

SCRUTINY COMMENTS ON EXAMINATION OF DRAFT REVIEW AND UPDATION OF MINING PLAN INCLUDING PROGRESSIVE MINE CLOSURE PLAN IN RESPECT OF DIDDADAHALLI IRON ORE MINE (ML NO.2658) OVER AN AREA OF 10.66 HA (AS PER LEASE DEED), 10.98 HA (AS PER CEC SKETCH) IN DINDADAHALLI VILLAGE, CHITRADURGA TALUK & DISTRICT, KARNATAKA STATE, SUBMITTED BY M/S. GOA SPONGE AND POWER LIMITED, FOR APPROVAL UNDER RULE 17(1) OF MCR, 2016.

GENERAL

1. Refer Minerals (Other than Atomic and Hydro Carbons Energy Mineral) Concession (Fourth Amendment) Rules, 2021 published vide Ministry of Mines, Gazette Notification G.S.R. 775(E) dated 2nd November 2021. In accordance with Sub-Rule (2) of Rule 17 of MCR, 2021 lessee has to submit the Draft RUMP 180 days before expiry of the plan period. The document has not been submitted in stipulated time. Hence, lessee needs to pay Rs.2,000/- per day penalty for late submission.

-In the instant case, the soft copy along with the processing fee is submitted to this office online on 02/12/2021 and it is 30 days late from the date of said Notification. You are therefore advised to pay penalty @ Rs2,000/- per day X 30 days i.e. Rs.60,000/- (Rupees sixty thousand Only). The penalty may be paid by Demand Draft drawn in favour of Drawing & Disbursing Officer, Indian Bureau of Mines, Bangalore.

2. No cells may be left blank. Either “Nil” or “Not applicable” may be furnished.
3. Soft copy of the Excel sheet/word format may be filled in & submitted while submitting the final copy.
4. If any relevant information pertaining to the ‘calculation’ or ‘supporting information’ or ‘clarification’ may be provided as foot note in the respective table/para.
5. Wherever additional information or supporting document is given in Annexure, Annexure no may be specified in respective paras.
6. Undertaking/Consent letter from the lessee may be digitally signed by the lessee.
7. Serial Numbers of paras are not maintained as per the prescribed format. This may be verified and maintained as per the formats issued on FAQ on New Mining Plan format vide letter No.R-11011/1/IBM-M-A-MP/2012-CCOM-Vol-II dated 08/09/2021.
8. Every New Chapter should start in the fresh page and final prints should be presented on one side only.
9. **Cover page:** On the cover page all the relevant details like Mining Lease Number, extent of the Mining lease area, type of land, Mine code, IBM registration Number, Period of the Lease, Category of the mine, Name of the Qualified person preparing the document etc., needs to be given. The rule under which the document is submitted may be corrected as Rule 17(1) of MCR, 2016.

Chapter-1: General Information:

10. **Para 1.1: Lease details:** Under Type of Lessee, it is wrongly mentioned as PSU which may be verified and corrected appropriately.

11. **Para 1.3.4.2: SPCB Approvals:** The copy of the Consent to operate issued by SPCB needs to be enclosed and reference of the annexure given in this para. Validity of Consent to operate issued by SPCB is valid upto 30/06/2016, the same may be renewed before resumption of Mining Operation.
12. **1.3.4.4: Land Acquisition Details:** Under this para it is stated as “Not Applicable” which is incorrect. Since the type of land is stated to be Non –Irrigated Agriculture Patta land, All the relevant details of its purchase, and conversion of the land if any for the purpose of Mining i.e Non Agricultural purpose needs to be given and copies of the same be enclosed and reference made here.
13. **Para 1.3.4: Statutory Compliances:** (i) The details of permissible Annual Production as per CEC approval letter along with CEC approval letter number and date. may be given as para Para 1.3.4.5 and supporting document may be provided as Annexure
14. **Para 1.3.6: Owner/ Nominated Owner Details:** (i) The certified list of board of Directors of the company along with all the contact details like address, phone number, e-mail ID should be enclosed and details in this section should be given accordingly. (ii) The resolution of Board of Directors for nominating as nominated owner of the company along with documentary evidences, the copy of the pan card of the Nominated Owner be enclosed and annexure reference be given.
15. **Para 1.3.7:** The copy of the pan card of the Qualified Person should be enclosed and annexure reference be given.

CHAPTER-2-GEOLOGY AND EXPLORATION:

16. **Para 2.1.2:** (i) The details of the Nallah passing through the southern part of the Mining Lease may be given here also. (ii) The details of the Railway track passing near (within 5km range) Mining lease should be given. (iii) Details of any others may be provided in Remarks.
17. **Para 2.1.3: Regional Geology:** (i) Regional Stratigraphy of the area may be provided.
18. **Para 2.1.4.2: Structure:** The lease area is fully covered with float ore/soil no major geological structures present. Hence, the details given in this para may be suitably modified.
19. **Para 2.1.4.6: Nature/Form of Mineral:** (i) Mentioned as lumps, the same may be deleted and should be mentioned as ‘Float ore with iron ore pebbles/chips’ in any other. (ii) The ratio of lumps to fines in ROM may be furnished under this para.
20. **Para 2.1.4.7 Extent of Mineralization:** (i) Details of area explored under G2 level and G3 level may be deleted. The thickness range of float ore should be provided along with lateral extent.
21. **Para 2.2.1.1 to 2.2.1.13:** If the exploration activity is not carried out during the last plan period, the same may be specified in all the paras.
22. **Para 2.2.2.10: Chemical Analysis:** (i) Mineral column, it is mentioned as others, the same may be deleted and should be mentioned as ‘Iron ore (float)’. (ii) Chemical analysis report of the samples analyzed and Pit log may be annexed and Annexure no. may be provided in this para.
23. **Para 2.2.1.13:** Bulk density & recovery considered for Iron Ore and number of samples drawn for each Rock type may be given supported by the test report. Bulk density study report may be annexed and annexure no. may be provided in this para.

24. **Para 2.2.2.14: Area covered under exploration:** Potentially Mineralized area should be mentioned.
25. **Para 2.2.3: Ore Body Geometry & Grade:** Since the Ore type is float, Strike & Dip information given under this para should be deleted.
13. **Para 2.2.2.5:** The location of exploratory pits may be given in UTM co-ordinate system and in all part of the text any locations needs to be given in UTM co-ordinate system only.
14. **Para 2.2.4: Reserve/Resource Estimation Method:** It is observed that the Serial Numbers are not maintained as per the prescribed format. This may be verified from the formats issued on FAQ on New Mining Plan format vide letter No.R-11011/1/IBM-M-A-MP/2012-CCOM-Vol-II dated 08/09/2021.
15. **Para 2.2.4.2: RESOURCE CALCULATION:** (i) Level of exploration should be G1/G2/G3/G4 accordingly details given may be corrected. (ii) Name of the radical mentioned as 'Fe with soil' the same may be corrected as 'Fe'. (iii) Type of land should be Forest or Non-Forest', the information provided should be corrected. (iv) Recovery percentage may also be considered while calculating Reserves & Resources.
16. **Para 2.2.5.9: Calculation of blocked resources:** G3 zone is also shown in blocked resources, only resources blocked under safety zone, UPL, road, infrastructure etc should be considered under blocked Resources. Accordingly, the information given in this para may be corrected.
17. **2.2.5.10: Calculation of Reserves:** (i) Name of the radical mentioned as 'Fe with soil' the same may be corrected as 'Fe'. (ii) Type of land should be Forest or Non-Forest', the information provided should be corrected.
18. **Para 2.2.5.11:** (i) Reserve/Resources should be estimated as on 01/04/2021. (ii) The quantity reported in Million tonnes, the same should be in Tonnes. (iii) Mineral name may be mentioned as 'Hematitic Iron Ore (float)', this comment is applicable to all the paras/plans/sections where mineral name is mentioned as 'iron ore'
19. **Para 2.2.6: Future Exploration Proposal:** If particular exploration activity viz. Geophysical, Geochemical, Trenching is not proposed, 'No Proposal' may be mentioned in all the respective paras.
20. **Para 2.2.6.6: Exploratory Mining:** The Mining activity proposed is for Production and not for the purpose of exploration. Hence the details given in this para should be deleted and may be mentioned as 'No Proposal'.
21. **Para 2.2.6.7:** Type of sample given as 'Rock-Chip', in the foot note of the table it may be mentioned as 'Rock chip samples from DTH Drilling'.

CHAPTER-3-MINERAL BENEFICIATION/PROCESSING:

22. **Para 3.1: Mineralogy of the ROM Ore/ Mineral:** (i) Valuable mineral name should be 'hematite'. (ii) Approximate Mineral given as 100% for Iron Ore is incorrect. Other gangue Mineral and percentage of it needs to be given.
23. **Para 3.2: Complete Chemical Analysis of the ROM Ore/Mineral:** Radicals including Fe and other radicals analyzed for, from NABL accredited laboratory need to be given.
24. **Para 3.6.1: Scrubbing/ Washing:** Details given under this chapter may be verified if applicable. If applicable, as per EC condition of 15 CBM per day water requirement limit may be adhered to

and all the details of source of water, Water balance chart indicating exclusively the water required for this process needs to be enclosed. Also disposal method for tailings/Rejects under para 3.8 needs to be given. Water balance chart given vide Annexure IX does not include the said process and also is not specifying the quantity of water requirement for each allied activities. May be rectified incorporating all the above detail sought for.

25. **Para 3.9:** The overall water requirement given as 2 KLD here does not match with 625L/H requirement of water under Para 3.6.1. The quantity of water required in KLD for mining & allied activities like dust suppression, drilling, plantation, domestic purpose, drinking etc. may be given under this Para. The details regarding source of supply of water, disposal of water, extent of recycling, chemical analysis of water should also be furnished in this Para. The Water balance charts 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 EC & CFO permissible limits.
26. **Para 3.10:** Material balance chart of dry crushing & screening may be furnished along with feed size & their expected recovery.

CHAPTER-4-MINING OPERATIONS:

27. **Para 4.1.1:** Existing Method of Mining should be mentioned.
28. **Para 4.2.1.1:** Details of status of pit is not given. Status may be mentioned as Mined-out/Active/Reclaimed-Rehabilitated.
29. **Para 4.2.1.2.2: Stack Details:** The details old Mineral stack given here may be supported with the Mahazar report by DMG or any other Government Agencies involved in the process.
30. **Para 4.2.1.3: DETAILS OF STABILIZED DUMPS:** Columns are changed to row, the table format/template should not be altered. This comment is also applicable to para 4.2.2.1 to 4.2.2.4 and wherever the changes made in the template.
31. **Para 4.2.2: Open Cast Mining: Bench Parameters:** (i) Year given as 1st Year, 2nd Year ... & 5th Year, the Year should be provided in financial year. (ii) Max Depth of Workings and Depth of water table may be given mRL. (iii) The proposed maximum depth of the workings may be reviewed and rectified. Based on the field inspection/ observations and details given for the existing old Mining Pits, it is observed for persistence of float ore even below 3.5 mtrs.
32. **Para 4.2.2.2: Year wise Opencast Development:** (i) The recovery of 60% considered appears to be on the lesser side based on the field observations. However a fresh study may be conducted after the resumption of Mining activities covering few locations of the proposed plan period. If there are considerable changes in the recovery factor, the document will have to be modified incorporating the outcome of the study. (ii) Location of Advancement should be given in UTM co-ordinates along with the direction of advancement. (iii) Production and Development sections should indicate the boundaries of each year of proposed workings. (iii) ROM quantity should be restricted to the Annual permissible limit given by CEC & DMG accordingly the given information in this may be re-calculated, this comment also applies to Para 4.3.2.
33. **Para 4.3.2:** (i) In-situ mining information provided may be updated as per revised calculation in Para 4.2.2.2. (ii) Grade range of iron ore should be specified.
34. **Para 4.4.3: Dumper Requirement:** Dumper Requirement given as Nil appears to be unrealistic. However requirement of 4 tipper operators is given in the para 4.6.3 (Skilled workers/ Operators) and Para 4.6.6. This may be checked and corrected. If not required, a foot note may be added justifying the non requirement of dumpers/tippers indicating the process of handling of the ROM to the screening unit without hauling equipments.

35. **Para 4.7: Waste Management:** The numbering of sub paras is not matching with the prescribed format as envisaged in the above chapters. Needs through rectification in all the chapters.
36. **Para 4.6.2:** A foot note may be given indicating the concurrent backfilling of the waste into the mined out pits and justifying the non requirement of a new waste dump.
37. **Para 4.6.3:** The details of all the existing temporary mineral stacks may be given as per the comments given at **Para 4.2.1.2.2.**
38. **Para 4.6.4: New Stack:** Provision for temporary New stacks for the Lumps and fines generation till the time it is sold/auctioned may be given. Different stacks for lumps, fines and ROM according to ratio of lumps and fines generation expected may be proposed for every year.
39. **Para 4.9: Use of Minerals:** Under Proposed use of Mineral, It may also be specified in the foot note as direct selling through Auction process as per the procedure existing in the State of Karnataka.

CHAPTER-5-SUSTAINABLE MINING:

40. **Para 5.1:** (i) It should be specifically mentioned under this Para ‘ Sustainable Mining and SDF implementations during the plan period will be carried out in accordance with Rule 35 of MCDR 2017’. (ii) Compliance of Vishakha Committee Guidelines for prevention of women harassment at workplace: The company guidelines for prevention of women harassment at place may be given and supporting document may be enclosed as Annexure. (ii) Information on compliance of Vishaka Committee Guidelines for prevention of women harassment at work place may be furnished. If not applicable, justifications need to be given.
41. **Para 5.2: CSR Initiatives:** Under cumulative work done for the proposed years, “Nil” may be mentioned. Para 5.2.1, 5.2.2 etc, under cumulative column, year on year proposals to be added taking 2021-2022 as the base year covering the entire plan period.
42. **Para 5.2.1.13:** It is advisable to give the proposal of green Energy consumption every year.

CHAPTER-6- PROGRESSIVE MINE CLOSURE PLAN:

43. **Para 6.1: Status of Land:** The extent of Virgin area under Green Belt in Hectares needs to be calculated and given.
44. **Para 6.2.1:** Bottom RL given may be reviewed and corrected as per the comments given at Para 4.2.2: Open Cast Mining: Bench Parameters:
45. **Para 6.2.2.2: Protective Measures: Fencing:** No proposals for fencing are made. During inspection it is observed that the entire Mining lease boundary is not fenced or has been removed except in the Northern part of Mining Lease. Year wise fencing along with erecting intermediate boundary pillars at every 20 meters interval needs to be given. Also 7.5 meters of green belt needs to be demarcated all along the boundary.
46. **Para 6.2.11: Land use of lease area at the expiry of lease period (conceptual stage):** The details under this chapter may be rechecked and corrected keeping in view the proposed extent of concurrent back filling of the mined out pits and reclamation of the same.

CHAPTER-7- FINANCIAL ASSURANCE/PERFORMANCE SURETY:

47. Revised bank guarantee as per the Mineral Conservation and Development (Amendment) Rules, 2021 needs to be submitted. Also the details given under Performance security are not understood. May be clarified.

CHAPTER-8- REVIEW OF PREVIOUS PROPOSALS:

48. **Para 8.1.2:** Since the last approved document didn't have SDF proposals, accordingly it should be mentioned "Not applicable" under this para.
49. **Para 8.2.1: Exploration:** Under each subheading the deviation and reasons for the same needs to be given. If achieved more (+) or (-) for less achievement be indicated in percentage. Also the area converted under G1 from G2/G3 may be reviewed in line the comments given under CHAPTER-2-GEOLOGY AND EXPLORATION. The other actual reasons may also be given like penalty issue etc.,
50. **Para 8.3:** Since there were no proposals in the last approved plan period under Socio-Economic Review, 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 "Not applicable".

CHAPTER-9- IMPACT ASSESSEMENT:

51. This chapter may be furnished as a part of the text document. Though this chapter is applicable only for fresh grant, all the headings & sub headings may be furnished with "Not Applicable" against each of the same as given in the format.

Plans & Sections (hard copy)

52. List of all the plates submitted and indexed.
53. Lease Boundary Pillar Co-ordinates (latitude and longitude) may be provided in all the Plans.
54. Plans and sections should be suitably updated as per changes made in text
55. All the hard copies of the plates should be folded and placed in the pouch in such a way that the Title of the plate and Numbers are clearly visible.
56. Hard copies of all the plans may be submitted in .dwg format with UTM grids (WGS 84 datum) only. Soft copies of the same may be submitted in KML/SHP format.
57. The plan submitted in SHP format does not contain any attribute data. Line, polygon & point feature should be in separate file with all the necessary information.
58. The numbering of plates has not been sequentially maintained as per the format. Numbering of plates to be specifically maintained as per the format. Any additional plates enclosed may be followed after plate no 11 with corresponding details.
59. All plans and sections should be signed with date by certified surveyor, Qualified Person, Geologist, Mining Engineer as per provisions of MCDR 2017.
60. **Plate No.2: Lease Sketch:** The lease sketch is not legible and surface features like roads if any & nallahs within the lease area are not visible. A legible copy may be submitted.
61. **Surface Geological Plan & Sections (Plate No.4 & 5):** In these plates all the necessary corrections may be done as per the comments placed under Geology and Exploration chapter.
62. **Production and Development Plan & Sections (Plate No 6A to 6E & 7):** In these plates all the necessary corrections may be done as per the comments placed under chapter 4: Mining operations.

- 63. Conceptual Plan & section (Plate No.8 & 9):** This plans needs to redrawn as per the information furnished in the text showing all the proposed activities at the conceptual stage of mining including fencing, plantation, construction of retaining wall if any, garland drain & re-grassification of the degraded land.
- 64. Financial Assurance Plan (Plate No.12):** (i) only the outline with solid fill colors may be marked for different land particulars and indexed. (ii) All the land particulars to be shown prominently in this plate.

Plans & Sections (Soft copy)

- 65.** All the plans in softcopy (kml files) need to be updated as per the comments given in the text part also in plates hardcopy.
- 66.** The plans submitted in kml format is a simple cartography map does not contain any attribute data. The features (point, line & polygon) should contain the attribute information, for example (i) Point feature – Bore hole should contain information of Proposed/Drilled borehole, Type of bore hole (RC/Core/DTH), Depth of drilling, collar RL etc. (ii) Line feature – Road, power line, streams etc should contain basic information and (iii) Polygon features – Dump, Pit, lease boundary, safety zone, infrastructure should contain details which are given in text. if we click on any point/polygon the details should be readily available. Accordingly all the plans in the kml files should be updated.

ANNEXURE:

- 67.** The numbering of annexure has not been sequentially maintained as per the format. Numbering of annexure to be specifically maintained as per the format. Any additional annexure enclosed may be followed after annexure no 18 with corresponding details. All the annexure as mentioned in above scrutiny comments of different chapters to be enclosed. Also, corrections in the annexure, as mentioned above in scrutiny comments of different chapters to be incorporated and corrected annexure to be enclosed.
- 68.** Undertaking/Consent letter from the lessee may be digitally signed by the lessee.
- 69.** Bulk density test report of each of the material handled in the mine may be enclosed.
- 70.** Copy of Valid Bank Guarantee for the entire plan period as per the amended MCDR Rule 2021 needs to be submitted.
- 71.** 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 list of Annexure. All the annexure should be legible.
