#### **SYSTEMATIC MINE WORKING**







Utilization of Advances Mine Survey Equipments (Total Station, 3D Laser Scanner & DGPS)



**Exploration: Conventional Core Drilling** 



**Exploration: Advanced Wireline Diamond Core Drilling** 

#### **SYSTEMATIC MINE WORKING**





**Deployment of State-of-the-art HEMM** 



**Mining: Panoramic View of Systematic Opencast Mining** 

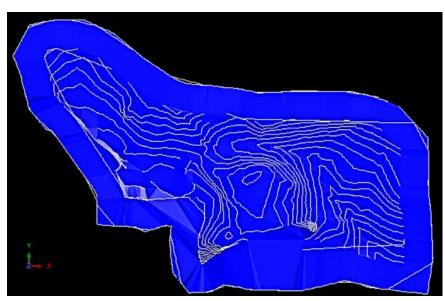


Mining: Extraction by HEMM in the Active Pit

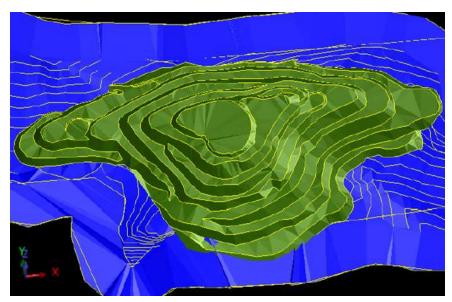




Waste Disposal Site Selection: Geologically Barren, Non-vegetated & Non-forest Land



**Topographic Survey** 



**Dump Designing** 





Multi-layered Dumping





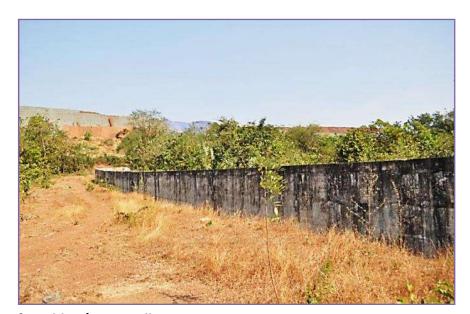
**Laying of Geotextile for Erosion Control** 







**Erosion Control: Provision of ERWMS Pipes** 



**Protection Measures: Provision of Boulder / RCC Wall** 





**Environment Management: Provision of Garland Drains at the Dump Toe** 





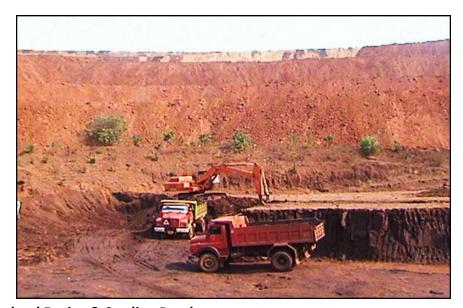
**Environment Management: Provision of Filter Beds & RCC Silt Arresters** 





**Environment Management: Provision of Settling Ponds** 





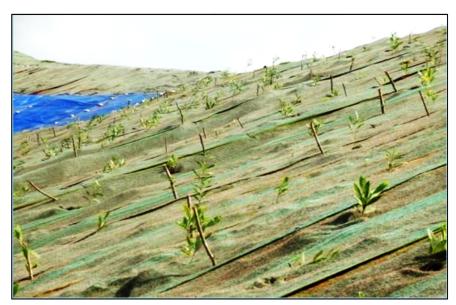
**Monsoon Preparations: De-silting of Garland Drains & Settling Ponds** 

#### **AFFORESTATION**



**Grass Grown on Dump Slopes covered by Geotextile** 





**Geotextile with Fresh Primary Plantation** 



**Plantation of Fruit bearing Native Species** 

## **AFFORESTATION**





**Mixed Plantation of Native Species** 





Organic Manuring & Regular Watering of the Plantation

# **KEY EFFORTS**





**Establishment of Root Trainer Nursery** 





**Monitoring of the Activities** 



**Horticultural Plantation on Mine Benches** 



**Horti-silvicultural Plantation on Overburden Dumps** 



Horticultural Plantation on both sides of Mine Road



**Forest Species & Nitrogen Fixing Cover Crop on Mine Benches** 



**Spice Plantation** 



Nakshatra Garden



**Pineapple Plantation** 



**Butterfly Garden** 



**Charak Vatika** 





**Bamboo Pavilion** 

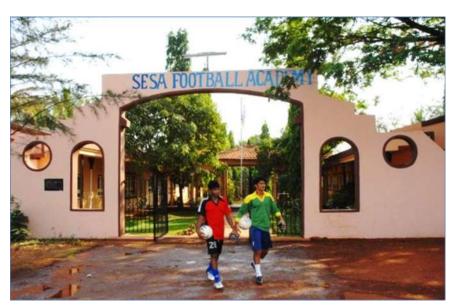


Harvested Rainwater in the Exhausted Mine Pit converted to Pisciculture Pond & Fresh Water Fish





**Technical School** 





**Football Academy**