

GAUTENG PROVINCIAL HOSPITALS
(including Community Health Centres having Incinerators)

Table 6.2

ESTIMATED HEALTH CARE RISK WASTE DESTRUCTION COSTS: AUGUST 2000

Service	Owner-ship	Category	SubRegion	Hospital Name	Beds	Source	Occu-pancy (DoH data)	Patients (hospitals)	Mnthly w/mass	Waste (kg)	Site Incinerator				Waste Incinerated on site			Waste Removed & Incinerated off site		Total Waste Destruction Cost Rand / mon.			
											Survey Mnthly w/mass	Survey Daily w.mass/patient	Model Mnthly w/mass	Stated Mthly Throughput kg	Max. Mnthly Cap. @ 400 hrs/mon	Fixed Mnthly O/heads (Rand)	Variable cost R/kg	kg	Cost		Effective cost/kg	kg	Cost
453	Hospitals	Public	Central	Johannesburg	897	m	114%	1 300	82 388	s.l	59 600	1.51	61 660	no records	17 600	12 000	1.43	17 600	R 37 200	R 2.11	44 060	R 80 630	R 117 830
457	Hospitals	Public	Central	Pretoria and Surrounds	1 804	m	78%	1 223	34 775	s.l,w	31 000	0.83	58 000	9 000	65 600	16 000	0.72	58 000	R 57 800	R 1.00	0	R 0	R 57 800
462	Hospitals	Public	Central	Pretoria and Surrounds	999	m	84%	675	54 600	s.l	49 800	2.43	49 800	22 500	65 600	15 000	0.71	49 800	R 50 400	R 1.01	0	R 0	R 50 400
470	Hospitals	Public	Central	West Rand	3 205	m	55%	1 554	31 980	s.l	42 540	0.90	76 360	n/a	0	n/a	n/a	0	R 0	n/a	76 360	R 139 739	R 139 739
440	Hospitals	Public	District	East Rand	191	h	50%		855	w			4 380	1 000	10 800	5 000	1.55	4 380	R 11 800	R 2.69	0	R 0	R 11 800
441	Hospitals	Public	District	East Rand	138	h	74%		455				3 290	250	10 800	5 000	1.55	3 290	R 10 100	R 3.07	0	R 0	R 10 100
454	Hospitals	Public	District	Johannesburg	185	m	71%						4 110	540	14 400	7 000	1.38	4 110	R 12 700	R 3.09	0	R 0	R 12 700
461	Hospitals	Public	District	Pretoria and Surrounds	90	m,s	70%	72			1 650	0.75	2 190	1 800	7 200	7 000	2.00	2 190	R 11 400	R 5.21	0	R 0	R 11 400
463	Hospitals	Public	District	Pretoria and Surrounds	176	h	69%	76			1 900	0.82	4 110	200	7 200	4 000	1.94	4 110	R 12 000	R 2.92	0	R 0	R 12 000
465	Hospitals	Public	District	Vaal Triangle	167	m	66%		98	s			3 840	250	10 800	4 000	1.55	3 840	R 10 000	R 2.60	0	R 0	R 10 000
427	Hospitals	Public	Psychiatric	Johannesburg	141	m	79%						220	n/a	0	n/a	n/a	0	R 0	n/a	220	R 403	R 403
434	Hospitals	Public	Psychiatric	Pretoria and Surrounds	1 350	m	90%	775	38	s.l	850	0.04	2 100	n/a	0	n/a	n/a	0	R 0	n/a	2 100	R 3 843	R 3 843
475	Hospitals	Public	Psychiatric	West Rand	840	m	88%		1 408	s.l,w			1 320	no records	10 800	5 000	2.11	1 320	R 7 800	R 5.91	0	R 0	R 7 800
438	Hospitals	Public	Regional	East Rand	124	h	45%		1 105	s.l			2 710	540	10 800	5 000	1.55	2 710	R 9 200	R 3.39	0	R 0	R 9 200
439	Hospitals	Public	Regional	East Rand	233	m	100%		6 288	s.l,w			4 930	10 500	10 800	7 000	1.44	4 930	R 14 100	R 2.96	0	R 0	R 14 100
444	Hospitals	Public	Regional	East Rand	784	m	91%		18 200				16 500	990	7 200	7 000	1.77	7 200	R 19 700	R 2.74	9 300	R 17 019	R 36 719
447	Hospitals	Public	Regional	East Rand	423	m	83%		3 577	s.l,w			8 870	200	65 600	11 000	1.06	8 870	R 20 400	R 2.30	0	R 0	R 20 400
450	Hospitals	Public	Regional	Johannesburg	349	m	72%		2 575	s,w			7 390	unknown	8 800	7 000	1.48	7 390	R 17 900	R 2.42	0	R 0	R 17 900
451	Hospitals	Public	Regional	Johannesburg	454	m	79%	400	22 775	s.l,w	16 800	1.38	16 800	9 000	14 400	8 000	1.32	14 400	R 27 000	R 1.88	2 400	R 4 392	R 31 392
455	Hospitals	Public	Regional	MidRand	778	m	76%	522	6 940	s.l,w	5 150	0.32	16 500	500	50 800	12 000	0.87	16 500	R 26 400	R 1.60	0	R 0	R 26 400
458	Hospitals	Public	Regional	Pretoria and Surrounds	1 113	m	87%	980	19 350	s.l	12 500	0.42	24 140	3 000	7 200	7 000	1.77	7 200	R 19 700	R 2.74	16 940	R 31 000	R 50 700
467	Hospitals	Public	Regional	Vaal Triangle	344	m	45%		276	s	1 900	0.23	7 390	1 800	10 800	6 000	1.55	7 390	R 17 500	R 2.37	0	R 0	R 17 500
468	Hospitals	Public	Regional	Vaal Triangle	888	m	86%		9 100				18 720	13 500	10 800	7 000	1.30	10 800	R 21 000	R 1.94	7 920	R 14 494	R 35 494
472	Hospitals	Public	Regional	West Rand	175	m	59%		3 874	s.l			3 700	no records	10 800	5 000	1.49	3 700	R 10 500	R 2.84	0	R 0	R 10 500
474	Hospitals	Public	Regional	West Rand	704	m	72%	652	585	s	7 350	0.37	16 060	13 500	25 600	6 000	0.87	16 060	R 20 000	R 1.25	0	R 0	R 20 000
449	Hospitals	Public	Regional	East Rand	543	h	125%						11 580	400	50 800	12 000	0.87	11 580	R 22 100	R 1.91	0	R 0	R 22 100
463	Hospitals	Public	Rehabilitation	Pretoria and Surrounds	320	m	100%	320			10	0.00	20	no records	3 600	4 000	5.43	20	R 4 100	R 205.00	0	R 0	R 4 100
448	Hospitals	Public	Special	Johannesburg	539	m	63%		800	w			1 100	1 260	10 800	7 000	1.33	1 100	R 5 500	R 7.73	0	R 0	R 5 500
445	C.H.C.	Public	East Rand	Nigel Community Health Centre									430	50	7 200	4 000	3.33	430	R 5 400	R 12.56	0	R 0	R 5 400
471	C.H.C.	Public	Johannesburg	Discoverers Community Health Centre				4 720					640	1 500	10 800	5 000	2.55	640	R 6 600	R 10.31	0	R 0	R 6 600
452	C.H.C.	Public	Johannesburg	Hillbrow Community Health Centre									1 200	unknown	14 400	5 000	2.14	1 200	R 7 600	R 6.33	0	R 0	R 7 600
460	C.H.C.	Public	Pretoria and Surrounds	Laudium Community Health Centre									770	1 800	7 200	4 000	3.33	770	R 6 600	R 8.57	0	R 0	R 6 600
466	C.H.C.	Public	Vaal Triangle	Johan Heyns Community Health Centre									400	700	7 200	4 000	3.33	400	R 5 300	R 13.25	0	R 0	R 5 300
685	C.H.C.	Public	Vaal Triangle	Khutsong Community Health Centre									770	50	25 600	7 000	0.91	770	R 7 700	R 10.00	0	R 0	R 7 700

⑥ R 1.83 per kg
(see note below)

Totals: 432 000 592 000 272 700 R 518 500 159 300 R 291 519 R 810 019
Cost /kg R 1.90 R 1.83 R 1.88

Note on cost of HCRW disposal by contractor:
1 HCRW disposal charge of R 21.00 per 142L box assumed.
2 Box cost = R 5.70; therefore collection + incineration cost = R 15.30
3 Average mass of full 142L container in this survey = 8.37 kg (2,500 observations)
4 Therefore collection+ incineration cost = approx. R 15.30 / 8.37 = R 1.83/kg.