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May 23, 1996

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WA #18-3LY2.0

Mr. Jim Harper, RPM
USEPA, Region III
841 Chestnut Street (3HW22)
Philadelphia, PA 19107

Dear Mr. Harper:

Subject: Boarhead Farms RI/FS, Summary of Analytes Detected in Residential Wells Through 1994 (November 1995 Data Excluded)

Enclosed for your information is a general summary of analytes that have been detected in residential wells through 1994. The 1995 data are not included in the project data base since EPA had planned for us to only update well-specific spreadsheets for distribution to the residents rather than continue to expand the RI data base.

There are 2 spreadsheets, one for all residential wells and one that excludes the farmhouse well (RW-10) data . The exclusion of RW-10, which is the highly contaminated onsite well, provides a better representation of what's in the groundwater offsite. I have highlighted the contaminants that exceed either an MCL or a State Health Advisory Limit (HAL) for your information for the offsite residential wells.

If you have any questions, please call me at 215/563-4220, ext. 312.

Sincerely,

CH2M HILL

Donna Connery

Donna Connery
Site Manager

Philadelphia Office 1700 Market Street, Suite 1600, Philadelphia, PA 19103-3916 215 563-4220
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EDMS Chemical Summary Remedial Investigation Statistics
Boarhead Farms
Detected Analytes in Residential Wells - Excluding RW-10 (Farmhouse Well)

Analyte	Count of Detected	Detected Minimum	Detected Maximum	Standard Deviation	Average	MCL (mg/L)	PA Act 2-Statewide Human Health Standards	
INORGANICS (MG/L)								
ALUMINUM	33	0.0286	3.3000	0.6047	0.2547	0.05 to 0.2[u]	0.200	MCL
ANTIMONY	4	0.0031	0.0224	0.0079	0.0132	0.006	0.006	MCL
ARSENIC	65	0.0008	0.0284	0.0065	0.0095	0.050	0.050	MCL
BARIUM	30	0.0010	0.0264	0.0089	0.0081	2.000	2.000	MCL
BERYLLIUM	2	0.0010	0.0030	0.0014	0.0020	0.004	0.004	MCL
CADMIUM	8	0.0010	0.0064	0.0020	0.0036	0.005	0.005	MCL
CALCIUM	177	0.0684	62.7000	12.2108	30.5302	NA	NA	
CHROMIUM	84	0.0020	0.0429	0.0070	0.0107	0.100	0.100	MCL
COBALT	3	0.0056	0.0077	0.0012	0.0064	NA	NA	
COPPER	139	0.0014	0.8420	0.0737	0.0504	1.3[u]	1.000	MCL
IRON	126	0.0028	13.0000	1.3604	0.3350	0.3[u]	NA	
LEAD	96	0.0003	0.0178	0.0028	0.0030	0.015[u]	0.005	MCL
MAGNESIUM	178	0.0678	45.2000	8.8295	21.5688	NA	NA	
MANGANESE	110	0.0005	0.6750	0.0785	0.0296	0.05[u]	0.050	MCL
MERCURY	2	0.0002	0.0004	0.0001	0.0003	0.002	0.002	MCL
NICKEL	29	0.0017	0.0461	0.0094	0.0091	0.100	0.100	MCL
POTASSIUM	127	0.1160	5.5800	1.0702	1.1471	NA	NA	
SELENIUM	10	0.0010	0.0021	0.0004	0.0014	0.050	0.050	MCL
SILVER	3	0.0058	0.2270	0.1130	0.0926	0.1[u]	0.100	MCL
SODIUM	173	2.2300	535.0000	67.3389	23.4394	NA	0.020	HAL-f
THALLIUM	7	0.0011	0.0024	0.0004	0.0017	0.002	0.002	MCL
VANADIUM	97	0.0005	0.0282	0.0050	0.0105	NA	NA	
ZINC	130	0.0021	8.7200	0.8440	0.2256	5[u]	5.000	MCL
SEMIVOLATILE ORGANICS (UG/L)								
4-NITROPHENOL	2	1.0000	2.0000	0.7071	1.5000	NA	60	HAL-f
BENZO(A)ANTHRACENE	1	0.5000	0.5000	0.0000	0.5000	0.10	NA	
BENZYL BUTYL PHTHALATE	3	0.6000	0.8000	0.1155	0.6667	NA	NA	
BIS(2-ETHYLHEXYL)PHTHALATE	18	1.0000	74.0000	22.3114	14.6778	6	6	MCL
CHRYSENE	1	0.8000	0.8000	0.0000	0.8000	0.20	NA	
DI-N-BUTYL PHTHALATE	4	0.7000	4.0000	1.4104	2.4250	NA	NA	
DIMETHYL PHTHALATE	3	9.0000	12.0000	1.7321	10.0000	NA	NA	
N-NITROSODIPHENYLAMINE	1	0.9000	0.9000	0.0000	0.9000	NA	NA	
N-NITROSODIPROPYLAMINE	1	0.5000	0.5000	0.0000	0.5000	NA	NA	
PENTACHLOROPHENOL	4	0.6000	2.0000	0.7118	1.4000	1	1	MCL
VOLATILE ORGANICS (UG/L)								
1,1,1-TRICHLOROETHANE	18	0.2000	32.4000	9.2807	5.4000	200	200	MCL
1,1-DICHLOROETHANE	5	0.4000	0.9000	0.1924	0.6200	NA	NA	
1,1-DICHLOROETHENE	8	0.1000	1.0000	0.3615	0.5750	7	7	MCL
1,2-DICHLOROETHANE	2	0.7000	0.8000	0.0707	0.7500	5	5	MCL
ACETONE	2	5.3000	23.0000	12.5158	14.1500	NA	NA	
BROMOCHLOROMETHANE	2	0.0600	0.3000	0.1697	0.1800	NA	90	HAL
BROMODICHLOROMETHANE	1	0.2000	0.2000	0.0000	0.2000	80/100[v]	100	MCL as TTHM
CARBON DISULFIDE	1	0.3000	0.3000	0.0000	0.3000	NA	NA	
CARBON TETRACHLORIDE	1	0.5000	0.5000	0.0000	0.5000	5	5	MCL
CHLOROFORM	7	0.1000	7.2000	2.6286	1.2571	100	100	MCL
CHLOROMETHANE	3	3.0000	720.0000	409.9785	246.6667	NA	NA	
TETRACHLOROETHENE	4	0.2000	12.0000	6.0434	5.3750	5	5	MCL
TOLUENE	4	0.2000	2.0000	0.8679	0.7000	1000	1000	MCL
TRICHLOROETHENE	2	0.2000	0.4000	0.1414	0.3000	5	5	MCL

EDMS Chemical Summary Remedial Investigation Statistics
Boarhead Farms
Detected Analytes in All Residential Wells

Analyte	Count of Detected	Detected Minimum	Detected Maximum	Standard Deviation	Average	MCL (mg/L)	PA Act 2-Statewide Human Health Standards	
INORGANICS (MG/L)								
ALUMINUM	35	0.0266	3.3000	0.5867	0.2533	0.05 to 0.2[u]	0.200	MCL
ANTIMONY	4	0.0031	0.0224	0.0079	0.0132	0.006	0.006	MCL
ARSENIC	56	0.0008	0.0284	0.0064	0.0095	0.050	0.050	MCL
BARIUM	30	0.0010	0.0264	0.0089	0.0081	2.000	2.000	MCL
BERYLLIUM	2	0.0010	0.0030	0.0014	0.0020	0.004	0.004	MCL
CADMIUM	6	0.0010	0.0064	0.0020	0.0036	0.005	0.005	MCL
CALCIUM	182	0.0684	62.7000	12.1502	30.3519	NA	NA	
CHROMIUM	88	0.0020	0.1550	0.0245	0.0155	0.100	0.100	MCL
COBALT	3	0.0056	0.0077	0.0012	0.0064	NA	NA	
COPPER	141	0.0014	0.6420	0.0734	0.0498	1.3[u]	1.000	MCL
IRON	131	0.0028	13.0000	1.3350	0.3254	0.3[u]	NA	
LEAD	36	0.0003	0.0178	0.0028	0.0030	0.015[u]	0.005	MCL
MAGNESIUM	183	0.0678	45.2000	8.7791	21.3997	NA	NA	
MANGANESE	113	0.0005	0.6750	0.0779	0.0304	0.05[u]	0.050	MCL
MERCURY	2	0.0002	0.0004	0.0001	0.0003	0.002	0.002	MCL
NICKEL	29	0.0017	0.0461	0.0094	0.0091	0.100	0.100	MCL
POTASSIUM	129	0.1160	5.5800	1.0660	1.1358	NA	NA	
SELENIUM	10	0.0010	0.0021	0.0004	0.0014	0.050	0.050	MCL
SILVER	3	0.0058	0.2270	0.1180	0.0926	0.1[u]	0.100	MCL
SODIUM	178	2.2300	535.0000	66.4555	22.9079	NA	0.020	HAL-f
THALLIUM	7	0.0011	0.0024	0.0004	0.0017	0.002	0.002	MCL
VANADIUM	100	0.0005	0.0282	0.0050	0.0104	NA	NA	
ZINC	134	0.0021	6.7200	0.8316	0.2209	5[u]	5.000	MCL
SEMIVOLATILE ORGANICS (UG/L)								
4-NITROPHENOL	2	1.0000	2.0000	0.7071	1.5000	NA	60	HAL-f
BENZO(A)ANTHRACENE	1	0.5000	0.5000	0.0000	0.5000	0.10	NA	
BENZYL BUTYL PHTHALATE	3	0.6000	0.8000	0.1155	0.6667	NA	NA	
BIS(2-ETHYLHEXYL)PHTHALATE	19	1.0000	74.0000	21.9087	13.9579	6	6	MCL
CHRYSENE	1	0.8000	0.8000	0.0000	0.8000	0.20	NA	
DI-N-BUTYL PHTHALATE	4	0.7000	4.0000	1.4104	2.4250	NA	NA	
DIMETHYL PHTHALATE	4	2.0000	12.0000	4.2426	8.0000	NA	NA	
N-NITROSODIPHENYLAMINE	1	0.9000	0.9000	0.0000	0.9000	NA	NA	
N-NITROSODIPROPYLAMINE	1	0.5000	0.5000	0.0000	0.5000	NA	NA	
PENTACHLOROPHENOL	4	0.6000	2.0000	0.7118	1.4000	1	1	MCL
VOLATILE ORGANICS (UG/L)								
1,1,1-TRICHLOROETHANE	22	0.2000	520.0000	156.8488	72.6000	200	200	MCL
1,1,2-TRICHLOROETHANE	3	1.0000	3.0000	1.1547	2.3333	5	5	MCL
1,1-DICHLOROETHANE	8	0.4000	3.0000	1.2403	1.5125	NA	NA	
1,1-DICHLOROETHENE	11	0.1000	19.0000	5.9180	4.3273	7	7	MCL
1,2-DICHLOROETHANE	5	0.7000	2.0000	0.5196	1.1000	5	5	MCL
1,2-DICHLOROETHENE (TOTAL)	2	5.0000	6.0000	0.7071	5.5000	70[v]	NA	
ACETONE	2	5.3000	23.0000	12.5158	14.1500	NA	NA	
BROMOCHLOROMETHANE	2	0.0600	0.3000	0.1697	0.1800	NA	90	HAL
BROMODICHLOROMETHANE	1	0.2000	0.2000	0.0000	0.2000	80/100[v]	100	[v]MCL as TTHM
CARBON DISULFIDE	1	0.3000	0.3000	0.0000	0.3000	NA	NA	
CARBON TETRACHLORIDE	1	0.5000	0.5000	0.0000	0.5000	5	5	MCL
CHLOROFORM	8	0.1000	7.2000	2.4524	1.1500	100	100	MCL
CHLOROMETHANE	4	3.0000	720.0000	347.9199	199.2500	NA	NA	
CIS-1,2-DICHLOROETHENE	1	2.0000	2.0000	0.0000	2.0000	70	70	MCL
METHYLENE CHLORIDE	2	2.0000	2.0000	0.0000	2.0000	5	5	MCL
TETRACHLOROETHENE	7	0.2000	12.0000	4.4499	4.7857	5	5	MCL
TOLUENE	4	0.2000	2.0000	0.8679	0.7000	1000	1000	MCL
TRICHLOROETHENE	6	0.2000	2800.0000	1265.4480	1283.4333	5	5	MCL