

T A B L E S

TABLE 1
Summary of Scrape Area and Confirmation Sampling Information for Parcels

Parcel	BEC Samples with BCL or Remediation Goal Exceedances (BEC, 2008)	Compounds Detected Above Remediation Goals or BCL	Confirmation Sample Identifier (Northgate, 2010)	Scrape Depth (feet)	Net Tonnage of Soil Removed (disposed weight)
C	TSB-CR-02	Amphibole= 1 fiber	E1-PC-1-1-0.0	1	2,751.65
	TSB-CR-03	Chrysotile=7 fibers	G1-PC-1-1-0.0	0.4	
	TSB-CJ-03	Amphibole=1 fiber	H2-PC-1-1-0.0	0.4	
	TSB-CR-07	Dioxins=1,521 pg/g	I6-PC-1-1-0.0	0.5	
D	TSB-DR-04	Chrysotile=4 fibers	F4-PD-1-1-0.0	0.4	139.9
F	TSB-FJ-01	Chrysotile=15 fibers	P2-PF-1-1-0.0	0.7	5,895.02
	TSB-FJ-02	Chrysotile=20 fibers	P3-PF-2-1-0.0	0.3	
		Arsenic=11.3 mg/kg			
	TSB-FJ-03	Chrysotile=8 fibers	P4-PF-1-1-0.0	0.6	
	TSB-FJ-05	Amphibole=1 fiber	P4-PH-1-1-0.0	0.6	
	TSB-FJ-06	Amphibole=1 fiber	Q3-PF-1-1-0.0	0.9	
	TSB-FJ-07	Amphibole=4 fibers	Q2-PF-1-1-0.0	0.2	
	TSB-FJ-08	Amphibole=3 fibers	P3-PF-1-1-0.0	0.9	
	TSB-FR-02	Chrysotile=7 fibers	Q3-PF-3-1-0.0	0.7	
		Aroclor 1254=0.76 mg/kg			
Benzo(a)pyrene=0.85 mg/kg					
Benzo(b)fluoranthene=3.3 mg/kg					
Dibenzo(a,h)anthracene=0.57 mg/kg					
G	TSB-GJ-04	Amphibole=1 fiber	S2-PG-1-1-0.0	0.3	1,588.56
	TSB-GJ-06	Benzo(a)pyrene=0.99 mg/kg	S3-PG-2-0.0	0.3	
	TSB-GJ-09	Amphibole=13 fibers	S3-PG-1-1-0.0	0.4	
H	TSB-HJ-09	Amphibole=2 fibers	W4-PH-1-1-0.0	0.3	886.93
	TSB-HR-06	Chrysotile=8 fibers	VS-PH-1-1-0.0	0.7	

TABLE 2
Parcel Soil Data Results Summary - Organics and General Chemistry

Parameter of Interest	Chemical	Result Unit	Total Count	Detect Count	Detect Frequency	Min. Detect	Max. Detect	Location of Max. Detect	Min. Non-Detect Limit	Max. Non-Detect Limit	NDEP 2010 Worker BCL ^a	Basis	Count of Detects > NDEP Worker BCL	Count of Non-Detects > NDEP Worker BCL	NDEP 2010 LBCL - DAF1 ^a	Count of Detects > NDPE LBCL - DAF 1	NDEP 2010 LBCL - DAF 20 ^a	Count of Detects > NDEP LBCL - DAF 20
Organochlorine Pesticides	4,4'-DDD	mg/kg	157	4	3%	0.0019	0.013	TSB-FR-02	0.0017	0.14	11.1	C	0	0	0.8	0	16	0
	4,4'-DDE	mg/kg	157	43	27%	0.0018	0.91	TSB-GJ-03	0.0017	0.14	7.81	C	0	0	3	0	60	0
	4,4'-DDT	mg/kg	157	37	24%	0.0018	0.61	TSB-GJ-03	0.0017	0.14	7.81	C	0	0	2	0	40	0
	Aldrin	mg/kg	157	0	0%	--	--	--	0.0017	0.14	0.113	C	0	1	0.02	0	0.4	0
	Alpha-BHC	mg/kg	157	11	7%	0.002	0.059	TSB-FR-01	0.0017	0.14	0.399	C	0	0	0.00003	11	0.0006	11
	Alpha-chlordane	mg/kg	157	0	0%	--	--	--	0.0017	0.14	--	--	--	--	--	--	--	--
	Beta-BHC	mg/kg	157	53	34%	0.0018	0.18	TSB-CR-06	0.0017	0.14	1.4	C	0	0	0.0001	53	0.002	47
	Delta-BHC	mg/kg	157	0	0%	--	--	--	0.0017	0.14	--	--	--	--	--	--	--	--
	Dieldrin	mg/kg	157	0	0%	--	--	--	0.0017	0.14	0.12	C	0	1	0.0002	0	0.004	0
	Endosulfan I	mg/kg	157	0	0%	--	--	--	0.0017	0.14	--	--	--	--	--	--	--	--
	Endosulfan II	mg/kg	157	0	0%	--	--	--	0.0017	0.14	--	--	--	--	--	--	--	--
	Endosulfan Sulfate	mg/kg	157	0	0%	--	--	--	0.0017	0.14	--	--	--	--	--	--	--	--
	Endrin	mg/kg	157	0	0%	--	--	--	0.0017	0.14	205	N	0	0	0.05	0	1	0
	Endrin Aldehyde	mg/kg	157	3	2%	0.0029	0.02	TSB-FJ-05	0.0017	0.14	--	--	--	--	--	--	--	--
	Endrin Ketone	mg/kg	157	0	0%	--	--	--	0.0017	0.14	--	--	--	--	--	--	--	--
	Gamma-BHC (Lindane)	mg/kg	157	1	1%	0.013	0.013	TSB-CJ-04	0.0017	0.14	1.93	C	0	0	0.0005	1	0.01	1
	Gamma-chlordane	mg/kg	157	1	1%	0.004	0.004	TSB-CR-06	0.0017	0.14	--	--	--	--	--	--	--	--
	Heptachlor	mg/kg	157	0	0%	--	--	--	0.0017	0.14	0.426	C	0	0	1	0	20	0
	Heptachlor Epoxide	mg/kg	157	0	0%	--	--	--	0.0017	0.14	0.21	C	0	0	0.03	0	0.6	0
	Methoxychlor	mg/kg	157	6	4%	0.002	0.01	--	0.0033	0.27	3420	N	0	0	8	0	160	0
Tech-Chlordane	mg/kg	157	0	0%	--	--	--	0.017	1.4	7.19	C	0	0	0.5	0	10	0	
Toxaphene	mg/kg	157	0	0%	--	--	--	0.067	5.4	1.74	C	0	2	2	0	40	0	
SVOCs	1,4-Dioxane	mg/kg	157	0	0%	--	--	--	0.33	0.43	174	C	0	0	--	--	--	--
	2-Methylnaphthalene	mg/kg	157	0	0%	--	--	--	0.02	0.43	--	--	--	--	--	--	--	--
	Acenaphthene	mg/kg	146	0	0%	--	--	--	0.011	0.38	2350	N	--	0	29	0	580	0
	Acenaphthylene	mg/kg	146	0	0%	--	--	--	0.018	0.38	147	sat	--	0	--	--	--	--
	Anthracene	mg/kg	146	0	0%	--	--	--	0.018	0.38	9060	max	--	0	590	0	11800	0
	Benz(a)anthracene	mg/kg	146	2	1%	0.06	0.096	TSB-FR-04	0.021	0.38	2.34	C	0	0	0.08	2	1.6	0
	Benzo(a)pyrene	mg/kg	144	1	1%	0.04	0.04	TSB-GR-02	0.021	0.38	0.234	C	0	142	0.4	0	8	0
	Benzo(b)fluoranthene	mg/kg	145	3	2%	0.043	0.11	TSB-FR-02	0.33	0.38	2.34	C	0	0	0.2	0	4	0
	Benzo(g,h,i)perylene	mg/kg	144	2	1%	0.042	0.075	TSB-GJ-06	0.33	0.38	34100	N	0	0	--	--	--	--
	Benzo(k)fluoranthene	mg/kg	144	1	1%	0.043	0.043	TSB-GR-02	0.042	0.38	23.4	C	0	0	2	0	40	0
	bis(2-Ethylhexyl)phthalate	mg/kg	157	6	4%	0.04	1.4	TSB-FJ-08	0.33	0.43	137	C	0	0	180	0	3600	0
	Butyl benzyl phthalate	mg/kg	157	1	1%	0.11	0.11	TSB-HJ-01	0.33	0.43	240	sat	0	0	810	0	16200	0
	Chrysene	mg/kg	147	7	5%	0.029	0.51	TSB-FR-04	0.029	0.38	234	C	0	0	8	0	160	0
	Dibenz(a,h)anthracene	mg/kg	144	0	0%	--	--	--	0.02	0.38	0.234	C	1	143	0.08	0	1.6	0
	Diethyl phthalate	mg/kg	157	0	0%	--	--	--	0.33	0.43	100000	max	0	0	--	--	--	--
	Dimethyl phthalate	mg/kg	157	0	0%	--	--	--	0.33	0.43	100000	max	0	0	--	--	--	--
	Di-N-Butyl phthalate	mg/kg	157	4	3%	0.047	5.2	TSB-FJ-06	0.33	0.43	68400	N	0	0	270	0	5400	0
	Di-N-Octyl phthalate	mg/kg	157	2	1%	0.21	0.28	TSB-FJ-05	0.33	0.43	--	--	--	--	--	--	--	--
	Fluoranthene	mg/kg	157	6	4%	0.041	0.097	TSB-FR-04	0.038	0.43	24400	N	0	0	210	0	4200	0
	Fluorene	mg/kg	157	0	0%	--	--	--	0.019	0.43	3440	N	0	0	28	0	560	0
Hexachlorobenzene ^c	mg/kg	157	4	3%	0.035	0.37	TSB-CJ-04	0.33	0.43	1.2	C	0	0	0.1	2	2	0	
Indeno(1,2,3-cd)pyrene	mg/kg	144	0	0%	--	--	--	0.023	0.38	2.34	C	0	0	0.7	0	14	0	
Naphthalene	mg/kg	157	0	0%	--	--	--	0.033	0.43	15.6	C	0	0	4	0	80	0	
Nitrobenzene	mg/kg	157	0	0%	--	--	--	0.33	0.43	13.6	C	0	0	0.007	0	0.14	0	

TABLE 2
Parcel Soil Data Results Summary - Organics and General Chemistry

Parameter of Interest	Chemical	Result Unit	Total Count	Detect Count	Detect Frequency	Min. Detect	Max. Detect	Location of Max. Detect	Min. Non-Detect Limit	Max. Non-Detect Limit	NDEP 2010 Worker BCL ^a	Basis	Count of Detects > NDEP Worker BCL	Count of Non-Detects > NDEP Worker BCL	NDEP 2010 LBCL - DAF1 ^a	Count of Detects > NDPE LBCL - DAF 1	NDEP 2010 LBCL - DAF 20 ^a	Count of Detects > NDEP LBCL - DAF 20
SVOCs (ctd)	Octachlorostyrene	mg/kg	157	2	1%	0.039	0.065	TSB-CJ-04	0.33	0.43	--	--	--	--	--	--	--	--
	Phenanthrene	mg/kg	146	4	3%	0.018	0.96	TSB-FR-04	0.019	0.38	24.5	sat	0	0	--	--	--	--
	Pyrene	mg/kg	146	6	4%	0.015	0.3	TSB-FR-04	0.33	0.38	19300	N	0	0	210	0	4200	0
	Pyridine	mg/kg	157	0	0%	--	--	--	0.66	0.87	667	N	--	--	--	--	--	--
VOCs	1,1,1,2-Tetrachloroethane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	19.9	C	0	0	--	--	--	--
	1,1,1-Trichloroethane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	1390	C	0	0	0.1	0	2	0
	1,1,2,2-Tetrachloroethane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	2.54	C	0	0	0.0002	0	0.004	0
	1,1,2-Trichloroethane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	5.51	C	0	0	0.0009	0	0.018	0
	1,1-Dichloroethane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	21.4	C	0	0	1	0	20	0
	1,1-Dichloroethene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	1270	N	0	0	0.003	0	0.06	0
	1,1-Dichloropropene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	--	--	0	0	--	--	--	--
	1,2,3-Trichlorobenzene	mg/kg	157	2	1%	0.00098	0.0017	TSB-CR-01	0.005	0.0066	--	--	0	0	--	--	--	--
	1,2,3-Trichloropropane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	1.59	C	0	0	--	--	--	--
	1,2,4-Trichlorobenzene	mg/kg	157	4	3%	0.0012	0.014	TSB-CR-01	0.005	0.0066	707	N	0	0	0.3	0	6	0
	1,2,4-Trimethylbenzene	mg/kg	157	22	14%	0.00038	0.0086	TSB-FJ-09	0.005	0.0066	604	N	0	0	--	--	--	--
	1,2-Dibromo-3-chloropropane	mg/kg	157	0	0%	--	--	--	0.01	0.013	0.0529	C	0	0	--	--	--	--
	1,2-Dichlorobenzene	mg/kg	157	1	1%	0.00036	0.00036	TSB-CJ-01	0.005	0.0066	373	sat	0	0	0.9	0	18	0
	1,2-Dichloroethane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	2.24	C	0	0	0.001	0	0.02	0
	1,2-Dichloropropane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	4.29	C	0	0	0.001	0	0.02	0
	1,3,5-Trimethylbenzene	mg/kg	157	8	5%	0.00029	0.0038	TSB-FJ-09	0.005	0.0066	246	N	0	0	--	--	--	--
	1,3-Dichlorobenzene	mg/kg	157	3	2%	0.00034	0.0008	TSB-CJ-08	0.005	0.0066	373	sat	0	0	--	--	--	--
	1,3-Dichloropropane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	64.6	sat	0	0	0.001	0	0.02	0
	1,4-Dichlorobenzene	mg/kg	157	3	2%	0.00027	0.00051	TSB-CJ-08	0.005	0.0066	13.6	C	0	0	0.1	0	2	0
	2,2-Dichloropropane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	--	--	0	0	--	--	--	--
	2-Butanone	mg/kg	156	5	3%	0.0038	0.013	TSB-FJ-09	0.02	0.026	34100	sat	0	0	--	--	--	--
	2-Chlorotoluene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	511	sat	0	0	--	--	--	--
	2-Hexanone	mg/kg	157	2	1%	0.0022	0.0071	TSB-FJ-06	0.02	0.026	1930	N	0	0	--	--	--	--
	4-Chlorotoluene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	--	--	0	0	--	--	--	--
	4-Isopropyltoluene	mg/kg	156	0	0%	--	--	--	0.005	0.0066	--	--	0	0	--	--	--	--
	4-Methyl-2-pentanone	mg/kg	157	0	0%	--	--	--	0.02	0.026	17200	sat	0	0	--	--	--	--
	Acetone	mg/kg	157	43	27%	0.0055	1.9	TSB-FJ-09	0.02	0.026	100000	max	0	0	0.8	1	16	0
	Benzene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	4.21	C	0	0	0.002	0	0.04	0
	Bromobenzene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	276	N	0	0	--	--	--	--
	Bromochloromethane	mg/kg	156	0	0%	--	--	--	0.005	0.0066	--	--	0	0	--	--	--	--
	Bromodichloromethane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	51.3	C	0	0	0.03	0	0.6	0
	Bromoform	mg/kg	157	0	0%	--	--	--	0.005	0.0066	242	C	0	0	0.04	0	0.8	0
	Bromomethane	mg/kg	157	0	0%	--	--	--	0.01	0.013	39.1	N	0	0	0.01	0	0.2	0
	Carbon tetrachloride	mg/kg	157	0	0%	--	--	--	0.005	0.0066	1.55	C	0	0	0.003	0	0.06	0
	Chlorobenzene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	695	N	0	0	0.07	0	1.4	0
	Chloroethane	mg/kg	157	0	0%	--	--	--	0.01	0.013	1100	C	0	0	--	--	--	--
	Chloroform	mg/kg	157	5	3%	0.00056	0.0023	TSB-CJ-01	0.005	0.0066	1.55	C	0	0	0.03	0	0.6	0
	Chloromethane	mg/kg	157	0	0%	--	--	--	0.01	0.013	8.05	C	0	0	--	--	--	--
	cis-1,2-Dichloroethene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	737	sat	0	0	0.02	0	0.4	0
	cis-1,3-Dichloropropene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	--	--	0	0	--	--	--	--
Dibromochloromethane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	6.03	C	0	0	0.02	0	0.4	0	
Dibromomethane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	191	N	0	0	--	--	--	--	
Dichlorodifluoromethane	mg/kg	157	0	0%	--	--	--	0.01	0.013	340	N	0	0	--	--	--	--	
Ethylbenzene	mg/kg	157	5	3%	0.00037	0.0022	TSB-CJ-08	0.005	0.0066	19.6	C	0	0	0.7	0	14	0	

TABLE 2
Parcel Soil Data Results Summary - Organics and General Chemistry

Parameter of Interest	Chemical	Result Unit	Total Count	Detect Count	Detect Frequency	Min. Detect	Max. Detect	Location of Max. Detect	Min. Non-Detect Limit	Max. Non-Detect Limit	NDEP 2010 Worker BCL ^a	Basis	Count of Detects > NDEP Worker BCL	Count of Non-Detects > NDEP Worker BCL	NDEP 2010 LBCL - DAF1 ^a	Count of Detects > NDPE LBCL - DAF 1	NDEP 2010 LBCL - DAF 20 ^a	Count of Detects > NDEP LBCL - DAF 20
VOCs (ctd)	Isopropylbenzene	mg/kg	157	1	1%	0.00029	0.00029	TSB-CJ-08	0.005	0.0066	647	N	0	0	--	--	--	--
	m,p-Xylene	mg/kg	157	11	7%	0.00064	0.011	TSB-CJ-08	0.005	0.0066	214	sat	0	0	--	--	--	--
	Methyl tert butyl ether	mg/kg	157	0	0%	--	--	--	0.005	0.0066	208	C	0	0	--	--	--	--
	Methylene chloride	mg/kg	156	14	9%	0.0035	0.021	TSB-FJ-02	0.005	0.0066	58.5	C	0	0	0.001	14	0.02	1
	N-Butylbenzene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	237	sat	0	0	--	--	--	--
	N-Propylbenzene	mg/kg	157	3	2%	0.001	0.0014	TSB-FJ-09	0.005	0.0066	237	sat	0	0	--	--	--	--
	o-Xylene	mg/kg	157	5	3%	0.00047	0.0041	TSB-CJ-08	0.005	0.0066	282	sat	0	0	9	0	180	0
	sec-Butylbenzene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	223	sat	0	0	--	--	--	--
	Styrene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	1730	sat	0	0	0.2	0	4	0
	tert-Butylbenzene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	393	sat	0	0	--	--	--	--
	Tetrachloroethene	mg/kg	157	2	1%	0.001	0.0027	TSB-CJ-08	0.005	0.0066	3.28	C	0	0	0.003	0	0.06	0
	Toluene	mg/kg	157	10	6%	0.00047	0.0017	TSB-HJ-08	0.005	0.0066	521	sat	0	0	0.6	0	12	0
	trans-1,2-Dichloroethylene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	547	N	0	0	0.03	0	0.6	0
	trans-1,3-Dichloropropene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	--	--	0	0	--	--	--	--
	Trichloroethene	mg/kg	157	0	0%	--	--	--	0.005	0.0066	5.49	C	0	0	0.003	0	0.06	0
	Trichlorofluoromethane	mg/kg	157	0	0%	--	--	--	0.005	0.0066	1980	N	0	0	--	--	--	--
	Vinyl Chloride	mg/kg	157	0	0%	--	--	--	0.005	0.0066	1.86	C	0	0	0.0007	0	0.014	0
Xylenes, total	mg/kg	157	7	4%	0.0014	0.015	TSB-CJ-08	0.01	0.013	214	sat	0	0	10	0	200	0	
TPH	TPH-d	mg/kg	157	7	4%	6.6	5500	TSB-FR-04	25	5000	100d	--	2	3	--	--	--	--
	TPH-g	mg/kg	151	1	1%	0.29	0.29	TSB-FJ-09	0.1	0.13	100d	--	0	0	--	--	--	--
PCBs	Aroclor-1016	mg/kg	67	0	0%	--	--	--	0.0083	0.043	0.826	C	0	0	--	--	--	--
	Aroclor-1221	mg/kg	67	0	0%	--	--	--	0.011	0.043	0.826	C	0	0	--	--	--	--
	Aroclor-1232	mg/kg	67	0	0%	--	--	--	0.0083	0.043	0.826	C	0	0	--	--	--	--
	Aroclor-1242	mg/kg	67	0	0%	--	--	--	0.0083	0.043	0.826	C	0	0	--	--	--	--
	Aroclor-1248	mg/kg	67	1	1%	0.074	0.074	TSB-FJ-03	0.0083	0.043	0.826	C	0	0	--	--	--	--
	Aroclor-1254	mg/kg	67	1	1%	0.29	0.29	TSB-FJ-04	0.0083	0.043	23.6	C	0	0	--	--	--	--
Aroclor-1260	mg/kg	67	0	0%	--	--	--	0.0083	0.043	0.826	C	0	0	--	--	--	--	
General Chemistry	Perchlorate	mg/kg	157	146	93%	0.0024	168	TSB-FJ-05	0.0104	0.0438	795	N	0	0	--	--	--	--
Dioxins/Furans	TCDD TEQ ^g	pg/g	139	79	57%	0.00035	765.0	TSB-DJ-01	--	--	1000 ^f	C	0	0	--	--	--	--

a - From User's Guide and Background Technical Document for Nevada Division of Environmental Protection (NDEP) Basic Comparison Levels (BCLs) for Human Health for the BMI Complex and Common Areas, Revision 5, August 2010. Values for the worker are the lower of the indoor and outdoor worker soil BCLs.

b - BCL based on mixed isomer.

c - Hexachlorobenzene analyzed using both EPA Methods 8081 and 8270. Data reported based on EPA 8270 as it was deemed to be the superior method.

d - 100 mg/kg total TPH value used for screening.

e - TCDD equivalents based on WHO 2005 TEFs for the 12 co-planer PCBs; the detection limit was used for non-detect values.

f - NDEP default value based on 1998 OSWER directive and consideration of the uncertainty regarding the potency factor

g - TCDD equivalents based on WHO 2005 TEFs for the 17 dioxin and furan congeners.

C = Cancer

N = Noncancer

sat = soil saturation

max = risk-based value is greater than 100,000 mg/kg

TABLE 3
Parcel Soil Data Results Summary - Metals and Radionuclides

Parameter of Interest	Chemical	Result Unit	Total Count	Detect Count	Detect Frequency	Min. Detect ^a	Max. Detect ^a	Location of Max. Detect	Min. Non-Detect Limit	Max. Non-Detect Limit	NDEP 2010 Worker BCL ^a	Basis	Count of Detects > NDEP Worker BCL	Count of Non-Detect > NDEP Worker BCL	NDEP 2010 LBCL - DAF1 ^a	Count of Detects > NDPE LBCL - DAF 1	NDEP 2010 LBCL - DAF 20 ^a	Count of Detects > NDEP LBCL - DAF 20
Metals	Aluminum	mg/kg	157	157	100%	3430	11600	TSB-FJ-04	--	--	100000	max	0	0	75	157	1500	157
	Antimony	mg/kg	157	126	80%	0.088	0.32	TSB-CR-06	1	5.4	454	N	0	0	0.3	0	6	0
	Arsenic	mg/kg	158	158	100%	1.3	8	TSB-CJ-08	--	--	1.77	C	152	0	1	157	20	0
	Barium	mg/kg	157	157	100%	67	1420	TSB-FJ-06	--	--	100000	max	0	0	82	156	1640	0
	Beryllium	mg/kg	157	157	100%	0.23	0.84	TSB-FJ-04	--	--	2230	N	0	0	3	0	60	0
	Boron	mg/kg	157	38	24%	3.2	22.6	TSB-DR-04	10.1	265	100000	max	0	0	23.4	0	467	0
	Cadmium	mg/kg	157	55	35%	0.049	0.42	TSB-FR-02	0.053	1.3	560	N	0	0	0.4	0	8	0
	Chromium (Total)	mg/kg	157	157	100%	4.1	19	TSB-FJ-04	--	--	100000	max	0	0	2	157	40	0
	Chromium (VI)	mg/kg	115	3	3%	0.49	1.3	TSB-DR-05	1	20	1230	C	0	0	2	0	40	0
	Cobalt	mg/kg	157	157	100%	3.2	11.2	TSB-FJ-04	--	--	337	C	0	0	33	0	660	0
	Copper	mg/kg	149	149	100%	6	27.4	TSB-CJ-03	--	--	42200	N	0	0	35.2	0	704	0
	Iron	mg/kg	157	157	100%	5950	22300	TSB-FJ-04	--	--	100000	max	0	0	7.56	157	151	157
	Lead	mg/kg	157	157	100%	3.8	136	TSB-FR-02	--	--	800	--	0	0	--	--	--	--
	Magnesium	mg/kg	157	157	100%	4100	25000	TSB-GJ-08	--	--	100000	max	0	0	649	157	13000	8
	Manganese	mg/kg	157	157	100%	111	917	TSB-FR-02	--	--	15100	N	0	0	3.26	157	65.2	157
	Mercury	mg/kg	157	56	36%	0.0076	0.0413	TSB-FJ-06	0.0336	0.0439	341	N	0	0	0.104	0	2.09	0
	Molybdenum	mg/kg	157	81	52%	0.16	1.5	TSB-FR-02	0.51	5.4	5680	N	0	0	3.64	0	72.7	0
	Nickel	mg/kg	157	157	100%	6	22.6	TSB-FJ-04	--	--	21800	N	0	0	7	156	140	0
	Platinum	mg/kg	157	7	4%	0.021	2.4	TSB-FJ-02	0.1	2.7	--	--	--	--	--	--	--	--
	Potassium	mg/kg	157	157	100%	704	4480	TSB-DR-05	--	--	--	--	--	--	--	--	--	--
	Selenium	mg/kg	157	0	0%	--	--	--	0.51	5.4	5680	N	0	0	0.3	0	6	0
	Silver	mg/kg	157	133	85%	0.038	0.22	TSB-GR-02	0.42	2.2	5680	N	0	0	2	0	40	0
	Sodium	mg/kg	157	156	99%	159	2910	TSB-FJ-01	218	218	--	--	--	--	--	--	--	--
	Strontium	mg/kg	157	157	100%	50.7	500	TSB-HR-04	--	--	100000	max	0	0	--	--	--	--
	Thallium	mg/kg	157	4	3%	0.19	0.45	TSB-DR-04	0.2	2.2	79.5	N	0	0	0.4	2	8	0
	Tin	mg/kg	157	110	70%	0.064	1.2	TSB-CJ-02	0.4	2.2	100000	max	0	0	--	--	--	--
	Titanium	mg/kg	157	157	100%	257	1010	TSB-FJ-04	--	--	100000	max	0	0	150000	0	3000000	0
	Tungsten	mg/kg	157	3	2%	1.1	9	TSB-FJ-02	0.51	13.3	8510	N	0	0	41.2	0	823	0
Uranium	mg/kg	157	157	100%	0.39	3.9	TSB-GJ-08	--	--	3400	N	0	0	13.5	0	270	0	
Vanadium	mg/kg	153	153	100%	19.1	65.8	TSB-FJ-04	--	--	5680	N	0	0	300	0	6000	0	
Zinc	mg/kg	157	157	100%	14	67.1	TSB-FJ-06	--	--	100000	max	0	0	620	0	12400	0	
Radionuclides	Radium-226	pCi/g	160	160	100%	0.0484	2.46	TSB-HR-02	--	--	0.023	C	160	0	0.016 ^b	160	0.32 ^b	130
	Radium-228	pCi/g	160	160	100%	0.17	14.3	TSB-FR-02	--	--	0.041	C	160	0	0.016 ^b	160	0.32 ^b	159
	Thorium-228	pCi/g	156	156	100%	1.07	2.92	TSB-HJ-10	--	--	0.025	C	156	0	0.0023	156	0.045	156
	Thorium-230	pCi/g	156	156	100%	0.792	3.03	TSB-HR-03	--	--	8.3	C	0	0	0.00084	156	0.017	156
	Thorium-232	pCi/g	156	156	100%	0.92	2.74	TSB-HJ-10	--	--	7.4	C	0	0	0.0029	156	0.058	156
	Uranium-234	pCi/g	152	152	100%	0.725	3.52	TSB-HR-02	--	--	11	C	0	0	--	--	--	--
	Uranium-235	pCi/g	152	152	100%	0	1	TSB-GJ-09	--	--	0.35	C	44	0	--	--	--	--
Uranium-238	pCi/g	152	152	100%	0.643	2.6	TSB-HR-03	--	--	1.4	C	26	0	--	--	--	--	

a - From User's Guide and Background Technical Document for Nevada Division of Environmental Protection (NDEP) Basic Comparison Levels (BCLs) for Human Health for the BMI Complex and Common Areas, Revision 5, August 2010. Values for the worker are the lower of the indoor and outdoor worker soil BCLs.

b - NDEP LBCL for radium.

C = Cancer

N = Noncancer

max = risk-based value is greater than 100,000 mg/kg

TABLE 4
Parcel Soil Data Results Summary - Asbestos

Parcel	Sample ID	Sample Name	Number of Long Chrysotile Fibers (>10µm and <0.4µm)	Number of Long Amphibole Fibers (>10µm and <0.4µm)	Type of Long Amphibole Fibers (>10µm and <0.4µm)
Parcel C	G1-PC-1-1	G1-PC-1-1-0.0	0	0	--
Parcel C	H2-PC-1-1	H2-PC-1-1-0.0	0	0	--
Parcel C	TSB-CJ-01	TSB-CJ-01-0	1	0	--
Parcel C	TSB-CJ-02	TSB-CJ-02-0	0	0	--
Parcel C	TSB-CJ-04	TSB-CJ-04-0	1	0	--
Parcel C	TSB-CJ-05	TSB-CJ-05-0	0	0	--
Parcel C	TSB-CJ-06	TSB-CJ-06-0	0	0	--
Parcel C	TSB-CJ-07	TSB-CJ-07-0	0	0	--
Parcel C	TSB-CJ-08	TSB-CJ-08-0	1	0	--
Parcel C	TSB-CR-01	TSB-CR-01-0	1	0	--
Parcel C	TSB-CR-01	TSB-CR-01-0 FD	1	0	--
Parcel C	TSB-CR-04	TSB-CR-04-0	0	0	--
Parcel C	TSB-CR-05	TSB-CR-05-0	2	0	--
Parcel C	TSB-CR-06	TSB-CR-06-0	0	0	--
Parcel C	TSB-CR-07	TSB-CR-07-0	2	0	--
Parcel C	E1-PC-1-1	E1-PC-1-1-0.0	0	0	--
Parcel D	F4-PD-1-1	F4-PD-1-1-0.0	0	0	--
Parcel D	TSB-DJ-01	TSB-DJ-01-0	2	0	--
Parcel D	TSB-DR-01	TSB-DR-01-0	0	0	--
Parcel D	TSB-DR-02	TSB-DR-02-0	0	0	--
Parcel D	TSB-DR-02	TSB-DR-02-0 FD	0	0	--
Parcel D	TSB-DR-03	TSB-DR-03-0	0	0	--
Parcel D	TSB-DR-05	TSB-DR-05-0	0	0	--
Parcel D	TSB-DR-06	TSB-DR-06-0	2	0	--
Parcel F	P2-PF-1-1	P2-PF-1-1-0.0	0	0	--
Parcel F	P3-PF-1-1	P3-PF-1-1-0.0	0	0	--
Parcel F	P3-PF-2-1	P3-PF-2-1-0.0	0	0	--
Parcel F	Q2-PF-1-1	Q2-PF-1-1-0.0	0	0	--
Parcel F	Q3-PF-1-1	Q3-PF-1-1-0.0	0	0	--
Parcel F	TSB-FJ-04	TSB-FJ-04-0	2	0	--
Parcel F	TSB-FJ-05	P4-PF-1-1-0.0-FD	0	0	--
Parcel F	TSB-FJ-05	P4-PH-1-1-0.0	0	0	--

TABLE 4
Parcel Soil Data Results Summary - Asbestos

Parcel	Sample ID	Sample Name	Number of Long Chrysotile Fibers (>10µm and <0.4µm)	Number of Long Amphibole Fibers (>10µm and <0.4µm)	Type of Long Amphibole Fibers (>10µm and <0.4µm)
Parcel F	TSB-FJ-05	TSB-FJ-05-0-FD	0	0	--
Parcel F	TSB-FJ-09	TSB-FJ-09-0	3	0	--
Parcel F	TSB-FJ-10	TSB-FJ-10-0	3	0	--
Parcel F	TSB-FR-01	TSB-FR-01-0	0	0	--
Parcel F	TSB-FR-02	Q3-PF-3-1-0.0	0	0	--
Parcel F	TSB-FR-03	TSB-FR-03-0	0	0	--
Parcel F	TSB-FR-04	TSB-FR-04-0	3	0	--
Parcel F	TSB-FR-04	TSB-FR-04-0-FD	4	0	--
Parcel F	TSB-FR-05	TSB-FR-05-0	0	0	--
Parcel G	S2-PG-1-1	S2-PG-1-1-0.0	0	0	--
Parcel G	S2-PG-1-1	S2-PG-1-1-0.0-FD	0	0	--
Parcel G	S3-PG-1-1	S3-PG-1-1-0.0	0	0	--
Parcel G	TSB-GJ-01	TSB-GJ-01-0	0	0	--
Parcel G	TSB-GJ-02	TSB-GJ-02-0	1	0	--
Parcel G	TSB-GJ-03	TSB-GJ-03-0	0	0	--
Parcel G	TSB-GJ-05	TSB-GJ-05-0	1	0	--
Parcel G	TSB-GJ-06	TSB-GJ-06-0	0	0	--
Parcel G	TSB-GJ-07	TSB-GJ-07-0	0	0	--
Parcel G	TSB-GR-01	TSB-GR-01-0	0	0	--
Parcel G	TSB-GR-01	TSB-GR-01-0-FD	0	0	--
Parcel G	TSB-GR-02	TSB-GR-02-0	1	0	--
Parcel H	TSB-HJ-01	TSB-HJ-01-0	0	0	--
Parcel H	TSB-HJ-02	TSB-HJ-02-0	0	0	--
Parcel H	TSB-HJ-03	TSB-HJ-03-0	0	0	--
Parcel H	TSB-HJ-04	TSB-HJ-04-0	0	0	--
Parcel H	TSB-HJ-05	TSB-HJ-05-0	0	0	--
Parcel H	TSB-HJ-06	TSB-HJ-06-0	0	0	--
Parcel H	TSB-HJ-07	TSB-HJ-07-0	0	0	--
Parcel H	TSB-HJ-08	TSB-HJ-08-0	1	0	--
Parcel H	TSB-HJ-10	TSB-HJ-10-0	0	0	--
Parcel H	TSB-HJ-11	TSB-HJ-11-0	1	0	--
Parcel H	TSB-HR-01	TSB-HR-01-0	0	0	--

TABLE 4
Parcel Soil Data Results Summary - Asbestos

Parcel	Sample ID	Sample Name	Number of Long Chrysotile Fibers (>10µm and <0.4µm)	Number of Long Amphibole Fibers (>10µm and <0.4µm)	Type of Long Amphibole Fibers (>10µm and <0.4µm)
Parcel H	TSB-HR-02	TSB-HR-02-0	0	0	--
Parcel H	TSB-HR-03	TSB-HR-03-0	1	0	--
Parcel H	TSB-HR-04	TSB-HR-04-0	0	0	--
Parcel H	TSB-HR-05	TSB-HR-05-0	0	0	--
Parcel H	TSB-HR-07	TSB-HR-07-0	0	0	--
Parcel H	TSB-HR-08	TSB-HR-08-0	0	0	--
Parcel H	V5-PH-1-1	V5-PH-1-1-0.0	0	0	--
Parcel H	W4-PH-1-1	W4-PH-1-1-0.0	0	0	--
Summary - All Samples					
Total Number of Samples:			72	72	
Total Number of Fibers:			34	0	
Number of Sample Locations with Detections:			20	0	
Maximum Number of Fibers Counted in a Sample:			4	0	

**TABLE 5
Parcel Background Comparison Results for Metals**

Chemical Name	Depth Interval	Background								Parcels								Two-Sample T-test <i>p</i>	Gehan Test <i>p</i>	Quantile Test (0.8) <i>p</i>	Slippage Test <i>p</i>	Parcels Samples Greater than RZ-A Background Samples?	Background Qualifier
		No. of Detects	Total Samples	% Detects	Minimum Detect	Maximum Detect	Median Detect	Mean Detect	Standard Deviation	No. of Detects	Total Samples	% Detects	Minimum Detect	Maximum Detect	Median Detect	Mean Detect	Standard Deviation						
Aluminum	0_10	31	31	100%	7340	11400	8970	9020	890	157	157	100%	3430	11600	7580	7450	1180	1.00E+00	1.00E+00	1.00E+00	8.35E-01	No	1
Antimony	0_10	3	31	10%	0.6	3.4	0.9	1.63	1.54	126	157	80%	0.088	0.32	0.17	0.179	0.0412	9.99E-01	1.00E+00	2.00E-01	1.00E+00	NA	1 2
Arsenic	0_2	16	16	100%	1.6	4.25	2	2.19	0.645	86	86	100%	1.3	6.9	2.9	3.02	0.97	7.71E-05	8.94E-05	1.49E-01	2.91E-01	Yes	
Arsenic	2_10	15	15	100%	2.05	3.13	2.54	2.59	0.321	72	72	100%	2.5	8	3.6	4.07	1.37	0.00E+00	1.19E-07	2.15E-02	1.23E-07	Yes	
Barium	0_10	31	31	100%	111	213	162	166	22.4	157	157	100%	67	1420	168	184	128	4.53E-02	3.56E-01	2.94E-02	4.01E-02	No	
Beryllium	0_10	31	31	100%	0.362	0.588	0.459	0.464	0.0475	157	157	100%	0.23	0.84	0.52	0.524	0.0876	2.30E-07	6.34E-06	2.21E-02	3.33E-03	Yes	
Boron	0_10	7	31	23%	3.6	11.7	6.2	6.67	2.68	38	157	24%	3.2	22.6	9.75	9.26	3.89	0.00E+00	2.50E-10	8.76E-02	3.67E-03	NA	2
Cadmium	0_10	25	31	81%	0.11	0.48	0.19	0.197	0.0853	55	157	35%	0.049	0.42	0.11	0.121	0.0623	9.99E-01	9.98E-01	1.00E+00	1.00E+00	No	1
Chromium (Total)	0_2	16	16	100%	5.57	8.63	7.24	7.11	0.718	85	85	100%	4.8	19	10.4	10.1	2.88	0.00E+00	1.48E-05	2.10E-02	2.61E-07	Yes	
Chromium (Total)	2_10	15	15	100%	5.6	10.7	8.12	8.43	1.23	72	72	100%	4.1	17.8	10.3	10.5	2.2	5.22E-06	1.60E-05	2.74E-02	4.52E-04	Yes	
Chromium (VI)	0_10	1	31	3%	0.29	0.29	0.29	0.29	NA	3	115	3%	0.49	1.3	0.55	0.78	0.451	1.66E-08	0.00E+00	7.13E-01	1.67E-04	NA	2
Cobalt	0_10	31	31	100%	5.4	9.1	7.3	7.34	0.758	157	157	100%	3.2	11.2	6.8	6.68	1.26	1.00E+00	9.99E-01	8.76E-01	4.02E-01	No	1
Copper	0_10	31	31	100%	15.8	140	19.1	23.1	21.8	149	149	100%	6	27.4	14.4	14.8	3.17	9.79E-01	1.00E+00	1.00E+00	1.00E+00	No	1
Iron	0_10	31	31	100%	11300	20600	15700	15500	2140	157	157	100%	5950	22300	12600	12400	2050	1.00E+00	1.00E+00	1.00E+00	8.35E-01	No	1
Lead	0_10	31	31	100%	7.1	72.8	8.9	11.3	11.6	157	157	100%	3.8	136	8.2	10.8	11.8	5.88E-01	8.97E-01	2.68E-01	8.35E-01	No	
Magnesium	0_2	16	16	100%	7700	11500	9120	9300	1110	85	85	100%	4200	13400	7930	8210	1680	9.99E-01	9.99E-01	9.84E-01	4.14E-01	No	1
Magnesium	2_10	15	15	100%	9230	13000	10500	10700	1140	72	72	100%	4100	25000	10400	10700	2980	4.93E-01	7.34E-01	3.52E-01	1.34E-01	No	
Manganese	0_10	31	31	100%	262	537	360	366	61.3	157	157	100%	111	917	319	342	125	9.49E-01	9.98E-01	8.62E-01	1.30E-01	No	1
Mercury	0_2	16	16	100%	0.012	0.362	0.0175	0.0479	0.0871	37	85	44%	0.0076	0.0413	0.0151	0.0168	0.00847	9.11E-01	2.43E-01	1.00E+00	1.00E+00	No	1
Mercury	2_10	11	15	73%	0.006	0.094	0.012	0.0192	0.025	19	72	26%	0.0079	0.0332	0.0105	0.0126	0.0061	4.94E-01	4.84E-04	1.00E+00	1.00E+00	Yes	3
Molybdenum	0_2	15	16	94%	0.31	32.7	0.43	2.56	8.34	43	85	51%	0.16	1.5	0.55	0.622	0.27	8.07E-01	2.38E-06	1.45E-01	1.00E+00	Yes	3
Molybdenum	2_10	15	15	100%	0.34	2.83	0.6	0.791	0.603	38	72	53%	0.27	1.1	0.53	0.556	0.167	9.19E-01	1.83E-01	9.99E-01	1.00E+00	No	1
Nickel	0_10	31	31	100%	12.7	21.4	15.6	15.9	1.78	157	157	100%	6	22.6	14.2	14.3	2.35	1.00E+00	1.00E+00	9.98E-01	6.97E-01	No	1
Platinum	0_10	19	31	61%	0.006	0.046	0.01	0.0119	0.00852	7	157	4%	0.021	2.4	0.11	0.415	0.877	0.00E+00	0.00E+00	9.97E-01	3.19E-04	NA	2
Potassium	0_2	16	16	100%	1830	4210	2280	2510	726	85	85	100%	704	4480	2000	2200	669	9.35E-01	9.75E-01	8.21E-01	8.42E-01	No	
Potassium	2_10	15	15	100%	1450	2420	1740	1830	333	72	72	100%	787	3660	1670	1730	477	8.39E-01	8.83E-01	9.48E-01	3.79E-01	No	
Selenium	0_10	3	31	10%	0.8	0.9	0.8	0.833	0.0577	0	157	0%	NA	NA	NA	NA	NA	5.30E-01	0.00E+00	1.00E+00	1.00E+00	NA	2 3
Silver	0_10	0	31	0%	NA	NA	NA	NA	NA	133	157	85%	0.038	0.22	0.099	0.104	0.0303	5.37E-05	1.00E+00	1.38E-03	NA	NA	2
Sodium	0_2	16	16	100%	307	864	468	533	181	84	85	99%	159	2910	480	592	487	2.24E-01	7.85E-01	3.40E-01	9.05E-02	No	
Sodium	2_10	15	15	100%	474	1050	729	714	166	72	72	100%	434	2640	767	899	440	3.92E-03	8.35E-02	2.74E-02	2.74E-02	Yes	3
Strontium	0_2	16	16	100%	129	299	186	189	46.8	85	85	100%	50.7	287	162	167	41.4	9.50E-01	9.45E-01	8.21E-01	1.00E+00	No	1
Strontium	2_10	15	15	100%	177	339	255	257	45.3	72	72	100%	128	500	248	267	75.5	2.42E-01	5.36E-01	3.52E-01	8.66E-02	No	
Thallium	0_10	31	31	100%	0.071	0.193	0.092	0.107	0.0329	4	157	3%	0.19	0.45	0.335	0.328	0.132	0.00E+00	0.00E+00	1.00E+00	6.11E-04	NA	2
Tin	0_10	0	31	0%	NA	NA	NA	NA	NA	110	157	70%	0.064	1.2	0.55	0.56	0.164	1.00E+00	1.00E+00	5.61E-04	NA	NA	2 3
Titanium	0_10	31	31	100%	480	1080	829	793	162	157	157	100%	257	1010	552	545	115	1.00E+00	1.00E+00	1.00E+00	1.00E+00	No	1
Tungsten	0_10	30	31	97%	0.12	0.62	0.17	0.214	0.11	3	157	2%	1.1	9	1.2	3.77	4.53	0.00E+00	0.00E+00	1.00E+00	1.40E-03	NA	2
Uranium	0_2	16	16	100%	0.655	1.01	0.829	0.817	0.116	85	85	100%	0.39	0.39	0.91	0.927	0.22	2.92E-03	1.73E-02	1.23E-01	2.61E-02	Yes	
Uranium	2_10	15	15	100%	0.913	1.94	1.34	1.34	0.332	72	72	100%	0.61	3.9	1.6	1.65	0.569	3.94E-03	1.58E-02	2.15E-02	2.15E-02	Yes	
Vanadium	0_10	31	31	100%	28	54.9	46	43.8	7.58	153	153	100%	19.1	65.8	37.2	37.3	7.5	1.00E+00	1.00E+00	1.00E+00	8.32E-01	No	1
Zinc	0_10	31	31	100%	25.8	254	33.3	40.4	39.9	157	157	100%	14	67.1	30.1	30.8	7.12	9.06E-01	1.00E+00	9.98E-01	1.00E+00	No	1

Notes:
Background comparison results shaded gray where the statistical comparison may not be applicable due to detection frequency <25%.
p values in boldface indicate *p* < 0.025
p values less than 10⁻¹⁰ shown as 0
NA - value not available
Background dataset is from RZ-A, excluding the 6 borings in LOU 62.
Background comparison tests use 1/2 the detection limit (DL) for non-detects in the parametric test (t-test) and the DL for non-parametric tests (Gehan test, Quantile test, and Slippage test).
Background Qualifiers:
1 = Gilbert's Toolbox results imply Site data lower than Background data
2 = Less than 25% frequency of detection in either site or background data sets.
3 = Failed Gilbert's Toolbox in only 1 out of 4 tests
Depth Intervals (measured from ground surface to the top of samples):
0_2 - 0 feet below ground surface (bgs) to 2 feet bgs
2_10 - greater than 2 feet bgs to 10 feet bgs
0_10 - 0 feet bgs to 10 feet bgs
10_UMCF - greater than 10 feet bgs to the top of the Upper Muddy Creek formation

TABLE 6a
Parcel Results of Equivalence Test for Secular Equilibrium of Radionuclides¹

Uranium Decay Series (U-238 Chain) - Shallow (Alluvium 0 to 6 ft)									
<i>p</i> -value	Conclusion ²	Delta	Sample Size ⁴	Number Missing	Analyte	Mean Proportions of Radioactivity	95% Confid. Intervals		Shifts ³
							Lower	Upper	
0.0353	in Secular Equilibrium	0.10	90	7	Ra-226	0.1931	0.1631	0.2231	0
					Th-230	0.2885	0.2746	0.3024	0
					U-234	0.2714	0.2562	0.2866	0
					U-238	0.247	0.2343	0.2597	0

Uranium Decay Series (U-238 Chain) - Shallow (Alluvium 6 to 10 ft)									
<i>p</i> -value	Conclusion ²	Delta	Sample Size ⁴	Number Missing	Analyte	Mean Proportions of Radioactivity	95% Confid. Intervals		Shifts ³
							Lower	Upper	
0.4396	Not in Secular Equilibrium	0.10	61	2	Ra-226	0.1788	0.1403	0.2173	0
					Th-230	0.272	0.2532	0.2908	0
					U-234	0.299	0.2804	0.3176	0
					U-238	0.2502	0.2329	0.2675	0

Thorium Decay Series (Th-232 Chain) - Shallow (Alluvium 0 to 10 ft)									
<i>p</i> -value	Conclusion ²	Delta	Sample Size ⁴	Number Missing	Analyte	Mean Proportions of Radioactivity	95% Confid. Intervals		Shifts ³
							Lower	Upper	
<0.0001	in Secular Equilibrium	0.10	156	4	Ra-228	0.3439	0.3278	0.3599	0
					Th-228	0.3416	0.3315	0.3517	0
					Th-232	0.3145	0.3053	0.3237	0

¹ Analyzed using the EnviroGISdT software tool from Neptune & Company, Inc.

² Tool states "in Secular Equilibrium" if the computed *p*-value is less than a standard significance level of 0.05.

³ Data Shift - Lists the values of the data shift utilized by the tool in case of negative radioactivity measurements. All measurements values for that radioisotope are shifted upwards by the shift value so that all values are non-negative. A zero shift value indicates lack of negative measurements.

⁴ Sample dataset includes field duplicates

TABLE 6b
Parcel Radionuclides Decay Chain Correlation Matrices

i) Parcels C, D, F, G and H

Uranium Decay Chain				
Correl.	Ra-226	Th-230	U-234	U-238
Ra-226	1	0.851	0.821	0.842
Th-230	0.851	1	0.958	0.946
U-234	0.821	0.958	1	0.979
U-238	0.842	0.946	0.979	1

Thorium Decay Chain			
Correl.	Ra-228	Th-228	Th-232
Ra-228	1	0.739	0.721
Th-228	0.739	1	0.962
Th-232	0.721	0.962	1

ii) 2005 BRC/TIMET Shallow Background (source: NDEP, 2009d)

Uranium Decay Chain				
Correl.	Ra-226	Th-230	U-234	U-238
Ra-226	1	0.663	0.691	0.707
Th-230	0.663	1	0.784	0.780
U-234	0.691	0.784	1	0.876
U-238	0.707	0.780	0.876	1

Thorium Decay Chain			
Correl.	Ra-228	Th-228	Th-232
Ra-228	1	0.297	0.341
Th-228	0.297	1	0.732
Th-232	0.341	0.732	1

**TABLE 7
Parcel Background Comparison Results for Radionuclides**

Chemical Name	Depth Interval	Background								Parcels								Two-Sample T-test <i>p</i>	Gehan Test <i>p</i>	Quantile Test (0.8) <i>p</i>	Slippage Test <i>p</i>	Parcels Samples Greater than RZ-A Background Samples?	Background Qualifier
		No. of Detects	Total Samples	% Detects	Minimum Detect	Maximum Detect	Median Detect	Mean Detect	Standard Deviation	No. of Detects	Total Samples	% Detects	Minimum Detect	Maximum Detect	Median Detect	Mean Detect	Standard Deviation						
Th-232	0_10	101	101	100%	1.22	2.23	1.66	1.66	0.255	156	156	100%	0.92	2.74	1.51	1.52	0.273	9.18E-01	9.45E-01	9.23E-01	2.22E-01	No	
Ra-228	0_10	81	81	100%	0.946	2.92	1.93	1.89	0.39	160	160	100%	0.17	14.3	1.66	1.62	0.304	7.52E-01	1.00E+00	1.00E+00	1.92E-01	No	1
Th-228	0_10	101	101	100%	1.15	2.28	1.78	1.74	0.262	156	156	100%	1.07	2.92	1.65	1.65	0.259	4.08E-01	7.58E-01	6.81E-01	6.04E-03	Yes	3
U-235	0_6	71	71	100%	0.042	0.13	0.081	0.0809	0.0286	91	91	100%	0	1	0.0739	0.186	0.329	6.09E-08	7.27E-02	1.00E+00	4.88E-08	Yes	
U-235	6_10	30	30	100%	0.037	0.21	0.1	0.111	0.047	61	61	100%	0.0302	1	0.0648	0.339	0.432	1.25E-05	2.72E-01	2.78E-04	2.78E-04	Yes	
U-238	0_6	71	71	100%	0.65	1.95	1.01	1.03	0.227	91	91	100%	0.643	1.55	1.19	1.19	0.199	4.83E-01	2.27E-01	7.08E-01	1.00E+00	No	1
U-238	6_10	30	30	100%	0.85	2.37	1.39	1.46	0.432	61	61	100%	0.696	2.6	1.33	1.42	0.442	6.34E-01	6.48E-01	9.23E-01	1.95E-01	No	
U-234	0_6	71	71	100%	0.63	2.44	0.98	1.03	0.288	91	91	100%	0.725	1.98	1.39	1.33	0.381	5.79E-03	3.19E-04	1.57E-01	1.00E+00	Yes	
U-234	6_10	30	30	100%	0.85	2.84	1.34	1.55	0.566	61	61	100%	0.865	3.52	1.55	1.72	0.606	9.69E-02	6.43E-02	4.12E-01	1.28E-01	No	
Th-230	0_6	71	71	100%	0.73	2.44	1.18	1.19	0.276	93	93	100%	0.792	1.98	1.19	1.28	0.206	2.62E-01	2.52E-01	3.32E-01	1.00E+00	No	1
Th-230	6_10	30	30	100%	0.81	3.01	1.56	1.54	0.498	63	63	100%	0.847	3.03	1.44	1.53	0.484	5.50E-01	6.24E-01	6.58E-01	4.57E-01	No	
Ra-226	0_6	65	65	100%	0.494	1.82	1.06	1.07	0.244	97	97	100%	0.0484	1.54	0.977	1.02	0.149	1.00E+00	9.99E-01	9.50E-01	1.00E+00	No	1
Ra-226	6_10	30	30	100%	0.507	2.36	1.25	1.33	0.442	63	63	100%	0.0521	2.46	1.07	1.07	0.641	9.87E-01	9.64E-01	9.02E-01	4.57E-01	No	1

Notes:

p values in boldface indicate $p < 0.025$

p values less than 10^{-10} shown as 0

NA - value not available

Background dataset used is the BRC/TIMET background dataset.

Background comparison tests use 1/2 the detection limit (DL) for non-detects in the parametric test (t-test) and the DL for non-parametric tests (Gehan test, Quantile test, and Slippage test).

Background Qualifiers:

¹ = Gilbert's Toolbox results imply Site data lower than Background data

² = Less than 25% frequency of detection in either site or background data sets.

³ = Failed Gilbert's Toolbox in only 1 out of 4 tests

Depth Intervals (measured from ground surface to the top of samples):

0_6 - 0 feet below ground surface (bgs) to 6 feet bgs

6_10 - greater than 6 feet bgs to 10 feet bgs

0_10 - 0 feet bgs to 10 feet bgs

TABLE 8
Parcel Chemicals of Potential Concern (COPC) Selection

Chemical	Result Unit	Total Count	Detect Count	Detect Frequency	Min. Detect	Max. Detect	PBT or Class A Carcinogen	NDEP BCL ^a	Ratio: BCL/max detect	COPC	Basis
4,4'-DDD	mg/kg	157	4	3%	0.0019	0.013	yes	11.1	854	no	1,5
4,4'-DDE	mg/kg	157	43	27%	0.0018	0.91	yes	7.81	9	yes	2
4,4'-DDT	mg/kg	157	37	24%	0.0018	0.61	yes	7.8	13	yes	2
Alpha-BHC	mg/kg	157	11	7%	0.002	0.059	no	0.399	7	yes	4
Beta-BHC	mg/kg	157	53	34%	0.0018	0.18	no	1.4	8	yes	4
Endrin aldehyde	mg/kg	157	3	2%	0.0029	0.02	no	na	na	no	see text
Gamma-BHC (Lindane)	mg/kg	157	1	1%	0.013	0.013	no	1.93	148	no	3,5
Gamma-chlordane	mg/kg	157	1	1%	0.004	0.004	yes	na	na	no	see text
Methoxychlor	mg/kg	157	6	4%	0.002	0.01	no	3420	342000	no	3,5
Benzo(a)anthracene	mg/kg	146	2	1%	0.06	0.096	no	2.34	24	yes	8
Benzo(a)pyrene	mg/kg	144	1	1%	0.04	0.04	yes	0.234	6	yes	2
Benzo(b)fluoranthene	mg/kg	145	3	2%	0.043	0.11	no	2.34	21	yes	8
Benzo(g,h,i)perylene	mg/kg	144	2	1%	0.042	0.075	no	34100	454667	no	3,5
Benzo(k)fluoranthene	mg/kg	144	1	1%	0.043	0.043	no	23.4	544	yes	8
bis(2-Ethylhexyl) phthalate	mg/kg	157	6	4%	0.04	1.4	no	137	98	no	3,5
Butyl benzyl phthalate	mg/kg	157	1	1%	0.11	0.11	no	240	2182	no	3,5
Chrysene	mg/kg	147	7	5%	0.029	0.51	no	234	459	yes	8
Di-N-Butyl phthalate	mg/kg	157	4	3%	0.047	5.2	no	64800	12462	no	3,5
Di-N-Octyl phthalate	mg/kg	157	2	1%	0.21	0.28	no	na	na	no	see text
Fluoranthene	mg/kg	157	6	4%	0.041	0.097	no	24400	251546	no	3,5
Hexachlorobenzene ^b	mg/kg	157	4	3%	0.035	0.37	yes	1.2	3	yes	2
Octachlorostyrene	mg/kg	157	2	1%	0.039	0.065	yes	na	na	no	see text
Phenanthrene	mg/kg	146	4	3%	0.018	0.96	no	24.5	26	no	3,5
Pyrene	mg/kg	146	6	4%	0.015	0.3	no	19300	64333	no	3,5
1,2,3-Trichlorobenzene	mg/kg	157	2	1%	0.00098	0.0017	no	na	na	no	see text
1,2,4-Trichlorobenzene	mg/kg	157	4	3%	0.0012	0.014	no	707	50500	no	3,5
1,2,4-Trimethylbenzene	mg/kg	157	22	14%	0.00038	0.0086	no	604	70233	no	3
1,2-Dichlorobenzene	mg/kg	157	1	1%	0.00036	0.00036	no	373	1036111	no	3,5
1,3,5-Trimethylbenzene	mg/kg	157	8	5%	0.00029	0.0038	no	246	64737	no	3
1,3-Dichlorobenzene	mg/kg	157	3	2%	0.00034	0.0008	no	373	466250	no	3,5

TABLE 8
Parcel Chemicals of Potential Concern (COPC) Selection

Chemical	Result Unit	Total Count	Detect Count	Detect Frequency	Min. Detect	Max. Detect	PBT or Class A Carcinogen	NDEP BCL ^a	Ratio: BCL/max detect	COPC	Basis
1,4-Dichlorobenzene	mg/kg	157	3	2%	0.00027	0.00051	no	13.6	26667	no	3,5
2-Butanone	mg/kg	156	5	3%	0.0038	0.013	no	511	39308	no	3,5
2-Hexanone	mg/kg	157	2	1%	0.0022	0.0071	no	1930	271831	no	3,5
Acetone	mg/kg	157	43	27%	0.0055	1.9	no	100000	52632	no	3
Chloroform	mg/kg	157	5	3%	0.00056	0.0023	no	1.55	674	no	3,5
Ethylbenzene	mg/kg	157	5	3%	0.00037	0.0022	no	19.6	8909	no	3,5
Isopropylbenzene	mg/kg	157	1	1%	0.00029	0.00029	no	647	2231034	no	3,5
m,p-Xylene	mg/kg	157	11	7%	0.00064	0.011	no	214	19455	no	3
Methylene chloride	mg/kg	156	14	9%	0.0035	0.021	no	58.5	2786	no	3
N-Propylbenzene	mg/kg	157	3	2%	0.001	0.0014	no	237	169286	no	3,5
o-Xylene	mg/kg	157	5	3%	0.00047	0.0041	no	282	68780	no	3,5
Tetrachloroethene	mg/kg	157	2	1%	0.001	0.0027	no	3.28	1215	no	3,5
Toluene	mg/kg	157	10	6%	0.00047	0.0017	no	521	306471	no	3
Xylenes, total	mg/kg	157	7	4%	0.0014	0.015	no	214	14267	no	3,5
Aroclor 1248	mg/kg	67	1	1%	0.074	0.074	yes	0.826	11	yes	2
Aroclor 1254	mg/kg	67	1	1%	0.29	0.29	yes	0.826	3	yes	2
Perchlorate	mg/kg	157	146	93%	0.0024	168	no	795	5	yes	4
Antimony	mg/kg	157	126	80%	0.088	0.32	no	454	1419	no	3
Arsenic	mg/kg	158	158	100%	1.3	8	no	1.77	0.2	no	see text
Beryllium	mg/kg	157	157	100%	0.23	0.84	no	2230	2655	no	3
Boron	mg/kg	157	38	24%	3.2	22.6	no	100000	4425	no	3
Chromium (Total)	mg/kg	157	157	100%	4.1	19	no	100000	5263	no	3
Chromium (VI)	mg/kg	115	3	3%	0.49	1.3	no	1230	946	no	3,5
Mercury	mg/kg	157	56	36%	0.0076	0.0413	yes	341	8257	no	2
Molybdenum	mg/kg	157	81	52%	0.16	1.5	no	15100	10067	no	3
Platinum	mg/kg	157	7	4%	0.021	2.4	no	na	na	no	see text
Silver	mg/kg	157	133	85%	0.038	0.22	no	5680	25818	no	3
Sodium	mg/kg	157	156	99%	159	2910	no	na	na	no	see text
Thallium	mg/kg	157	4	3%	0.19	0.45	no	79.5	177	no	3,5
Tin	mg/kg	157	110	70%	0.064	1.2	no	100000	83333	no	3
Tungsten	mg/kg	157	3	2%	1.1	9	no	8510	946	no	3
Uranium	mg/kg	157	157	100%	0.39	3.9	no	3400	872	no	3

TABLE 8
Parcel Chemicals of Potential Concern (COPC) Selection

Chemical	Result Unit	Total Count	Detect Count	Detect Frequency	Min. Detect	Max. Detect	PBT or Class A Carcinogen	NDEP BCL ^a	Ratio: BCL/max detect	COPC	Basis
TCDD TEQ	pg/g	139	79	57%	0.00035	765	yes	1000	1	no	7
Asbestos - Long Chrysotile	fibers	72	34	47%	1	4	yes	na	na	yes	6

- (1) chemical is a PBT or Class A carcinogen but BCL/maximum detect ratio is greater than 100
- (2) chemical is a PBT or Class A carcinogen and BCL/maximum detect ratio is less than 100
- (3) chemical is not a PBT or Class A carcinogen and BCL/maximum detect ratio is greater than 10
- (4) chemical is not a PBT or Class A carcinogen but BCL/maximum detect ratio is less than 10
- (5) chemical is detected in less than 5% of samples
- (6) asbestos does not have a BCL; therefore, it is identified as a COPC if detected in one or more samples
- (7) below NDEP target goal of TCDD TEQ 1000 pg/g as stipulated in the approved HRA Workplan (Northgate 2010)
- (8) If any one of the seven carcinogenic PAHs is retained as a COPC, then all other detected carcinogenic PAHs are retained as COPCs (see text).

a - From User's Guide and Background Technical Document for Nevada Division of Environmental Protection (NDEP) Basic Comparison Levels (BCLs) for Human Health for the BMI Complex and Common Areas, Revision 5, August 2010. Values for the worker are the lower of the indoor and outdoor worker soil BCLs.

b - Hexachlorobenzene analyzed using both EPA Methods 8081 and 8270. Data reported based on EPA 8270 as it was deemed to be the superior method.

PBT: persistent bioaccumulative and toxic

TABLE 9
Fate and Transport Screening Model Values

Parameter	Abbrev.	Value						Units	Reference
		All Parcels	Parcel C	Parcel D	Parcel F	Parcel G	Parcel H		
On-Site Commercial Worker Dust Parameters									
Fraction of vegetative cover	V	0.5	--	--	--	--	--	--	USEPA 2002a
Mean annual wind speed	U _m	4.1	--	--	--	--	--	m/s	(1)
Equivalent threshold value of wind speed	U _t	11.32	--	--	--	--	--	m/s	USEPA 2002a
Function dependent on U/U _t	F(x)	0.194	--	--	--	--	--	--	USEPA 2002a
Air dispersion factor for area source (calculated)	Q/C _{wind}	--	45.51	44.29	53.24	56.02	43.93	g/m ² -s per kg/m ³	USEPA 2002a
Dispersion factor for area source - Constant A (Las Vegas, NV)	A	13.309	--	--	--	--	--	--	USEPA 2002a
Dispersion factor for area source - Constant B (Las Vegas, NV)	B	19.839	--	--	--	--	--	--	USEPA 2002a
Dispersion factor for area source - Constant C (Las Vegas, NV)	C	230.165	--	--	--	--	--	--	USEPA 2002a
Areal extent of site surface contamination	A _{surf}	--	20.41	24.62	7.21	5.21	26.03	acres	Area of parcel
Particulate emission factor - Worker (calculated)	PEF _{worker}	--	9.88 E+8	9.61 E+8	1.16 E+9	1.22 E+9	9.53 E+8	m ³ /kg	USEPA 2002a (2)
Construction Worker Dust Parameters									
Fraction of vegetative cover	V	0	--	--	--	--	--	--	USEPA 2002a
Mean annual wind speed	U _m	4.1	--	--	--	--	--	m/s	(1)
Equivalent threshold value of wind speed	U _t	11.32	--	--	--	--	--	m/s	USEPA 2002a
Function dependent on U/U _t	F(x)	0.194	--	--	--	--	--	--	USEPA 2002a
Wet soil bulk density	r _{soil}	1.88	--	--	--	--	--	Mg/m ³	Site-specific (3)
Percent moisture in soil	M	9.0	--	--	--	--	--	%	Site-specific (3)
Areal extent of site excavation	A _{excav}	--	16520.51	19931.46	5836.32	4217.50	21071.97	m ²	(4)
Depth of site excavation	d _{excav}	1.0	--	--	--	--	--	m	USEPA 2002a
Number of times soil is dumped	N _A	2.0	--	--	--	--	--	--	USEPA 2002a
Percent weight of silt in soil	s	10.8	--	--	--	--	--	%	Site-specific (2)
Average dozing speed	S _{doz}	11.4	--	--	--	--	--	km/hr	USEPA 2002a
Average grading speed	S _{grade}	11.4	--	--	--	--	--	km/hr	USEPA 2002a
Areal extent of site tilling	A _{till}	--	4.08	4.92	1.44	1.04	5.21	acre	(4)
Number of times soil is tilled	N _A	2	--	--	--	--	--	--	USEPA 2002a
Subchronic dispersion factor for area source-Constant A	A	2.454	--	--	--	--	--	--	USEPA 2002a
Subchronic dispersion factor for area source-Constant B	B	17.566	--	--	--	--	--	--	USEPA 2002a

TABLE 9
Fate and Transport Screening Model Values

Parameter	Abbrev.	Value						Units	Reference
		All Parcels	Parcel C	Parcel D	Parcel F	Parcel G	Parcel H		
Subchronic dispersion factor for area source-Constant C	C	189.043	--	--	--	--	--	--	USEPA 2002a
Length of road segment	L _R	--	287.41	315.69	170.83	145.22	324.59	m	(5)
Width of road segment	W _R	6.1	--	--	--	--	--	m	USEPA 2002a
Mean vehicle weight	W	8.0	--	--	--	--	--	tonnes	USEPA 2002a
Percent moisture in dry road surface	M _{dry}	0.2	--	--	--	--	--	--	USEPA 2002a
Number of days/year ≥ 0.01 inches	p	27	--	--	--	--	--	days	(6)
Number of vehicles for duration of construction	N _V	30	--	--	--	--	--	vehicles	USEPA 2002a
Length of road traveled per day	L _D	--	287.41	315.69	170.83	145.22	324.59	m/day	(5)
Subchronic dispersion factor for road segment-Constant A	A	12.935	--	--	--	--	--	--	USEPA 2002a
Subchronic dispersion factor for road segment-Constant B	B	5.738	--	--	--	--	--	--	USEPA 2002a
Subchronic dispersion factor for road segment-Constant C	C	71.771	--	--	--	--	--	--	USEPA 2002a
Particulate emission factor - Construction Worker (calculated)	PEF _{cw}	--	9.19 E+5	9.06 E+5	1.01 E+6	1.05 E+6	9.03 E+5	m ³ /kg	USEPA 2002a (2)

(1) - Derived from Western Regional Climate Center (WRCC). 2010. Average wind speeds for Las Vegas. Desert Research Institute.

(2) - Equations used to calculate PEFs are shown in Appendix D

(3) - Data provided in Appendix A of HRA Work Plan

(4) - Assumed value of one fifth of the site based upon USEPA (2002a).

(5) - Assumed value of the square root of the site area, based upon USEPA (2002a).

(6) - Based on long-term weather data for the area of interest (NDEP asbestos calculation worksheet, On-line. <http://www.ndep.nv.gov/bmi/technical.htm#asbestos>).

TABLE 10
Deterministic Exposure Factors – Commercial Workers

Parameter	Abbrev.	Value	Units	Reference
Dermal absorption fraction	ABS	--chemical-specific-- (Table 11)		USEPA 2004c
Outdoor worker dermal adherence factor	AF _o	0.2	mg/cm ²	USEPA 2002a
Averaging time, carcinogenic	AT _c	25550	days	Calculated (1)
Averaging time, carcinogenic for inhalation exposures	AT _c	613200	hours	Calculated (2)
Averaging time, non-carcinogenic	AT _{nc}	9125	days	Calculated (3)
Averaging time, non-carcinogenic for inhalation exposures	AT _{nc}	219000	hours	Calculated (4)
Relative bioavailability	BIO	1	unitless	Maximum
Adult body weight	BW	70	kg	USEPA 2002a
Outdoor worker exposure frequency	EF _o	225	days/year	USEPA 2002a
Indoor worker exposure frequency	EF _i	250	days/year	USEPA 2002a
Worker exposure duration	ED _w	25	years	USEPA 2002a
Outdoor worker exposed surface area	SA _o	3,300	cm ² /day	USEPA 2002a
Outdoor worker soil ingestion rate	SIR _o	100	mg/day	USEPA 2002a
Indoor worker soil ingestion rate	SIR _i	50	mg/day	USEPA 2002a
Outdoor worker exposure time, outdoors	ET _o	8	hours/day	(5)
Conversion factor	CF ₁	1000	ug/mg	
Conversion factor	CF ₂	1000	g/kg	
Conversion factor	CF ₃	1000000	cm ³ /m ³	
Conversion factor	CF ₄	1E-06	kg/mg	

- (1) 70 years × 365 days/year (based on USEPA 2002a)
(2) 70 years × 365 days/year × 24 hours/day
(3) 25 years × 365 days/year (based on ED_w)
(4) 25 years × 365 days/year × 24 hours/day
(5) Assumes worker spends 100% of time outdoors, 8 hours a day.

TABLE 11
Deterministic Exposure Factors – Construction Workers

Parameter	Abbrev.	Value	Units	Reference
Dermal absorption fraction	ABS	--chemical-specific-- (Table 11)		USEPA 2004c
Dermal adherence factor, soil	AF _{cw}	0.3	mg/cm ²	USEPA 2002a
Averaging time, carcinogenic	AT _c	25550	days	Calculated (1)
Averaging time, carcinogenic for inhalation exposures	AT _c	613200	hours	Calculated (2)
Averaging time, non-carcinogenic	AT _{nc}	365	days	Calculated (3)
Averaging time, non-carcinogenic for inhalation exposures	AT _{nc}	8760	hours	Calculated (4)
Relative bioavailability	BIO	1	unitless	Maximum
Adult body weight	BW	70	kg	USEPA 2002a
Construction worker exposure frequency	EF _{cw}	250	days/year	USEPA 2002a
Construction worker exposure duration	ED _{cw}	1	years	(5)
Construction worker exposed surface area, soil	SA _{cw}	3,300	cm ² /day	USEPA 2002a
Construction worker soil ingestion rate	SIR _{cw}	330	mg/day	USEPA 2002a
Exposure time, outdoors	ET _o	8	hours/day	(6)
Conversion factor	CF ₁	1000	ug/mg	
Conversion factor	CF ₂	1000	g/kg	
Conversion factor	CF ₃	1000000	cm ³ /m ³	
Conversion factor	CF ₄	1E-06	kg/mg	

(1) 70 years × 365 days/year (based on USEPA 2002a)

(2) 70 years × 365 days/year × 24 hours/day

(3) 1 year × 365 days/year × 24 hours/day (based on ED_{cw})

(4) 1 year × 365 days/year × 24 hours/day

(5) Assumed to be 1 year based on USEPA 2002a.

(6) Assumes worker spends 100% of time outdoors, 8 hours a day.

TABLE 12
Summary of Toxicity Criteria and Absorption Factors for Chemicals of Potential Concern

Chemical	Noncarcinogenic			Carcinogenic				Dermal ABS		
	Inhalation	Oral		Inhalation		Oral				Cancer Weight of Evidence
	RfC (mg/m ³)	RfD (mg/kg-day)		IUR (µg/m ³) ⁻¹	SF (mg/kg-day) ⁻¹					
Aroclor 1248	NA	NA		5.70E-04	CA	2.00E+00	CA	B2	1.4E-01	RAGS
Aroclor 1254	NA	2.00E-05	I	5.70E-04	CA	2.00E+00	CA	B2	1.4E-01	RAGS
Benz(a)anthracene	NA	3.00E-02	*	1.10E-04	CA	7.30E-01	N	B2	1.3E-01	RAGS
Benzo(a)pyrene	NA	3.00E-02	*	1.10E-03	CA	7.30E+00	I	B2	1.3E-01	RAGS
Benzo(b)fluoranthene	NA	3.00E-02	*	1.10E-04	CA	7.30E-01	N	B2	1.3E-01	RAGS
Benzo(k)fluoranthene	NA	3.00E-02	*	1.10E-04	CA	7.30E-02	N	B2	1.3E-01	RAGS
Alpha-BHC	NA	8.00E-03	A	1.80E-03	I	6.30E+00	I	B2	4.0E-02	**
Beta-BHC	NA	NA		5.30E-04	I	1.80E+00	I	C	4.0E-02	**
Chrysene	NA	3.00E-02	*	1.10E-05	CA	7.30E-03	N	B2	1.3E-01	RAGS
4,4'-DDD	NA	NA		6.90E-05	CA	2.40E-01	I	B2	3.0E-02	***
4,4'-DDE	NA	NA		9.70E-05	CA	3.40E-01	I	B2	3.0E-02	***
4,4'-DDT	NA	5.00E-04	I	9.70E-05	I	3.40E-01	I	B2	3.0E-02	RAGS
Hexachlorobenzene	NA	8.00E-04	I	4.60E-04	I	1.60E+00	I	B2	1.0E-01	RAGS
Perchlorate	NA	7.00E-04	I	NA		NA		****	NA	RAGS

ABS - Absorption factor

A - Agency for Toxic Substances Disease Registry (ATSDR) (as cited in NDEP, 2010)

B2 - Probable human carcinogen

C - Possible human carcinogen

CA - CalEPA - OEHHA Toxicity Criteria database (accessed December 2010; <http://www.oehha.org/risk/ChemicalDB/index.asp>)

EPA - U.S. Environmental Protection Agency

I - EPA Integrated Risk Information System (IRIS) database (accessed November 2010; <http://www.epa.gov/iris/>)

IUR - Inhalation unit risk

N - National Center for Environmental Assessment (NCEA) (as cited in NDEP, 2010)

NA - Not applicable

OEHHA - Office of Environmental Health Hazard Assessment

RAGS - US EPA, 2004. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual, Part E

RfC - Reference concentration

RfD - Reference dose

SF - Slope factor

* - Per NDEP guidance (NDEP, 2006), pyrene was selected as a surrogate to evaluate the noncancer health hazards of carcinogenic polycyclic aromatic hydrocarbons

** - Based on value for lindane (NDEP, 2010)

*** - Based on value for DDT (NDEP, 2010)

*** - Not likely to pose a thyroid cancer risk in humans (IRIS, 2010)

TABLE 13
Parcel Chemical Risk Summary for Commercial Workers

Chemical	Risk Summary for Indoor Commercial Workers		Risk Summary for Outdoor Commercial Workers							
	Theoretical Excess Cancer Risk From Ingestion	Theoretical HQ From Ingestion	Theoretical Excess Cancer Risk From Ingestion	Theoretical Excess Cancer Risk From Dermal	Theoretical Excess Cancer Risk From Inhalation	Total Theoretical Excess Cancer Risk	Theoretical HQ From Ingestion	Theoretical HQ From Dermal	Theoretical HQ From Inhalation	Total Theoretical HI
Aroclor 1248	2.6E-08	NA	4.7E-08	4.3E-08	2.5E-12	9.0E-08	NA	NA	NA	NA
Aroclor 1254	1.0E-07	7.1E-03	1.8E-07	1.7E-07	1.0E-11	3.5E-07	1.3E-02	1.2E-02	NA	2.5E-02
Benz(a)anthracene	1.2E-08	1.6E-06	2.2E-08	1.9E-08	6.4E-13	4.1E-08	2.8E-06	2.4E-06	NA	5.2E-06
Benzo(a)pyrene	5.1E-08	6.5E-07	9.2E-08	7.9E-08	2.7E-12	1.7E-07	1.2E-06	1.0E-06	NA	2.2E-06
Benzo(b)fluoranthene	1.4E-08	1.8E-06	2.5E-08	2.2E-08	7.3E-13	4.7E-08	3.2E-06	2.8E-06	NA	6.0E-06
Benzo(k)fluoranthene	5.5E-10	7.0E-07	9.9E-10	8.5E-10	2.9E-13	1.8E-09	1.3E-06	1.1E-06	NA	2.3E-06
Alpha-BHC	6.5E-08	3.6E-06	1.2E-07	3.1E-08	6.4E-12	1.5E-07	6.5E-06	1.7E-06	NA	8.2E-06
Beta-BHC	5.7E-08	NA	1.0E-07	2.7E-08	5.8E-12	1.3E-07	NA	NA	NA	0.0E+00
Chrysene	6.5E-10	8.3E-06	1.2E-09	1.0E-09	3.4E-13	2.2E-09	1.5E-05	1.3E-05	NA	2.8E-05
4,4'-DDD	5.5E-10	NA	9.8E-10	1.9E-10	5.4E-14	1.2E-09	NA	NA	NA	0.0E+00
4,4'-DDE	5.4E-08	NA	9.7E-08	1.9E-08	5.3E-12	1.2E-07	NA	NA	NA	0.0E+00
4,4'-DDT	3.6E-08	6.0E-04	6.5E-08	1.3E-08	3.6E-12	7.8E-08	1.1E-03	2.1E-04	NA	1.3E-03
Hexachlorobenzene	1.0E-07	2.3E-04	1.9E-07	1.2E-07	1.0E-11	3.1E-07	4.1E-04	2.7E-04	NA	6.8E-04
Perchlorate	NA	1.2E-01	NA	NA	NA	NA	2.1E-01	NA	NA	2.1E-01
TOTAL	5E-07	1E-01				1E-06				2E-01

HI - Hazard Index
 HQ - Hazard quotient
 NA - Not applicable

TABLE 14
Parcel Chemical Risk Summary for Construction Workers

Chemical	Risk Summary for Construction Workers							
	Theoretical Excess Cancer Risk From Ingestion	Theoretical Excess Cancer Risk From Dermal	Theoretical Excess Cancer Risk From Inhalation	Total Theoretical Excess Cancer Risk	Theoretical HQ From Ingestion	Theoretical HQ From Dermal	Theoretical HQ From Inhalation	Total Theoretical HI
Aroclor 1248	6.8E-09	2.9E-09	1.3E-10	9.8E-09	NA	NA	NA	NA
Aroclor 1254	2.7E-08	1.1E-08	5.1E-10	3.9E-08	4.7E-02	2.0E-02	NA	6.6E-02
Benz(a)anthracene	3.2E-09	1.3E-09	3.3E-11	4.5E-09	1.0E-05	4.0E-06	NA	1.4E-05
Benzo(a)pyrene	1.3E-08	5.3E-09	1.4E-10	1.9E-08	4.3E-06	1.7E-06	NA	6.0E-06
Benzo(b)fluoranthene	3.7E-09	1.4E-09	3.8E-11	5.2E-09	1.2E-05	4.6E-06	NA	1.6E-05
Benzo(k)fluoranthene	1.4E-10	5.6E-11	1.5E-11	2.2E-10	4.6E-06	1.8E-06	NA	6.4E-06
Alpha-BHC	1.7E-08	2.1E-09	3.3E-10	2.0E-08	2.4E-05	2.9E-06	NA	2.7E-05
Beta-BHC	1.5E-08	1.8E-09	3.0E-10	1.7E-08	NA	NA	NA	NA
Chrysene	1.7E-10	6.7E-11	1.7E-11	2.6E-10	5.5E-05	2.1E-05	NA	7.6E-05
4,4'-DDD	1.4E-10	1.3E-11	2.8E-12	1.6E-10	NA	NA	NA	NA
4,4'-DDE	1.4E-08	1.3E-09	2.7E-10	1.6E-08	NA	NA	NA	NA
4,4'-DDT	9.6E-09	8.6E-10	1.8E-10	1.1E-08	3.9E-03	3.5E-04	NA	4.3E-03
Hexachlorobenzene	2.7E-08	8.2E-09	5.3E-10	3.6E-08	1.5E-03	4.5E-04	NA	1.9E-03
Perchlorate	NA	NA	NA	NA	7.7E-01	NA	NA	7.7E-01
TOTAL				2E-07				8E-01

HI - Hazard Index
 HQ - Hazard quotient
 NA - Not applicable

TABLE 15
Parcel Asbestos Risk Summary

Scenario	Estimated Airborne Chrysotile Concentrations ⁽¹⁾ (f/cm ³)	Estimated Airborne Amphibole Concentrations ⁽¹⁾ (f/cm ³)	Chrysotile URF ⁽¹⁾ (f/cm ³) ⁻¹	Amphibole URF ⁽¹⁾ (f/cm ³) ⁻¹	URF Adjustment Factor ⁽¹⁾ (unitless)	Estimated Chrysotile Risk ⁽²⁾	Estimated Amphibole Risk ⁽²⁾
Parcel C							
Future Construction Workers - Best Estimate	1.82E-03	0.00E+00	0.0569336	6.3206	0.003259346	3E-07	0E+00
Future Construction Workers - Upper Bound	3.17E-03	6.05E-04	0.0569336	6.3206	0.003259346	6E-07	1E-05
Future On-Site Industrial/Commercial Worker - Best Estimate	1.69E-06	0.00E+00	0.0569336	6.3206	0.081483654	8E-09	0E+00
Future On-Site Industrial/Commercial Worker - Upper Bound	2.95E-06	5.63E-07	0.0569336	6.3206	0.081483654	1E-08	3E-07
Parcel D							
Future Construction Workers - Best Estimate	1.64E-03	0.00E+00	0.0569336	6.3206	0.003259346	3E-07	0E+00
Future Construction Workers - Upper Bound	3.76E-03	1.23E-03	0.0569336	6.3206	0.003259346	7E-07	3E-05
Future On-Site Industrial/Commercial Worker - Best Estimate	1.55E-06	0.00E+00	0.0569336	6.3206	0.081483654	7E-09	0E+00
Future On-Site Industrial/Commercial Worker - Upper Bound	3.54E-06	1.16E-06	0.0569336	6.3206	0.081483654	2E-08	6E-07
Parcel F							
Future Construction Workers - Best Estimate	2.59E-03	0.00E+00	0.0569336	6.3206	0.003259346	5E-07	0E+00
Future Construction Workers - Upper Bound	3.99E-03	5.17E-04	0.0569336	6.3206	0.003259346	7E-07	1E-05
Future On-Site Industrial/Commercial Worker - Best Estimate	2.26E-06	0.00E+00	0.0569336	6.3206	0.081483654	1E-08	0E+00
Future On-Site Industrial/Commercial Worker - Upper Bound	3.49E-06	4.52E-07	0.0569336	6.3206	0.081483654	2E-08	2E-07
Parcel G							
Future Construction Workers - Best Estimate	7.04E-04	0.00E+00	0.0569336	6.3206	0.003259346	1E-07	0E+00
Future Construction Workers - Upper Bound	1.82E-03	7.03E-04	0.0569336	6.3206	0.003259346	3E-07	1E-05
Future On-Site Industrial/Commercial Worker - Best Estimate	6.07E-07	0.00E+00	0.0569336	6.3206	0.081483654	3E-09	0E+00
Future On-Site Industrial/Commercial Worker - Upper Bound	1.57E-06	6.06E-07	0.0569336	6.3206	0.081483654	7E-09	3E-07
Parcel H							
Future Construction Workers - Best Estimate	5.41E-04	0.00E+00	0.0569336	6.3206	0.003259346	1E-07	0E+00
Future Construction Workers - Upper Bound	1.40E-03	5.40E-04	0.0569336	6.3206	0.003259346	3E-07	1E-05
Future On-Site Industrial/Commercial Worker - Best Estimate	5.12E-07	0.00E+00	0.0569336	6.3206	0.081483654	2E-09	0E+00
Future On-Site Industrial/Commercial Worker - Upper Bound	1.32E-06	5.11E-07	0.0569336	6.3206	0.081483654	6E-09	3E-07

¹ = From calculation spreadsheets in (Appendix F)

² = Estimated airborne concentration x URF x URF adjustment factor

Best estimate - based on the pooled analytical sensitivity multiplied by the number of asbestos fibers found

Upper bound - based on the 95 % UCL of the Poisson distribution