

Summary

Options 1A and 1B					
Cap Configuration	Dike Volume (cy)	Volume above dike (cy)	Total Volume (cy)	Less Cap Vol (cy)	Disposal Vol (cy)
Option 1A 3:1 slope w/ 15 ft bench	951078	8628728	9579806	282246	9297560
Option 1B 3:1 slope w/ bench	951078	8250883	9201961	282246	8919715
Option 1A 4:1 slope w/ 15 ft bench	951078	6837027	7788105	282246	7505859
Option 1B 3:1 slope and 15 ft bench			7330981	282246	7048735
Options 2A and 2B					
2A	1372977	11024724	12397701	312040	12085661
2B	1372977	15349580	16722557	432410	14917170

Option 2B volumes
are more
approximate than
other options

PARSONS - Energy & Chemicals Group

KINGSTON FOSSIL PLANT

Proposed Scrubber Sludge Disposal Site
Volume in Cap with 3:1 Slope

PRELIMINARY Volume

Prepared: JANUARY 6, 2003

Section No.	X-section Area (SF)	Depth	Volume(CF)	Total Vol. (CF)	Volume(CY)
760	0	0	0	0	0
770	3048262	10	15241310	15241310	564493
780	2827953	10	29381075	44622385	1652681
790	2613298	10	27206255	71828640	2660320
800	2301921	10	24576095	96404735	3570546
810	2101405	10	22016630	118421365	4385976
820	1906544	10	20039745	138461110	5128189
830	1624859	10	17657015	156118125	5782153
840	1444145	10	15345020	171463145	6350487
850	1269096	10	13566205	185029350	6852939
860	1020330	10	11447130	196476480	7276907
870	866412	10	9433710	205910190	7626303
880	722242	10	7943270	213853460	7920499
890	524956	10	6235990	220089450	8151461
900	406272	10	4656140	224745590	8323911
910	300340	10	3533060	228278650	8454765
920	168096	10	2342180	230620830	8541512
930	98138	10	1331170	231952000	8590815
940	43769	10	709535	232661535	8617094
950	9528	10	266485	232928020	8626964
960	0	10	47640	232975660	8628728
		-960	0	232975660	8628728
		0	0	232975660	8628728
		0	0	232975660	8628728
		0	0	232975660	8628728
		0	0	232975660	8628728
		0	0	232975660	8628728
		0	0	232975660	8628728
		0	0	232975660	8628728
		0	0	232975660	8628728
		0	0	232975660	8628728
		0	0	232975660	8628728
		0	0	232975660	8,628,728

PARSONS - Energy & Chemicals Group

KINGSTON FOSSIL PLANT

Proposed Scrubber Sludge Disposal Site

PRELIMINARY Volume

Prepared: JANUARY 6, 2003

Volume within dike - 3:1 Interior slope and min el of 748

Section No.	X-section Area (SF)	Depth	Volume(CF)	Total Vol. (CF)	Volume(CY)
746	0	0	0	0	0
748	7572	2	7572	7572	280
750	118031	2	125603	133175	4932
752	359505	2	477536	610711	22619
754	794904	2	1154409	1765120	65375
756	1347991	2	2142895	3908015	144741
758	1986555	2	3334546	7242561	268243
760	2684224	2	4670779	11913340	441235
762	2727079	2	5411303	17324643	641653
764	2770161	2	5497240	22821883	845255
766	2813468	2	5583629	28405512	1052056
760	2857001	-6	-17011407	11394105	422004
770	0	10	14285005	25679110	951078
		-770	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951078
		0	0	25679110	951,078

PARSONS - Energy & Chemicals Group

KINGSTON FOSSIL PLANT

Proposed Scrubber Sludge Disposal Site
Truncated Volume in Cap with 3:1 Slope

PRELIMINARY Volume

Prepared: JANUARY 6, 2003

Section No.	X-section Area (SF)	Depth	Volume(CF)	Total Vol. (CF)	Volume(CY)
746	0	0	0	0	0
748	7572	2	7,572	7572	280
750	118031	2	125,603	133175	4932
752	481200	2	599,231	732407	27126
754	940291	2	1,421,491	2153898	79774
756	1398516	2	2,338,807	4492705	166396
758	1821985	2	3,220,500	7713205	285674
760	2008118	2	3,830,102	11543308	427530
762	2041044	2	4,049,161	15592469	577499
764	2074196	2	4,115,239	19707708	729915
766	2107574	2	4,181,769	23889478	884795
768	2141178	2	4,248,752	28138230	1042157
770	2289411	2	4,430,590	32568819	1206253
780	2118750	10	22,040,807	54609626	2022579
790	1953744	10	20,362,471	74972097	2776744
800	1716839	10	18,352,915	93325013	3456482
810	1565971	10	16,414,051	109739064	4064410
820	1420759	10	14,933,654	124672717	4617508
830	1213546	10	13,171,529	137844246	5105342
840	1082587	10	11,480,669	149324915	5530552
850	957769	10	10,201,785	159526700	5908396
860	782111	10	8,699,404	168226103	6230596
870	672724	10	7,274,179	175500282	6500010
880	569691	10	6,212,077	181712359	6730087
890	427659	10	4,986,751	186699110	6914782
900	341483	10	3,845,712	190544823	7057216
910	262258	10	3,018,705	193563528	7169020
920	156854	10	2,095,558	195659086	7246633
930	95993	10	1,264,235	196923320	7293456
940	43790	10	698,916	197622236	7319342
950	9531	10	266,604	197888840	7329216
960	0	10	47,654	197936493	7330981
		-960	0	197936493	7,330,981

PARSONS - Energy & Chemicals Group

KINGSTON FOSSIL PLANT

Proposed Scrubber Sludge Disposal Site
Volume in Cap with 3:1 Slope

PRELIMINARY Volume

Prepared: March 31, 2003

Section No.	X-section Area (SF)	Depth	Volume(CF)	Total Vol. (CF)	Volume(CY)
760	0	0	0	0	0
770	3370035	10	16850175	16850175	624081
780	3141881	10	32559580	49409755	1829991
790	2920783	10	30313320	79723075	2952706
800	2706897	10	28138400	107861475	3994869
810	2399502	10	25531995	133393470	4940499
820	2203538	10	23015200	156408670	5792914
830	2014860	10	21091990	177500660	6574099
840	1745437	10	18801485	196302145	7270450
850	1574836	10	16601365	212903510	7885315
860	1411912	10	14933740	227837250	8438417
870	1183684	10	12977980	240815230	8919083
880	1042256	10	11129700	251944930	9331294
890	909956	10	9761060	261705990	9692814
900	730367	10	8201615	269907605	9996578
910	622643	10	6765050	276672655	10247135
920	523813	10	5732280	282404935	10459442
930	391252	10	4575325	286980260	10628899
940	312881	10	3520665	290500925	10759294
950	242234	10	2775575	293276500	10862093
960	150340	10	1962870	295239370	10934791
970	98246	10	1242930	296482300	10980826
980	56053	10	771495	297253795	11009400
990	13349	10	347010	297600805	11022252
1000	0	10	66745	297667550	11024724
		-1000	0	297667550	11024724
		0	0	297667550	11024724
		0	0	297667550	11024724
		0	0	297667550	11024724
		0	0	297667550	11024724
		0	0	297667550	11,024,724

Vol Between 755 and 770 =

15-4 X 3,370,035/27 =

Grand total

1,372,977
12,397,701

Option 2B Approximation

Section	Area Sq ft	Avg Area Sq ft	Dist ft	Volume cf	Volume cy
	0				
A	60140	30070	400	12028000	445481
B	82212	71176	600	42705600	1581689
C	33666	57939	940	54462660	2017136
	0	16833	450	7574850	280550
			Total		4,324,856
		Vol from 2A			12,397,701
		Grand Total			16,722,557