Rules, 2015.
13. From enclosed data of the exploratory BH, it is observed the geological section have not been prepared considering the same. All the BH data and exposed pit to be considered in preparation of geological plan and section.
14. Justification to be given to kept reserve under 111 category, even after the mine is under suspension for want of statutory clearances. Accordingly verify and rectify.
15. Page 29: The recovery of the iron ore has been mentioned as 100%, however, documentary evidence in support of same has not been enclosed.
16. The depth of the proposed BH should be in such a manner that the lateral and depth extension of the Ore Zone to be proved upto the depth of the mineralization considering the geology and nature of the deposit. Hence, all the proposed BH to be shown on the Geological Section along with its depth and inclination.
17. Para E: As per the Guideline of "IBM manual of appraisal of Mining Plan 2014" at least for 10% of total samples may be analyzed in accordance to BIS and reports from NABL accredited/other government laboratory. Hence, details of chemical analysis carried out to be given along with the laboratory details which should be NABL accredited/other government laboratory. Further, chemical analysis report in respect of the area considered under G2 level of exploration needs to be enclosed.
18. Para I: A summary of lease area explored as per UNFC norms indicating G1, G2, etc. should be given in the following format and area explored under G1, G2 etc. to mark on relevant plan:

Item of information	Lease area explored as per UNFC norms (in Ha) as on dt.					Remarks/Comments including reasons for not carrying out the exploration as per UNFC norms.
	<i>Total Lease area = A+B+C+D+E</i>					
	G1 Level	G2 Level	G3 Level	Explored and found non-mineralized with level of exploration (Remarks)	Unexplored lease area	
	A	B	C	D	E	
Area as per level of exploration						
No. of BH Drilled						
No. of BH considered for Resource Estimation.						
Meterage Drilled						
Grid Interval						
Scale of Mapping						

3. Mining:

19. Page 35: The location (coordinates) of the Quarry, Waste Dump and Sub-grade dump may also be mentioned in the tables.
20. From development section and plan the position of benches at the end of each year is not clear. As discussed during the field visit the orientation and color code of the benches in plan and section to be revised. Ultimate pit limit to be drawn on the on the sections.

21. It is observed that two separate quarries have been proposed in the float area. In the interest of scientific mining and protection of the environment a single quarry to be proposed for required quantum of Ore and concurrent back filling proposal to be given in same area. Accordingly proposal of excavation and dumping of waste to be revised.
22. The area proposed for waste bumping and float quarry needs to explore in the first year of the proposal and a proposal of submission of Modification of review of Mining Plan submission to be given, If, found mineralized. Accordingly proposal of exploration to be revised.
23. In Conceptual Mine plan the details about total excavation, Disposal of waste, Sub-grade generation and its beneficiation/utilization, mine development, manpower and equipment requirement, conceptual exploration, land degradation, waste required and its availability for back filling the ultimate pit, depth of the back filling, reclamation and rehabilitation, Proposal of any expansion, etc. showing on a plan with few relevant sections to be given.
24. Mine Drainage: Minimum and maximum depth of water table in the form of mRL based on observations from nearby wells and water bodies to be given.
25. The details of Quantity and quality of water likely to be encountered, the pumping arrangements and places where the mine water is finally proposed to be discharged needs to be given.
26. A drainage plan may be submitted showing the drainage pattern of the lease area. Accordingly, environment protective measures like retaining wall, garland drain, settling tank etc. may be proposed/revised.

4. Stacking of Mineral Reject/Sub-grade and Disposal of Waste:

27. Page 60: It is mentioned that waste material will be dumped over proposed dump 1,2 and 3, however, proposal has been given for only two dumps. Verify and rectify.
28. Indicate briefly the nature and quantity of top soil, overburden / waste and Mineral Reject to be disposed off as per table given in the IBM Manual on Appraisal of Mining Plan 2014.
29. Page64: A proposal of the plantation and coir matting has been given over existing dump, however, same has not shown year wise on the relevant plans. Also year wise proposal of plantation and coir matting to be given over the proposed dump slops.
30. Existing waste dump and subgrade dump to be described with its location along with its mRL, height, capacity of waste holding, quantity of waste and to be depicted clearly on relevant plan. Further, the location of proposed dump and location of subgrade dump along with its year to year development to be given.
31. Details of all existing protective measures like retaining wall, garland drain, settling pond, check dam etc. to be given with their location and details and needs to be depicted in different color on relevant plan.
32. Proposal of blending of Sub-grade/Mineral reject to be given in the interest of conservation of Mineral. Blending ratio also should be mentioned.

5. Use of Mineral and Mineral reject:

33. The details given are not as per the IBM Manual on Appraisal of Mining Plan 2014. Para wise information as desired in IBM Manual on Appraisal of Mining Plan 2014 needs to be given.

6.Processing of ROM and Mineral Reject:

34. The details given are not as per the IBM Manual on Appraisal of Mining Plan 2014. Para wise information as desired in IBM Manual on Appraisal of Mining Plan 2014 needs to be given.

7. Progressive Mine Closure Plan:

35. Base line information in respect of water regime, quality of air, ambient noise level, flora, climatic conditions etc. to be given along with the analysis data of Air quality, noise, ground vibration, water quality, etc. at least of last one year.
36. Page 72 and 75: it is mentioned that there is no human settlement in lease area, however, same has been observed in the lease area. Verify and rectify accordingly.
37. The location and schedule of measurement of as proposed in table presented on page 82 to be given in text.
38. The FA to be revised as discussed during mine visit.

8. Plates:

39. General: It is observed that many of the drawings are not prepared at prescribed scale (1:2000) as specified in rule 27 of MCDR, 1988. This seems to be done to fit large area within A0 size paper. Hence, letter of competent authority for scale reduction to be enclosed as per rule 31 of MCDR, 2017.
40. All plans and sections should be signed with date by certified Surveyor, Qualified Person, Mine Manager, Mining Engineer and Mining Geologist as per provisions of Rule 34 of MCDR, 2017 and Rule 66 of MMR, 1961.
41. Wind direction may be shown in wind rose diagram at the top right corner of the relevant plans.
42. Color code given for different features in plans and sections to be same. Further, Contour value to be shown in all the plans invariably. All the relevant section should have the existing bench mRL and Proposed bench mRL. Further, all the sections should have the direction along which the sections have been created.
43. Surface Plan: Forest/non-forest/private land to be shown clearly. Further, no bauxite zone, conveyor belt, contour are not indexed. Proposed, Five year excavation block has not depicted as per Scale permission letter from CCOM dated 21/05/2016. The mRL mention are not legible.
44. The grid line (EW) wherever cross the different sections, coordinate of that point to be mentioned on the geological and other sections for better referencing. Ultimate pit limit to be drawn on all the sections considering bench height and width and other statutory barriers. Existing and proposed bench mRL (concern sections) to be mentioned in all the sections for better referencing.
45. Geological Plan & Section: Geological section to be drawn for entire lease area form boundary to boundary. Geological plan submitted in instant document is differ from the earlier plan. Justification to be given for such changes in plan. All the proposed BH to be shown on Geo-section with dotted line along with collar mRL, BH id and proposed depth at the end. The index in geological plan and section should be same.
46. Development Plan and Section: Quarry 5B as show in the surface plan have not showed in development plan and other plans. Verify and rectory in all the plans. The nomenclature of development section and geological section should be same for better understanding and referencing.
47. Environment plan: few features as mentioned in rule 32 (5)(b) of MCDR, 2017 has not been shown. Verify and rectify. Contour line to be extended upto the boundary of 60 meters.

9. Enclosures:

48. A legible copy of Photo id and signature proof in respect of the lessee to be submitted. Further, it is to inform you the signature of the lessee in certificate does not match with the signature in submitted id.

49. CTO submitted is valid up to 23.07.2015, hence, copy of latest CTO to be submitted.

50. Few photograph of the Boundary pillars, present land use to be attached.

51. The experience certificate and degree certificate as mentioned in rule 15 of MCR, 2015 to be submitted i.r.o. Qualified Person.

52. The copy of renewal application in form J and its receipt in form D and revised renewal application to be submitted.

53. Page 7 & 19: Joint survey report to be enclosed as mentioned. Further, copy of all the letters communicated form mining officer, director of mines and lessee to be enclosed.

In view of above, wherever necessary correction required to be made.

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