

7.0 USE OF MINERAL

a) Describe briefly the end use of the mineral (sale to intermediary parties, captive consumption, export, industrial use).

The lessee has no such captive use of the ore raised from the M.L. area.

b) Indicate physical and chemical specifications stipulated by buyers.

The marketable ore raised from the mine is being consumed by different industries. The detailed specification of ore being supplied to these industries is as follows:

SPECIFICATION OF IRON ORE WITH RESPECT TO CONSUMING INDUSTRIES

| Iron Ore Constituents | Blast Furnace | Steel Plan | Sponge Iron Grade |
|---|---------------|------------|-------------------|
| Fe | 60 – 67% | 62 – 68% | 65 – 67% |
| SiO ₂ | 2 – 3% | 2 – 3% | 2% max |
| Al ₂ O ₃ | 3 – 6% | 2 – 3% | 3% max |
| SiO ₂ + Al ₂ O ₃ | Nil | Nil | 5% max |
| Al ₂ O ₃ / SiO ₂ | 1 : 6 max | Nil | 1.6 max |
| P | 0.15% max | 0.03 – 0.1 | 0.05% max |
| S | 0.03% max | Nil | 0.02% max |
| Cu | 0.03% max | Nil | 0.04% max |
| Pb & Others | Nil | Nil | Traces |
| Size | 10mm to 15mm | 50 – 150mm | 5 to 18mm |

SPECIFICATION OF MANGANESE ORE WITH RESPECT TO CONSUMING INDUSTRIES

| Specification | Ferro Manganese | Blast Furnace | Dry Battery | Chemical Industry | Glass Industry |
|---------------|-----------------|---------------|--------------|-------------------|----------------|
| Mn % | 46 - 48% | 25% min | +72% | +75% | +80% |
| Silica % | 9% max | 8% max | Nil | 6% max | 2.8% max |
| Alumina % | 3% max | 8% max | Nil | Nil | 1.1% max |
| Iron % | 8% max | 18 - 24% | Nil | 1.5% max | 5% max |
| Phosphorous% | 0.16% | 0.18% max | Nil | Nil | Nil |
| Moisture | 3% max | 3% max | 3% max | 3% max | Nil |
| Size | 10mm to 40mm | 10mm to 40mm | 10mm to 40mm | Nil | Nil |

* For manufacture of ferromanganese phosphorous and sulphur are most deleterious constituents

* For battery industry, the ore should be free from copper, nickel, cobalt, etc.