

## SITE INSPECTION REPORT

1) A proposal for ***diversion of forest area of 72.08 ha*** was received for the Project "Zamblidagga Dongor Iron and Manganese Ore Mine M.L. No.3 FeMn 79" with proposal number FP/GA/MIN/153183/2022. From the records placed before this office, it is noted that the diverted area will be used for open cast mining. The area proposed for diversion falls in Sy. No. 19/0 of Cavrem village of Quepem Taluka, South Goa district, Goa. In administrative jurisdiction of the division, the said area falls in Cavrem Beat, Maina Round of Quepem Range, South Goa division. The name of the forest of above area is CAVOREM and the said Sy. No. is notified under Section 4 as per Indian Forest Act 1927 vide Gazette No. 13-3-77-FOR (2) Series III dated 05/04/1979. The area was inspected by the undersigned on July 18, 2022. From forest cover map of Forest Survey of India (FSI), the area was found to have natural vegetation with a majority of Medium Dense Forest (MDF) as per FSI classification based on canopy density. Some patches of Very Dense Forest (VDF) and Open Forest (OF) were also noted. The area is of gentle slope and in places where prior mining pits exist, steep slope was noted. Most of the terrain has green cover and vegetation was noted in steep slopes as well. Hence the vulnerability to erosion is minimal. The said area is not part of any National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve. As per field inspection of the undersigned and the available data from working plan of the division, no rare / unique flora and fauna are found in the area. The said area is also devoid of any protected archaeological/ heritage site/ defence establishment. It was also noted that there is no river or stream present in the proposed area for diversion.

2) The major forest type in this area is Moist mixed deciduous [3B/C2] as per Champion and Seth classification. The proposed area is having very old Acacia and Eucalyptus Plantation in scattered manner. The major fauna in this area are Indian gaur, leopard, sambhar, porcupine, wild boar, etc. The major tree species in the site are *Terminalia elliptica*, *Terminalia tomentosa*, *Terminalia paniculata*, *Hydnocarpus laurifolia*, *Garcinia indica*, *Dillenia pentagyna*, *Xylia xylocarpa*, *Anacardium occidentale*, *Careya arborea* etc.,

3) From the documents submitted, it is known that the **lease area as approved by competent authority amounts to 70.2 ha**. From the site inspection, it was noted that the User Agency would be using a trail in the forest area for movement of logistics and the same would be used as access road for the diverted area. From the User Agency, it was noted that a road of width approx. 10 m would be required for access road. Site inspection and consequent mapping in GIS revealed length of the road as 1.756 km. Based on KML file plotted for the **access road, it is known that this amounts to an area of 1.88 ha**.

4) Further, to comply with pollution control regulations as in vogue, the User Agency has to install some pollution control measures before the mining trucks enter the main road. These structures are to be established within the diverted area of the road only. Hence no additional area has been recommended for this purpose.

5) Enumeration was done for the lease area by laying 7 sample plots of 1 ha area each. Stratified random sampling method was used to identify the sample plots, canopy density and forest type being the stratifications. After correcting for weightages according to their respective prevalence in the forest cover map of Forest Survey of India, and on extrapolation to total lease area of 70.2 ha, total of

**19,126 number of trees are enumerated for the area of the lease.** The number of trees are enumerated in the site marked for access road amounts to 554 trees. In total, **the enumeration stands at 19,680 number of trees.**

- 6) From the records placed before this office, it is noted that as per the updated mining plan submitted, the lease period ends in 12/12/2029. From the mining plan of the User Agency, it is noted that under 'Chapter 7: Area put to use', **an area of 28.30 ha is proposed to be used for 5 years ie., till 2026-27.** The same can be verified from the documents placed on record during the submission. **Hence it is recommended that breaking of ground be permitted for 28.30 ha at this instance.**
- 7) **In total, an area of 72.08 ha is recommended for diversion** (including both the lease area and the area of the access road)
- 8) It shall be the responsibility of the UA to establish pillars demarcating the total diverted area. The mining operation shall be done as per the permissible specifications in FCA rules of MoEF&CC. Further, after the end of lease period, it shall be the responsibility of the User Agency (UA) to ensure that the excavated land is sufficiently covered up (in terms of quantum of filling) and adequately sloped (slope stabilization measures included). Necessary mine reclamation activities shall also be done by the UA. The UA shall work in close coordination with the RFO, Quepem to ensure the same. The UA shall ensure that no camping of labor force is done inside the forest area. The UA shall also incorporate suitable measures such as speed limits etc., to ensure that the sanctity of the habitat around the diverted area is not disturbed in any possible way. For the mining operations, permissions and clearances as per rules and regulations shall be taken by the agencies separately and it shall be the duty of the agencies involved to keep this office and

the RFO, Quepem updated of the developments in this regard. Due pollution control regulations shall be followed by the UA to ensure the sanctity of the forest area.

- 9) The UA shall follow all the above mentioned directions and all due guidelines for safety of wildlife and to avoid adverse human-wildlife interactions.
- 10) In conclusion, ***an area of 72.08 ha is recommended for diversion and of this 28.30 ha is recommended for ground breaking*** as per the mining plan till 2026-27 approved by competent authority.

*P*  
24/8/22  
**(R. Prem Kumar IFS)**  
**DCF (South)**

Place: Madgaon, Goa