



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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BHUBANESWAR-751020

No FMCP/FM/42-ORI/BHU/2018-19

दिनांक / Date: 24.09.2018

To

Shri Pawan Kumar Ahluwalia,
Post Box No-3, At/Post-Barbil,
Dist-Keonjhar, Odisha-758035.

Sub: Approval of Final Mine Closure Plan of Gonua Iron & Manganese Ore Mines over an area of 86.886 ha in Sundargarh district of Odisha of Shri Pawan Kumar Ahluwalia submitted under Rule-24 of Mineral Conservation and Development Rules, 2017.

Ref: - i) Your letter no. nil dated 10.09.2018.
ii) This office letter of even no. dated 12.09.2018.
iii) This office letter of even no. dated 12.09.2018 addressed to the Director of Mines, Govt. of Odisha, copy endorsed to you.

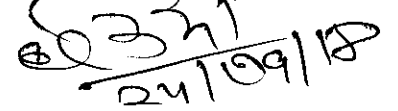
Sir,

This has reference to the letters cited above on the subject. The draft Final Mine Closure Plan (FMCP) has been examined in this office based on earlier site inspection carried out on 10.06.2018 by Shri Dilip Jain, Junior Mining Geologist and Shri Ashok Kumar Pany, Asst. Mining Engineer. The deficiencies observed are enclosed herewith as Annexure-I.

You are advised to carry out the necessary modifications in the draft Final 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 should be submitted in Auto CAD compatible format and JPG format in resolution of 100x100 pixels on same CD)** 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 Final Mine Closure 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 Final Mine Closure Plan. It may be noted that no extension of time in this regard will be entertained and the Final 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

Copy for kind information and necessary action to:

1. Shri Chandrabhanu Dash, Qualified Person, Geo Consultants Private Limited, Plot No-853, Gobind Prasad (Medical Lane), Mahavir Nagar (Infront of Radhika Complex/Reliance Fresh), Laxmisagar, Bhubaneswar-751006, Odisha.

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(HARKESH MEENA)

क्षेत्रीय खान नियंत्रक / Regional Controller of Mines

SCRUTINY COMMENTS ON FMCP DOCUMENT IN RESPECT OF GONUA IRON AND MANGANESE ORE MINES OF SRI P.K. AHLUWALIA OVER AN AREA OF 86.886 HA IN SUNDERGARH DISTRICT OF ODISHA STATE (For the Lease expiring on 31/03/2020)

1. On examination of cover page Mine code, Lease number as allotted by state government, period of proposal, qualification details, address, email id, fax number of the qualified person is found missing.
2. Introduction: The details of latest approved document have not been furnished. Para 1.2.4: The period of lease to be mentioned as per latest executed lease deed.
3. Page 6: The details of the land to be given as per specified format and all details to be filled. Para 1.2.11: The details of approach route to be given. Para 1.2.13: The UTM coordinates of boundary pillars also to be given as per ORSAC DGPS map.
4. Para 1.3: The period of proposal to be mentioned in same format for all documents. Approval letter for all approved document as mentioned in the table to be enclosed.
5. As the part E of the Manual of appraisal of FMCP is not applicable, However, details form para 1.4.29 to 1.4.32 to be given for ready reference. The reason of suspension to be elaborated with proper documentary evidence. The details of revocation to be furnished along with documentary evidence.
6. **Geology and Exploration:** Para 2.1 (local Geology)-The information like disposition of lithology, structural feature, mode of occurrence etc. for all lithological units encountered in lease area to be given.
7. Para 2.2.1: As per approved document no pits and trenches have been carried out in the lease area. Hence, the details of the existing quarry to be given in tabulated form separately.
8. Para 2.2.2: The details to be given as per format. Para 2.23: The BH wise details of sample collected and analysed to be given. Further, total number of sample analyzed form NABL accredited lab or similar lab to be given.
9. Para 2.2.5: The depth of the exploration to be mentioned as per drilled BH. Non mineralized area has not been mentioned as per approve document.
10. Para 2.2.6: Brief details of the applicable factor causing blockage of resource to be given.
11. The gist of proposed exploration may be given in the following table.

Year	Number of BH proposed			Total
	Diverted forest area	Non-diverted forest area	Non-forest area	
2018-19				

12. Para 2.3: As per format balance reserve and resource to be indicated separately for forest and non-forest area.
13. Para 2.4: It is to propose that all the cores/samples etc will be stored properly for future use and will not be destroyed prior approval of the competent authority. Brief details regarding preservation of cores should be given. The cores should be stored serially with suitable indexing and cataloguing and shall insure the submission of cores to GSI. The proposal of storage location of core/samples to be given and mentioned in text along with showing on the plan.
14. Para 3.1(b). The details of the fines generation to mention based on the past experience/generation.
15. Para 4.1: All details of existing and proposed top soil dump, waste dump, mineral reject dump, fines and tailing/slimes to be given as per table given in format of Final Mine closure plan. The details related to existing dumps, fines etc. to be shown on the surface plan. The date to be mentioned for the details as on.
16. Para 4.2: Instead of mentioning grade rage for mineral reject average grade to be mentioned. Para 4.4: The details of fines generation and its utilization to be mentioned.
17. **Final Mine Closure Plan:** Baseline information as given in the in the approved document to be furnished.

18. Para 5.1.1: Describe the proposals to be implemented for reclamation and rehabilitation of mined-out land only for those excavations, which have been proved through exploration to have no underlying deposits. The details of existing land use and land use at the end of plan period to be submitted in tabulated form. It is to indicate that whether any area is to be exhausted in near future or not. The proposed pit limit and ultimate pit limited to be indicated in tabulated form for the proposed area of excavation.
19. Para 5.1.2: The details of wire fencing to be indicated along pits/mineralized dump/mineral reject stack/fines stack/ etc.
20. Para 5.1.3: The details of area available for afforestation to be given in tabulated form. The details of existing plantation to be given in tabulated form comprising location, grid reference, area afforested, and number of saplings planted etc. The proposal of afforestation to be given on virgin area, Backfilled area, Dump plantation and plantation on ultimate benches indicating area and **number of saplings.**
21. Para 5.1.4: The details of top soil generation and its utilization during proposed period to be indicated
22. **Para 5.1.5 (Water Quality Management):** Describe in detail the existing surface and ground water bodies available in the lease areas in terms of IS: 10500 or IS: 2490 (as the case may be) and the measures to be taken for protection of the same, for protection of contamination of ground water from leaching etc.
23. Water balance chart and Report of hydrological study (if any) carried out in the area shall be submitted. If there is potential of Acid Mine Drainage the treatment method shall be given to neutralize the acidity of water.
24. Make of water in the lease area based on the average rainfall for last 5 years and catchment area and pumping and other arrangements for dewatering (along with annual cost) shall be informed.
25. The details in tabulated form comprising location (core and buffer zone), grid reference, parameters of monitoring, frequency of monitoring etc. to be submitted for proposed water monitoring stations both for ground water and surface water.
26. **Para 5.1.6 (Air Quality Management):** Describe the existing air quality status. The mitigative measures to be taken for prevention of pollution of air from airborne dust particles shall be described.
27. The information of the air quality monitoring station to be furnished for both core and buffer zone. Further, the location and grid reference to be indicated in table proposed for air quality management. Similar information in detail to be furnished for noise monitoring stations (as furnished for air).
28. **Para 5.1.7 (Waste Management):** The figures and location etc to be furnished in tabulated form for proposed period. Describe the type and quality of Waste/overburden dumps available and their disposal practice. The protective measures to be taken for prevention of siltation, erosion and dust generation from these waste materials should also be described. If toxic and hazardous elements are present in the waste material, the protective measures to be taken for prevention of their dispersal in the air environment, leaching in the surface and ground water etc., should be described.
29. The details of mineral reject generation and its dumping along with existing mineral reject dumps to be furnished. The protective measure proposed to secure mineral reject dumps to be given separately. Adequate proposal of Garland drain, retaining wall and settling tank etc. to be given.
30. The details of plantation proposed over waste dumps to establish dead slope of the dumps to be give in tabulated form comprising dump number, grid reference, area proposed, number of sapling, year of proposal.
31. Para 5.1.10: The details information of existing feature in each direction wise of lease to be furnished within 500 mts of lease area.
32. **Para 5.1.11 (Infrastructure):** The existing infrastructural facilities available such as roads, aerial ropeways, conveyer belts etc. and their future utilization should be evaluated. If retained, the measures to be taken for their physical stability and maintenance should be described. If decommissioning proposed, dismantling and disposal of building structures, support facilities and

other infrastructure, electrical equipments and infrastructures such as electric cables, transformers etc. should be described.

33. The information to be furnished about existing infrastructure within lease area in detail.
34. Para 5.1.12: The information to be given about contractual and lessee's machinery separately as per approved document. A firm proposal of decommissioning of mining machinery i.e. period of decommissioning to be given.
35. Para 5.1.13 and 5.1.14: The details have not been furnished as per the guideline of the FMCP format. To be revised as per guideline.
36. Para 5.1.15: The details of time schedule of all closure operations as discussed in para from 5.1.1 to 5.1.14 to be described/represent here in tabulated form. The manpower and other resources required for completion of proposed job may be described.
37. Para 5.1.15: Time scheduling for abandonment of mines should be supplemented by PERT (programme evaluation review technique) or Bar chart and these activities should be clearly shown on reclamation plan. All closure activity to be completed by 31/03/2020.
38. Para 5.1.16: The cost of closure activities furnished has not been detailed. Cost to be estimated based on the activities required for implementing the protective and rehabilitation measures.
39. Para 5.1.17: Maintenance and protective works as envisaged during post closure period shall also be mentioned along with annual cost estimates towards, maintenance of dumps, watch & ward etc.
40. Para 5.2: The details have not been furnished as per the format. Para 5.4: The details of the bank guarantee to be furnished in tabulated form.
41. **Plates: General:** All updated plans and sections to be submitted. Accordingly all relevant tables in text and plan to be modified. The revised date of survey to be mentioned in all the plans and sections.
42. As per guideline, the length, width, height and other information of waste dump, mineral reject dump and quarry to be indicated in tabulated form on the relevant plan. Ultimate bench mRL to be mentioned in relevant plan and sections.
43. On various plates Mineral reject dump has been furnished as sub-grade dumps. However, in text same has been furnished as Mineral reject dump.
44. **Key Plan:** Features like village boundary, forest boundary, tree density, prominent wind direction, sanctuary, waste land, agriculture land etc. within five kilometer boundary has not been shown on the plan. The details of the environment monitoring station to be furnished as per EMP submitted to MoEF.
45. **Geological Plan & Section:** The area explored and found non-mineralized to be indicated. Ultimate pit limit to be shown. .
46. **Environment plan:** Many of the features as indicated under rule 32(5)(b) of MCDR, 2017 has not been shown on the plan. Check and rectify.
47. **Reclamation plan:** Only proposed features to be highlighted on the plan. The color code for existing and proposed feature should be clear and distinct. All the proposed features in tabulated form to be depicted on the plan showing period wise details. The flow direction of water to be shown in garland drain and nala.
48. **Enclosures:** All the updated annexures as enclosed in the latest approved document to be enclosed. Few enclosures are not legible, legible copy of same to be enclosed. A legible copy of photo id proof lessee to be submitted.
49. Few photographs covering ML Boundary pillars, pits/quarries, mining activity, dumps, processing plant, core shed, coir matting on dumps, retaining wall and garland drain etc. to be enclosed with description and location. .

In view of above comments and site inspection discussion, wherever necessary correction required to be made in plates, text etc.

J. M. K.
21/09/2018