

Contractor Introduction: Watermark ECC LLC

- Awarded performance-based acquisition (PBA) in September 2012 to perform:
 - Vapor Intrusion Assessments at Areas A and B
 - Bedrock Drilling and Well Installation at Area B
 - Institutional Control Evaluation/Soil Sampling Investigation at Area C
 - Pending EE/CA alternative approval: Potable Water Connections and Private Well Abandonment at 5 properties on Kemp Lane.
- Contract No. W912DR-12-D-0001/0005 awarded to a Joint Venture (JV) between Watermark Environmental and Environmental Chemical Corporation (ECC)
- Local Offices in Abingdon, MD, Manassas, VA, and Newtown, PA.
- Primary Points of Contact:
 - Program Manager: David DiCesare, P.E.
 - Project Manager: Robert Wasserman, P.G.
 - Senior Scientists: Ethan Prout, P.G. and Tara Weeks, P.G.



Completed Activities

- General Contract Documents
 - ✓ PMP, QASP, Draft Final APP, Draft Final UFP-QAPP

- Area B Vapor Intrusion Assessments
 - ✓ Former Montevue Care Facility

- Area C Waste Water Treatment Plant Former Ash Disposal Site (Land Use Control Site)
 - ✓ Draft Work Plan

Vapor Intrusion Assessments - Area B

Sub-Slab Vapor Intrusion (VI) Overview:

- Consists of sampling the gases beneath building slabs, which may be impacted by impacts to groundwater underlying Area B.
- Since vapors can pass through building slabs and accumulate in buildings where people reside and work, screening criteria have been established that trigger actions to mitigate VI hazards to human health.

VI Activities Completed to Date at Area B:

- VI sampling has occurred at the Former Montevue Care Facility at located at 355 Montevue Lane in Frederick MD, 21702. Samples were collected on 15 and 16 May 2013.

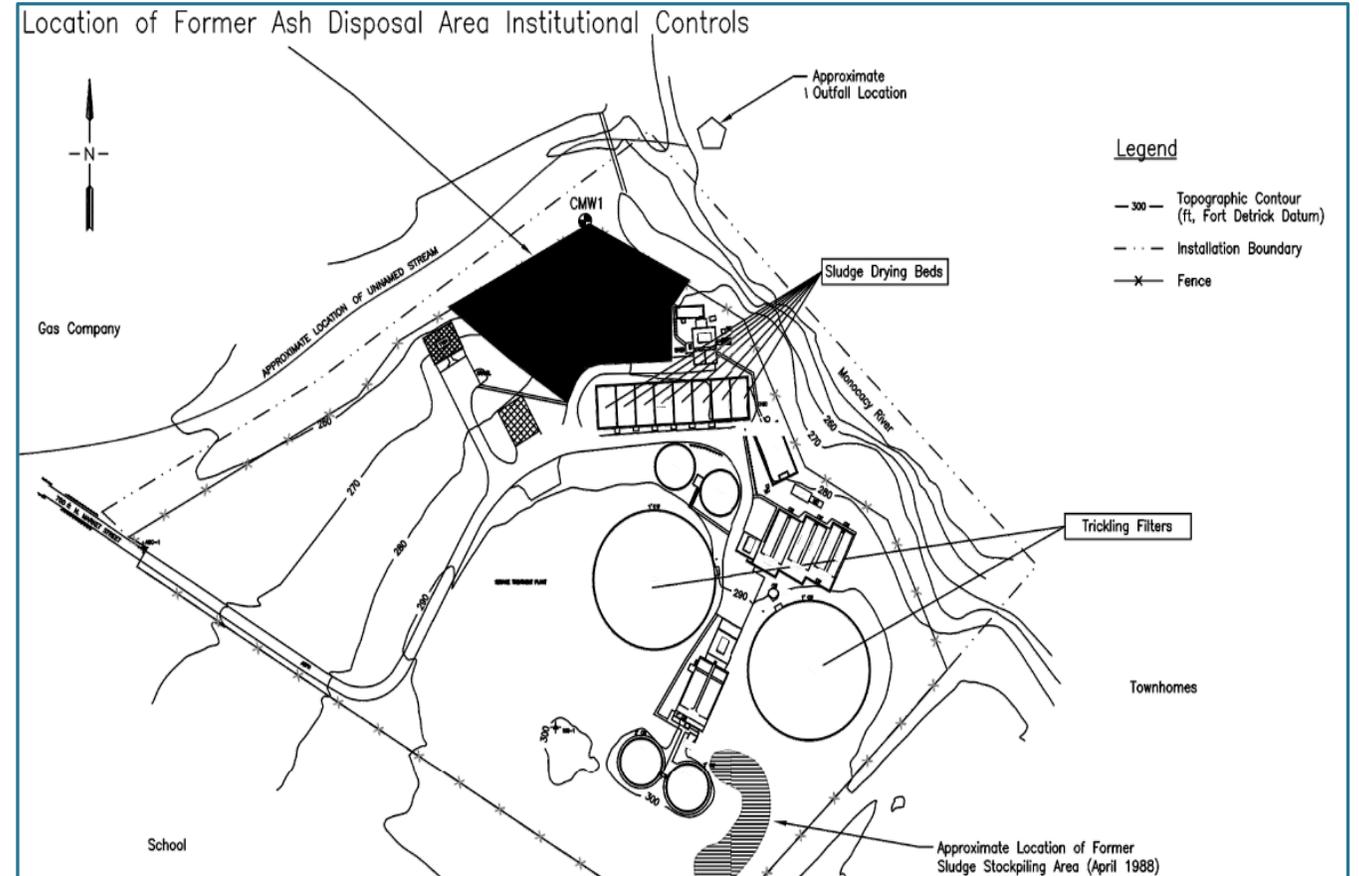
VI Sampling Results – 355 Montevue Lane					Samples Taken										
CVOC (µg/M ³)	EPA RSL Residential (Indoor Air)	Sub-Slab Action Limit (33.3 Attenuation Factor)	EPA RSL Industrial (Indoor Air)	Sub-Slab Action Limit (33.3 Attenuation Factor)	A-SS-01 /Duplicate	A-SS-02	A-SS-03	B-SS-01	B-SS-02	B-SS-03	B-SS-04	B-SS-05	C-SS-01	D-SS-01	
Vinyl Chloride	0.16	5.3	2.8	93.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-DCE	None	None	None	None	ND	ND	ND	0.41 J	ND	ND	ND	ND	ND	ND	
TCE	0.43	14.3	3	99.9	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	
PCE	9.4	313.3	47	1,551	0.54 J/ 0.54 J	0.38 J	ND	ND	0.25 J	0.22 J	0.25 J	ND	ND	0.33 J	

- Upcoming activities include VI sampling at 1699 Shookstown Road (Late August/Early September 2013) and Area A (Fall/Winter 2013).

Soil Investigation – Area C

Background and Purpose:

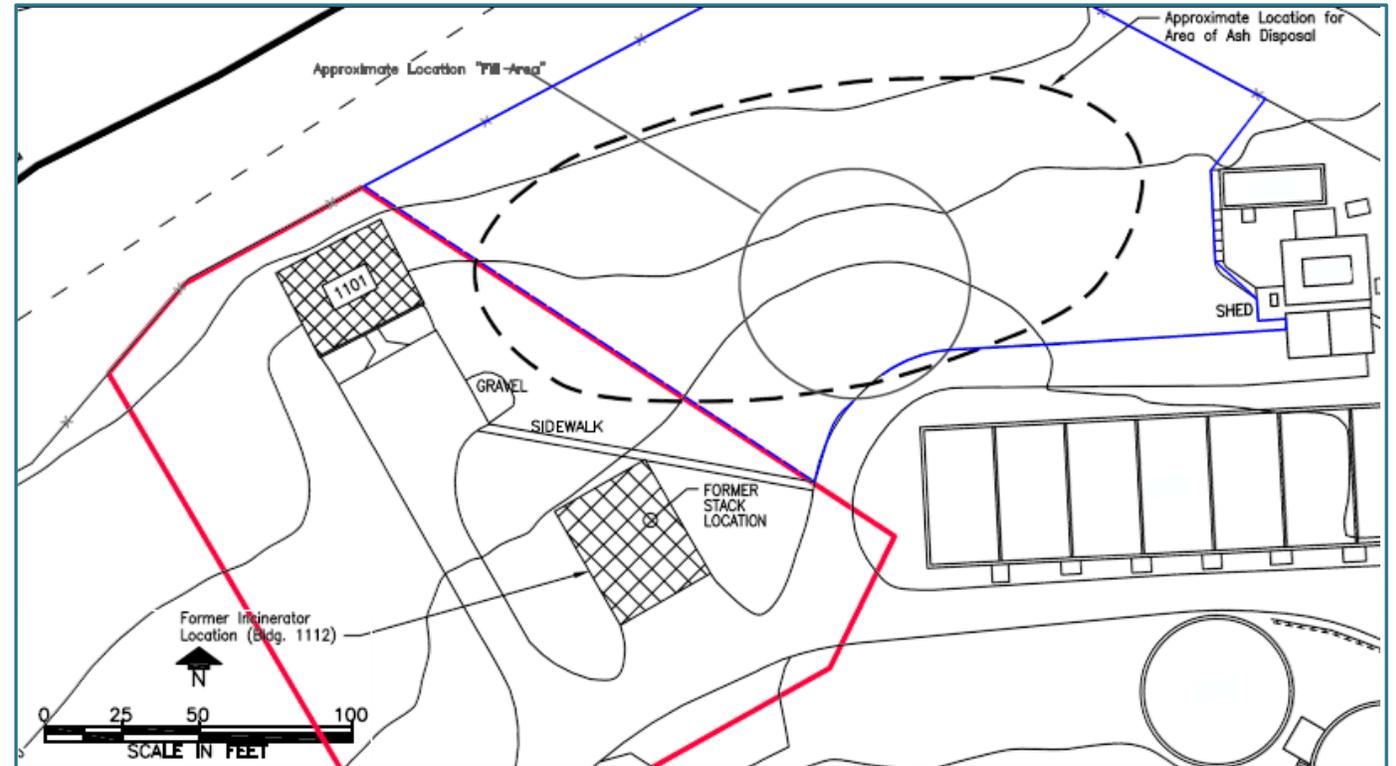
- The Waste Water Treatment Plant (WWTP) historically had a laboratory waste incinerator that ceased operations in 1975 and was demolished.
- Ash from the incinerator was disposed of on-site in a burial pit.
- Environmental investigations from 2000 through 2002 discovered that the ash contained potentially hazardous levels of dioxins.
- A removal action was conducted in 2002 to remove as much of the buried ash as possible.
- Subsequent investigations indicate that residual, buried ash may still exist. In 2004, a Land Use Control (LUC) of no-digging/development was put in place in the vicinity of the burial pit to prevent contact with the buried ash.
- Subsequent investigations in 2008 for the WWTP upgrade identified that demolition debris and ash contamination may exist outside of the current LUC boundary.



Soil Investigation – Area C

Proposed Investigation:

- Purpose of investigation:
 - verify whether residual ash and demolition debris exist outside of the current LUC boundary
 - Characterize residual chemical impacts
- Investigation will use Direct Push Technology (DPT) to efficiently collect soil borings in the investigation area.
- Borings will be used to identify and delineate the extent where residual ash and demolition debris reside.
- Boring materials will be collected and analyzed for dioxins and metals to chemically characterize the subsurface media.



-  - Location of current LUC boundary
-  - Proposed Investigation Area

Soil Investigation – Area C

- Collected data will aid the Army and the Community in re-evaluating the protectiveness of the current LUC boundary and if the LUC boundary requires modification.
- Collected data will further be used for human health and environmental risk-based management decisions regarding the presence of the buried waste and future land uses.
- Field work is scheduled to occur in late August/early September 2013 pending finalization of the work plan.

Pending Activities –Fall 2013/ Winter 2014

- Area B Bedrock Groundwater Monitoring Well Installation
- Areas A & B Vapor Intrusion Assessments
- Area C WWTP Former Ash Disposal Site (Land Use Control Site)
 - Work Plan Approval
 - Field Investigation & Sampling
 - Report