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**Appendix 2E**  
**Evaluation of Soil Excavation Volumes and**  
**Footprints**

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# Evaluation of Soil Excavation Volumes and Footprints, Santa Susana Field Laboratory, Ventura County, California

PREPARED FOR: National Aeronautics and Space Administration (NASA)

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## Introduction

This technical memorandum documents the methodology used to estimate soil excavation volumes and footprints for the following cleanup alternatives, which are discussed in the *Draft Supplemental Environmental Impact Statement for Soil Cleanup Activities at Santa Susana Field Laboratory*:

Alternative	Soil Excavation Volume (yd <sup>3</sup> )	Soil Excavation Footprint (acres)	Soil Excavation Average Depth (ft bgs)
Alternative A: AOC Cleanup	870,000	220	2.45
Alternative B: Revised LUT Levels Cleanup	384,000	78	3.05
Alternative C: Suburban Residential Cleanup	247,000	36	4.25
Alternative D: Recreational Cleanup	176,500	26	4.21

AOC = Administrative Order on Consent

ft bgs = feet below ground surface

LUT = Look-Up Table

yd<sup>3</sup> = cubic yards

The soil excavation volumes and footprints listed in the table were calculated based on a rigorous analysis of soil analytical data, regulatory and risk-based criteria, site topography (slopes, rock outcrops, drainageways, and roads), and site operations (structures, features, and activities). For all alternatives, the NASA-administered property at the Santa Susana Field Laboratory (SSFL) is divided into the following individual areas or operational sites:

- Former Liquid Oxygen (LOX) Plant
- Area II Landfill
- Expendable Launch Vehicle (ELV) Area
- Ash Pile/Sewage Treatment Plant (AP/STP)
- Alfa Area
- Bravo Area
- Alfa/Bravo Fuel Farm (ABFF)
- Storable Propellant Area (SPA)
- Building 204 Area
- Skyline Road Area
- Hazardous Waste Storage Area (HWSA)

- Coca Area
- Delta Area
- Propellant Load Facility (PLF)
- Coca/Delta Fuel Farm (CFFF)
- R-2 Ponds

## Alternative A: AOC Cleanup

During the field efforts documented in the *NASA Soil Data Summary Report for Santa Susana Field Laboratory* (NASA, 2017b), estimated remediation areas (ERAs) and extended remediation areas (XRAs) were generated using field sampling results. The ERAs (AOC-Based Estimated Remediation Areas) represent the estimated extent of contamination based on site conditions and analytical data for all chemicals of concern (COCs). The XRAs (AOC-Based Extended Remediation Areas) represent the *potential* extent of contamination for two parameter classes that could not be delineated through field sampling: dioxins/furans and total petroleum hydrocarbons (TPHs).

The lateral extents of the ERAs were located by evaluating the degree of exceedances above the screening levels through field samples. Boundaries for the AOC cleanup were generated by identifying samples that did not have reported criteria exceedances (non-detected data). In some cases, however, step-out samples<sup>1</sup> were not feasible because of the presence of limiting topographic and/or site-related features. When a step-out sample was infeasible, the ERA was adjusted to extend to the limiting feature or professional judgement was exercised to determine the estimated lateral extent of contamination.

However, an alternate delineation method, that is, the XRA, was necessary for dioxins/furans and TPHs. Sampling with step-out samples was not effective in delineating the extent of contamination for these COCs, because the AOC LUT values are significantly below conventional laboratory capabilities for detection. Laboratories failed to identify the difference between the minimum reporting limit and the AOC LUT value, resulting in endless “detected” samples. The XRA approach is used to assess the existing terrain around known contamination sources and identify natural barriers for chemical transport (slopes, rock outcrops, drainageways, roads). The XRAs are conservative and show the *potential* extent of dioxins/furans and TPHs based on the AOC LUT values. The XRA approach was presented to DTSC in the *NASA Soil Data Summary Report for Santa Susana Field Laboratory* (NASA, 2017b), which was accepted by DTSC in May 2019.

For Alternative A: AOC Cleanup, AOC LUT XRA and ERA extents were used to generate the remediation area. The average depth of contamination and corresponding volume was then determined for each soil remediation area. The following steps describe the process used to calculate the estimated cleanup volume per site for Alternative A: AOC Cleanup:

- Step 1: Based on the determination of the XRAs, the boundary for each soil remediation area was delineated around soil samples with analytical data that exceeded the AOC LUT values.
- Step 2: Average depth of contamination for each soil remediation area was determined based on the samples inside the boundary.
- Step 3: Excavation volume for each soil remediation area was obtained by multiplying the excavation footprint by the average depth.
- Step 4: Total excavation volume for a given site was obtained by adding the excavation volumes for all the individual soil remediation areas.

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<sup>1</sup> A step-out sample is used to further delineate the extent of contamination around a sample location exceeding the LUT value.

The overall soil excavation volume and footprint for Alternative A: AOC Cleanup (all sites combined) are 870,000 yd<sup>3</sup> and 220 acres, respectively, which correspond to an overall average depth of 2.45 feet. These calculations were performed in the excel workbook provided in Attachment 1.

## Alternative B: Revised LUT Levels Cleanup

For Alternative B: Revised LUT Levels Cleanup, seven soil COCs were given revised LUT values using the California Environmental Protection Agency (Cal EPA) Office of Environmental Health Hazard Assessment, Los Angeles County screening levels and U.S. Environmental Protection Agency (EPA) screening levels. All other current AOC LUT values remained the same. These seven COCs were chosen because they resulted in the greatest disproportionate level of cleanup between the COC LUT values and the environmental agency cleaning levels. The following steps describe the process used to calculate the estimated cleanup volume per site for Alternative B: Revised LUT Levels Cleanup:

- Step 1: Individual soil remediation areas were developed for each operational site based on a data comparison. The boundary for each soil remediation area was delineated around soil samples with analytical data that exceeded the revised AOC LUT values.
- Step 2: Average depth of contamination for each soil remediation area was determined based on the samples inside the boundary.
- Step 3: Excavation volume for each soil remediation area was obtained by multiplying the excavation footprint by the average depth.
- Step 4: Total excavation volume for a given site was obtained by adding the excavation volumes for all the individual soil remediation areas.

The overall soil excavation volume and footprint for Alternative B: Revised LUT Levels Cleanup (all sites combined) are 384,000 yd<sup>3</sup> and 78 acres, respectively, which correspond to an overall average depth of 3.05 feet. These calculations were performed in the excel workbook provided in Attachment 2.

## Alternative C: Suburban Residential Cleanup

For Alternative C: Suburban Residential Cleanup, established suburban residential risk-based cleanup levels were compared to the soil data at each operational site. Site-specific, risk-based cleanup levels for soil contaminants at SSFL have been developed based on standard risk assessment procedures and equations provided in the DTSC-approved Standardized Risk Assessment Methodology (SRAM), EPA risk assessment guidance (RAG), and Cal EPA RAG. The following steps describe the process used to calculate the estimated cleanup volume per site for Alternative C: Suburban Residential Cleanup:

- Step 1: Individual soil remediation areas were developed for each operational site based on a data comparison. The boundary for each soil remediation area was delineated around soil samples with analytical data that exceeded the suburban residential risk-based cleanup levels.
- Step 2: Average depth of contamination for each soil remediation area was determined based on the samples inside the boundary.
- Step 3: Excavation volume for each soil remediation area was obtained by multiplying the excavation footprint by the average depth.
- Step 4: Total excavation volume for a given site was obtained by adding the excavation volumes for all the individual soil remediation areas.

The overall soil excavation volume and footprint for Alternative C: Suburban Residential Cleanup (all sites combined) are 247,000 yd<sup>3</sup> and 36 acres, respectively, which correspond to an overall average depth of 4.25 feet. These calculations were performed in the excel workbook provided in Attachment 3.

## Alternative D: Recreational Cleanup

For Alternative D: Recreational Cleanup, recreational risk-based cleanup levels were compared to the soil data at each operational site. Site-specific risk-based cleanup levels for soil contaminants at SSFL have been developed based on standard risk assessment procedures and equations provided in the DTSC-approved SRAM, EPA RAG, and Cal EPA RAG. This alternative reflects the cleanup standards to be implemented in the adjacent land areas administered by Boeing.

The following steps describe the process used to calculate the estimated cleanup volume per site for Alternative D: Recreational Cleanup:

- Step 1: Individual soil remediation areas were developed for each operational site based on a data comparison. The boundary for each soil remediation area was delineated around soil samples with analytical data that exceeded the recreational risk-based cleanup levels.
- Step 2: Average depth of contamination for each soil remediation area was determined based on the samples inside the boundary.
- Step 3: Excavation volume for each soil remediation area was obtained by multiplying the excavation footprint by the average depth.
- Step 4: Total excavation volume for a given site was obtained by adding the excavation volumes for all the individual soil remediation areas.

The overall soil excavation volume and footprint for Alternative D: Recreational Cleanup (all sites combined) are 176,500 yd<sup>3</sup> and 26 acres, respectively, which correspond to an overall average depth of 4.21 feet. These calculations were performed in the excel workbook provided in Attachment 4.

**Attachment 1**  
**Summary of Soil Excavation Volumes and**  
**Footprints (All Sites)**  
**Alternative A: AOC Cleanup**

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**ATTACHMENT 1**

**Alternative A: AOC Cleanup**

DESCRIPTION	LOX	A2LF	ELV	AP/STP	Alfa	Bravo	ABFF	SPA	B204	Skyline	HWSA	Coca	Delta	PLF	CDFP	R2Ponds	Totals
Excavation Area (square feet)	695,617	1,054,867	1,299,851	657,945	1,034,635	662,943	196,490	721,627	183,114	237,472	124,882	1,420,432	549,565	141,411	335,730	231,916	9,548,497
Excavation Area (acres)	16	24	30	15	24	15	5	17	4	5	3	33	13	3	8	5	220
Excavation Volume (cubic feet)	1,985,384	4,880,713	2,488,761	1,765,037	2,685,448	1,565,991	466,437	1,606,045	453,918	415,985	239,384	2,296,338	1,138,825	306,018	767,127	416,881	23,478,291
Excavation Volume (cubic yards)	73,533	180,767	92,176	65,372	99,461	58,000	17,275	59,483	16,812	15,407	8,866	85,050	42,179	11,334	28,412	15,440	869,567
Tons (assume 1.5 tons/cubic yard)	110,299	271,151	138,265	98,058	149,192	87,000	25,913	89,225	25,218	23,110	13,299	127,574	63,268	17,001	42,618	23,160	1,304,350

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Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>Former LOX Plant</b>					
MX159-NT	43721.32	1.29	56400	2089	3133
MX159-TT		0.42	18363	680	1020
MX161-NT	2774.07	1.50	4161	154	231
MX161-TT		1.60	4439	164	247
MX163-NT	171401.27	1.55	265672	9840	14760
MX163-TT		1.27	217680	8062	12093
MX191-NT	507.51	3.50	1776	66	99
MX191-TT		1.00	508	19	28
NT/MX30	3624.97	2.75	9969	369	554
NT/MX31	1352.55	0.50	676	25	38
NT/MX32	4306.02	0.93	4005	148	222
NT/MX33	703.34	1.50	1055	39	59
NT/MX134	9638.73	1.75	16868	625	937
NT46	914.32	0.50	457	17	25
NT47	2237.97	0.50	1119	41	62
NT48	507.51	1.00	508	19	28
NT49	507.51	1.00	508	19	28
NT50	1408.76	2.75	3874	143	215
NT51	6525.65	1.50	9788	363	544
NT52	2599.00	1.00	2599	96	144
NT53	1003.35	6.00	6020	223	334
NT54	779.56	1.00	780	29	43
NT56	1743.99	0.50	872	32	48
NT72	1402.45	1.00	1402	52	78
NT73	680.20	1.00	680	25	38
TT106	760.49	1.50	1141	42	63
TT107	1395.69	1.00	1396	52	78
TT108	5282.58	2.00	10565	391	587
TT109	2144.11	1.50	3216	119	179
TT110	4317.06	0.50	2159	80	120
TT111	28016.58	1.87	52391	1940	2911
TT112	1163.60	1.00	1164	43	65
TT113	12841.32	2.10	26967	999	1498
TT114	7330.00	1.25	9163	339	509
TT115	1283.41	1.50	1925	71	107
TT116	2268.17	1.00	2268	84	126
TT117	518.80	0.50	259	10	14
TT118	20388.54	1.90	38738	1435	2152
TT119	13252.87	1.08	14313	530	795
TT120	10931.34	1.00	10931	405	607
TT121	64696.13	6.43	415996	15407	23111
SUB79-NT	2076.82	7.66	15908	589	884
SUB80-TT	112.52	6.50	731	27	41
SUB81-TT	112.52	6.00	675	25	38
SUB82-NT	112.52	14.00	1575	58	88
SUB83-MX-NT	2554.98	1.50	3832	142	213
SUB83-MX-TT		10.90	27849	1031	1547
SUB84-MX-NT	112.52	4.50	506	19	28
SUB84-MX-TT		15.00	1688	63	94
SUB85-NT	112.52	15.50	1744	65	97

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
SUB86-MX-NT	112.52	1.50	169	6	9
SUB86-MX-TT		8.75	985	36	55
SUB87-MX-NT	112.52	1.50	169	6	9
SUB87-MX-TT		8.50	956	35	53
SUB88-NT	112.52	11.00	1238	46	69
SUB89-MX-NT	13912.44	5.23	72762	2695	4042
SUB89-MX-TT		4.38	60936	2257	3385
SUB90-TT	112.52	11.00	1238	46	69
SUB91-TT	112.52	15.50	1744	65	97
SUB92-NT	112.52	10.00	1125	42	63
SUB93-TT	112.52	13.50	1519	56	84
SUB94-NT	112.52	8.50	956	35	53
SUB95-MX-NT	9288.60	7.25	67342	2494	3741
SUB95-MX-TT		3.68	34182	1266	1899
ERA-1	9151.32	2.00	18303	678	1017
ERA-2	4552.13	2.00	9104	337	506
ERA-3	4824.96	2.00	9650	357	536
ERA-4	61890.68	2.00	123781	4584	6877
ERA-5	81261.25	2.00	162523	6019	9029
ERA-6	67888.28	2.00	135777	5029	7543
ERA-84	1822.23	2.00	3644	135	202
Total	695617.26		1985384	73532.72	
	<b>Total Acres = 15.969</b>		<b>Total Cubic Yards = 73,533</b>		

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>Area II Landfill</b>					
EX1	239250.85	15.45	3696426	136905	205357
NT/MX17	19034.93	0.75	14276	529	793
NT/MX18	3193.86	1.33	4248	157	236
NT/MX19	58872.28	1.56	91841	3402	5102
NT/MX20	7471.76	2.00	14944	553	830
NT/MX21	2529.78	0.50	1265	47	70
NT/MX22	19095.10	1.00	19095	707	1061
NT/MX23	1565.11	1.50	2348	87	130
NT/MX24	85137.87	1.36	115788	4288	6433
NT/MX25	15110.95	0.85	12844	476	714
NT/MX26	8802.93	0.62	5458	202	303
NT/MX27	8371.03	1.30	10882	403	605
NT/MX28	11364.53	1.50	17047	631	947
NT/MX29	462.21	0.50	231	9	13
TT1	8601.76	0.50	4301	159	239
TT2	71167.87	1.21	86113	3189	4784
TT3	313.17	0.50	157	6	9
TT4	2898.49	1.25	3623	134	201
TT5	162867.05	0.89	144952	5369	8053
TT6	2864.25	0.50	1432	53	80
TT7	1760.59	0.50	880	33	49
TT8	18687.06	1.16	21677	803	1204
ERA-116	5133.33	2.00	10267	380	570
ERA-7	1286.01	2.00	2572	95	143
ERA-8	6147.54	2.00	12295	455	683
ERA-29	13100.61	2.00	26201	970	1456
ERA-30	6936.79	2.00	13874	514	771
ERA-31	163402.66	2.00	326805	12104	18156
ERA-32	109436.21	2.00	218872	8106	12160
Total	1054866.583		4880712.52	180767.13	
<b>Total Acres =</b>	<b>24.216</b>		<b>Total Cubic Yards =</b>	<b>180,767</b>	

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>ELV</b>					
MX136-NT	8785.49	1.12	9839.75	364	547
MX136-TT		0.98	8609.78	319	478
MX142-NT	6283.19	2.25	14137.18	524	785
MX142-TT		2.00	12566.38	465	698
MX151-NT	93149.95	1.93	179779.41	6,658	9988
MX151-TT		0.83	77314.46	2,863	4295
NT/MX10	3519.52	0.81	2850.81	106	158
NT/MX11	1265.72	1.50	1898.58	70	105
NT/MX12	2422.22	1.00	2422.22	90	135
NT/MX13	845.34	0.40	338.14	13	19
NT/MX133	514.34	1.00	514.34	19	29
NT/MX14	776.54	1.00	776.54	29	43
NT/MX15	269610.79	1.42	382847.32	14,180	21269
NT/MX16	1265.72	4.50	5695.75	211	316
NT/MX4	7102.03	1.33	9445.70	350	525
NT/MX5	1265.72	1.00	1265.72	47	70
NT/MX6	1184.60	1.00	1184.60	44	66
NT/MX7	1250.27	1.00	1250.27	46	69
NT/MX8	5794.24	4.50	26074.07	966	1449
NT/MX9	6968.09	0.50	3484.04	129	194
NT150R	514.34	0.50	257.17	10	14
NT36	3846.21	1.50	5769.32	214	321
NT37	666.03	1.50	999.04	37	56
NT38	1207.34	0.50	603.67	22	34
NT39	3897.77	0.50	1948.89	72	108
NT40	3431.02	0.50	1715.51	64	95
NT41	791.28	0.50	395.64	15	22
NT42	738.29	0.50	369.15	14	21
NT43	7568.04	0.72	5448.99	202	303
NT44	2154.40	0.50	1077.20	40	60
NT45	3617.19	0.75	2712.89	100	151
TT100	142305.50	1.32	187843.26	6,957	10436
TT101	3843.43	1.00	3843.43	142	214
TT102	106660.24	2.19	233585.93	8,651	12977
TT103	33202.88	1.18	39179.40	1,451	2177
TT104	6232.89	0.75	4674.67	173	260
TT105	158025.18	1.39	219655.00	8,135	12203
TT158	1729.76	4.00	6919.03	256	384
TT159	1271.91	2.75	3497.74	130	194
TT160	3794.55	0.87	3301.26	122	183
TT99	12191.83	2.14	26090.51	966	1449
Sub73-NT	112.52	8.00	900.19	33	50
Sub74-TT	112.52	9.50	1068.98	40	59
Sub75-MX-NT	29680.03	7.57	224677.83	8,321	12482
Sub75-MX-TT		1.58	46894.45	1,737	2605
Sub76-TT	112.52	10.00	1125.24	42	63
Sub77-TT	112.52	9.00	1012.72	38	56
Sub 78-TT	112.52	9.50	1068.98	40	59
ERA-46	20520.72	2.00	41041.44	1,520	2280
ERA-47	1112.01	2.00	2224.02	82	124
ERA-48	136351.59	2.00	272703.18	10,100	15150

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
ERA-49	3633.09	2.00	7266.18	269	404
ERA-50	1237.30	2.00	2474.60	92	137
ERA-51	81552.30	2.00	163104.60	6,041	9061
ERA-52	6291.57	2.00	12583.14	466	699
ERA-53	87070.61	2.00	174141.22	6,450	9675
ERA-54	14927.95	2.00	29855.90	1,106	1659
ERA-55	7217.84	2.00	14435.68	535	802
<b>Total</b>	1,299,851		2,488,761	92,176	
<b>Total Acres =</b>	<b>29.84</b>		<b>Total Cubic Yards =</b>	<b>92,176</b>	

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>AP/STP</b>					
MX49-NT	260.77	1.50	391	14	22
MX49-TT		18.50	4824	179	268
MX50-NT	155036.84	1.84	285268	10565	15848
MX50-TT		1.20	186044	6891	10336
NT/MX1	636.47	1.25	796	29	44
NT/MX2	636.47	1.50	955	35	53
NT/MX34	636.47	0.80	509	19	28
NT/MX35	636.47	1.00	636	24	35
NT10	5302.79	1.12	5939	220	330
NT11	2508.90	1.25	3136	116	174
NT12	65941.34	1.34	88361	3273	4909
NT13	1659.07	1.00	1659	61	92
NT5	4266.47	1.50	6400	237	356
NT6	636.47	0.30	191	7	11
NT7	2642.17	1.50	3963	147	220
NT8	313.06	0.50	157	6	9
NT9	57791.49	1.98	114427	4238	6357
TT32	744.61	1.50	1117	41	62
TT33	1364.27	1.00	1364	51	76
TT34	8267.37	3.66	30259	1121	1681
TT35	36146.32	3.61	130488	4833	7249
TT36	8654.10	0.90	7789	288	433
TT37	9577.69	0.90	8620	319	479
TT38	636.47	1.50	955	35	53
SUB156-TT	332.85	20.00	6657	247	370
SUB157-TT	112.52	12.00	1350	50	75
SUB25-MX-NT	2550.14	7.50	19126	708	1063
SUB25-MX-TT		0.75	1913	71	106
SUB26-MX-NT	1312.01	1.00	1312	49	73
SUB26-MX-TT		9.00	11808	437	656
SUB27-TT	1312.01	17.00	22304	826	1239
SUB28-NT	332.85	8.00	2663	99	148
SUB29-TT	112.52	7.00	788	29	44
SUB30-NT	112.52	7.00	788	29	44
SUB31-NT	112.52	8.00	900	33	50
SUB32-NT	112.41	16.00	1799	67	100
SUB33-MX-NT	112.52	1.00	113	4	6
SUB33-MX-TT		9.50	1069	40	59
SUB34-TT	112.52	10.00	1125	42	63
SUB35-NT	112.52	7.50	844	31	47
SUB36-MX-NT	7023.50	4.18	29358	1087	1631
SUB36-MX-TT		9.76	68549	2539	3808
SUB37-MX-NT	7440.72	8.87	65999	2444	3667
SUB37-MX-TT		2.01	14956	554	831
SUB38-NT	794.79	7.75	6160	228	342
SUB39-MX-NT	673.78	6.16	4151	154	231
SUB39-MX-TT		0.84	566	21	31
SUB40-NT	1997.03	10.16	20290	751	1127
SUB41-MX-NT	1664.63	8.60	14316	530	795
SUB41-MX-TT		3.40	5660	210	314



Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
SUB42-MX-NT	2870.73	8.61	24717	915	1373
SUB42-MX-TT		7.39	21215	786	1179
SUB43-NT	112.52	6.50	731	27	41
SUB44-NT	112.52	10.00	1125	42	63
ERA-17	1745.50	2.00	3491	129	194
ERA-56	216.41	2.00	433	16	24
ERA-57	5669.64	2.00	11339	420	630
ERA-58	1282.36	2.00	2565	95	142
ERA-59	194361.42	2.00	388723	14397	21596
ERA-60	60943.82	2.00	121888	4514	6772
Total	657,945		1,765,037	65,372	
<b>Total Acres =</b>	<b>15.10</b>		<b>Total Cubic Yards =</b>	<b>65,372</b>	

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>Alfa Area</b>					
MX31-NT	26819.56	1.50	40229	1490	2235
MX31-TT		0.37	9923	368	551
MX32-NT	417932.66	1.30	543312	20123	30184
MX32-TT		1.02	426291	15789	23683
MX190-NT	7305.46	2.08	15195	563	844
MX190-TT		1.50	10958	406	609
NT/MX41	11846.90	1.00	11847	439	658
NT/MX42	10437.31	0.75	7828	290	435
NT/MX43	2357.97	1.10	2594	96	144
NT/MX44	2537.81	1.00	2538	94	141
NT/MX45	1160.49	1.50	1741	64	97
NT/MX46	545.67	1.50	818	30	45
NT/MX47	1446.98	1.00	1447	54	80
NT/MX48	1301.64	2.50	3254	121	181
NT/MX50	376.84	1.50	565	21	31
NT/MX51	1774.76	3.25	5768	214	320
NT/MX52	376.84	1.50	565	21	31
NT/MX53	1449.77	3.50	5074	188	282
NT/MX54	1612.53	4.50	7256	269	403
NT/MX55	1362.36	6.00	8174	303	454
NT/MX56	8572.36	2.83	24260	899	1348
NT/MX57	1972.84	2.50	4932	183	274
NT/MX58	10904.93	1.20	13086	485	727
NT3	2487.52	0.30	746	28	41
NT4	10313.59	0.25	2578	95	143
TT13	1627.60	0.50	814	30	45
TT14	1586.91	0.50	793	29	44
TT15	1128.77	0.50	564	21	31
TT16	1956.14	0.50	978	36	54
TT17	997.66	1.00	998	37	55
TT18	2223.77	1.50	3336	124	185
TT19	32500.05	1.00	32500	1204	1806
TT20	3902.11	1.00	3902	145	217
TT22	3190.96	0.67	2138	79	119
TT23	511.96	0.50	256	9	14
TT24	335.89	0.50	168	6	9
TT25	25566.06	11.83	302446	11202	16803
TT27	48542.54	2.45	118929	4405	6607
TT28	1241.22	1.00	1241	46	69
TT29	12763.13	3.66	46713	1730	2595
TT30	92658.87	1.16	107484	3981	5971
TT31	10228.54	2.75	28128	1042	1563
SUB10-TT	538.10	4.25	2287	85	127
SUB11-TT	2375.10	10.16	24131	894	1341
SUB12-MX-NT	4895.30	7.87	38526	1427	2140
SUB12-MX-TT		0.23	1126	42	63
SUB13-MX-NT	7688.68	2.30	17684	655	982
SUB13-MX-TT		6.25	48054	1780	2670
SUB14-MX-NT	3731.51	1.50	5597	207	311

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
SUB14-MX-TT		9.00	33584	1244	1866
SUB15-MX-NT	2660.59	1.50	3991	148	222
SUB15-MX-TT		7.45	19821	734	1101
SUB16-MX-NT	17632.81	2.61	46022	1705	2557
SUB16-MX-TT		9.66	170333	6309	9463
SUB17-NT	991.97	9.50	9424	349	524
SUB18-TT	112.52	9.00	1013	38	56
SUB19-TT	112.52	10.00	1125	42	63
SUB20-MX-NT	112.52	1.50	169	6	9
SUB20-MX-TT		8.75	985	36	55
SUB21-MX-NT	112.52	1.50	169	6	9
SUB21-MX-TT		9.50	1069	40	59
SUB22-MX-NT	78.14	1.50	117	4	7
SUB22-MX-TT		6.50	508	19	28
SUB23-MX-NT	78.14	1.50	117	4	7
SUB23-MX-TT		16.50	1289	48	72
SUB24-NT	78.14	10.00	781	29	43
ERA-35	52510.95	2.00	105022	3890	5835
ERA-36	15038.47	2.00	30077	1114	1671
ERA-69	160027.76	2.00	320056	11854	17781
<b>Total</b>	<b>1,034,635</b>		<b>2,685,448</b>	<b>99,461</b>	
<b>Total Acres =</b>	<b>23.75</b>		<b>Total Cubic Yards =</b>	<b>99,461</b>	

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>Bravo Area</b>					
MX54-NT	501.51	1.50	752	28	42
MX54-TT		3.35	1680	62	93
MX61-NT	910.31	2.25	2048	76	114
MX61-TT		2.12	1930	71	107
MX63-NT	1678.18	2.75	4615	171	256
MX63-TT		0.65	1091	40	61
MX65-NT	172667.88	1.50	259002	9593	14389
MX65-TT		0.67	115687	4285	6427
NT/MX61	2039.12	0.62	1264	47	70
NT/MX62	735.45	1.00	735	27	41
NT/MX63	7055.88	1.87	13194	489	733
NT/MX64	3167.92	1.00	3168	117	176
NT/MX65	496.59	5.00	2483	92	138
NT/MX66	1214.98	1.00	1215	45	67
NT/MX67	146.56	0.50	73	3	4
NT/MX68	577.76	3.00	1733	64	96
NT/MX69	1656.71	0.50	828	31	46
NT/MX135	494.49	6.00	2967	110	165
NT17	683.92	0.50	342	13	19
NT18	690.17	5.00	3451	128	192
NT19	2134.61	1.25	2668	99	148
NT20	401.93	2.00	804	30	45
NT21	1767.62	1.50	2651	98	147
NT22	811.96	0.50	406	15	23
NT23	3055.79	0.50	1528	57	85
TT43	4038.43	1.50	6058	224	337
TT44	64779.13	3.05	197576	7318	10976
TT45	444.31	1.00	444	16	25
TT46	8887.96	1.00	8888	329	494
TT47	773.83	1.50	1161	43	64
TT48	3539.56	1.25	4424	164	246
TT49	16980.27	1.00	16980	629	943
TT50	7155.58	1.25	8944	331	497
TT51	1181.30	1.00	1181	44	66
TT53	46482.97	3.66	170128	6301	9452
TT55R	287.83	1.50	432	16	24
SUB137-MX-NT	112.52	1.50	169	6	9
SUB137-MX-TT		4.25	478	18	27
SUB138-MX-NT	8895.84	7.25	64495	2389	3583
SUB138-MX-TT		2.78	24730	916	1374
SUB139-MX-NT	753.10	8.00	6025	223	335
SUB139-MX-TT		1.00	753	28	42
SUB140-MX-NT	1155.18	5.80	6700	248	372
SUB140-MX-TT		2.45	2830	105	157
SUB141-MX-NT	1274.87	5.75	7331	272	407
SUB141-MX-TT		3.15	4016	149	223
SUB142-TT	1341.82	8.83	11848	439	658
SUB143-MX-NT	112.45	1.50	169	6	9
SUB143-MX-TT		6.50	731	27	41

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
SUB144-MX-NT	112.52	1.50	169	6	9
SUB144-MX-TT		8.25	928	34	52
SUB145-TT	112.52	6.50	731	27	41
SUB146-NT	112.52	7.00	788	29	44
SUB147-TT	112.52	9.50	1069	40	59
SUB148-MX-NT	112.52	1.50	169	6	9
SUB148-MX-TT		12.00	1350	50	75
SUB149-TT	610.57	4.70	2870	106	159
SUB150-NT	112.52	10.00	1125	42	63
SUB151-TT	112.52	6.00	675	25	38
SUB152-MX-NT	112.52	1.50	169	6	9
SUB152-MX-TT		5.00	563	21	31
SUB153-MX-NT	112.52	1.50	169	6	9
SUB153-MX-TT		5.25	591	22	33
SUB154-TT	112.52	7.00	788	29	44
SUB155-TT	112.52	9.00	1013	38	56
ERA-20	5248.12	2.00	10496	389	583
ERA-37	8338.47	2.00	16677	618	926
ERA-38	969.14	2.00	1938	72	108
ERA-39	200911.73	2.00	401823	14882	22324
ERA-40	2910.57	2.00	5821	216	323
ERA-41	43235.87	2.00	86472	3203	4804
ERA-42	25262.59	2.00	50525	1871	2807
ERA-43	1135.23	2.00	2270	84	126
ERA-44	187.79	2.00	376	14	21
ERA-45	1808.75	2.00	3618	134	201
<b>Total</b>	<b>662,943</b>		<b>1,565,991</b>	<b>58,000</b>	
<b>Total Acres =</b>	<b>15.22</b>		<b>Total Cubic Yards =</b>	<b>58,000</b>	

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>ABFF</b>					
MX20-NT	14830.98	3.00	44492.94	1,648	2472
MX20-TT		0.30	4449.29	165	247
MX21-NT	7125.03	1.20	8550.03	317	475
MX21-TT		0.92	6555.03	243	364
NT/MX36	515.79	1.50	773.69	29	43
NT/MX37	643.41	0.50	321.70	12	18
NT/MX38	404.15	0.50	202.07	7	11
NT/MX39	404.15	1.00	404.15	15	22
NT/MX40	1341.17	0.75	1005.88	37	56
NT1	419.13	1.00	419.13	16	23
NT2	994.15	1.00	994.15	37	55
NT70	404.15	1.50	606.22	22	34
TT10	3623.62	1.12	4058.46	150	225
TT11	286.03	6.00	1716.16	64	95
TT12	30897.89	2.43	75081.86	2,781	4171
TT17R	240.84	2.00	481.67	18	27
TT9	15847.40	1.86	29476.17	1,092	1638
Sub1-MX-NT	419.13	1.50	628.69	23	35
Sub1-MX-TT		8.50	3562.60	132	198
Sub2-NT	112.52	10.00	1125.24	42	63
Sub3-NT	112.52	6.50	731.41	27	41
Sub4-TT	112.52	10.00	1125.24	42	63
Sub5-NT	663.93	10.00	6639.33	246	369
Sub6-MX-NT	632.83	2.00	1265.66	47	70
Sub6-MX-TT		10.25	6486.53	240	360
Sub7-MX-NT	3443.09	5.08	17490.89	648	972
Sub7-MX-TT		1.69	5818.82	216	323
Sub8-TT	1626.00	7.16	11642.18	431	647
Sub9-MX-NT	1099.23	4.00	4396.91	163	244
Sub9-MX-TT		4.87	5353.24	198	297
ERA-9	1365.39	2.00	2730.78	101	152
ERA-10	29545.42	2.00	59090.84	2,189	3283
ERA-33	3339.02	2.00	6678.04	247	371
ERA-61	39129.59	2.00	78259.18	2,898	4348
ERA-62	36911.29	2.00	73822.58	2,734	4101
<b>Total</b>	<b>196,490</b>		<b>466,437</b>	<b>17,275</b>	
<b>Total Acres =</b>	<b>4.51</b>		<b>Total Cubic Yards =</b>	<b>17,275</b>	

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>SPA</b>					
MX184-NT	203914.27	1.66	338498	12537	18805
MX184-TT		0.46	93801	3474	5211
NT/MX78	951.07	1.00	951	35	53
NT/MX79	6356.19	0.75	4767	177	265
NT144R	909.72	1.50	1365	51	76
NT66	653.11	0.50	327	12	18
NT67	424.70	1.00	425	16	24
NT68	1657.65	2.00	3315	123	184
NT69	2719.75	1.50	4080	151	227
TT143	962.32	1.50	1443	53	80
TT145	17085.54	2.87	49036	1816	2724
TT146	537.71	1.00	538	20	30
TT147	25230.09	1.07	26996	1000	1500
TT148	1148.88	1.00	1149	43	64
TT149	737.27	5.50	4055	150	225
SUB106-NT	1206.34	8.00	9651	357	536
SUB107-MX-NT	1063.54	5.75	6115	226	340
SUB107-MX-TT		5.25	5584	207	310
SUB108-NT	2259.00	9.66	21822	808	1212
SUB109-NT	112.52	10.00	1125	42	63
SUB110-NT	3576.43	15.37	54970	2036	3054
SUB111-NT	112.52	8.00	900	33	50
SUB112-NT	112.52	14.50	1632	60	91
SUB113-NT	3262.54	15.25	49754	1843	2764
SUB114-NT	3297.65	9.62	31723	1175	1762
SUB115-MX-NT	112.52	1.50	169	6	9
SUB115-MX-TT		6.50	731	27	41
SUB116-TT	112.52	10.00	1125	42	63
SUB117-MX-NT	112.52	1.50	169	6	9
SUB117-MX-TT		8.50	956	35	53
SUB118-MX-NT	112.52	1.50	169	6	9
SUB118-MX-TT		5.00	563	21	31
SUB119-TT	112.52	7.00	788	29	44
SUB120-TT	112.52	6.50	731	27	41
SUB121-MX-NT	112.52	1.50	169	6	9
SUB121-MX-TT		7.50	844	31	47
SUB122-TT	93.89	7.50	704	26	39
ERA-12	103066.58	2.00	206133	7635	11452
ERA-63	24162.80	2.00	48326	1790	2685
ERA-64	26583.98	2.00	53168	1969	2954
ERA-65	288640.56	2.00	577281	21381	32071
<b>Total</b>	<b>721,627</b>		<b>1,606,045</b>	<b>59,483</b>	
<b>Total Acres =</b>	<b>16.57</b>		<b>Total Cubic Yards =</b>	<b>59,483</b>	

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>B204</b>					
MX51-NT	110746.77	1.59	176087.36	6,522	9783
MX51-TT		0.68	75307.80	2,789	4184
NT/MX60	1034.21	5.00	5171.04	192	287
NT14	16744.92	0.94	15740.23	583	874
NT15	953.91	0.50	476.95	18	26
NT16	958.89	1.50	1438.33	53	80
TT40	10642.03	2.82	30010.53	1,112	1667
TT41	3997.72	1.00	3997.72	148	222
Sub124-NT	112.52	10.00	1125.24	42	63
Sub125-TT	112.52	7.75	872.06	32	48
Sub126-NT	112.52	10.00	1125.24	42	63
Sub127-MX-NT	112.52	1.50	168.79	6	9
Sub127-MX-TT		16.00	1800.38	67	100
Sub128-NT	112.52	7.50	843.93	31	47
Sub129-MX-NT	112.52	1.50	168.79	6	9
Sub129-MX-TT		9.00	1012.72	38	56
Sub130-MX-NT	112.52	1.50	168.79	6	9
Sub130-MX-TT		6.50	731.41	27	41
Sub131-MX-NT	112.52	1.50	168.79	6	9
Sub131-MX-TT		7.50	843.93	31	47
Sub132-NT	112.52	10.00	1125.24	42	63
Sub133-TT	112.52	6.50	731.41	27	41
Sub134-MX-NT	419.69	5.75	2413.20	89	134
Sub134-MX-TT		1.91	801.60	30	45
Sub135-MX-NT	1234.81	1.50	1852.22	69	103
Sub135-MX-TT		6.83	8433.76	312	469
Sub136-MX-NT	5593.39	7.66	42845.37	1,587	2380
Sub136-MX-TT		3.42	19129.39	708	1063
ERA-18	3322.24	2.00	6644.48	246	369
ERA-19	9616.72	2.00	19233.44	712	1069
ERA-66	16723.72	2.00	33447.44	1,239	1858
<b>Total</b>	183,114		453,918	16,812	
<b>Total Acres =</b>	<b>4.20</b>		<b>Total Cubic Yards =</b>	<b>16,812</b>	



Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>Skyline Road</b>					
MX179-NT	43165.95	1.38	59569	2206	3309
MX179-TT		0.28	12086	448	671
NT/MX73	24606.51	1.37	33711	1249	1873
NT/MX74	6140.26	2.75	16886	625	938
NT/MX75	1314.87	1.50	1972	73	110
NT/MX76	1282.21	1.00	1282	47	71
NT/MX77	488.92	3.50	1711	63	95
NT63	1170.59	0.50	585	22	33
NT64	5500.87	1.10	6051	224	336
NT65	5740.41	0.58	3329	123	185
TT135	2769.36	1.50	4154	154	231
TT136	5994.59	1.50	8992	333	500
TT137	28765.58	1.50	43148	1598	2397
TT138	986.94	1.50	1480	55	82
TT139	1326.82	2.00	2654	98	147
TT140	1326.82	5.00	6634	246	369
TT141	1479.30	1.00	1479	55	82
TT142	2139.72	1.50	3210	119	178
SUB105-TT	112.52	6.50	731	27	41
ERA-13	5415.53	2.00	10831	401	602
ERA-14	32006.76	2.00	64014	2371	3556
ERA-67	23919.84	2.00	47840	1772	2658
ERA-68	41817.40	2.00	83635	3098	4646
Total	237,472		415,985	15,407	
<b>Total Acres =</b>	<b>5.45</b>		<b>Total Cubic Yards =</b>	<b>15,407</b>	

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>HWSA</b>					
MX188-NT	4079.24	1.20	4895	181	272
MX188-TT		1.00	4079	151	227
NT/MX70	306.71	1.50	460	17	26
NT/MX71	4339.50	1.08	4687	174	260
NT/MX72	928.53	0.50	464	17	26
TT150	206.79	1.50	310	11	17
TT151	5370.11	1.93	10364	384	576
TT152	116.86	3.50	409	15	23
TT153	249.63	0.50	125	5	7
TT154	489.68	1.00	490	18	27
TT155	5141.73	1.10	5656	209	314
TT156	132.06	1.50	198	7	11
TT157	239.06	0.50	120	4	7
SUB123-TT	112.52	7.00	788	29	44
ERA-11	103169.54	2.00	206339	7642	11463
Total	124,882		239,384	8,866	
<b>Total Acres =</b>	<b>2.87</b>		<b>Total Cubic Yards =</b>	<b>8,866</b>	

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>Coca Area</b>					
MX69R-NT	3598.33	0.50	1799	67	100
MX69R-TT		0.50	1799	67	100
MX85-NT	2099.82	1.50	3150	117	175
MX85-TT		1.50	3150	117	175
MX88-NT	822.52	1.50	1234	46	69
MX88-TT		1.50	1234	46	69
MX89-NT	1570.17	0.80	1256	47	70
MX89-TT		0.35	550	20	31
MX99-NT	336880.06	1.20	404256	14972	22459
MX99-TT		0.21	70745	2620	3930
NT/MX100	822.52	1.00	823	30	46
NT/MX101	801.29	0.75	601	22	33
NT/MX102	2273.55	1.00	2274	84	126
NT/MX103	14058.61	0.70	9841	364	547
NT/MX80	11505.26	1.25	14382	533	799
NT/MX81	1051.52	1.00	1052	39	58
NT/MX82	1030.20	1.00	1030	38	57
NT/MX83	25899.97	1.16	30044	1113	1669
NT/MX86	712.29	1.00	712	26	40
NT/MX87	395.44	1.00	395	15	22
NT/MX88	960.81	1.00	961	36	53
NT/MX89	866.79	1.00	867	32	48
NT/MX90	3282.99	3.50	11490	426	638
NT/MX91	2777.21	1.00	2777	103	154
NT/MX92	1051.77	1.00	1052	39	58
NT/MX93	1229.14	1.25	1536	57	85
NT/MX94	825.84	1.00	826	31	46
NT/MX95	1136.80	0.75	853	32	47
NT/MX96	16371.96	1.00	16372	606	910
NT/MX97	1087.04	0.33	359	13	20
NT/MX98	822.52	1.00	823	30	46
NT/MX99	1054.76	1.00	1055	39	59
NT29	1339.95	0.50	670	25	37
NT30	997.34	1.00	997	37	55
NT91R	3082.08	1.00	3082	114	171
TT58	2037.72	0.50	1019	38	57
TT59	10522.06	1.12	11785	436	655
TT60	653.23	1.00	653	24	36
TT61	10214.62	2.75	28090	1040	1561
TT62	1910.34	1.50	2866	106	159
TT63	2664.52	1.00	2665	99	148
TT64	1100.08	1.50	1650	61	92
TT65	17537.47	2.00	35075	1299	1949
TT67	106035.28	1.59	168596	6244	9366
TT68	1807.62	1.00	1808	67	100
TT70	673.69	1.00	674	25	37
TT71	2198.46	1.00	2198	81	122
TT72	3032.33	0.50	1516	56	84
TT73	134447.51	1.58	212427	7868	11802

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
TT74	2405.84	0.50	1203	45	67
TT75	1386.79	0.25	347	13	19
TT76	1626.75	1.00	1627	60	90
TT77	11453.64	0.81	9277	344	515
TT78	1498.98	1.00	1499	56	83
TT79	868.24	1.00	868	32	48
TT80	176392.04	1.12	197559	7317	10976
TT82	2122.99	1.00	2123	79	118
TT83	2520.52	1.00	2521	93	140
SUB53-MX-NT	822.52	1.50	1234	46	69
SUB53-MX-TT		2.25	1851	69	103
SUB54-NT	112.52	9.00	1013	38	56
SUB55-TT	112.52	7.00	788	29	44
SUB56-TT	112.52	8.00	900	33	50
SUB57-TT	112.52	8.00	900	33	50
SUB58-MX-NT	1272.91	0.75	955	35	53
SUB58-MX-TT		8.50	10820	401	601
SUB59-MX-NT	3931.09	1.00	3931	146	218
SUB59-MX-TT		8.90	34987	1296	1944
ERA-21	18615.07	2.00	37230	1379	2068
ERA-22	47506.20	2.00	95012	3519	5278
ERA-23	6305.85	2.00	12612	467	701
ERA-24	49217.00	2.00	98434	3646	5469
ERA-25	16505.59	2.00	33011	1223	1834
ERA-70	49538.26	2.00	99077	3670	5504
ERA-71	6142.43	2.00	12285	455	682
ERA-72	10474.63	2.00	20949	776	1164
ERA-73	1387.14	2.00	2774	103	154
ERA-74	102547.43	2.00	205095	7596	11394
ERA-77	9391.98	2.00	18784	696	1044
ERA-78	17272.47	2.00	34545	1279	1919
ERA-79	55743.58	2.00	111487	4129	6194
ERA-80	290.81	2.00	582	22	32
ERA-81	40518.05	2.00	81036	3001	4502
ERA-82	1289.49	2.00	2579	96	143
ERA-83	14134.72	2.00	28269	1047	1571
ERA-84	31555.02	2.00	63110	2337	3506
<b>Total</b>	<b>1,420,432</b>		<b>2,296,338</b>	<b>85,050</b>	
<b>Total Acres =</b>	<b>32.61</b>		<b>Total Cubic Yards =</b>	<b>85,050</b>	

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>Delta Area</b>					
MX128MX-NT	50335.22	0.37	18624.03	690	1035
MX128MX-TT		2.04	102683.84	3,803	5705
MX189-NT	1494.06	1.50	2241.08	83	125
MX189-TT		4.50	6723.25	249	374
NT/MX105	1053.61	1.50	1580.42	59	88
NT/MX106	481.20	1.00	481.20	18	27
NT/MX107	481.20	0.60	288.72	11	16
NT/MX108	1536.01	0.60	921.60	34	51
NT/MX109	481.20	0.50	240.60	9	13
NT/MX110	6419.13	0.62	3979.86	147	221
NT/MX111	8267.09	1.75	14467.40	536	804
NT/MX113	703.28	0.50	351.64	13	20
NT/MX114	738.89	0.50	369.45	14	21
NT/MX115	527.08	1.50	790.62	29	44
NT/MX116	5677.83	1.00	5677.83	210	315
NT/MX117	556.86	0.50	278.43	10	15
NT/MX118	304.58	1.50	456.88	17	25
NT111R	481.20	1.00	481.20	18	27
NT31	4528.34	0.50	2264.17	84	126
NT32	1195.34	1.00	1195.34	44	66
NT33	6941.73	0.66	4581.54	170	255
NT34	1195.34	1.00	1195.34	44	66
NT35	20644.15	1.00	20644.15	765	1147
TT113R	228.38	0.50	114.19	4	6
TT131R	556.64	1.00	556.64	21	31
TT161	2610.84	0.25	652.71	24	36
TT84	618.38	1.00	618.38	23	34
TT85	2020.95	1.00	2020.95	75	112
TT86	618.38	0.50	309.19	11	17
TT88	287.57	0.50	143.79	5	8
TT89	297.37	0.50	148.69	6	8
TT90	1295.23	5.50	7123.75	264	396
TT91	340.54	1.00	340.54	13	19
TT92	1016.51	1.50	1524.76	56	85
TT93	69246.10	3.17	219510.15	8,130	12195
TT94	556.64	0.50	278.32	10	15
TT97	22916.74	1.12	25666.75	951	1426
TT98	556.64	0.50	278.32	10	15
Sub60-TT	112.52	7.00	787.67	29	44
Sub61-TT	112.52	17.50	1969.17	73	109
Sub62-TT	112.52	7.00	787.67	29	44
Sub63-TT	112.52	6.75	759.54	28	42
Sub64-TT	112.52	13.00	1462.81	54	81
Sub65-NT	112.52	6.50	731.41	27	41
Sub66-NT	1277.47	17.00	21716.97	804	1206
ERA-106	48002.04	2.00	96004.08	3,556	5334
ERA-107	45658.49	2.00	91316.98	3,382	5073
ERA-108	1049.55	2.00	2099.10	78	117
ERA-109	25121.89	2.00	50243.78	1,861	2791

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
ERA-110	11652.97	2.00	23305.94	863	1295
ERA-111	108726.27	2.00	217452.54	8,054	12081
ERA-112	62016.52	2.00	124033.04	4,594	6891
ERA-113	401.79	2.00	803.58	30	45
ERA-114	283.16	2.00	566.32	21	31
ERA-105	5519.73	2.00	11039.46	409	613
ERA-115	21969.41	2.00	43938.82	1,627	2441
Total	549,565		1,138,825	42,179	
<b>Total Acres =</b>	<b>12.62</b>		<b>Total Cubic Yards =</b>	<b>42,179</b>	

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>PLF</b>					
MX168-NT	6677.72	1.07	7145	265	397
MX168-TT		2.64	17629	653	979
MX172-NT	4016.81	0.75	3013	112	167
MX172-TT		1.25	5021	186	279
NT/MX119	262.23	1.00	262	10	15
NT/MX120	407.34	0.50	204	8	11
NT/MX121	345.08	1.00	345	13	19
NT/MX122	5957.71	0.90	5362	199	298
NT/MX123	300.83	0.70	211	8	12
NT166R	425.41	1.00	425	16	24
NT57	703.28	0.50	352	13	20
NT58	652.12	1.00	652	24	36
NT59	703.28	1.50	1055	39	59
TT122	343.82	1.50	516	19	29
TT123	308.13	5.00	1541	57	86
TT124	1595.61	5.25	8377	310	465
TT125	343.82	0.50	172	6	10
TT126	81930.94	2.15	176152	6524	9786
TT127	1370.65	1.00	1371	51	76
SUB100-TT	112.52	14.00	1575	58	88
SUB101-TT	112.52	6.50	731	27	41
SUB102-MX-NT	112.52	2.00	225	8	13
SUB102-MX-TT		5.00	563	21	31
SUB103-NT	112.52	7.90	889	33	49
SUB96-NT	262.23	7.00	1836	68	102
SUB97-TT	112.52	8.00	900	33	50
SUB98-TT	112.52	6.50	731	27	41
SUB99-TT	112.52	6.50	731	27	41
ERA-27	13712.63	2.00	27425	1016	1524
ERA-98	434.57	2.00	869	32	48
ERA-99	3037.19	2.00	6074	225	337
ERA-100	1418.39	2.00	2837	105	158
ERA-101	9738.72	2.00	19477	721	1082
ERA-102	2293.68	2.00	4587	170	255
ERA-28	3381.49	2.00	6763	250	376
<b>Total</b>	<b>141,411</b>		<b>306,018</b>	<b>11,334</b>	
<b>Total Acres =</b>	<b>3.25</b>		<b>Total Cubic Yards =</b>	<b>11,334</b>	

Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>CDF</b>					
MX75-NT	435.65	1.20	522.78	19	29
MX75-TT		0.65	283.17	10	16
MX77-NT	83424.03	1.59	132644.21	4,913	7369
MX77-TT		0.60	50054.42	1,854	2781
NT/MX124	4149.79	4.33	17968.59	666	998
NT/MX125	1382.62	1.00	1382.62	51	77
NT/MX126	3351.05	1.50	5026.58	186	279
NT/MX127	15289.07	2.50	38222.67	1,416	2123
NT/MX128	580.81	1.00	580.81	22	32
NT24	12076.57	1.10	13284.22	492	738
NT25	1284.12	0.05	642.06	24	36
NT26	1567.81	1.00	1567.81	58	87
NT27	6609.84	1.00	6609.84	245	367
NT28	804.40	0.50	402.20	15	22
TT54	1671.33	1.50	2506.99	93	139
TT55	5242.60	0.75	3931.95	146	218
TT56	739.55	1.50	1109.32	41	62
TT57	58837.13	2.70	158860.26	5,884	8826
Sub45MX-NT	220.38	1.00	220.38	8	12
Sub45MX-TT		7.50	1652.87	61	92
Sub46MX-NT	303.02	1.00	303.02	11	17
Sub46MX-TT		10.00	3030.21	112	168
Sub47MX-NT	487.03	1.00	487.03	18	27
Sub47MX-TT		13.00	6331.39	234	352
Sub48-TT	112.52	14.00	1575.34	58	88
Sub49MX-NT	112.52	11.00	1237.76	46	69
Sub49MX-TT		8.50	956.45	35	53
Sub50-NT	1069.44	8.63	9229.31	342	513
Sub51MX-NT	3321.14	4.33	14380.54	533	799
Sub51MX-TT		7.92	26303.44	974	1461
Sub52-NT	112.52	6.50	731.41	27	41
ERA-92	6052.44	2.00	12104.88	448	672
ERA-93	273.55	2.00	547.09	20	30
ERA-94	39749.08	2.00	79498.17	2,944	4417
ERA-95	3832.94	2.00	7665.88	284	426
ERA-96	4081.33	2.00	8162.66	302	453
ERA-97	2619.80	2.00	5239.60	194	291
ERA-103	59365.14	2.00	118730.27	4,397	6596
ERA-104	16570.39	2.00	33140.77	1,227	1841
<b>Total</b>	<b>335,730</b>		<b>767,127</b>	<b>28,412</b>	
<b>Total Acres =</b>	<b>7.71</b>		<b>Total Cubic Yards =</b>	<b>28,412</b>	



Santa Susana Field Laboratory  
Lookup Table/Reporting Limit Exceedances

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cu yd)	Tons (assume 1.5 tons/cy)
<b>R-2 Ponds</b>					
NT/MX129	1260.46	1.50	1891	70	105
NT/MX130	703.28	0.50	352	13	20
NT/MX131	4698.65	1.50	7048	261	392
NT/MX132	103165.99	1.66	171256	6343	9514
NT60	703.28	0.50	352	13	20
NT61	1078.96	1.00	1079	40	60
NT62	2709.44	0.62	1680	62	93
TT128	1000.44	0.50	500	19	28
TT129	1000.44	1.00	1000	37	56
TT130	849.36	1.00	849	31	47
TT131	8178.64	1.00	8179	303	454
TT132	1025.43	1.00	1025	38	57
TT133	336.39	1.00	336	12	19
TT134	1115.82	1.00	1116	41	62
SUB104-NT	1505.01	10.00	15050	557	836
ERA-15	26900.72	2.00	53801	1993	2989
ERA-16	37577.85	2.00	75156	2784	4175
ERA-85	2140.75	2.00	4282	159	238
ERA-86	646.30	2.00	1293	48	72
ERA-87	4113.33	2.00	8227	305	457
ERA-88	1477.54	2.00	2955	109	164
ERA-89	1959.06	2.00	3918	145	218
ERA-90	17405.49	2.00	34811	1289	1934
ERA-91	10363.16	2.00	20726	768	1151
<b>Total</b>	<b>231,916</b>		<b>416,881</b>	<b>15,440</b>	
<b>Total Acres =</b>	<b>5.32</b>		<b>Total Cubic Yards =</b>	<b>15,440</b>	

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**Attachment 2**  
**Summary of Soil Excavation Volumes and**  
**Footprints (All Sites)**  
**Alternative B: Revised LUT Levels Cleanup**

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**ATTACHMENT 2**

**Alternative B: Revised LUT Levels Cleanup**

DESCRIPTION	LOX	A2LF	ELV	AP/STP	Alfa	Bravo	ABFF	SPA	B204	Skyline	HWSA	Coca	Delta	PLF	CDFP	R2Ponds	Totals
Excavation Area (square feet)	237,502	318,561	487,542	202,094	430,722	201,992	70,459	106,763	99,659	140,950	5,337	578,027	227,137	63,589	117,246	110,351	3,397,934
Excavation Area (acres)	5.5	7.3	11.2	4.6	9.9	4.6	1.6	2.5	2.3	3.2	0.1	13.3	5.2	1.5	2.7	2.5	78
Excavation Volume (cubic feet)	906,484	3,788,251	981,077	623,216	979,435	562,265	172,847	279,357	216,414	179,039	5,158	828,036	299,403	135,748	277,931	143,523	10,378,184
Excavation Volume (cubic yards)	33,573	140,306	36,336	23,082	36,275	20,825	6,402	10,346	8,015	6,631	191	30,668	11,089	5,028	10,294	5,316	384,377
Tons (assume 1.5 tons/cubic yard)	50,360	210,458	54,504	34,623	54,413	31,237	9,603	15,520	12,023	9,947	287	46,002	16,633	7,542	15,441	7,974	576,566

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Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX147 -- NT	1025	3.50	3587	133	199
MX147 -- TT		1.00	1025	38	57
MX153	1867	3.25	6069	225	337
MX154 - NT	392	1.00	392	15	22
MX154 - TT		2.00	783	29	44
MX160 -- NT	390	1.00	390	14	22
MX160 -- TT		4.50	1753	65	97
NT/MX45	2451	1.50	3676	136	204
NT/MX46	2143	1.00	2143	79	119
NT/MX47	3005	1.00	3005	111	167
NT/MX48	181	2.50	453	17	25
NT/MX49	11185	2.18	24354	902	1353
NT/MX50	11268	2.25	25352	939	1408
NT/MX51	2089	1.00	2089	77	116
NT129	795	0.50	398	15	22
NT130	4844	1.00	4844	179	269
NT131	2238	0.50	1119	41	62
NT132	508	1.00	508	19	28
NT133	2687	1.50	4031	149	224
NT136	2179	1.50	3268	121	182
NT138	3727	6.00	22363	828	1242
NT141	405	2.00	809	30	45
NT142	713	4.00	2850	106	158
NT143	1647	1.00	1647	61	92
TT167	634.588283	0.50	317	12	18
TT168	6197.762898	1.20	7437	275	413
TT169	2445.540099	1.00	2446	91	136
TT170	872.482629	5.00	4362	162	242
TT171	6589.655953	1.25	8237	305	458
TT172	5994.880936	1.50	8992	333	500
TT173	1965.801977	3.75	7372	273	410
TT174	2767.299087	1.00	2767	102	154
TT177	37814.48295	1.42	53813	1993	2990
TT178	3458.565856	0.50	1729	64	96
TT179	63482.15373	2.23	141777	5251	7876
TT180	416.015602	1.50	624	23	35
TT247	334.294983	3.50	1170	43	65
TT248	349.892517	5.50	1924	71	107
SB58-MX -- NT	855	1.50	1283	48	71
SB58-MX -- TT		8.50	7271	269	404
SB59-TT	1173	10.00	11731	434	652
SB60-NT	3845	14.00	53829	1994	2991
SB61-TT	1229	9.50	11679	433	649
SB62-MX	1670	18.00	30063	1113	1670
SB63-MX	2067	8.25	17055	632	948

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
SB64-TT	2758	6.00	16547	613	919
SB65-NT/MX --	2899	10.00	28993	1074	1611
SB65-NT/MX --TT		4.00	11597	430	644
SB66-TT	26944	10.76	289782	10733	16099
SB67-MX	291	10.00	2907	108	161
SB68-MX -- NT	538	3.50	1883	70	105
SB68-MX -- TT		6.50	3497	130	194
SB82-TT	3096	13.50	41792	1548	2322
SB83-NT	1077	15.50	16699	618	928
<b>Totals</b>	237502		906484	33573	50360
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>5.5</b>		<b>Yards =</b>	<b>33,573</b>	



Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT/MX12	16055	1.57	25229	934	1402
NT/MX13	8780	0.75	6585	244	366
NT/MX14	2848	1.00	2848	105	158
NT/MX15	1715	1.27	2177	81	121
NT/MX16	1537	1.00	1537	57	85
NT/MX17	1481	0.50	741	27	41
NT/MX18	13972	1.00	13972	517	776
NT1	14238	1.50	21356	791	1186
NT2	1684	0.50	842	31	47
NT4	3496	0.81	2840	105	158
NT5	2807	1.00	2807	104	156
NT7	339	1.75	593	22	33
TT3	6849	0.75	5136	190	285
TT5	204	0.72	148	5	8
TT6	1614	1.83	2959	110	164
TT7	1578	1.27	1998	74	111
TT252	113	0.50	56	2	3
<b>NT180-PDA</b>	<b>239251</b>	<b>15.45</b>	<b>3696426</b>	<b>136905</b>	<b>205357</b>
<b>Totals</b>	<b>318561</b>		<b>3788251</b>	<b>140306</b>	<b>210458</b>
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>7.3</b>		<b>Yards =</b>	<b>140,306</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX140	6024	0.666666667	4016	149	223
NT/MX109	2112	0.5	1056	39	59
NT/MX110	4608	1.5	6912	256	384
NT/MX111	3564	0.5	1782	66	99
NT/MX112	4799	0.5	2399	89	133
NT/MX113	5022	1.9	9541	353	530
NT/MX114	6716	0.9	6044	224	336
NT/MX115	5752	1	5752	213	320
NT/MX116	1476	1	1476	55	82
NT/MX117	1355	0.375	508	19	28
NT/MX118	10255	1.333333333	13673	506	760
NT/MX119	2553	1	2553	95	142
NT/MX121	29295	1.5	43943	1628	2441
NT100	3463	1.5	5195	192	289
NT101	1361	4.5	6127	227	340
NT102	5781	0.828571429	4790	177	266
NT103	1357	0.5	679	25	38
NT105	1617	1	1617	60	90
NT107	3254	1	3254	121	181
NT108	6092	1	6092	226	338
NT109	1993	0.5	997	37	55
NT111	1198	1	1198	44	67
NT112	3151	6	18905	700	1050
NT114	735	3.75	2757	102	153
NT118	449	2.5	1122	42	62
NT119	514	0.5	257	10	14
NT120	1533	0.5	766	28	43
NT121	3546	0.7	2482	92	138
NT123	3694	0.5	1847	68	103
NT124	3431	0.5	1716	64	95
NT125	791	0.50	396	15	22
NT126	738	0.50	369	14	21
NT127	7568	0.72	5466	202	304
NT128	2154	0.50	1077	40	60
TT148	5742	2.63	15120	560	840
TT150	1307	4.00	5228	194	290
TT151	3487	2.25	7846	291	436
TT152	1304	1.00	1304	48	72
TT153	5509	0.83	4591	170	255
TT154	3099	0.88	2711	100	151
TT155	10271	0.50	5135	190	285
TT157	6644	1.00	6644	246	369
TT158	26157	2.49	65029	2408	3613
TT159	19854	1.74	34546	1279	1919
TT160	3211	0.50	1606	59	89

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
TT161	7476	3.29	24566	910	1365
TT162	12702	1.00	12702	470	706
TT163	43981	3.15	138541	5131	7697
TT166	162713	1.53	249493	9240	13861
TT246	13372	1.25	16715	619	929
SB41-TT	3726	10.00	37263	1380	2070
SB42-NT	1958	7.00	13708	508	762
SB43-TT	904	16.00	14458	535	803
SB44-MX	1271	10.00	12707	471	706
SB45-TT	1588	7.00	11113	412	617
SB46-TT	2546	8.00	20371	754	1132
SB85-TT	1505	10.00	15054	558	836
SB86-MX	2481	10.00	24807	919	1378
SB87-MX - NT	1272	1.50	1908	71	106
SB87-MX - TT		20.00	25437	942	1413
SB88-TT	1689	10.00	16885	625	938
SB89-TT	2755	9.40	25894	959	1439
SB90-TT	396	5.00	1981	73	110
NT185-PDA	671	1.42	953	35	53
<b>Totals</b>	487542		981077	36336	54504
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>11.2</b>		<b>Yards =</b>	<b>36,336</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX35 -- NT	11339	5.00	56694	2100	3150
MX35 -- TT		3.00	34016	1260	1890
NT/MX31	3161	0.50	5669	210	315
NT/MX32	8096	2.56	20746	768	1153
NT/MX33	731	0.50	365	14	20
NT/MX34	1424	0.80	1139	42	63
NT/MX35	1569	1.50	2354	87	131
NT/MX36	12501	2.78	34768	1288	1932
NT/MX37	2910	1.00	2910	108	162
NT/MX38	3414	0.50	1707	63	95
NT/MX39	5255	2.15	11282	418	627
NT25	10776	1.70	18319	678	1018
NT27	21846	1.80	39417	1460	2190
NT28	510	3.50	1785	66	99
NT29	3083	1.50	4624	171	257
NT30	210	2.50	524	19	29
NT31	2669	1.50	4004	148	222
NT34	1717	0.50	858	32	48
NT36	1668	1.25	2084	77	116
NT37	388	1.00	388	14	22
NT38	1922	1.83	3525	131	196
NT39	798	1.83	1464	54	81
NT40	9805	2.08	20428	757	1135
NT41	794	1.50	1191	44	66
SB6-TT	503	12.50	6286	233	349
SB7-TT	980	11.00	10777	399	599
SB8-TT	716	8.50	6088	225	338
SB9-NT/MX	808	7.50	6064	225	337
SB10-NT	1362	8.00	10900	404	606
SB11-MX	1386	9.50	13165	488	731
SB12-MX	1078	7.00	7549	280	419
SB13-NT	369	7.00	2584	96	144
SB14-MX -- NT	261	1.50	391	14	22
SB14-MX -- TT		18.50	4824	179	268
SB15-MX -- NT	261	1.00	261	10	14
SB15-MX -- TT		11.00	2869	106	159
SB16-TT	3909	6.00	23453	869	1303
SB17-TT	437	15.00	6557	243	364
SB19-TT	3925	19.00	74570	2762	4143
SB20-MX	462	20.00	9249	343	514
SB21-MX	291	15.00	4359	161	242
TT37	739	1.00	739	27	41
TT38	9278	1.00	9278	344	515
TT39	20026	1.60	32042	1187	1780
TT40	7352	2.75	20219	749	1123

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
TT44	13387	2.00	26775	992	1487
TT45	3404	0.75	2553	95	142
TT46	14778	3.70	54678	2025	3038
TT48	4141	2.75	11387	422	633
TT49	5020	1.00	5020	186	279
TT50	636	0.50	318	12	18
<b>Totals</b>	202094		623216	23082	34623
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>4.6</b>		<b>Yards =</b>	<b>23,082</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX23 -- NT	8685.564182	1.00	8686	322	483
MX23 -- TT		1.50	13028	483	724
MX27 -- NT	7943.679004	1.50	11916	441	662
MX27 -- TT		3.00	23831	883	1324
MX29 -- NT	3353.684036	0.60	2012	75	112
MX29 -- TT		4.40	14756	547	820
NT/MX10	513.625018	0.50	257	10	14
NT/MX11	1337.753967	1.00	1338	50	74
NT/MX2	11424.72998	1.50	2007	74	111
NT/MX3	11387.88758	1.25	14235	527	791
NT/MX4	1446.981258	1.00	1447	54	80
NT/MX5	6568.105216	1.00	6568	243	365
NT/MX6	1254.470457	1.00	1254	46	70
NT/MX7	58992.01862	1.70	100069	3706	5559
NT/MX8	761.360643	1.50	1142	42	63
NT/MX9	953.470395	0.75	715	26	40
NT11	1530.130545	1.00	1530	57	85
NT12	2488.820887	0.33	830	31	46
NT13	7398.244105	1.50	11097	411	617
NT14	5677.375114	1.00	5677	210	315
NT19	4993.743354	1.50	7491	277	416
NT22	556.106239	2.50	1390	51	77
NT23	2408.486007	0.50	1204	45	67
NT24	3302.097649	0.50	1651	61	92
SB1-TT	2796.785331	6.83	19111	708	1062
SB2-TT	17013.00106	14.04	238891	8848	13272
SB3-TT	7299.103683	7.67	55980	2073	3110
TT12	4912.870368	0.50	2456	91	136
TT13	11754.33784	0.75	8816	327	490
TT14	797.799397	1.00	798	30	44
TT15	545.664504	1.00	546	20	30
TT16	545.664504	1.00	546	20	30
TT17	16463.41727	1.17	19207	711	1067
TT18	15417.11733	1.20	18501	685	1028
TT19	27325.68316	2.75	75146	2783	4175
TT21	559.694845	1.00	560	21	31
TT23	2669.270688	1.00	2669	99	148
TT24	271.601896	4.75	1290	48	72
TT240	4377.967534	4.50	19701	730	1094
TT241	24600.84543	1.50	36901	1367	2050
TT242	2533.126419	3.50	8866	328	493
TT25	21961.95777	1.44	31647	1172	1758
TT26	1378.438865	2.20	3033	112	168
TT27	600.783597	1.00	601	22	33
TT29	8714.881947	2.75	1652	61	92

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
TT30	27905.23109	1.71	47838	1772	2658
TT31	32784.74972	1.58	51909	1923	2884
TT32	9350.315055	1.00	9350	346	519
TT33	19106.94465	2.33	44583	1651	2477
TT34	16558.71241	1.00	16559	613	920
TT35	4814.655246	3.50	16851	624	936
TT36	2399.214696	2.50	5998	222	333
NT188-PDA	2284	2.32	5299	196	294
<b>Totals</b>	430722		979435	36275	54413
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>9.9</b>		<b>Yards =</b>	<b>36,275</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX55	613.932415	0.25	153	6	9
MX61 - NT	435.726685	0.50	218	8	12
MX61 - TT		3.50	1525	56	85
MX62	383.440542	3.30	1265	47	70
MX63	738.704138	3.75	2770	103	154
MX65 -- NT	4524.338616	0.50	2262	84	126
MX65 -- TT		3.50	15835	586	880
NT/MX24	3358.890007	0.63	2099	78	117
NT/MX25	156.619283	0.50	78	3	4
NT/MX26	1226.269039	1.00	1226	45	68
NT/MX27	2826.317468	1.50	4239	157	236
NT/MX28	4327.622652	1.50	6491	240	361
NT/MX29	2993.321468	2.17	6486	240	360
NT/MX30	4801.827972	1.17	5602	207	311
NT180	4180.735622	6.50	27175	1006	1510
NT50	1869.143975	0.50	935	35	52
NT51	9122.805029	1.30	11860	439	659
NT53	2340.30324	0.50	1170	43	65
NT54	432.051111	0.50	216	8	12
NT55	312.859885	1.50	469	17	26
NT56	8784	1.33	11713	434	651
NT57	4542	0.50	2271	84	126
NT58	740	1.00	740	27	41
SB29-TT	1200	10.33	12395	459	689
SB30-TT	170	6.00	1021	38	57
SB31-TT	170	6.00	1021	38	57
SB32-TT	4779	4.97	23760	880	1320
SB33-TT	283	14.00	3968	147	220
SB34-TT	1036	8.50	8807	326	489
SB35-TT	2883	9.50	27385	1014	1521
SB36-MX	827	13.00	10748	398	597
SB37-TT	5158	8.00	41268	1528	2293
SB38-NT/MX	10124	6.53	66107	2448	3673
SB39-NT/MX	1421	8.00	11367	421	632
SB40-TT	1895	7.00	13263	491	737
TT59	84	5.00	419	16	23
TT60	1619	1.33	2159	80	120
TT61	10638	1.50	15957	591	887
TT62	243	2.00	487	18	27
TT63	50308	2.56	129021	4779	7168
TT64	1061	1.00	1061	39	59
TT65	2015	5.25	10577	392	588
TT66	997	3.00	2991	111	166
TT67	446	4.50	2006	74	111
TT68	374	1.50	561	21	31



Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
TT70	972	0.29	282	10	16
TT73	5898	1.00	5898	218	328
TT74	1494	2.00	2988	111	166
TT75	4880	2.56	12505	463	695
TT78	427	4.00	1708	63	95
TT81	6989	0.75	5242	194	291
TT82	8156	1.00	8156	302	453
TT83	3369	1.00	3369	125	187
TT245	4946	1.00	4946	183	275
TT253	1721	3.40	5851	217	325
TT254	4383	3.00	13149	487	731
NT182-PDA	2314	2.17	5021	186	279
<b>Totals</b>	201992		562265	20825	31237
<b>Total Cubic Yards =</b>					
<b>Total Acres</b>	<b>4.6</b>			<b>20,825</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT/MX19	6795.107355	1.08	7361	273	409
NT/MX20	2842.036008	1.50	4263	158	237
NT/MX21	643.407558	0.50	322	12	18
NT8	515.79418	1.50	774	29	43
SB4-TT	4505.867635	7.06	31791	1177	1766
SB5-MX -- NT	3149.538715	6.50	20472	758	1137
SB5-MX -- TT		3.50	11023	408	612
TT10	5311.495499	3.14	16659	617	925
TT11	610.944734	0.50	305	11	17
TT237	2835.496907	1.25	3544	131	197
TT238	826.747113	1.50	1240	46	69
TT243	4517.807661	2.79	12585	466	699
TT8	12915.74662	0.97	12528	464	696
NT181-PDA	24989	2.00	49978	1851	2777
<b>Totals</b>	70459		172847	6402	9603
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>1.6</b>		<b>Yards =</b>	<b>6,402</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX188 -- NT	929	1.50	1393	52	77
MX188 -- TT		2.00	1858	69	103
MX193 -- NT	560	1.50	839	31	47
MX193 -- TT		4.50	2518	93	140
MX194 -- NT	909	4.50	4092	152	227
MX194 -- TT		0.50	455	17	25
NT/MX71	1251.723208	0.50	626	23	35
NT/MX72	1096.477917	0.50	548	20	30
NT/MX73	3527.789636	3.00	10583	392	588
NT/MX74	699.665553	1.50	1049	39	58
NT/MX75	1196.543128	2.25	2692	100	150
NT166	653	0.50	327	12	18
NT168	1197	1.00	1197	44	66
NT169	4909	2.33	11454	424	636
NT170	560	1.50	840	31	47
NT171	903	0.50	451	17	25
NT173	434	1.00	434	16	24
NT174	307	2.25	690	26	38
NT175	1150	1.50	1725	64	96
NT177	214	1.50	321	12	18
NT178	3844	0.50	1922	71	107
NT179	999	1.50	1499	56	83
TT213	1415	1.50	2123	79	118
TT214	2508	1.00	2508	93	139
TT215	12226	1.17	14264	528	792
TT218	363	5.25	1905	71	106
TT219	40810	2.46	100567	3725	5587
TT223	724	5.00	3621	134	201
TT224	2119	3.00	6356	235	353
TT225	698	0.50	349	13	19
TT227	892	3.50	3122	116	173
TT228	4704	0.50	2352	87	131
TT230	1501	0.80	1201	44	67
TT249	3041	2.67	8108	300	450
TT251	594	1.50	891	33	49
SB71-MX	782	7.00	5474	203	304
SB72-TT	554.98941	7.00	3885	144	216
SB73-TT	440.396654	10.50	4624	171	257
SB74-TT	865.492107	10.00	8655	321	481
SB75-TT	213.790076	10.00	2138	79	119
SB76-TT	182.982529	7.50	1372	51	76
SB77-TT	2556.560306	8.00	20452	757	1136
SB78-TT	553.510977	4.00	2214	82	123
SB79-TT	3191.666752	10.00	31917	1182	1773
SB80-TT	319.368591	7.50	2395	89	133

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
SB81-TT	168.716204	8.00	1350	50	75
<b>Totals</b>	106763		279357	10347	15520
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>2.5</b>		<b>Yards =</b>	<b>10,347</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX51 -- NT	389.302633	0.50	195	7	11
MX51 -- TT		5.00	1947	72	108
NT/MX40	2818.024061	1.00	2818	104	157
NT/MX41	6605.325221	1.67	11009	408	612
NT/MX42	1831.489992	0.50	916	34	51
NT/MX43	4482.498739	0.50	2241	83	125
NT/MX44	1465.314592	3.25	4762	176	265
NT42	12031.90922	1.14	13751	509	764
NT43	730.030643	0.50	365	14	20
NT44	728.78863	1.50	1093	40	61
NT45	1082.894391	1.00	1083	40	60
NT46	539.090346	3.00	1617	60	90
NT47	1497.525093	0.50	749	28	42
NT48	778.404803	1.25	973	36	54
NT49	1175.458591	1.50	1763	65	98
SB22-TT	323.961753	10.00	3240	120	180
SB23-MX	929.511445	11.00	10225	379	568
SB24-TT	323.961753	9.00	2916	108	162
SB25-MX -- NT	392.621721	3.50	1374	51	76
SB25-MX -- TT		10.50	4123	153	229
SB26-TT	323.961753	20.00	6479	240	360
SB27-TT	345.833448	10.00	3458	128	192
SB28-TT	323.961753	17.50	5669	210	315
TT250	419.073008	6.00	2514	93	140
TT52	239.973971	5.00	1200	44	67
TT53	4074.1144	0.92	3735	138	207
TT55	891.630257	1.00	892	33	50
TT56	3200.097861	2.31	7400	274	411
TT58	51714.21873	2.28	117908	4367	6550
<b>Totals</b>	99659		216414	8015	12023
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>2.3</b>		<b>Yards =</b>	<b>8,015</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT/MX62	1352	1.50	2028	75	113
NT/MX63	1352.033898	1.00	1352	50	75
NT/MX64	1352.033899	0.50	676	25	38
NT/MX65	2202.085742	0.75	1652	61	92
NT/MX66	43304.47837	1.17	50522	1871	2807
NT/MX67	2738.588404	4.50	12324	456	685
NT/MX68	2585.535765	0.83	2155	80	120
NT/MX69	7481.405834	0.95	7141	264	397
NT/MX70	1072.983541	1.50	1609	60	89
NT156	1171	0.50	585	22	33
NT157	1290	0.50	645	24	36
NT158	2324	0.50	1162	43	65
NT159	2147	1.50	3220	119	179
NT160	3522	1.00	3522	130	196
NT163	1202	0.75	902	33	50
TT204	38355	1.39	53271	1973	2960
TT207	3493	1.00	3493	129	194
TT208	5289	1.50	7933	294	441
TT209	1327	1.50	1990	74	111
TT210	10940	1.25	13675	506	760
TT211	986	1.00	986	37	55
TT212	5464	1.50	8196	304	455
<b>Totals</b>	140950		179039	6631	9947
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>3.2</b>		<b>Yards =</b>	<b>6,631</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT/MX1	316	0.50	158	6	9
TT231	894	1.00	894	33	50
TT232	1269	1.00	1269	47	70
TT233	207	1.50	310	11	17
TT234	2152	1.00	2152	80	120
TT235	250	0.50	125	5	7
TT236	250	1.00	250	9	14
<b>Totals</b>	5337		5158	191	287
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>0.1</b>		<b>Yards =</b>	<b>191</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX89 -- NT	16916	1.00	16916	627	940
MX89 -- TT		3.00	50747	1880	2819
NT/MX83	903	2.00	1806	67	100
NT/MX84	4209	1.50	6314	234	351
NT/MX85	1052	0.75	789	29	44
NT/MX86	849	0.50	424	16	24
NT/MX87	5624	0.60	3374	125	187
NT/MX88	1590	1.00	1590	59	88
NT/MX89	8832	0.50	4416	164	245
NT/MX90	13705	2.45	33577	1244	1865
NT/MX91	903	1.50	1354	50	75
NT/MX92	13019	0.48	6249	231	347
NT/MX93	16102	1.00	16102	596	895
NT/MX94	681	1.00	681	25	38
NT/MX95	890	1.00	890	33	49
NT/MX96	2023	0.33	668	25	37
NT/MX97	188947	1.09	205240	7601	11402
NT67	1137	1.00	1137	42	63
NT69	851	1.50	1276	47	71
NT70	6848	1.83	12555	465	698
NT71	2191	0.50	1095	41	61
NT72	4984	0.50	2492	92	138
NT74	2888	1.00	2888	107	160
NT76	4100	3.25	13324	493	740
NT79	5478	1.17	6391	237	355
NT81	3338	1.00	3338	124	185
NT82	1365	0.50	682	25	38
NT83	921	1.00	921	34	51
NT84	3361	1.00	3361	124	187
NT86	6291	0.67	4194	155	233
NT87	690	0.75	518	19	29
NT88	3921	1.00	3921	145	218
NT89	2597	0.50	1299	48	72
SB48-MX	2865	7.00	20058	743	1114
SB49-TT	2104	7.50	15776	584	876
SB50-MX	6024	9.32	56150	2080	3119
SB51-TT	320	6.00	1918	71	107
SB52-TT	3360	6.00	20163	747	1120
TT92	34373	1.10	37811	1400	2101
TT93	2713	1.00	2713	100	151
TT94	1646	0.50	823	30	46
TT96	5831	0.50	2916	108	162
TT98	5844	1.00	5844	216	325
TT99	1203	3.00	3609	134	201
TT104	1352	1.00	1352	50	75



Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
TT107	4643	1.00	4643	172	258
TT110	1154	1.00	1154	43	64
TT112	472	1.00	472	17	26
TT113	14244	1.33	18992	703	1055
TT114	1205	1.50	1808	67	100
TT115	414	2.50	1035	38	58
TT116	1429	1.00	1429	53	79
TT119	252	1.00	252	9	14
TT120	24066	0.81	19554	724	1086
TT121	1203	0.75	902	33	50
TT123	1142	1.00	1142	42	63
TT124	1362	1.00	1362	50	76
TT125	128501	1.49	191261	7084	10626
NT184-PDA	3096	1.41	4366	162	243
<b>Totals</b>	<b>578027</b>		<b>828036</b>	<b>30668</b>	<b>46002</b>
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>13.3</b>		<b>Yards =</b>	<b>30,668</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT/MX100	779	0.50	389	14	22
NT/MX101	3080	0.17	513	19	29
NT/MX102	4927	3.90	19214	712	1067
NT/MX103	716	2.50	1790	66	99
NT/MX104	2715	0.25	679	25	38
NT/MX105	557	1.00	557	21	31
NT/MX106	481	1.50	722	27	40
NT/MX107	1056	1.50	1584	59	88
NT/MX108	1642	0.50	821	30	46
NT/MX122	557	1.00	557	21	31
NT/MX98	788	0.60	473	18	26
NT/MX99	1925	1.00	1925	71	107
NT90	4809	0.75	3607	134	200
NT93	903	4.00	3611	134	201
NT94	1430	0.50	715	26	40
NT95	651	0.50	326	12	18
NT96	5883	1.25	7354	272	409
NT97	13737	0.50	6868	254	382
NT181	260	1.50	390	14	22
NT182	481	0.10	48	2	3
SB53-TT	509	5.25	2672	99	148
SB54-TT	2375	14.67	34831	1290	1935
SB55-TT	299	7.25	2168	80	120
SB56-TT	604	6.00	3622	134	201
SB57-TT	2391	3.17	7571	280	421
TT127	481	0.60	289	11	16
TT130	1695	2.75	4662	173	259
TT131	576	5.00	2880	107	160
TT132	62769	1.01	63666	2358	3537
TT134	779	1.00	779	29	43
TT135	22338	1.45	32391	1200	1799
TT137	481	0.60	289	11	16
TT138	3328	0.50	1664	62	92
TT139	557	0.50	278	10	15
TT140	5773	1.70	9814	363	545
TT141	481	1.50	722	27	40
TT142	557	0.50	278	10	15
TT143	22933	0.70	16053	595	892
TT145	9680	0.50	4840	179	269
TT146	40600	1.42	57517	2130	3195
TT147	557	0.50	278	10	15
<b>Totals</b>	227137		299403	11089	16633
<b>Total Acres</b>	<b>5.2</b>		<b>Total Cubic Yards =</b>	<b>11,089</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX163 -- NT	1743	1.00	1743	65	97
MX163 -- TT		3.00	5230	194	291
NT/MX52	425	1.00	425	16	24
NT/MX53	703	1.50	1054	39	59
NT/MX54	703	0.50	352	13	20
NT144	652	0.50	326	12	18
NT147	1097	0.50	549	20	30
TT181	203	1.50	304	11	17
TT182	7017	1.41	9888	366	549
TT183	742	4.25	3154	117	175
TT184	991	6.00	5946	220	330
TT185	344	1.00	344	13	19
TT186	480	1.50	720	27	40
TT187	42495	1.54	65442	2424	3636
TT188	2451	1.33	3268	121	182
SB69-TT	2044	13.00	26578	984	1477
SB70-NT	218	7.00	1524	56	85
SB84-NT/MX	1281	6.95	8902	330	495
<b>Totals</b>	63589		135748	5028	7542
<b>Total Acres</b>	<b>1.5</b>		<b>Total Cubic Yar</b>	<b>5,028</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT/MX76	6086.069982	3.00	18258	676	1014
NT/MX77	14076.43662	0.97	13662	506	759
NT/MX78	4984.494925	1.63	8100	300	450
NT/MX79	491.784051	1.00	492	18	27
NT/MX80	2242.313638	1.00	2242	83	125
NT/MX81	2318.861961	1.50	3478	129	193
NT/MX82	403.026365	1.50	605	22	34
NT59	1714.046794	0.50	857	32	48
NT60	866.990791	6.00	5202	193	289
NT61	1016.132329	1.00	1016	38	56
NT62	961.689283	1.00	962	36	53
NT63	33778.64746	2.18	73518	2723	4084
NT64	938.752004	6.00	5633	209	313
SB47-NT	1250.361302	4.33	5418	201	301
TT84	351.09579	1.00	351	13	20
TT86	1293.115698	0.50	647	24	36
TT87	1818.654331	1.00	1819	67	101
TT88	1346.438797	0.50	673	25	37
TT89	331.23573	3.50	1159	43	64
TT90	6094.153179	1.83	11173	414	621
TT91	16628.08393	2.33	38820	1438	2157
NT183-PDA	18253.79584	4.59	83846	3105	4658
<b>Totals</b>	117246		277931	10294	15441
<b>Total Cubic Yards =</b>					
<b>Total Acres</b>	<b>2.7</b>			<b>10,294</b>	

Santa Susanna Field Laboratory  
Revised Lookup Table

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT/MX55	1174	0.50	587	22	33
NT/MX56	5919.949365	1.50	8880	329	493
NT/MX57	24287.40416	1.88	45734	1694	2541
NT/MX58	738.173455	1.00	738	27	41
NT/MX59	726.598876	0.50	363	13	20
NT/MX60	36123.25464	1.34	48315	1789	2684
NT/MX61	9264.116858	0.85	7839	290	435
NT149	703	0.50	352	13	20
NT150	8335	1.17	9724	360	540
NT151	309	1.20	371	14	21
NT152	1082	1.00	1082	40	60
NT155	525	1.00	525	19	29
TT189	1000	0.50	500	19	28
TT190	1000	1.00	1000	37	56
TT193	13941	0.86	11949	443	664
TT198	1572	0.75	1179	44	65
TT200	483	1.50	725	27	40
TT202	342	1.00	342	13	19
TT203	1182	0.50	591	22	33
NT186-PDA	925	1.66	1535	57	85
NT187-PDA	719	1.66	1193	44	66
<b>Totals</b>	110351		143523	5316	7974
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>2.5</b>		<b>Yards =</b>	<b>5,316</b>	

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**Attachment 3**  
**Summary of Soil Excavation Volumes and**  
**Footprints (All Sites)**  
**Alternative C: Suburban Residential Cleanup**

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**ATTACHMENT 3**

**Alternative C: Suburban Residential Cleanup**

DESCRIPTION	LOX	A2LF	ELV	AP/STP	Alfa	Bravo	ABFF	SPA	B204	Skyline	HWSA	Coca	Delta	PLF	CDFP	R2Ponds	Totals
Excavation Area (square feet)	135,430	345,455	102,500	106,578	204,479	61,625	34,649	22,115	24,677	37,695	3,664	245,100	47,419	18,691	80,027	82,404	1,552,508
Excavation Area (acres)	3.1	7.9	2.4	2.4	4.7	1.4	0.8	0.5	0.6	0.9	0.1	5.6	1.1	0.4	1.8	1.9	36
Excavation Volume (cubic feet)	577,365	3,819,024	171,608	405,694	569,782	141,049	60,538	64,455	22,741	37,649	4,459	447,717	76,693	36,888	117,553	123,921	6,677,137
Excavation Volume (cubic yards)	21,384	141,445	6,356	15,026	21,103	5,224	2,242	2,388	842	1,394	165	16,582	2,840	1,366	4,354	4,590	247,301
Tons (assume 1.5 tons/cubic yard)	32,076	212,168	9,534	22,539	31,655	7,836	3,363	3,581	1,263	2,092	248	24,873	4,261	2,049	6,531	6,885	370,952

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Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX47 -- NT	420	0.50	210	8	12
MX47 -- TT		4.00	1679	62	93
NT/MX11	3400	1.58	5354	198	297
NT/MX12	2363	1.50	3545	131	197
NT/MX31	1868	2.25	4202	156	233
NT145	883	0.50	441	16	25
NT146	2108	1.00	2108	78	117
NT147	2093	0.50	1047	39	58
NT148	2203	1.00	2203	82	122
NT149	603	1.00	603	22	33
NT150	603	1.00	603	22	33
NT151	1199	1.50	1799	67	100
NT152	7831	1.50	11747	435	653
NT153	406	1.00	406	15	23
NT154	1018	1.50	1528	57	85
NT155	826	5.00	4132	153	230
NT156	1250	1.50	1875	69	104
NT157	693	2.25	1560	58	87
NT158	1250	1.00	1250	46	69
TT72	485	1.50	727	27	40
TT73	2937	4.00	11749	435	653
TT74	308	5.00	1541	57	86
TT75	1013	1.50	1519	56	84
TT76	1593	1.00	1593	59	89
TT77	745	1.00	745	28	41
TT79	1608	3.25	5225	194	290
TT80	392	3.00	1175	44	65
TT82	9575	0.75	7181	266	399
TT83	6855	1.00	6855	254	381
TT86	47430	2.73	129445	4794	7191
TT87	203	2.50	507	19	28
TT88	117	0.50	59	2	3
TT111	267	5.00	1336	49	74
TT113	1069	5.75	6148	228	342
TT114	545	4.50	2453	91	136
TT115	1300	4.50	5849	217	325
SB12-TT	22347	11.48	256449	9498	14247
SB13-TT	247	10.00	2472	92	137
SB14-TT	2608	13.50	35204	1304	1956
SB15-TT	267	18.00	4809	178	267
SB41-TT	200	9.00	1798	67	100
SB43-MX -- NT	456	1.00	456	17	25
SB43-MX -- TT		11.48	5231	194	291
<b>Totals</b>	<b>133584</b>		<b>536817</b>	<b>19882</b>	<b>29823</b>
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>3.1</b>		<b>Cubic Yards =</b>	<b>19,882</b>	

Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX5 -- NT	2354	0.50	1177	44	65
MX5 -- TT		3.00	7061	262	392
NT/MX28	2848	1.00	2848	105	158
NT/MX29	1715	1.00	1715	64	95
NT1	1537	1.50	2305	85	128
NT2	1481	1.50	2222	82	123
NT3	13972	0.75	10479	388	582
NT4	14238	1.54	21950	813	1219
NT5	7856	0.50	3928	145	218
NT6	1684	0.75	1263	47	70
NT8	3496	1.50	5244	194	291
NT9	2807	1.25	3509	130	195
NT10	339	2.50	847	31	47
NT186	6849	0.50	3424	127	190
NT187	204	1.00	204	8	11
TT1	1614	0.50	807	30	45
TT2	1578	0.50	789	29	44
TT3	1408	1.00	1408	52	78
TT4	5211	0.50	2606	97	145
TT5	673	3.50	2356	87	131
TT6	11929	1.13	13420	497	746
TT7	17177	1.77	30418	1127	1690
TT8	2399	0.50	1199	44	67
TT10	2234	0.50	1117	41	62
TT11	601	0.50	301	11	17
NT7-PDA	239251	15.45	3696426	136905	205357
<b>Totals</b>	<b>345455</b>		<b>3819024</b>	<b>141445</b>	<b>212168</b>
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>7.9</b>		<b>Cubic Yards =</b>	<b>141,445</b>	

Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX44 -- NT	693	0.75	520	19	29
MX44 -- TT		3.75	2600	96	144
MX46 -- NT	5912	0.67	3942	146	219
MX46 -- TT		2.83	16752	620	931
NT118	779	0.50	390	14	22
NT119	1566	1.00	1566	58	87
NT120	6494	0.83	5380	199	299
NT121	5835	0.50	2918	108	162
NT122	1357	0.50	679	25	38
NT123	4604	0.75	3453	128	192
NT124	4614	1.00	4614	171	256
NT125	2130	1.00	2130	79	118
NT126	1462	1.50	2194	81	122
NT127	2466	1.00	2466	91	137
NT128	1174	3.00	3521	130	196
NT129	1111	1.00	1111	41	62
NT130	1692	1.00	1692	63	94
NT131	2745	0.25	686	25	38
NT132	2236	1.00	2236	83	124
NT133	3268	1.00	3268	121	182
NT134	1521	1.50	2281	84	127
NT135	1314	0.50	657	24	37
NT136	1198	0.50	599	22	33
NT137	5635	0.79	4427	164	246
NT138	2740	0.50	1370	51	76
NT139	6246	1.00	6246	231	347
NT140	2350	0.50	1175	44	65
NT141	1078	0.50	539	20	30
NT142	801	0.50	400	15	22
NT143	6148	0.50	3074	114	171
NT144	813	0.50	406	15	23
TT67	2491	1.00	2491	92	138
TT68	4449	2.50	11122	412	618
TT70	2455	1.50	3683	136	205
TT71	8355	3.75	31332	1160	1741
SB31-TT	1783	8.75	15603	578	867
SB32-TT	2313	10.00	23132	857	1285
NT196-PDA	671	1.42	953	35	53
<b>Totals</b>	<b>102500</b>		<b>171608</b>	<b>6356</b>	<b>9534</b>
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>2.4</b>		<b>Cubic Yards =</b>	<b>6,356</b>	

Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX24 --NT	782	0.50	391	14	22
MX24 --TT		3.50	2737	101	152
NT/MX21	636	5.00	3182	118	177
NT/MX22	4978	1.00	4978	184	277
NT40	958	0.50	479	18	27
NT41	5678	0.83	4732	175	263
NT42	1320	0.50	660	24	37
NT43	1873	1.00	1873	69	104
NT46	24220	1.505	36440	1350	2024
NT47	4123	1.50	6185	229	344
NT48	3054	1.50	4581	170	255
NT49	1113	0.50	557	21	31
NT50	2729	0.50	1365	51	76
NT51	636	0.50	318	12	18
NT52	636	0.80	509	19	28
NT53	6314	2.00	12629	468	702
NT54	3871	1.83	7096	263	394
NT56	1270	1.83	2328	86	129
NT57	10590	1.36	14403	533	800
NT58	1022	1.50	1534	57	85
NT185	2000	1.00	2000	74	111
NT199	3176	1.58	5028	186	279
TT25	5481	1.00	5481	203	304
SB33-MX -- NT	261	1.50	391	14	22
SB33-MX -- TT		22.00	5737	212	319
SB34-NT	609	7.50	4567	169	254
SB35-TT	261	20.00	5215	193	290
SB36-NT	7805	8.17	63737	2361	3541
SB37-NT	291	7.00	2038	75	113
SB38-TT	265	11.00	2920	108	162
SB39-MX -- NT	4901	1.95	9557	354	531
SB39-MX -- TT		15.55	76213	2823	4234
SB40-TT	5087	21.75	110636	4098	6146
SB42-NT/MX	636	8.17	5198	193	289
<b>Totals</b>	106578		405694	15026	22539
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>2.5</b>		<b>Cubic Yards =</b>	<b>15,026</b>	

Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX8 -- NT	1190	1.00	1190	44	66
MX8 -- TT		1.50	1785	66	99
MX11 -- NT	6996	0.58	4058	150	225
MX11 -- TT		2.30	16055	595	892
MX14 -- NT	5210	1.33	6929	257	385
MX14 -- TT		2.84	14779	547	821
NT/MX23	3540	1.50	5310	197	295
NT/MX24	1676	1.66	2783	103	155
NT/MX25	5014	0.50	2507	93	139
NT/MX26	3126	1.00	3126	116	174
NT16	2012	1.00	2012	75	112
NT17	1751	1.00	1751	65	97
NT18	2302	1.00	2302	85	128
NT19	6306	0.63	3941	146	219
NT20	4363	1.50	6545	242	364
NT21	8992	1.50	13488	500	749
NT22	4504	1.50	6757	250	375
NT23	3491	0.50	1746	65	97
NT24	11896	0.88	10409	386	578
NT25	6021	0.63	3763	139	209
NT26	1054	1.00	1054	39	59
NT29	5979	1.25	7474	277	415
NT30	976	0.50	488	18	27
NT32	3443	1.00	3443	128	191
NT33	3701	0.50	1851	69	103
NT34	15312	0.91	13972	517	776
NT35	4267	1.50	6401	237	356
NT36	7625	1.50	11438	424	635
NT37	1325	0.50	662	25	37
NT38	2912	1.00	2912	108	162
TT16	4074	0.38	1548	57	86
TT17	996	1.50	1494	55	83
TT18	9233	0.75	6924	256	385
TT19	1466	4.83	7087	262	394
TT20	19980	3.13	62437	2312	3469
TT21	3367	1.50	5050	187	281
TT22	2516	3.50	8806	326	489
TT24	1872	1.00	1872	69	104
TT117	9574	2.48	23744	879	1319
SB27-TT	11245	15.43	173495	6426	9639
SB28-TT	7449	9.20	68533	2538	3807
SB29-MX -- NT	414	0.88	362	13	20
SB29-MX -- TT		9.13	3776	140	210
SB30-TT	405	10.00	4050	150	225
NT195-PDA	2284	2.32	5299	196	294
<b>Totals</b>	<b>199860</b>		<b>535408</b>	<b>19830</b>	<b>29745</b>
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>4.6</b>		<b>Cubic Yards =</b>	<b>19,830</b>	

Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX31 -- NT	235	0.83	196	7	11
MX31 -- TT		2.17	510	19	28
MX35 -- NT	1217	0.50	609	23	34
MX35 -- TT		2.00	2435	90	135
NT/MX17	373	2.00	745	28	41
NT/MX18	441	0.75	331	12	18
NT66	956	0.50	478	18	27
NT67	3877	1.50	5815	215	323
NT68	1089	1.00	1089	40	60
NT69	353	0.50	177	7	10
NT71	856	1.00	856	32	48
NT72	147	0.50	73	3	4
NT73	3147	1.50	4720	175	262
NT188	15070	0.83	12558	465	698
NT189	14708	0.70	10296	381	572
TT30	463	6.00	2780	103	154
TT31	2600	4.91	12757	472	709
TT32	463	0.50	232	9	13
TT33	463	1.50	695	26	39
TT36	236	2.50	590	22	33
TT37	2633	2.75	7241	268	402
TT38	463	1.50	695	26	39
TT39	463	6.00	2780	103	154
TT40	1488	3.00	4465	165	248
TT42	789	1.50	1184	44	66
TT43	432	4.00	1728	64	96
TT44	1242	5.83	7245	268	403
TT45	427	4.00	1708	63	95
SB21-MX -- NT	1286	1.50	1928	71	107
SB21-MX -- TT		11.50	14785	548	821
SB22-MX -- NT	1584	5.50	8713	323	484
SB22-MX -- TT		3.25	5148	191	286
SB23-TT	303	14.00	4242	157	236
SB24-NT	806	9.00	7250	269	403
SB25-TT	367	10.00	3673	136	204
SB26-TT	331	16.00	5300	196	294
NT70-PDA	2314	2.17	5022	186	279
<b>Totals</b>	<b>61625</b>		<b>141049</b>	<b>5224</b>	<b>7836</b>
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>1.4</b>		<b>Cubic Yards =</b>	<b>5,224</b>	



Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT/MX19	947	0.50	473	18	26
NT11	516	1.50	774	29	43
NT12	947	1.50	1420	53	79
NT13	947	0.50	473	18	26
NT15	5463	1.00	5463	202	303
TT12	194	5.00	972	36	54
TT13	132	5.50	728	27	40
TT14	515	0.50	257	10	14
NT14-PDA	24989	2.00	49978	1851	2777
<b>Totals</b>	34649		60538	2242	3363
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>0.8</b>		<b>Cubic Yards =</b>	<b>2,242</b>	

Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT/MX1	2615	0.50	1308	48	73
NT175	653	0.50	327	12	18
NT176	4941	3.00	14823	549	824
NT177	903	0.50	451	17	25
NT178	304	1.50	456	17	25
NT180	772	0.50	386	14	21
TT100	271	0.50	135	5	8
TT101	245	5.00	1224	45	68
TT103	363	5.50	1996	74	111
TT106	283	4.00	1131	42	63
TT108	364	1.00	364	13	20
TT109	796	0.50	398	15	22
SB1-TT	74	7.00	517	19	29
SB2-TT	395	10.00	3946	146	219
SB3-TT	440	10.50	4624	171	257
SB4-TT	293	8.00	2343	87	130
SB5-TT	1268	8.00	10145	376	564
SB6-TT	302	7.00	2114	78	117
SB7-TT	302	8.00	2416	89	134
SB9-TT	256	7.00	1790	66	99
<b>Totals</b>	15839		50894	1885	2827
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>0.4</b>		<b>Cubic Yards =</b>	<b>1,885</b>	

Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT/MX27	243	1.00	243	9	14
NT59	13534	0.56	7613	282	423
NT60	974	1.50	1461	54	81
NT61	1250	1.50	1876	69	104
NT62	465	0.50	233	9	13
NT63	1764	0.50	882	33	49
NT64	4535	0.81	3685	136	205
NT65	1175	1.50	1763	65	98
SB10-MX -- NT	292	0.81	237	9	13
SB10-MX -- TT		10.19	2973	110	165
<b>Totals</b>	<b>24233</b>		<b>20966</b>	<b>777</b>	<b>1165</b>
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>0.6</b>		<b>Cubic Yards =</b>	<b>777</b>	

Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT/MX13	1202	1.50	1802	67	100
NT/MX14	3958	0.50	1979	73	110
NT/MX15	6165	1.50	9247	342	514
NT167	1321	0.50	660	24	37
NT168	10556	0.90	9500	352	528
NT169	1394	0.75	1046	39	58
NT170	1019	0.50	509	19	28
NT171	1617	0.75	1213	45	67
NT172	1205	1.50	1807	67	100
NT173	1250	1.50	1875	69	104
NT174	848	1.00	848	31	47
TT95	5692	1.00	5692	211	316
TT97	1470	1.00	1470	54	82
<b>Totals</b>	<b>37695</b>		<b>37649</b>	<b>1394</b>	<b>2092</b>
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>0.9</b>		<b>Cubic Yards =</b>	<b>1,394</b>	

Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT181	580	2.00	1160	43	64
NT182	274	0.50	137	5	8
NT183	2810	1.13	3161	117	176
<b>Totals</b>	3664		4459	165	248
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>0.1</b>		<b>Cubic Yards =</b>	<b>165</b>	

Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX39 -- NT	3541	0.10	354	13	20
MX39 -- TT		3.90	13811	512	767
NT/MX16	47475	1.38	65279	2418	3627
NT83	2691	1.50	4037	150	224
NT84	1139	0.75	854	32	47
NT85	637	1.00	637	24	35
NT86	2100	1.50	3150	117	175
NT87	8594	1.50	12891	477	716
NT88	7253	1.00	7253	269	403
NT89	6819	0.75	5114	189	284
NT90	2495	1.25	3118	115	173
NT91	2481	0.75	1861	69	103
NT93	1287	0.33	425	16	24
NT94	2486	0.50	1243	46	69
NT95	11015	1.00	11015	408	612
NT96	6992	1.00	6992	259	388
NT97	1929	1.50	2893	107	161
NT98	1117	0.50	558	21	31
NT99	56502	0.86	48430	1794	2691
NT100	690	0.75	518	19	29
NT101	1585	1.00	1585	59	88
NT103	8490	0.75	6367	236	354
NT104	1030	0.50	515	19	29
NT105	762	1.00	762	28	42
NT184	1229	0.50	614	23	34
NT193	7304	2.00	14608	541	812
NT194	4630	2.00	9261	343	514
TT50	2851	1.00	2851	106	158
TT51	5335	5.00	26675	988	1482
TT52	9945	2.50	24862	921	1381
TT53	2982	1.00	2982	110	166
TT54	4384	0.50	2192	81	122
TT112	2172	1.00	2172	80	121
TT116	3992	3.00	11977	444	665
SB16-TT	7557	12.00	90682	3359	5038
NT102-PDA	3096	1.41	4366	162	243
<b>Totals</b>	<b>234590</b>		<b>392906</b>	<b>14552</b>	<b>21828</b>
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>5.4</b>		<b>Cubic Yards =</b>	<b>14,552</b>	

Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT106	481	0.60	289	11	16
NT107	2061	1.00	2061	76	114
NT108	4566	0.75	3425	127	190
NT109	1753	0.10	175	6	10
NT110	481	0.10	48	2	3
NT111	4772	5.50	26245	972	1458
NT112	481	0.50	241	9	13
NT113	2346	0.50	1173	43	65
NT114	1108	1.50	1662	62	92
NT115	4047	1.00	4047	150	225
NT116	1108	1.00	1108	41	62
NT117	13688	0.50	6844	253	380
TT55	481	1.50	722	27	40
TT57	299	4.00	1196	44	66
TT58	1180	5.50	6487	240	360
TT59	2041	0.10	204	8	11
TT60	481	0.50	241	9	13
TT62	675	0.50	338	13	19
TT63	1015	0.50	508	19	28
TT64	1831	2.67	4883	181	271
SB17-TT	112	10.00	1118	41	62
SB18-TT	169	18.00	3035	112	169
SB19-TT	880	8.00	7041	261	391
SB20-TT	299	8.50	2541	94	141
<b>Totals</b>	46355		75630	2801	4202
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>1.1</b>		<b>Cubic Yards =</b>	<b>2,801</b>	

Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT/MX2	770	1.00	770	29	43
NT159	703	0.50	352	13	20
NT160	934	1.00	934	35	52
TT89	1181	1.00	1181	44	66
TT90	202	1.00	202	7	11
TT91	6181	1.70	10476	388	582
TT92	4848	1.67	8079	299	449
SB8-NT	1597	7.90	12618	467	701
<b>Totals</b>	16416		34613	1282	1923
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>0.4</b>		<b>Cubic Yards =</b>	<b>1,282</b>	



Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT74	660	0.50	330	12	18
NT75	711	0.50	355	13	20
NT76	987	1.00	987	37	55
NT77	1121	1.00	1121	42	62
NT79	1709	1.00	1709	63	95
NT80	323	0.50	161	6	9
NT81	1258	1.50	1888	70	105
NT82	1207	1.00	1207	45	67
NT190	43112	1.36	58789	2177	3266
NT191	504	1.00	504	19	28
NT192	4192	0.63	2620	97	146
TT47	907	1.50	1360	50	76
TT48	3119	3.25	10136	375	563
NT78-PDA	18254	1.89	34421	1275	1912
<b>Totals</b>	<b>78064</b>		<b>115590</b>	<b>4281</b>	<b>6422</b>
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>1.8</b>		<b>Cubic Yards =</b>	<b>4,281</b>	

Santa Susanna Field Laboratory  
Suburban Residential Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT/MX10	818	0.75	613	23	34
NT/MX3	1051	1.00	1051	39	58
NT/MX4	1055	4.00	4219	156	234
NT/MX5	4355	0.67	2903	108	161
NT/MX6	1017	1.90	1932	72	107
NT/MX7	607	0.50	303	11	17
NT/MX9	2019	1.50	3029	112	168
NT162	703	0.50	352	13	20
NT163	1199	0.50	600	22	33
NT164	3281	1.50	4922	182	273
NT165	58665	1.55	91185	3377	5066
TT93	1120	1.00	1120	41	62
TT94	763	1.00	763	28	42
SB11-MX -- NT	482	1.00	482	18	27
SB11-MX -- TT		8.50	4094	152	227
NT197-PDA	925	1.66	1535	57	85
NT198-PDA	719	1.66	1193	44	66
<b>Totals</b>	<b>78778</b>		<b>120295</b>	<b>4455</b>	<b>6683</b>
<b>HHRA/ERA</b>					
<b>Total Acres</b>	<b>1.8</b>		<b>Cubic Yards =</b>	<b>4,455</b>	

**Attachment 4**  
**Summary of Soil Excavation Volumes and**  
**Footprints (All Sites)**  
**Alternative D: Recreational Cleanup**

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**ATTACHMENT 4**

**Alternative D: Recreational Cleanup**

DESCRIPTION	LOX	A2LF	ELV	AP/STP	Alfa	Bravo	ABFF	SPA	B204	Skyline	HWSA	Coca	Delta	PLF	CDFP	R2Ponds	Totals
Excavation Area (square feet)	63,115	307,759	70,375	61,757	140,874	38,999	32,960	13,601	18,051	32,414	3,332	159,692	30,242	10,152	69,753	76,954	1,130,029
Excavation Area (acres)	1.4	7.1	1.6	1.4	3.2	0.9	0.8	0.3	0.4	0.7	0.1	3.7	0.7	0.2	1.6	1.8	26
Excavation Volume (cubic feet)	102,543	3,758,846	66,606	71,830	190,756	51,375	57,697	18,345	16,206	31,930	3,827	207,680	22,592	8,929	66,641	89,445	4,765,245
Excavation Volume (cubic yards)	3,798	139,217	2,467	2,660	7,065	1,903	2,136	679	600	1,183	142	7,692	837	331	2,468	3,313	176,491
Tons (assume 1.5 tons/cubic yard)	5,697	208,825	3,700	3,991	10,598	2,854	3,205	1,019	900	1,774	213	11,538	1,255	496	3,702	4,969	264,736

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Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX21 -- NT	796	0.75	597	22	33
MX21 --TT		0.00	0	0	0
MX22	413	1.00	413	15	23
MX23	2258	1.50	3387	125	188
MX25	3780	1.58	5954	221	331
NT124	971	0.50	485	18	27
NT125	2189	0.50	1094	41	61
NT126	2503	1.00	2503	93	139
NT127	2628	1.00	2628	97	146
NT128	508	1.00	508	19	28
NT129	508	1.00	508	19	28
NT130	1073	1.50	1610	60	89
NT131	8088	1.50	12133	449	674
NT132	726	1.00	726	27	40
NT134	1240	1.50	1860	69	103
NT135	0	0.33	0	0	0
NT136	537	2.00	1073	40	60
NT137	1346	1.50	2019	75	112
NT138	1567	1.00	1567	58	87
NT139	522	1.00	522	19	29
TT34	1614	0.50	807	30	45
TT35	989	2.00	1978	73	110
TT36	2486	1.00	2486	92	138
TT37	628	0.50	314	12	17
TT38	5710	2.50	14276	529	793
TT39	902	1.50	1352	50	75
TT40	2812	1.00	2812	104	156
TT42	376	0.50	188	7	10
TT43	734	0.50	367	14	20
TT50	409	4.50	1842	68	102
TT51	1119	2.00	2238	83	124
TT52	945	2.00	1891	70	105
SB5-TT	2362	4.36	10290	381	572
LCH3	8236	1.00	8236	305	458
LCH2	682	7.52	5128	190	285
LCH1	1458	6.00	8751	324	486
<b>Totals</b>	<b>63115</b>		<b>102543</b>	<b>3798</b>	<b>5697</b>
<b>Total Cubic Yards = 3,798</b>					
<b>Total Acres</b>	<b>1.5</b>				

Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT1	1565	1.50	2347	86.94	130
NT2	7780	0.50	3890	144.08	216
NT3	3057	2.33	7133	264.20	396
NT4	11641	0.75	8731	323.36	485
NT5	4393	0.63	2746	101.69	153
NT6	278	1.00	278	10.29	15
NT7	516	0.75	387	14.33	21
NT8	7917	0.50	3959	146.61	220
NT9	6299	1.33	8399	311.06	467
NT11	5410	1.17	6312	233.79	351
NT12	1988	0.50	994	36.82	55
TT1	1281	0.50	641	23.72	36
TT2	2593	0.50	1297	48.02	72
TT3	429	3.50	1502	55.62	83
TT4	1405	1.67	2341	86.70	130
TT5	7525	1.17	8779	325.14	488
TT6 (1941)	577	0.50	289	10.69	16
TT6 (1943)	685	1.19	814	30.14	45
TT7	2543	0.50	1272	47.09	71
TT8	625	0.50	313	11.58	17
<b>NT167-PDA</b>	<b>239251</b>	<b>15.45</b>	<b>3696426</b>	<b>136904.65</b>	<b>205357</b>
<b>Totals</b>	<b>307759</b>		<b>3758846</b>	<b>139217</b>	<b>208825</b>
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>7.1</b>		<b>Yards =</b>	<b>139,217</b>	



Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT103	992	0.50	496	18	28
NT104	1266	1.00	1266	47	70
NT105	1259	0.50	630	23	35
NT106	1259	0.50	630	23	35
NT107	1357	0.50	679	25	38
NT108	6972	0.75	5229	194	290
NT109	1612	1.00	1612	60	90
NT110	514	1.00	514	19	29
NT111	514	0.25	129	5	7
NT112	1169	1.00	1169	43	65
NT113	1636	1.00	1636	61	91
NT114	514	0.50	257	10	14
NT115	514	0.50	257	10	14
NT116	3374	0.83	2811	104	156
NT117	1661	0.50	831	31	46
NT118	6329	1.00	6329	234	352
NT119 (177)	2215	0.50	1108	41	62
NT119 (1966)	1478	1.50	2217	82	123
NT120	462	0.50	231	9	13
NT121	791	0.50	396	15	22
NT122	7592	0.50	3796	141	211
NT123	1522	0.50	761	28	42
NT196	6683	0.75	5012	186	278
NT195	3175	1.00	3175	118	176
NT197	5954	0.90	5359	198	298
NT198	514	1.00	514	19	29
NT199	166	3.00	497	18	28
TT30	3197	1.00	3197	118	178
TT32	974	1.50	1461	54	81
TT33	4037	3.33	13455	498	748
SB6-TT	0	5.00	0	0	0
SB7-TT	0	5.00	0	0	0
NT170-PDA	671	1.42	953	35	53
<b>Totals</b>	70375		66606	2467	3700
<b>Total Cubic Yards = 2,467</b>					
<b>Total Acres</b>	<b>1.6</b>				

Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX9	2014	0.50	1007	37	56
NT37	936	0.50	468	17	26
NT38	5700	1.00	5700	211	317
NT39	22030	1.31	28832	1068	1602
NT40	2535	0.50	1268	47	70
NT41	533	1.50	799	30	44
NT42	2567	1.50	3851	143	214
NT43	2661	0.50	1331	49	74
NT44	1442	2.75	3965	147	220
NT45	1130	0.50	565	21	31
NT46	1459	0.50	729	27	41
NT47	478	0.50	239	9	13
NT48	636	0.80	509	19	28
NT49	2052	1.00	2052	76	114
NT50	982	1.50	1472	55	82
NT51	703	1.00	703	26	39
NT52	1083	1.50	1624	60	90
NT53	7970	1.50	11955	443	664
NT54	805	1.50	1208	45	67
NT186	3066	1.00	3066	114	170
NT187	975	0.50	487	18	27
SB2-TT	0	5.00	0	0	0
<b>Totals</b>	<b>61757</b>		<b>71830</b>	<b>2660</b>	<b>3991</b>
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>1.4</b>		<b>Yards =</b>	<b>2,660</b>	

Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX4	1963	1.00	1963	73	109
MX5	4195	0.50	2097	78	117
MX7	2136	1.33	2840	105	158
MX8	1059	2.00	2118	78	118
NT18	1657	1.00	1657	61	92
NT19	4892	0.63	3057	113	170
NT20	3101	1.50	4651	172	258
NT21	9115	1.50	13673	506	760
NT22	3957	1.50	5936	220	330
NT23	3956	0.50	1978	73	110
NT24	9761	0.90	8785	325	488
NT25	1406	1.00	1406	52	78
NT26	10058	0.63	6286	233	349
NT27	798	0.50	399	15	22
NT28	6543	1.25	8179	303	454
NT29	841	1.66	1396	52	78
NT30	10332	0.66	6840	253	380
NT31	2132	1.50	3198	118	178
NT32	3018	1.00	3018	112	168
NT33	5245	0.70	3672	136	204
NT34	3737	1.50	5605	208	311
NT35	9051	1.50	13576	503	754
NT36	2566	1.00	2566	95	143
NT188	1473	1.00	1473	55	82
NT189	2008	1.00	2008	74	112
TT9	5154	0.38	1959	73	109
TT10	4880	1.00	4880	181	271
TT11	3809	1.96	7465	276	415
TT12	2673	4.83	12922	479	718
TT13	7189	2.50	17974	666	999
TT14	1993	1.00	1993	74	111
SB1-TT	0	5.00	0	0	0
SB8-TT	0	3.00	0	0	0
NT171-PDA	2284	2.32	5299	196	294
LCH4	2122	3.00	6366	236	354
LCH5	2122	4.00	8488	314	472
LCH6	2017	4.57	9216	341	512
LCH7	705	3.00	2116	78	118
LCH8	925	4.00	3700	137	206
<b>Totals</b>	<b>140874</b>		<b>190756</b>	<b>7065</b>	<b>10598</b>
<b>Total Cubic Yards = 7,065</b>					
<b>Total Acres</b>	<b>3.2</b>				

Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT61	2315	0.50	1157	43	64
NT62	1081	1.00	1081	40	60
NT63	603	0.50	302	11	17
NT64	6014	1.00	6014	223	334
NT65	993	1.00	993	37	55
NT66	267	0.50	134	5	7
NT67	3068	1.50	4602	170	256
NT178	12387	0.88	10839	401	602
NT192	2185	0.67	1457	54	81
NT193	1059	0.50	529	20	29
NT194	2045	1.50	3068	114	170
TT17	1459	5.05	7369	273	409
TT18	970	3.00	2910	108	162
TT19	1271	3.50	4449	165	247
TT20	0	6.00	0	0	0
TT53	580	1.50	870	32	48
TT20	387	1.50	581	22	32
SB3-TT	0	6.00	0	0	0
NT172-PDA	2314	2.17	5021	186	279
<b>Totals</b>	<b>38999</b>		<b>51375</b>	<b>1903</b>	<b>2854</b>
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>0.9</b>		<b>Yards =</b>	<b>1,903</b>	

Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT13	512	1.50	768	28	43
NT14	643	0.50	322	12	18
NT15	419	1.50	629	23	35
NT16	791	0.50	396	15	22
NT17	5605	1.00	5605	208	311
NT169-PDA	24989	2.00	49978	1851	2777
<b>Totals</b>	<b>32960</b>		<b>57697</b>	<b>2137</b>	<b>3205</b>
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>0.8</b>		<b>Yards =</b>	<b>2,137</b>	

Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT158	653	0.50	327	12	18
NT159	4881.98	1.00	4882	181	271
NT160	902.972416	0.50	451	17	25
NT161	304	1.50	456	17	25
NT162	921.89	0.50	461	17	26
NT163	772	0.50	386	14	21
TT48	0	8.00	0	0	0
TT49	608	0.50	304	11	17
LCH21	1198	1.00	1198	44	67
LCH24	1171	5.00	5854	217	325
LCH25	1237	2.00	2475	92	137
LCH23	601	2.00	1202	45	67
LCH22	349	1.00	349	13	19
<b>Totals</b>	13601		18345	679	1019
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>0.3</b>		<b>Yards =</b>	<b>679</b>	

Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX10	423	1.00	423	16	24
NT55	6265.25	0.50	3133	116	174
NT56	1144.46	1.50	1717	64	95
NT57	1620.72	1.50	2431	90	135
NT58	444.7	0.50	222	8	12
NT58	1777.78	0.50	889	33	49
NT59	4759.27	0.81	3867	143	215
NT60	1175.458591	1.50	1763	65	98
LCH20	440.17	4.00	1761	65	98
<b>Totals</b>	18051		16206	600	900
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>0.4</b>		<b>Yards =</b>	<b>600</b>	

Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX32	1233	1.5	1850	69	103
MX33	3749	0.5	1875	69	104
NT149	1248	0.50	624	23	35
NT150	6454	1.50	9681	359	538
NT151	7001	0.75	5250	194	292
NT152	670	0.75	502	19	28
NT153	2025	0.75	1519	56	84
NT154	721	0.50	360	13	20
NT155	981	1.50	1472	55	82
NT156	928	1.50	1393	52	77
NT157	450	1.00	450	17	25
TT47	6953	1.00	6953	258	386
<b>Totals</b>	<b>32414</b>		<b>31930</b>	<b>1183</b>	<b>1774</b>
<b>Total Cubic Yards =</b>					
<b>Total Acres</b>	<b>0.7</b>			<b>1,183</b>	



Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT164	313	0.50	156	6	9
NT165	313	2.00	625	23	35
NT166	2706.97	1.13	3045	113	169
<b>Totals</b>	3332		3827	142	213
<b>Total Cubic Yards =</b>					
<b>Total Acres</b>	<b>0.1</b>			<b>142</b>	

Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX15	12503	0.88	10940	405	608
MX17	5129	0.50	2565	95	142
NT78	3393	1.50	5090	189	283
NT79	2100	0.75	1575	58	87
NT80	2100	1.50	3150	117	175
NT81	2299	1.00	2299	85	128
NT82	1731	1.50	2596	96	144
NT83	13817	0.44	6125	227	340
NT84	1313	1.50	1970	73	109
NT85	2100	0.50	1050	39	58
NT86	2100	1.00	2100	78	117
NT87	50554	0.86	43332	1605	2407
NT88	2100	0.75	1575	58	87
NT89	2100	1.00	2100	78	117
NT90	3002	2.00	6005	222	334
NT91	1916	0.50	958	35	53
NT92	1030	0.50	515	19	29
NT93	1030	1.00	1030	38	57
NT179	1890	2.00	3780	140	210
NT180	2177	0.50	1089	40	60
NT181	2100	1.00	2100	78	117
NT182	6867	1.00	6867	254	381
NT183	5675	0.75	4256	158	236
NT184	2299	1.50	3448	128	192
NT185	2299	1.50	3448	128	192
TT23	4498	1.00	4498	167	250
TT25	2100	2.00	4200	156	233
TT26	0	2.50	0	0	0
SB4-TT	0	6.00	0	0	0
NT174-PDA	3095	1.41	4364	162	242
LCH15	9321	5.00	46603	1726	2589
LCH16	2100	7.00	14699	544	817
LCH17	2100	5.00	10499	389	583
LCH18	2855	1.00	2855	106	159
<b>Totals</b>	159692		207680	7692	11538
<b>Total Acres</b>	<b>3.7</b>		<b>Total Cubic Yards =</b>	<b>7,692</b>	

Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT94	481	0.60	289	11	16
NT95	2099	1.00	2099	78	117
NT96	4144	0.75	3108	115	173
NT97	1066	0.10	107	4	6
NT98	481	0.10	48	2	3
NT99	3513	1.00	3513	130	195
NT100	393	0.50	196	7	11
NT101	3396	1.00	3396	126	189
NT102	9127	0.50	4564	169	254
NT190	2220	0.50	1110	41	62
NT191	776	1.00	776	29	43
TT27	481	1.50	722	27	40
TT28	481	0.50	241	9	13
TT29	840	2.00	1681	62	93
LCH14	743	1.00	743	28	41
<b>Totals</b>	30242		22592	837	1255
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>0.7</b>		<b>Yards =</b>	<b>837</b>	

Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX28	643	1	643	24	36
NT140	703	0.50	352	13	20
NT141	1064	1.00	1064	39	59
NT142	1442	1.00	1442	53	80
TT44	4203	0.79	3331	123	185
LCH13	2097	1.00	2097	78	116
<b>Totals</b>	10152		8929	331	496
<b>Total Cubic Yards = 331</b>					
<b>Total Acres</b>	<b>0.2</b>				

Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
NT68	772	0.50	386	14	21
NT69	772	0.50	386	14	21
NT70	944	0.50	472	17	26
NT71	693.58	1.00	694	26	39
NT72	684.53	1.00	685	25	38
NT73	641.22	1.00	641	24	36
NT74	40437.58	1.07	43075	1595	2393
NT75	1541.72	1.00	1542	57	86
NT76	381.937503	0.50	191	7	11
NT77	1093.54	1.00	1094	41	61
TT21	619	1.50	928	34	52
TT22	1461	2.00	2923	108	162
NT168-PDA	18254	0.67	12169	451	676
LCH9	1456	1.00	1456	54	81
<b>Totals</b>	69753		66641	2468	3702
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>1.6</b>		<b>Yards =</b>	<b>2,468</b>	

Santa Susanne Field Laboratory  
Recreational Cleanup

Individual Soil Remediation Areas	Area (sq ft)	Depth (ft)	Volume (cu ft)	Volume (cy)	Tons (assume 1.5 tons/cy)
MX30	7567	0.75	5675	210	315
MX31	919	1.00	919	34	51
NT143	703	0.50	352	13	20
NT144	542	0.50	271	10	15
NT145	3281.023022	1.50	4922	182	273
NT146	15485.39	1.07	16591	614	922
NT147	40846.74	1.25	51058	1891	2837
NT148	486	0.50	243	9	13
TT45	2411	1.50	3616	134	201
NT175-PDA	925	1.66	1535	57	85
NT175-PDA	719	1.66	1193	44	66
LCH12	1733	1.00	1733	64	96
LCH11	1337	1.00	1337	50	74
<b>Totals</b>	76954		89445	3313	4969
<b>Total Cubic</b>					
<b>Total Acres</b>	<b>1.8</b>		<b>Yards =</b>	<b>3,313</b>	