



VINCA LANDFILL  
LANDFILL VOLUMES  
INPUT DATA

1. Input data

COVER THICKNESS (m)	Top soil	Inert Materials	Fine Material above liner	Fine Material below liner	Other	Total
Interim Landfill	0.10	0.70	0.20	0.10	0.10	1.20
Unprocessed 1	0.10	0.70	0.20	0.10	0.10	1.20
Residues 1	0.10	0.70	0.20	0.10	0.10	1.20
Unprocessed 2	0.10	0.70	0.20	0.10	0.10	1.20
Residues 2	0.10	0.70	0.20	0.10	0.10	1.20
Buffer	0.10	0.70	0.20	0.10	0.10	1.20

COVERING SURFACES OF EXTENSION (m)		RUNNING TOTAL
Interim Landfill	32 100	32 100
Unprocessed 1	27 500	59 600
Residues 1	15 200	74 800
Unprocessed 2	81 800	156 600
Residues 2	65 400	222 000
Buffer	70 000	292 000

DRAINAGE LAYER THICKNESS (m)	
Interim Landfill	0.50
Unprocessed 1	0.50
Residues 1	0.50
Unprocessed 2	0.50
Residues 2	0.50
Buffer	0.50

DRAINAGE LAYER SURFACES (m²)		RUNNING TOTAL
Interim Landfill	27 800	27 800
Unprocessed 1	35 500	63 300
Residues 1	12 500	75 800
Unprocessed 2	78 000	153 800
Residues 2	19 000	172 800
Buffer	1 100	173 900

EXPLOITATION NEEDS (%)	
Interim Landfill	10%
Unprocessed 1	10%
Residues 1	6%
Unprocessed 2	10%
Residues 2	6%
Buffer	10%

1. Landfill volumes

	Gross volume (m3)	Drainage layer volume (m3)	Cover Volume (m3)	Net Volume 1 (m3)	Exploitation needs (m3)	Net Volume 2 (m³)
Landfill volumes						
Interim Landfill	854 000	13 900	38 520	801 580	80 158	721 422
Unprocessed 1	587 000	17 750	33 000	536 250	53 625	482 625
Unprocessed 2	4 044 000	39 000	98 160	3 906 840	390 684	3 516 156
Residues 1	211 000	6 250	18 240	186 510	11 191	175 319
Residues 2	1 445 000	9 500	78 480	1 357 020	81 421	1 275 599
Buffer	1 408 000	550	84 000	1 323 450	132 345	1 191 105
Total Landfill volume (with buffer)	8 549 000	86 950	350 400	8 111 650	749 424	7 362 226
Total Landfill volume (without buffer)	7 141 000	86 400	266 400	6 788 200	617 079	6 171 121

Waste diposal (tonnes)	Density	Waste diposal (m3) *
765 000	1.06	721 698
510 000	1.06	481 132
3 740 000	1.06	3 528 302
264 600	1.50	176 400
1 940 400	1.50	1 293 600
7 220 000		6 201 132

*\*NOTE : the slight difference between the waste disposal volume and the calculated landfill capacity is not restraining, considering the "low" accuracy of the input hypothesis on density and exploitation needs*