

## CHAPTER – VII - B

## DUMPING STRATEGY

## 7.B.1 WASTE DISPOSAL

## 7.B.1.1 Identification of external dump site

One external dump site (site A) and two internal dump sites (Site B&C) are proposed in this PR as shown in Final Stage Dump Plan (Drg.No. RI-3/OCM/001279). External dump site A is proposed partly on non-forest land and partly on forest land. The total volume of OBR is estimated as 949.96 Mcum including 526.19 Mcum from East section and 423.77 Mcum from West section. West section includes 3.0 Mcum of rehandling.

Out of total volume of OBR of 949.96 Mcum 35.86 Mcum would be placed on External dump site A over and above 17.28 OBR already dumped on site A and balance 962.48 Mcum including 48.38 Mcum of OBR of Chandragupta OCP will be placed in internal dump site B & C.

## 7.B.1.2 Capacity of Dumps

The details of OB dumps A, B, C & D is given below:

**Table 7.4 – Accomodation of OBR (in Mcum) at different stages of mine working:**

Dump	Type	8 <sup>th</sup> Year			15 <sup>th</sup> Year			Final Stage		
		Volume (MCum)	Top RL (m)	Area (Ha)	Volume (MCum)	Top RL (m)	Area (Ha)	Volume (MCum)	Top RL (m)	Area (Ha)
A	External	35.86	+560	89.16	35.86	+560	89.16	35.86	+560	89.16
B	Internal	128.24	+560	193.61	357.52	+560	336.54	562.98	+560	532.63
C	Internal	36.52	+560	99.23	206.34	+560	253.77	399.50	+560	412.42
Total		200.62			599.72			998.34		

  
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- 20-22 Cum Electrical Hyd. shovel Bench 15-18m
- 10-12 Cum Electrical Hyd. shovel Bench 12-15m

b) Minimum Bench Width:

- |   |         |
|---|---------|
| Working Bench Width for 20-22cum Hyd Shovel     | - 50m   |
| Working Bench Width for 10-12cum Hyd Shovel     | - 40m   |
| Non-working Bench width for 10-12cum Hyd Shovel | - 25m   |
| 2. Width of the permanent haul road             | - 30 m. |
| 3. Usual height of the spoil dump bench         | - 30 m. |
| 4. The width of the active dump bench           | - 60 m. |
| 5. Bench Slope (working)                        |         |
| O.B. bench                                      | - 70°   |
| Coal bench                                      | - 70°   |
| Dump bench                                      | - 37°   |
| 6. Overall pit slope                            | - 37°   |

**6.4 Dumping Strategy**

Chandragupt 15 MTY PR

Spoil Dump

Total volume of overburden from all the 3 (three) sections of the proposed OCP has been estimated as 995.34 Mcum. 48.38 Mcum OB will be dumped at Amrapali out of total 70.38 Mcum during the first 5<sup>th</sup> year of quarry operation. From 4<sup>th</sup> year onwards, overburden of Section 1, Section 2 and Section 3 has to be dumped internally.

		Volume of OB (Mcum)
1	External Dump (at Amrapali)	48.38
2	Internal Dump	946.96
	Total	995.34

The maximum RL of the external dump (at Amrapali) and internal dump is +550m & +500m respectively.

Top Soil Management

The salvaging, stockpiling and re-application of top soil to be used as growth medium in the reclamation of Internal & External overburden dumps within the mining area is a major environment protection programme. Soil management in opencast mine is necessary to re-establish the stability & productivity of lands disturbed due to mining activity.

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