

Table 4: Palmerton - ASTDR Investigation October 16-17, 2018 Soil Screening/Sampling Results

SAMPLE #:	SAMPLE ID:	DATE:	TIME:	% MOISTURE in Soil**	SOIL pH 1:1 DI H2O Leach (pH units)	RESULTS: (1 ppm = 1 mg/kg) (Statewide Health Standard)												
						Pb (450 mg/kg)		Cd (38 mg/kg)		Cr (Cr3 = 190000 mg/kg Cr6 = 4 mg/kg)			Zn (12,000 mg/kg)		Ni (650 mg/kg)		Cu (8,100 mg/kg)	
						LAB	XRF	LAB	XRF	LAB		XRF	LAB	XRF	LAB	XRF	LAB	XRF
										Total Cr	Cr6							
2224572	SSP K-9	10/16/18	0930	34.04 %	6.34	<76.50	24.1	3.83	24	16.70	<0.03032	ND	706.00	574	15.70	ND	27.30	5.8
2224573	PBP S-6	10/16/18	1022	20.75 %	6.38	485.00	195	73.90	52	42.50	<0.02524	ND	7866.00	2824	71.90	23	113.00	43
2224574	PBP K-27	10/16/18	1037	21.26 %	6.48	912.00	285	136.00	70	86.00	<0.02540	ND	11128.00	4358	33.20	ND	223.00	60
2224575	EVF K-31	10/16/18	1120	26.14 %	6.92	183.00	118	11.40	25	37.00	<0.02708	ND	3411.00	4353	13.10	ND	126.00	53
2224576	SSA K-39	10/16/18	1150	20.66 %	7.28	*65.10	58	12.50	ND	28.50	<0.02521	ND	830.00	723	18.80	21	49.50	22
2224577	SMC K-49	10/16/18	1311	21.68 %	7.39	346.00	175	26.00	48	70.10	<0.02554	ND	4868.00	3727	42.90	ND	184.00	56
2224578	WED S-2	10/16/18	1340	18.58 %	7.42	701.00	381	86.30	61	32.30	<0.02456	ND	16046.00	7364	50.30	19	346.00	168
2224579	BPB K-59	10/16/18	1348	12.93 %	5.88	<56.10	67	3.37	ND	39.30	<0.02297	ND	227.00	398	13.90	19	24.20	30
2224580	SRP S-6	10/16/18	1440	18.58 %	6.25	<62.10	26.3	<0.62	ND	28.90	<0.02456	ND	191.00	148	30.90	15	29.60	19
2224581	SRP K-60	10/16/18	1451	25.21 %	7.48	<67.90	27.8	*1.16	28	*7.54	<0.02674	ND	9661.00	6599	7.61	14	45.00	46
2224583	PHS S-8	10/17/18	0940	24.00%	7.23	*60.90	13.7	9.80	23	26.80	<0.02632	ND	933.00	275	19.30	ND	42.30	ND
2224584	PHS S-13	10/17/18	1000	26.63 %	7.19	*109.00	34.4	25.30	22	26.90	<0.02726	ND	2222.00	476	14.40	ND	36.50	5
2224585	PHS S-17	10/17/18	1030	17.30 %	7.32	*69.10	34.1	8.19	ND	27.50	<0.02418	ND	702.00	294	18.30	16	37.90	13
2224587	PHS K-26	10/17/18	1028	14.32 %	4.98	<59.00	58.2	*6.78	40	18.80	<0.02334	ND	228.00	1388	6.37	ND	14.80	5.2
2224589	PHS K-6	10/17/18	1053	34.03 %	6.02	*91.10	34.6	9.77	21	22.90	<0.03032	ND	2844.00	1151	40.20	ND	45.50	11.2
2224590	PMP S-5	10/17/18	1142	23.00 %	6.85	<62.80	26.6	11.60	29	29.70	<0.02597	ND	1333.00	525	22.60	ND	28.50	ND
2224591	PMP S-10	10/17/18	1158	25.15 %	7.08	*72.80	89.6	17.70	35	28.40	<0.02672	ND	1461.00	1302	25.80	ND	52.30	28
2224592	PMP K-34	10/17/18	1125	27.72 %	7.32	*111.00	142	21.00	38	20.30	<0.02767	ND	4533.00	2025	22.50	ND	36.00	29

SSP – SS Palmer Elementary School Playground
 PBP – Palmerton Borough Park
 EVF – Elmer Valo Field
 SSA – 7th Street Athletic Fields
 SMC – Salem United Methodist Church
 WED – West End Daycare
 BPB – BPBSA Field
 SRP – Stoney Ridge P.A.R.C
 PHS – Palmerton Jr. & Sr. High Schools
 PMP – Palmerton Memorial Park

- Exceeds the PA Statewide Health Standard
 ** Sample Holding Time Exceeded (% moisture)
 Soil Metals Test Methods – 6010D or *6020B
 XRF – X-Ray Fluorescence
 K-# & S-# = Assigned XRF Sample ID Number
 K-# = XRF EPA Equipment No. C08956, Operator - Karl Markiewicz, ATSDR Sr. Toxicologist
 S-# = XRF EPA Equipment No. C08957, Operator – Dominic Ventura, EPA OSC
 ND – Not Detected
 1 part per million (ppm) = 1 milligram per kilogram (mg/kg)
 LAB – PA DEP Bureau of Laboratories

Pb – Total Lead
 Cd – Total Cadmium
 Cr – Total Chromium
 Cr6 – Hexavalent Chromium
 Cr3 – Trivalent Chromium (Total Cr – Cr6 = Cr3)
 Zn – Total Zinc
 Ni – Total Nickel
 Cu – Total Copper