Dewberry

DRAFT

Goodes Bridge Center

Physical Assessment

Amelia County, VA

November 2, 2015

SUBMITTED BY:

Dewberry
551 Piney Forest Road
Danville, VA 24540

SUBMITTED TO:

Amelia County
16360 Dunn Street, Suite 101
Amelia Courthouse, VA 23002

Goodes Bridge Center - Physical Assessment

TABLE OF CONTENTS

Goodes Bridge Center – Physical Assessment

EXECUTIVE SUMMARY

Overview and Purpose

We understand that Amelia County has an option to purchase the Goodes Bridge Center (GBC) located in Amelia County. The County intends to repair the building and lease the building to one or more tenants. Dewberry is providing a physical assessment of the building and site including the following:

- Written physical assessment documenting the physical condition of the building and building systems.
- Identifying code deficiencies.
- Preparation of a cost estimate to correct items identified in the physical assessment.
- Prepare a Phase I Environmental Assessment (see appendix).

The County has also hired Fire Sprinkler Limited of Chatham, VA to conduct a 5-Year Inspection and an NFPA 25 Inspection Report of the existing sprinkler system. Those reports and associated repair costs are included in the appendix of this report and in the "Summary of Probable Construction Costs".

Summary

This report assumes the Occupancy and Use of the Building will remain the same and be used for Light Industrial (F-1) and Business (B-1) Occupancies as defined by the 2012 International Building Code.

The only major code violation identified is the disabled automatic sprinkler system. We also observed that the vacant 1950 metal building and the 1967 metal building contained several abandoned vehicles which we assume will be removed upon purchase of the building. Also the car lift located in the Borum duct work fabrication area should also be removed or an exhaust system installed.

The costs presented in "Statement of Probable Construction Costs" reflect the costs to repair damaged items, to bring the facility up to present day building codes, and to address any code issues that may arise as a result of having future multiple tenants. It does not address additional costs that may be incurred for tenant fit-ups in the 1950 Metal Pre-Engineered Building (now vacant). One example would be the need to add restrooms ($25,000 is included to add a waste line to the sewer main and a water heater to serve the restroom).

One major expense identified in the report has to do with the recommendations to replace or overlay the 1967 metal roof system. The existing metal roof panels have a lot of surface rust over the majority of the roof panels. Given its age and the presence of surface rust we recommend the roof system be replaced or overlaid with a new metal roof. Replacement would include the removal and replacement of one roof panel at a time so contents of the interior are not exposed to inclement weather. An option called the Hugger System leaves the existing roof intact and a new metal roof system is installed on top of the existing (roofhugger.com). Spray-on paint coatings are seen as quick fixes and would cover the rust but normally fail to permanently fix existing roof systems.

Dewberry performed a Phase I Environmental Site Assessment (ESA) on 2.274 acres at 15401 Goodes Bridge Road in Amelia Court House, Virginia. Based on the historical use of the subject property and Phase I ESA and limited Phase II ESA reports completed in 2003 and 2004, respectively, this assessment revealed evidence of recognized environmental conditions in connection with historical activities at the subject property. Dewberry recommends an update to the limited Phase II ESA conducted by Froehling and Robertson (F&R) in 2004. Soil

samples should be collected within the subject property in similar locations to those collected in F&R's 2004 limited Phase II report. Additional soil sampling is recommended within the vicinity of the petroleum staining observed at the southwestern corner of the building.




Goodes Bridge Center – Physical Assessment

FACILITY PROFILE

Location/Address	15401 Goodes Building Road Amelia Courthouse, VA 23002
Date of Construction	
• Original Pre-Engineered Metal Bldg	1950
• Borum Pre-Engineered Metal Bldg	1967
• Office/Fitness Center	Late 1950's Renovated in 2006
Site Size	2.274 Acres
Building Area	39,000 SF
Type of Construction	
• Pre-Engineered Building	Type IIB (non-combustible and unprotected, sprinkler system)
• Office/Fitness Center	Type IV (wood frame, sprinkler system)
Occupancy	
• Pre-Engineered Building	Factory Industrial (light industrial)
• Office/Fitness Center	Business (B-1)
Exterior Surface	
• Pre-Engineered Building	Metal Wall Panels
• Office/Fitness Center	Vinyl Siding
Floor Construction	Slab on Grade
Roof Construction	
• Pre-Engineered Building	Standing Seam and Screw Down Metal Roofing
• Office/Fitness Center	Shingles
Energy Source	Electrical
Heating / Air Conditioning	
• 1950 Pre-Engineered Building	Oil Fired Furnaces
• 1967 Pre-Engineered Building	Propane Unit Heaters
• 2006 Office/Fitness Center	Split System Heat Pumps
Water / Sewer	Amelia County

Location Map

Physical Assessment					
GBC Facility	**Good Condition**	**Minor Repair**	**Major Repairs**	**Needs Replacing**	**Comments**
A. Physical Condition of Site					
1 Paved Areas					
• Parking Lot		✓			restripe parking spaces/fill cracks and seal all pavement
• Service Drive (to 1967 building)		✓			fill cracks and seal all pavement
• Loading Dock				✓	replace deteriorated section of paving around drain and verify drain line is not clogged
2 Site Lighting	---	---	---	---	none existing
3 Landscaping	✓				all areas have good strand grass
B. Physical Condition of Building					
1 Roof: 1950 Original Pre-Engineered Building					
• Standing Seam Metal Roof Panels		✓			
• Roof Panel Laps			✓		appears panel laps are letting water enter building/seal all laps
• Roof Penetrations		✓			roof panels adjacent to both hot stacks (flues) are rusting and repairs are needed
• Ridge Panel	✓				
• Gutters		✓			minor ponding of water/approximately 20 LF of gutters are rusted at dock area
• Downspouts	✓				
2 Roof: 1967 Borum Pre-Engineered Building					
• Screw down metal roof panels				✓	a lot of surface rust - need to replace the metal roof panels
• Roof Panel Laps		✓			no leaks observed at panel laps/seal all screw heads
• Roof Penetrations, Curbs, etc.		✓			all roof penetrations have had repairs
• Ridge Panel		✓			repairs have been made - sheet metal installed along ridge in several areas
• Gutters		✓			minor ponding of water/approximately 20 LF of gutters are rusted
• Downspouts	✓				
3 Roof: 2006 Office/Fitness Center					
• Shingles	✓				no leaks observed
• Roof to Wall Flashing		✓			shingle roof to metal building flashing is rusting
• Gutters	✓				
• Downspouts	✓				
• Ridge Shingles	✓				
• Vent Pipe Flashing	✓				
4 Exterior					
• Metal Wall Panels		✓			few dented and a few rusted wall panels
• Vinyl Siding	✓				
• Hollow Metal Doors, Frames, and Hardware					
- Pre-Engineered Metal Building				✓	dented, rusting, no picnic hardware
- Office/Fitness Center	✓				
• Overhead Sectional Doors					
- Manual: 1950 Original Pre-Engineered Building		✓			
- Electric: 1967 Borum Pre-Engineered Building		✓			one sectional door out of level, gap at bottom on one side

GBC Facility	Good Condition	Minor Repair	Major Repairs	Needs Replacing	Comments
5 Foundation/Steps: 1967 Pre-Engineered Building					
• Painted CMU		✓			need to paint
• Steps and Landing				✓	one set concrete steps and landing in bad condition
6 Retaining Wall at Loading Dock: 1950 Metal Bldg					
• Painted CMU		✓			remove loose and flaking paint, waterproof and repaint
7 Loading Dock: 1950 Metal Building					
• Dock Levelers				✓	rusted, assumed not to be operational
• Dock Seals				✓	torn and damaged
8 Interior of Metal Buildings					
• Floor Slabs	✓				minor cracking
• Purling and Girts	✓				
• Cross Bracing	✓				
• Anchor Bolts	✓				
• Vinyl Backed Roof Insulation - 1950 Metal Bldg	✓				some sagging at roof due to leaks at panel laps (need to dry out)
• Vinyl / Foil Backed Wall Insulation	✓				
• Interior Metal Wall Liners		✓			some dents
• Toilet Fixtures WC/LAV/Urinals				✓	stained, most fixtures are not operational
9 Physical Condition of HVAC System					
• 1950 Original Pre-Engineered Building				✓	existing oil furnaces have deteriorated and are non-operational
• 1967 Borum Pre-Engineered Building				✓	majority of HVAC units are abandoned, limited spaces are conditioned.
• 2006 Office Fitness Center	---	---	---	---	
- Split System Heat Pumps		✓			ventilation air is not provided to the space in accordance with code.
10 Physical Condition of Plumbing System					
• 1950 Original Pre-Engineered Building	---	---	---	---	none existing
• 1967 Borum Pre-Engineered Building					
- Water Closets				✓	
- Urinals				✓	
- Lavatory				✓	
- Drinking Fountains	---	---	---	---	none existing
• 2006 Office/Fitness Center					
- Water Closets	✓				
- Urinals	✓				
- Lavatory	✓				
- Drinking Fountains	✓				
11 Sprinkler System					
• 1950, 1967 Pre-Engineered Buildings and 2006 Office/Fitness Center			✓		see detailed physical assessment

GBC Facility	Good Condition	Minor Repair	Major Repairs	Needs Replacing	Comments
12 Physical Condition of Electrical System					
• 1950 Original Pre-Engineered Building					
- Electrical Service				✓	
- Lighting			✓		
- Power			✓		
- Receptacles			✓		
- Fire Alarm	---	---	---	---	none existing
- Site Lighting	---	---	---	---	none existing
• 1967 Borum Pre-Engineered Building					
- Electrical Service				✓	
- Lighting			✓		
- Power			✓		
- Receptacles			✓		
- Fire Alarm	---	---	---	---	none existing
- Site Lighting	---	---	---	---	none existing
• 2006 Office/Fitness Center					
- Electrical Service				✓	
- Lighting	✓				
- Power			✓		
- Receptacles	✓				
- Fire Alarm	---	---	---	---	none existing
- Site Lighting	---	---	---	---	none existing

2012 International Building Code - Code Review

Occupancy

• Pre-Engineered Metal Building	Factory Industrial F-1
• Office/Fitness Center	Businiess B-1

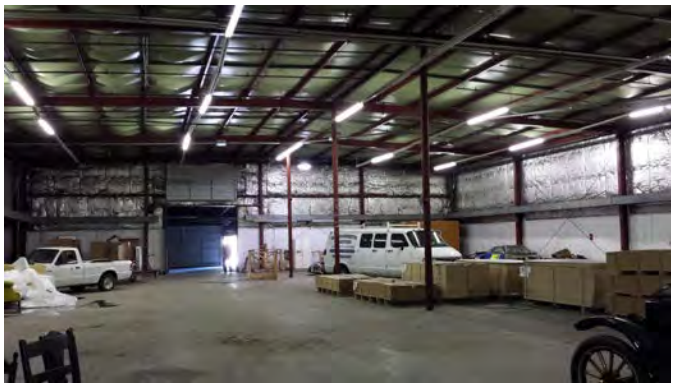
Type of Construction

• Pre-Engineered Metal Building	Type II B (non-combustibule and unprotected, sprinkler system)
• Office/Fitness Center	Type IV (wood frame, sprinkler system)

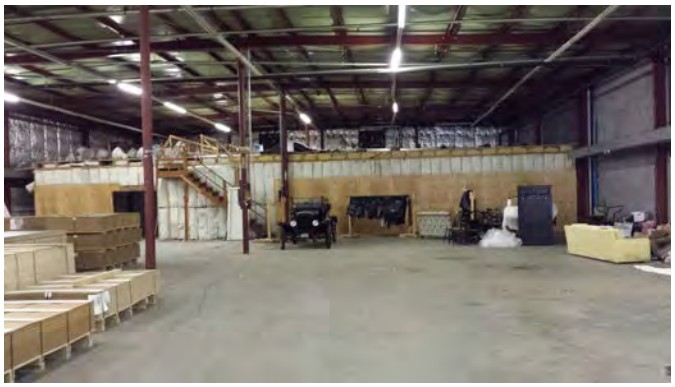
Gross Building Area	39,000 SF
Table 503: Allowable Building Area	15,500 SF
Section 506.3: Area Increase for Sprinkler System - 200%	31,000 SF
• Total allowable building area	46,500 SF
Section 508: Mixed Use and Occupancy	
• Business Area (B-1) is an accessory occupancy per 508.2	2,964 SF
- Less than 10% building area	
Table 508.4: Required Seperation of Occupancies (F-1 and B-1)	no seperation required

Note: the only code violation noted was the disabled sprinkler system

Goodes Bridge Center - Photos

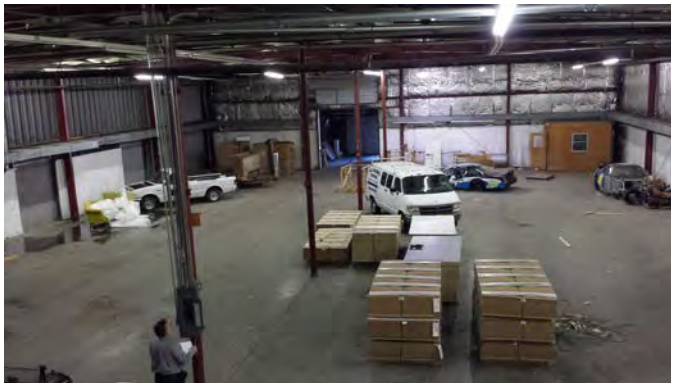


1950 Metal Building



1950 Metal Building

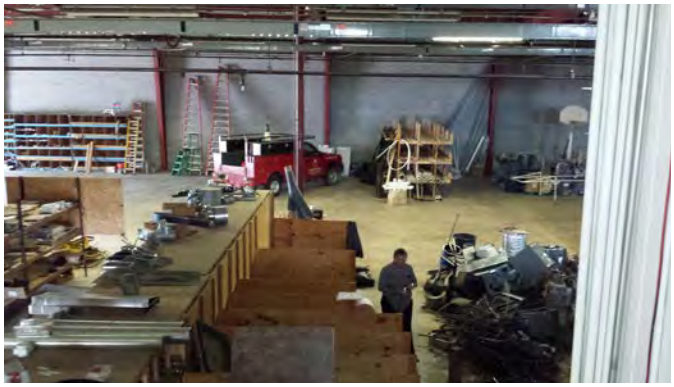
1950 Metal Building - Looking Towards Fitness Center



1950 Metal Building

HVAC Unit Above Fitness Center at 1950 Metal Building

1967 Metal Building (Borum Shop)



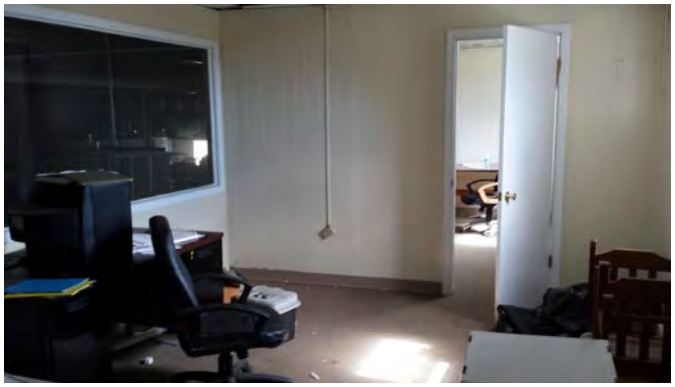
1967 Metal Building (Borum Shop Area)

1967 Metal Building (Borum Shop) Towards Duct Fabrication

1967 Metal Building (Borum) Upper Office Area

Elevated Storage Area - 1967 Metal Building (Borum Shop)

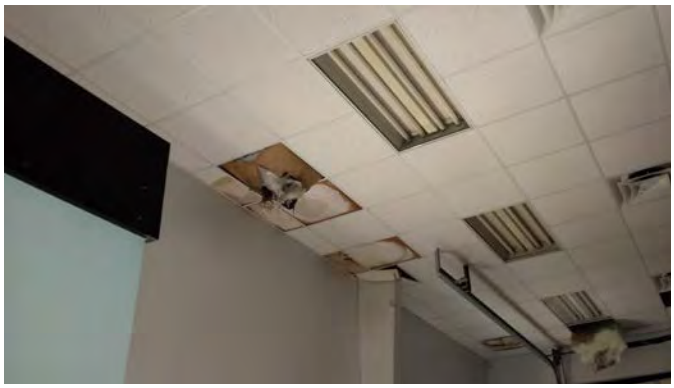
1967 Metal Building - Steps Leading to Upper Office Area (Borum Shop)



1967 Metal Building Upper Office Area (Borum Shop)

Typical Condition of Restrooms 1967 Metal Building (Borum Shop)

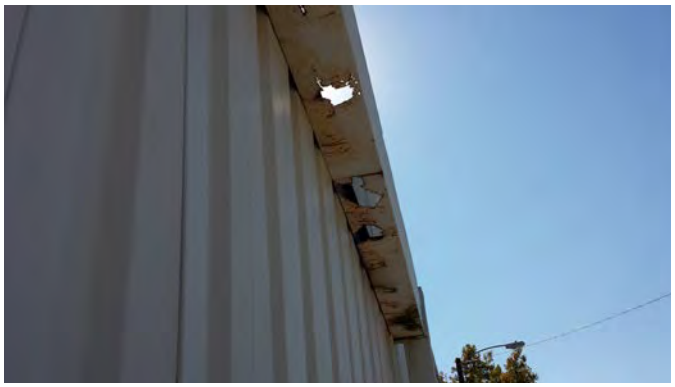
1967 Metal Building (Borum Shop)



Suspended Acoustical Tile Ceiling in Duct Fabrication Shop in 1967 Metal Building

Wet Block from Gutter Leak - 1967 Metal Building (Borum Shop)

Exterior 1950 Metal Building, Loading Dock and Paving

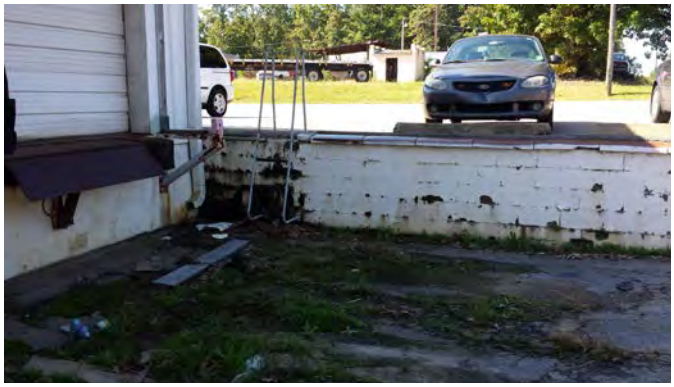


Rusted Gutter at Loading Dock Area

Exterior 1967 Metal Building (Borum Shop) and Paving

Dented Metal Wall Panels - Few Locations

Aluminum Trim Missing at 1967 Metal Building (Borum Shop)



Retaining Wall at Loading Dock

Dock Levelers and Dock Seals at Loading Dock

Drain Inlet at Loading Dock

Foundation and Metal Wall Panels at 1967 Metal Building

Existing Painted Block Foundation and Steps/Landing at 1967 Metal Building

Existing Painted Block Foundation and Steps/Landing at 1967 Metal Building

Existing Concrete Steps and Landing 1967 Metal Building

Foundation Wall and Downspout 1967 Metal Building

Concrete Drainage Swale at Rear of Property

Exterior 1967 Metal Building and Water Tank

Office Area and Fitness Center - Vinyl Siding

1967 Metal Building/Fitness Center - Vinyl Siding

Front Parking Lot - Minor Cracking in Paving

Front Parking Lot - Minor Cracking in Paving

Office Area and Fitness Center

Downspout Draining Shingle Roof at 1950 Metal Building

Overall View of 1950 and 1967 Metal Roofs

Typical Condition of Standing Seam Roof Over 1950 Metal Building

Standing Seam Roof Panels Showing Extent of Panel Laps (1950 Metal Building)

Non-Vented Ridge at 1950 Metal Building

Typical Standing Seam Roof at 1950 Metal Building

Typical Roof Panel Lap at 1950 Metal Building

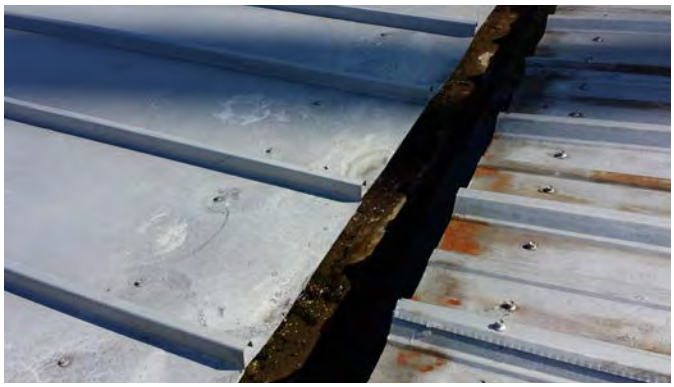
Weatherheads on 1950 Metal Building

Standing Seam Roof and Flume at 1950 Metal Building

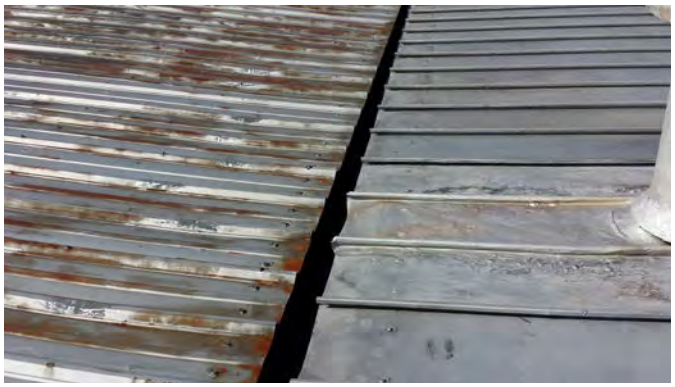
Typical Cutter - Minor Ponding of Water

Typical Roof Penetration Over 1950 Metal Building

Typical Roof Penetration at Standing Seam Roof (1950 Metal Building)



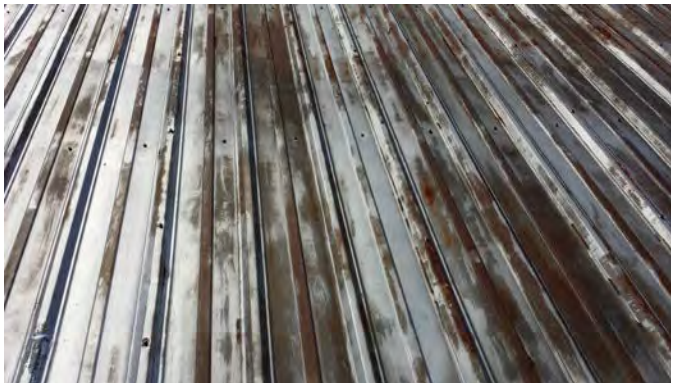
Gutter Between 1950 and 1967 Metal Buildings



Gutter Between 1950 Metal Standing Seam Roof and 1967 Screw Down Roof

Ridge Repairs on the 1967 Metal Building (Borum Shop)

Typical Condition of Screw Down Metal Roof Over 1967 Metal Building (Borum Shop)



Typical Condition of Roof Over 1967 Metal Building (Borum Shop)

Typical Condition of Screw Down Metal Roof at 1967 Metal Building (Borum Shop)

Metal Standing Seam Roof Over Lower Roof Adjacent to 1950 Metal Building

Rusted Gutter on Higher Roof (2 locations) Adjacent to Loading Dock Roof

Shingle Roof Over Office/Fitness Center Area

Condensing Units Serving Office Area Fitness Center

Roof to Wall Flashing at Shingle Roof to Metal Building Wall Panels

Roof to Wall Flashing at Shingle Roof to Metal Building Wall Panels

Goodes Bridge Center - Detailed Physical Assessment

A. PHYSICAL CONDITION OF THE SITE

- **Issues, Concerns, Recommendations**

1. **Paved Areas**
   - Paving at parking lot and service drive appears to be in good condition except minor cracking was observed throughout. We recommend you fill all cracks and seal all pavement.
   - All paint lines at parking spaces have faded and need to be repainted.

2. **Loading Dock Pavement**
   - Paving at loading dock around the storm drain inlet appears to be deteriorated and should be replaced.
   - While water was not ponding around the storm drain inlet at the time of inspection, the presence of vegetation indicates this area is holding water. Verify storm drain line is operational.

B. PHYSICAL CONDITION OF THE BUILDING

- **Issues, Concerns, Recommendations**

1. **Roof: 1950 Pre-Engineered Metal Building**
   - The existing roof is a standing seam metal roof. Only minor repairs are needed.
   - The standing seam metal roof has one row of alternating roof panel laps along the entire length of the building. It appears water is entering the building at the roof panel laps causing the vinyl back insulation on the interior of the building to sag. Water was observed on the concrete slab in one location. Seal all roof panel laps.
   - Repairs have been made at all roof penetrations and minor rusting has occurred at roof panels adjacent to roof curbs.
   - Gutters are ponding very little water.

2. **Roof: 1967 Pre-Engineered Metal Building**
   - The existing roof is a screw down metal roof and no leaks were observed at the time of this inspection. The metal roof has one row of panel laps along the entire length of the building. The majority of the metal roof has surface rust. Due to the age of the roof and the extent of rusting we recommend replacing the existing metal roof. An option may be to overlay the existing metal roof with a Roof Hugger System (metal roof overlay).
   - The majority of the metal roof panels have surface rust and most screw heads have been caulked.
   - Roof repairs have been made at all roof penetrations.
   - Sheet metal repairs have been made to the roof ridge in numerous locations.
   - Gutters are ponding very little water.
   - The interior gutter located between the 1950 and 1967 building is leaking in one location. Wet block was observed at the firewall in the Borum Shop area (see photos).

3. **Roof: 2006 Office/Fitness Center**
   - The shingle roof installed in 2006 appears to be in good condition with no leaks observed.
   - The metal flashing between the shingles and the metal building wall panels acts as a gutter however, is rusting along the entire length of the Office/Fitness Center. Remove surface rust from flashing and prime and paint metal flashing at base of shingles.

4. **Exterior of Building**
    - Exterior metal wall panels are in good condition. Only a few were noted as dented or rusted. Replace or repair all rusted and dented wall panels.
    - Exterior hollow metal doors and frames are rusted and dented and none of the exterior doors have panic hardware. Replace all exterior hollow metal doors and provide panic hardware.
    - Manual overhead sectional doors in the 1950 Metal Building appear operational.
    - One electrically operated overhead sectional door in the 1967 Metal Building is out of level with a large gap at bottom on one side of the door. The other sectional door is missing the aluminum trim at the head of the door. Align sectional door and install aluminum trim at head of door.

5. **Foundations: 1967 Pre-Engineered Metal Building**
    - Exposed block at base of 1967 Borum Metal Building needs to be painted (occurs at rear and one side of building).
    - One set exterior concrete steps and landing are deteriorated beyond repair and should be replaced.

6. **CMU Retaining Wall at Loading Dock: 1950 Pre-Engineered Metal Building**
    - Need to remove all loose and flaking paint, water proof, prime and paint all concrete blocks the entire length of the retaining wall.

7. **Loading Dock: 1950 Pre-Engineered Metal Building**
    - Dock levelers are assumed not to be operational and need to be replaced.
    - Dock seals are damaged beyond repair and should be replaced.

8. **Interior of Metal Buildings**
    - Several interior metal wall liners in the 1967 metal building were dented.
    - Both restrooms in the 1967 metal building are in very poor condition. All toilet fixtures (toilets, urinals, and lavatories) are stained and most are not operational. Both restrooms need a complete renovation and made ADA accessible.
    - In the 1950 metal building water is entering the building at the roof panel laps causing the vinyl backed insulation to sag. Once leaks are stopped the insulation should dry out.

9. **Electrical – 1950 Metal Pre-Engineered Building**
    - Electrical Service
        - The electrical services that serve all three of the structures (1950, 1967 and 2006) are located in the 1950 building.
        - The building has two electrical services:
            - 240/120v, 800amp, 3-phase, 4-wire HI-Leg-Serves general power to all three structures.
            - 480/277v, 800amp, 3-phase, 4-wire-Serves power to specific equipment in the 1967 building.
        - The majority of the existing electrical equipment is manufactured by Square D and General Electric.
        - The existing 240v service is served from an overhead transformer bank, with an overhead service drop to weather heads extended thru the roof.
        - The service conductors extend down to a main fused disconnect switch. Conductors are routed from the main service disconnect to a wiring gutter. There are approximately a combination of eleven (11) disconnect switches/enclosed circuit breakers/panel boards tapped to the wiring gutter. The disconnect switches/enclosed breakers serves existing branch circuit panel boards or served equipment that has been removed in all three structures.

- The existing 480v service is served from an overhead transformer bank, with an underground service to a utility current transformer enclosure (CT Cabinet) on the exterior of the building.
- The service conductors are routed from the CT cabinet to two service disconnects on the inside of the building.
- Recommendation:
  - Upgrade the 240/120v, 3-phase HI-Leg service to a 208/120v 3-phase service.
  - Re-work existing service to provide a separate electrical meter and main disconnect switch for each 'Tenant' space.

- Lighting
  - Warehouse Area
    - Five continuous rows of 8' fluorescent industrial type fixtures are installed. All lights were not operational. No light switches were observed, lights are controlled from breakers in electrical panel.
    - One metal halide hi-bay type light fixture is installed near the loading dock.
    - Two emergency battery packs were installed with-in the space. One was tested, but it didn't work.
    - EXIT light was installed exterior door a loading dock. No other EXIT lights were observed with-in the space.
  - Unfinished Office Space within Warehouse
    - Several of the rooms do not have lights installed. The spaces are roughed-in but not trimmed out.
    - EXIT and emergency lights were no observed in this area.
    - Other spaces have 4' fluorescent wrap fixtures.
  - Building Mounted Exterior Lights
    - No lights were observed on the exterior of the building.
  - Recommendation
    - Complete light and wiring device installation in unfinished office space.
    - Federal energy legislation such as EPACT (The Energy Policy Act) mandates the phase out of many of the older T12 linear fluorescent lamp.
    - Replace interior light fixtures with more energy efficient fixtures and provide automatic lighting controls per current building codes.
    - Provide EXIT lights at egress doors and emergency battery powered lights along the path of egress to the doors.
    - Provide exterior building lights at egress doors for building security.

- Receptacles
  - Warehouse Area
    - Duplex receptacles were mounted on the wall adjacent the loading dock area and a few were located on the columns in the center of the building.
  - Unfinished Office Space within Warehouse
    - Several of the rooms do not have receptacles installed. The spaces are roughed-in but not trimmed out.
  - Recommendation
    - Complete wiring device installation in unfinished office space.
    - Additional devices will need to be added based future tenant requirements.

- General Purpose Power
    - Warehouse Area
        - A wiring gutter is located on the wall between the 1950 and 1967 building. The gutter has a combination of ten (10) disconnect switches/enclosed circuit breakers tapped to the wiring gutter. These switches served equipment that has been removed.
        - Two branch circuit panels are located on the center row of columns near the office space with-in the warehouse area. These two branch circuit panels serve the lights and receptacles in the space and served equipment that has been removed.
        - A branch circuit panel is located in the narrow corridor between the exterior wall and office space with-in the warehouse. There is no panel schedule to indicate what this panel serves. Based on site observations it appears to serve the office area. The panel has six (6) buck boost transformer located adjacent to the panel that serve dedicated equipment loads. No schedules or labels are installed to indicate what loads are being served.
    - Recommendation
        - Re-wire the existing 240/120v panels to the new proposed 208/120v electrical service for this tenant space.
        - Additional panel may need to be added based future tenant requirements.
        - Remove electrical disconnect switches and feeders that served equipment that has been removed.

- Fire Alarm
    - No fire alarm audio visual devices were observed in this area.
    - Recommendation
        - Provide a fire alarm system with manual pull stations, sprinkler monitoring and audio visual devices in all the tenant spaces.

10. Electrical – 1967 Metal Pre-Engineered Building

- Electrical Service
    - The electrical service disconnect switches that serves this building are located in the 1950 building.
    - The building has two electrical services.
        - 240/120v, 3-phase, 4-wire HI-Leg- Panels serve general power to space for lights, receptacles, overhead bus duct and HVAC equipment.
        - 480/277v, 800amp, 3-phase, 4-wire-Panels serve dedicated shop equipment.
    - The majority of the existing electrical equipment is manufactured by Square D, Cutler Hammer and General Electric.
    - There are a combination of disconnect switches and enclosed circuit breakers tapped to the wiring gutter in the 1950 building. The disconnect switches and enclosed breakers serves existing branch circuit panel boards in the 1967 building.
    - Recommendation
        - Upgrade the 240/120v, 3-phase HI-Leg service to a 208/120v 3-phase service.
        - Re-work existing service to provide a separate electrical meter and main disconnect switch for each ‘Tenant’ space.
        - Provide proper labels in the 480/277v service disconnect switches.

- Lighting
  - Warehouse Area
    - Six rows of 8' fluorescent industrial type fixtures are installed. All lights were not operational. No light switches were observed, lights are controlled from breakers in electrical panel.
    - Two rows of metal halide hi-bay type light fixture is installed along with the fluorescent industrial type fixtures on the plan south side of the building.
    - Emergency battery packs and EXIT lights were installed at some of the exit doors. Lights did not appear to be working.
  - Office Space within Warehouse
    - 2x4 lay-in type fluorescent lights were located on the upper level offices. Lights are controlled from wall switches
    - Surface mounted fluorescent lights were located in the lower level restroom area. Lights are controlled from wall switches.
  - Building Mounted Exterior Lights
    - No lights were observed on the exterior of the building.
  - Recommendation
    - Federal energy legislation such as EPACT (The Energy Policy Act) mandates the phase out of many of the older T12 linear fluorescent lamp.
    - Replace interior light fixtures with more energy efficient fixtures and provide automatic lighting controls per current building codes.
    - Provide EXIT lights at egress doors and emergency battery powered lights along the path of egress to the doors.
    - Provide exterior building lights at egress doors from building security.

- Receptacles
  - Warehouse Area
    - Duplex receptacles were mounted on the walls and the columns to serve the current tenants power requirements.
  - Office Space within Warehouse
    - Duplex receptacles were mounted on the walls serve the current tenants power requirements.
  - Recommendation
    - Additional devices will need to be added based on future tenant requirements.

- General Purpose Power
  - Warehouse Area
    - Eight branch circuit panels are located on the center row of columns and the perimeter walls warehouse area. These branch circuit panels serve the lights, receptacles and shop equipment.
    - Branch circuit panels are located on the exterior of the building to serve the HVAC condensing units.
    - Four runs (two on each half of building) of plug-in bus way are routed approximately ¾ the length of the building. No equipment was observed connected to the bus way.
  - Recommendation
    - Re-wire the existing 240/120v panels to the new proposed 208/120v electrical service for this tenant space.
    - Additional panel may need to be added based future tenant requirements.
    - Re-install covers on all the electrical panels.

- Fire Alarm
    - The sprinkler system main riser is located in the 1967 building. The sprinkler system appears to have a tamper and flow switch.
    - No fire alarm audio visual devices were observed in this area.
    - Recommendation
        - Provide a fire alarm system with manual pull station, sprinkler monitoring and audio visual devices in all the tenant spaces.

11. Electrical – 2006 Office/Fitness Center

- Electrical Service
    - The electrical service disconnect switch that serves this building are located in the 1950 building.
    - There are two branch circuit panels located in the fitness center area. It appears that one panel serves the office area and one served the fitness area.
    - The existing electrical equipment is manufactured by Cutler Hammer.
    - Recommendation
        - This area currently has two different tenants. Re-wire the existing 240/120v panels to the new proposed 208/120v electrical service for this tenant space so that each tenant space has a separate meter.

- Lighting
    - Each space has a combination of 2x4 lay-in type fluorescent lights, recessed down lights and ceiling fans.
    - Building mounted exterior lights.
        - Wall mounted lights are mounted adjacent the main entrance doors.
    - Recommendation
        - Provide EXIT lights at egress doors and emergency battery powered lights along the path of egress to the doors.
        - Upgrade exterior building lights at egress doors for building security.

- Receptacles
    - Duplex receptacles are spaced around each space to support the existing functions of the space.
    - Recommendation
        - No work recommended.

- Fire Alarm
    - No fire alarm audio visual devices were observed in this area.
    - Recommendation
        - Provide a fire alarm system with manual pull station, sprinkler monitoring and audio visual devices in all the tenant spaces.

12. Mechanical/Plumbing/Fire Protection - 1950 Metal Pre-Engineered Building

- Mechanical
    - Warehouse Area
        - The space is served by two oil fired vertical furnaces with ductwork routed along the perimeter of the building at approximately 10’ above finish floor. These units are in poor condition, are non-operable, and need to be replaced.
        - Oil fired furnaces vent to roof. These vents have been disconnect and are severely corroded.
        - A pool of water was visible on the floor under one of the oil furnace units. It appears water is infiltrating either through the vent or the roof penetration for the vent, running down the vent, falling on the unit, and down to the floor.

        - Two propeller type sidewall exhaust fans are located on the east side of the space above the unfinished office space. These fans were not observed operating during the site visit.
    - Unfinished Office Space within Warehouse
        - Three <5 ton AHUs were located above the unfinished office space. Their associated condensers were located on the roof of the 2006 addition at the east end of the building. These systems were not observed operating during the site visit.
        - Refrigerant piping and condensate drain piping was not secured and was laid on top of the ceiling batt insulation. At times piping would span 10-15 feet across ceiling elevation changes unsupported. Wall penetrations were sleeved, but not sealed. Daylight was visible.
        - All ductwork was plastic wrapped flex duct with R-6 insulation. The outer layer of plastic wrap was ripped in several location. Ductwork was neatly laid out.
        - Several galvanized vent pipes, approx. 6" diameter rise through the ceiling and out the east end of the warehouse. These are assumed vents for the tanning beds. Exterior wall penetrations are sloppy, not sealed, and vents are not supplied with bird screening.

- Plumbing
    - Warehouse Area
        - Building provided with gutter and external downspouts. No internal roof drains.
        - No running water available in the warehouse.
        - There were no plumbing fixtures located in the warehouse.
    - Unfinished Office Space within Warehouse
        - PEX hot water piping was visible above ceiling. This was secured with plastic clips and nailed to a plywood subfloor.
        - No hub cast iron piping was observed above ceiling routed to the exterior. This serves as part of the plumbing vent system.

- Fire Protection
    - Warehouse Area
        - An exterior wall mounted post indicator valve (PIV) and fire department connection (FDC) have been disconnected and capped for an unknown reason. These devices should be reconnected, removed in their entirety, or labeled on the exterior of the building as out of service.
        - Piping appears to be in good condition. It is black steel with groove lock fittings on piping 3" or larger. Threaded fittings are used on piping 2.5" and smaller.
        - No indication of significant leaking (past or present) was observed.
        - The main fire riser was not located in this building. The main pipe was routed from the PIV/FDC location at the northwest corner across the ceiling and into the 1967 warehouse.
    - Unfinished Office Space within Warehouse
        - The sprinkler system was extended from the 1950 warehouse piping to serve the unfinished office. Branch piping is located above the ceiling of the new spaces.

- Recommendations
    - The existing furnaces and ductwork should be demolished and replaced with propane fired radiant heater. Cooling shall be added based on tenant needs.
    - The propeller exhaust fans should be cleaned and serviced.
    - HVAC systems located in the warehouse, serving the Office/Fitness Center, shall have all associate piping properly supported and wall penetrations sealed.

- The sprinkler system should be returned to service. The disconnected PIV and FDC shall be reconnected or removed.
- Restrooms and running water should be added to the warehouse space. A water heater shall be included. These fixtures should be located near the exterior wall to limit the need to saw cut and disturb the existing warehouse floor. Drain piping could be routed on the exterior of the building to the main sewer line.

13. Mechanical/Plumbing/Fire Protection - 1967 Metal Pre-Engineered Building

- Mechanical
  - Warehouse Area
    - Three York ceiling hung, unducted, horizontal cooling units serve the space. These units were not observed operating during the site visit.
    - The York condensing units on the exterior of the building were in poor condition, rusty, with bent fins.
    - Several residential type ceiling fans are installed at roof level. The intent of these fans are for de-stratification.
    - Propane fired heaters were install above actively used storage space. Units appeared fairly new and in good condition. Units were not vented.
    - Several ducts were observed passing down from the roof and capped once inside the building. These are assumed to be from roof top equipment since removed or abandoned.
    - Mezzanine office space was conditioned with a through the wall window unit.
    - Four general exhaust fans (two on each end) ventilate the warehouse. These were not accessible during the inspection. They were not observed operating during the site visit.
  - Duct Fabrication Shop within Warehouse
    - Served by a new propane fired furnace with DX cooling coils. Air is distributed into the space via a duct system located above the space.
    - No exhaust fans were observed in the space.

- Plumbing
  - Warehouse Area
    - The women's restroom contained drain piping for three toilets, only two fixture were in place. Three sinks were installed. Odors in the room gave the impression that all traps were dried. All fixtures and finished are recommended to be replaced.
    - The men's restroom contained two urinals, two toilets, and three sinks. All fixtures were operational. Fixtures were heavily soiled. Several of the sink fixtures leaked. Exposed piping was corroded.
    - A 40 Gal electric water heater in serviceable condition was located in a Janitor's closet.

- Fire Protection
  - Warehouse Area
    - Two sprinkler risers are located on the south side of the building. There was no pressure on the system, an indication it has been drained.
    - Per the inspection sheet, it was last inspected in March of 2004.
    - Two post indicator valved are located approx. 10ft outside the building opposite the wall from the risers. A hydrant is also located at this location.
    - No sprinkler heads were located under the wooden "deck" structure on the east end of the warehouse.
  - Finished Garage Space within Warehouse
    - The sprinkler system was not extended into this space.

- Recommendations
    - A new HVAC system with fresh air intake shall be installed in the mezzanine office and toilet rooms.
    - An exhaust system shall be added to the duct fabrication shop area suitable for handling vehicular exhaust.
    - Abandoned warehouse heaters shall be removed and replaced with propone fired radiant heater. Cooling shall be added based on tenant needs.
    - The propeller exhaust fans should be cleaned and serviced.
    - All new plumbing fixtures shall be provided in both the men's and women's restrooms.
    - The sprinkler system shall be energized. Sprinkler heads should be added in the enclosed garage area and under the wooden mezzanine. The FDC for this system shall be relocated to improved access by the fire department. Consider a location adjacent to the 1950s warehouse FDC.
    - A single city fire water supply could serve both sprinkler riser. General routing for the new City water supply could follow one of two routes. From Goodes Bridge Road the new water line could be routed underground around the rear of the building entering the building in the vicinity of the existing sprinkler risers. An alternative would be to enter the building as soon as possible and route piping overhead in the warehouses to the existing sprinkler risers.

14. Mechanical/Plumbing - 2006 Office/Fitness Center

- Mechanical
    - The HVAC units serving these spaces are located in the 1950 warehouse and commented on in the above section.
    - Diffusers/grilles are located in the ceiling.
    - The condensing units are located on the roof. Nameplate date on the units indicate a manufacture date of 2006. These units appeared in good condition and can be expected to be about halfway through their expected life.

- Plumbing
    - The exhaust fan in the toilet spaces was loud.
    - Hot water was functional
    - The ADA women's sink was disconnected.
    - One of the women's sinks was not draining.

- Fire Protection
    - The warehouse sprinkler system has been extended into the Office/Fitness center. This system is not active.

- Recommendations
    - Ventilation air shall be introduced to the HVAC systems.
    - Drain piping in the women's restroom shall be inspected for a blockage.

Goodes Bridge Center
Statement of Probable Construction Costs

Description	Quantity	Unit Price	Total
1. Site			
• Fill all cracks and seal all pavement	4,500 SY	$5/SY	$22,500
• Paint parking space lines	50 spaces	$10/space	$500
• Replace paving at loading dock storm drain inlet	50 SY	$60/SY	$3,000
2. Building – Roof			
• 1950 Metal Building ○ Seal all metal roof panel laps	165 LF	$20/LF	$3,300
• 1967 Metal Building ○ Replace all metal roof panels	18,528 SF	$3/SF	$55,584
○ Repair gutter leak – one location above firewall	Lump Sum		$500
• 2006 Shingle Roof ○ Remove rust, prime, and paint roof to wall flashing	Lump Sum		$750
3. Exterior of Building			
• Repair dented and rusted metal wall panels	Lump Sum		$500
• Replace exterior H.M. doors and hardware	6 EA	$1,500/EA	$9,000
• Align one electric sectional door	Lump Sum		$1,000
• Install aluminum trim at head of sectional door	Lump Sum		$500
4. Foundations: 1967 Metal Building			
• Prime and paint CMU foundation wall	1,200 SF	$2.50/SF	$3,000
• Replace one set concrete steps, landing, and handrail	Lump Sum		$1,500
5. CMU Retaining Wall at Loading Dock: 1950 Metal Building			
• Remove all loose and flaking paint, waterproof, prime and paint all CMU at retaining wall	200 SF	$5.00/SF	$1,000
6. Loading Dock: 1950 Metal Building			
• Replace dock levelers	2 EA	$7,500/EA	$15,000
• Replace dock seals	2 EA	$2,900/EA	$5,800
7. Interior of Metal Buildings			
• Renovate men's and women's restrooms	Lump Sum		$25,000
8. Electrical: 1950 Metal Building			
• Electrical Service Upgrades	Lump Sum		$16,890
• Electrical Lighting	Lump Sum		$27,024

Description	Quantity	Unit Price	Total
• General Purpose Power Upgrades	Lump Sum		$50,805
• Fire Alarm	Lump Sum		$8,107
9. Electrical: 1967 Metal Building			
• Electrical Service Upgrades	Lump Sum		$23,160
• Electrical Lighting	Lump Sum		$37,056
• General Purpose Power Upgrades	Lump Sum		$69,665
• Fire Alarm	Lump Sum		$11,116
10. Electrical: 2006 Office/Fitness Center			
• Electrical Service Upgrades	Lump Sum		$3,562
• Electrical Lighting	Lump Sum		$5,698
• General Purpose Power Upgrades	Lump Sum		$0
• Fire Alarm	Lump Sum		$1,709
11. Mechanical/Plumbing/Fire Protection			
• Add radiant heaters and propane piping to each warehouse	16 EA	$2,500	$40,000
• Clean and service propeller fans	4 EA	$200/EA	$800
• Add ventilation air to Office/Fitness	4 EA	$2,500/EA	$10,000
• New HVAC for Mezz. Office and Toilet Rooms	Lump Sum		$10,000
• Garage vehicle exhaust	Lump Sum		$2,500
• Return sprinkler system to service per Fire Sprinkler, LTD's proposal dated November 6, 2015	Lump Sum		$23,400
• Add backflow preventer and rework existing risers to accept a single 6" fire water line (does not include site work)	Lump Sum		$6,560
• Connect 1967 warehouse sprinkler system to FDC on 1950's warehouse to provide improved fire department access	Lump Sum		$4,300
• Add waste line to sewer main and water heater for future restroom in 1950 metal building	Lump Sum		$25,000
Total			**$525,786**
Construction Contingency (10%)			**$52,578**
Grand Total			**$578,364**

Report of 5-Year Internal Inspection
of Water Based Fire Protection Systems

Inspecting Firm (Contractor): **Fire Sprinkler, Ltd** Inspector: **Edward Myers / Josh Mitchell**

Inspector's office phone number: **434-432-0938** Date of This Inspection: 10-14-15 Job # **R15-594**

Name of Property: **Former Borum Electrical Building**

Street Address: **15401 Goodes Bridge Road**

City: **Amelia Court House** State: **VA** Zip: **23002**

Phone: **804-314-1698** Fax:

Contact Person Name: **Daryl Gough**

Position: Authority to Approve Work? Y N/A N

Property Owner:

Street Address:

City: State: Zip:

Phone: Fax:

Responsible Party Name: Position:

Name of Supervisory Alarm Company: Phone:

		Y	N/A	N
1	Material Safety Data Sheets reviewed and hazards to inspector removed?	X		
2	Owner/Owner's Representative verifies that responsible occupants are aware of the location of the shut-off valves and procedure for shutting down the system.	X		

(Use separate sheet for additional information as may be needed. All "NO" answers to be explained.)

COMMENTS:

The owner and/or designated representative acknowledges the responsibility of the operating condition of the component parts at the time of this inspection. It is agreed that the inspection service provided by the contractor as prescribed herein is limited to performing a visual inspection and/or routine testing, and any investigation or unscheduled testing, modification, maintenance, repair, etc. of the component parts is not included as part of the inspection work performed. It is further understood that all information contained herein is provided to the best of the knowledge of the part providing such information;

OWNER/DESIGNATED REPRESENTATIVE: Marshall R Martin DATE: 10-15-15

INSPECTOR'S SIGNATURE: Josh Mitchell DATE: 10-14-15

Rev. 7/14

Report of 5 Year Internal Inspection

of Wet Pipe Fire Sprinkler Systems

American Fire Sprinkler Association

ALL QUESTIONS ARE TO BE ANSWERED AND ALL BLANKS TO BE FILLED

Inspecting Firm (Contractor): **Fire Sprinkler, Ltd.** | MAIN OFFICE: 434-821-4222 INSPECTION OFFICE: 434-432-0938 | JOB # **R15-594**

Name of Inspected Property: ***Former Borum Electrical Building*** System #1

Inspector Name: **Edward Myers / Josh Mitchell** Date: 10-14-15

Items of 5 Year Frequency

System Installed 1967		Y	N/A	N
H.1.0	System in service before conducting tasks			X
H.2.0	Pertinent parties notified before conducting tasks.	X		
H.3.0	Alarm valve internally inspected	X		
H.3.1	Alarm valve strainers, filters, and restriction orifices internally inspected	X		
H.3.2	Alarm valve internal components cleaned/replaced as necessary	X		
H.3.3	Alarm valve internal components inspection/maintenance date: 10-14-15			
H.4.0	System gauges replace as necessary	X		
H.4.1	System gauges tested by comparison with calibrated gauge		X	
H.4.2	System gauges accurate within 3% of full scale		X	
H.4.3	System gauges recalibrated as necessary		X	
H.4.4	System gauges test/replacement date: 10-14-15			
H.5.0	Check valves internally inspected	X		
H.5.1	Check valve internal components operate correctly	X		
H.5.2	Check valve internal components move freely	X		
H.5.3	Check valve internal components in good condition	X		
H.5.4	Check valve internal components cleaned/repaired/replaced as necessary	X		
H.5.5	Check valve internal inspection date: 10-14-15			
H.6.0	Adequate drainage provided before flow testing		X	

SPRINKLERS

H.7.0 Extra high temp solder type sprinklers tested/replaced - date: N/A

Items of 5 Year Frequency (continued.....)

H.7.1 Sprinklers in harsh environment tested/replaced- date: N/A

H.7.2 Dry sprinklers tested/replaced (10 years) - date: N/A

H.7.3 Sprinklers with fast response elements tested/replaced (at 20 years, 10 thereafter) - date: installed 2006

H.7.4 All sprinklers tested/replaced (at 50 years, 10 thereafter) date: N/A (at 75 years, 5 thereafter) - date:

H.7.5 All sprinklers manufactured before 1920 replaced - date: N/A

H.8.0 Obstruction investigation conducted (**see AFSA Form 114A**) date:

		Y	N/A	N
H.9.0	Pertinent parties notified after conclusion of tasks	X		
H.10.0	**ALARM PANEL CLEAR**		X	
H.11.0	**SYSTEM RETURNED TO SERVICE**		X	

H.12.0 COMMENTS *Flushing connection of one main and sprinkler head from one branch line from the opposite side of the Inspector's Test removed to inspect internally. If more than one wet system, this is done for every other wet system (See below for which system was inspected at this time). The remaining wet system(s) will be inspected at the next 5-year internal inspection.*

Our inspection is meant to identify the signs of normal wear and tear or aging of the system and its components. A NFPA-25 inspection assumes the system was installed according to code and without defects. Design defects and/or inadequacy of the sprinkler system cannot be determined from this inspection. Sprinkler systems are designed according tot he adopted code in place at the time the system was installed-a NFPA-25 inspection foes not evaluate the system(s)'s code compliance. Code compliance is the OWNER'S responsibility.

(All "NO" answers to be explained)

INSPECTOR'S INITIAL JM. OWNER/DESIGNATED REP. INITIAL MRM DATE: 10-14-15

Rev. 7/14

Report of 5 Year Internal Inspection

of Wet Pipe Fire Sprinkler Systems

American Fire Sprinkler Association

ALL QUESTIONS ARE TO BE ANSWERED AND ALL BLANKS TO BE FILLED

Inspecting Firm (Contractor): **Fire Sprinkler, Ltd.** | MAIN OFFICE: 434-821-4222 INSPECTION OFFICE: 434-432-0938 | JOB # **R15-594**

Name of Inspected Property: ***Former Borum Electrical Building*** System # 2

Inspector Name: **Edward Myers / Josh Mitchell** Date: 10-14-15

Items of 5 Year Frequency

System Installed		Y	N/A	N
H.1.0	System in service before conducting tasks			X
H.2.0	Pertinent parties notified before conducting tasks.	X		
H.3.0	Alarm valve internally inspected	X		
H.3.1	Alarm valve strainers, filters, and restriction orifices internally inspected	X		
H.3.2	Alarm valve internal components cleaned/replaced as necessary	X		
H.3.3	Alarm valve internal components inspection/maintenance date: 10-14-15			
H.4.0	System gauges replace as necessary	X		
H.4.1	System gauges tested by comparison with calibrated gauge		X	
H.4.2	System gauges accurate within 3% of full scale		X	
H.4.3	System gauges recalibrated as necessary		X	
H.4.4	System gauges test/replacement date: 10-14-15			
H.5.0	Check valves internally inspected	X		
H.5.1	Check valve internal components operate correctly	X		
H.5.2	Check valve internal components move freely	X		
H.5.3	Check valve internal components in good condition	X		
H.5.4	Check valve internal components cleaned/repaired/replaced as necessary	X		
H.5.5	Check valve internal inspection date: 10-14-15			
H.6.0	Adequate drainage provided before flow testing		X	

SPRINKLERS

H.7.0 Extra high temp solder type sprinklers tested/replaced - date: N/A

Items of 5 Year Frequency (continued.....)

H.7.1 Sprinklers in harsh environment tested/replaced- date: N/A

H.7.2 Dry sprinklers tested/replaced (10 years) - date: N/A

H.7.3 Sprinklers with fast response elements tested/replaced (at 20 years, 10 thereafter) - date: N/A

H.7.4 All sprinklers tested/replaced (at 50 years, 10 thereafter) date: N/A (at 75 years, 5 thereafter) - date:

H.7.5 All sprinklers manufactured before 1920 replaced - date: N/A

H.8.0 Obstruction investigation conducted (**see AFSA Form 114A**) date:

		Y	N/A	N
H.9.0	Pertinent parties notified after conclusion of tasks	X		
H.10.0	**ALARM PANEL CLEAR**		X	
H.11.0	**SYSTEM RETURNED TO SERVICE**		X	

H.12.0 COMMENTS *Flushing connection of one main and sprinkler head from one branch line from the opposite side of the Inspector's Test removed to inspect internally. If more than one wet system, this is done for every other wet system (See below for which system was inspected at this time). The remaining wet system(s) will be inspected at the next 5-year internal inspection.*

Our inspection is meant to identify the signs of normal wear and tear or aging of the system and its components. A NFPA-25 inspection assumes the system was installed according to code and without defects. Design defects and/or inadequacy of the sprinkler system cannot be determined from this inspection. Sprinkler systems are designed according tot he adopted code in place at the time the system was installed-a NFPA-25 inspection foes not evaluate the system(s)'s code compliance. Code compliance is the OWNER'S responsibility.

(All "NO" answers to be explained)

INSPECTOR'S INITIAL E.M. OWNER/DESIGNATED REP. INITIAL MRM DATE: 10-14-15

REV. 7/14

Report of 5 Year Internal Inspection
of Dry Pipe Fire Sprinkler Systems

ALL QUESTIONS ARE TO BE ANSWERED AND ALL BLANKS TO BE FILLED

Inspecting Firm (Contractor): **Fire Sprinkler, Ltd.** | MAIN OFFICE: 434-821-4222 | INSPECTION OFFICE: 434-432-0938 | JOB # **R15-594**

Name of Inspected Property: ***Former Borum Electrical Building***

Inspector Name: **Edward Myers / Josh Mitchell** Date:

Items of 5 Year Frequency

System Installed	Y	N/A	N
H.1.0 System in service before conducting tasks			
H.2.0 Pertinent parties notified before conducting tasks.			
H.3.0 Dry pipe valve internally inspected			
H.3.1 Dry pipe valve strainers, filters, and restriction orifices internally inspected			
H.3.2 Dry pipe valve internal components cleaned/replaced as necessary			
H.3.3 Dry pipe valve internal components inspection/maintenance date:			
H.4.0 System gauges replace as necessary			
H.4.1 System gauges tested by comparison with calibrated gauge			
H.4.2 System gauges accurate within 3% of full scale			
H.4.3 System gauges recalibrated as necessary			
H.4.4 System gauges test/replacement date:			
H.5.0 Check valves internally inspected			
H.5.1 Check valve internal components operate correctly			
H.5.2 Check valve internal components move freely			
H.5.3 Check valve internal components in good condition			
H.5.4 Check valve internal components cleaned/repaired/replaced as necessary			
H.5.5 Check valve internal inspection date:			
H.6.0 Adequate drainage provided before flow testing			
H.7.0 Extra high temp solder type sprinklers tested/replaced date:			
H.7.1 Sprinklers in harsh environment tested/replaced-date:			
H.7.2 Dry sprinklers tested/replaced (10 years) - date:			

Items of 5 Year Frequency (continued.....)

	Y	N/A	N
H.7.3 Sprinklers with fast response elements tested/replaced (at 20 years, 10 thereafter)-date:			
H.7.4 All sprinklers tested/replaced (at 50 years, 10 thereafter)- date: at 75 years, 5 thereafter - date:			
H.7.5 All sprinklers manufactured before 1920 replaced-date:			
H.8.0 Obstruction investigation conducted - date:			
H.9.0 Pertinent parties notified after conclusion of tasks			
H.10.0 ALARM PANEL CLEAR			
H.11.0 SYSTEM RETURNED TO SERVICE			

H.12.0 COMMENTS: *Flushing Connection of one main and sprinkler head from one branch line from the opposite side of the inspector's Test removed to inspect internally. If more than one dry system, this is done for every other dry system (See below for which system was inspected) The remaining dry system(s) will be inspected at the next 5-year internal inspection.*

Our inspection is meant to identify the signs of normal wear and tear or aging of the system and its components. A NFPA-25 inspection assumes the system was installed according to code and without defects. Design defects and/or inadequacy of the sprinkler system cannot be determined from this inspection. Sprinkler systems are designed according to the adopted code in place at the time the system was installed-a NFPA-25 inspection does not evaluate the system(s)'s code compliance. Code compliance is the OWNER'S responsibility.

(All "NO" answers to be explained)

INSPECTOR'S INITIAL _____ **OWNER/DESIGNATED REP. INITIAL** _____ **DATE:** _____

REV. 7/14

Report of 5 Year Internal Inspection
of Dry Pipe Fire Sprinkler Systems

ALL QUESTIONS ARE TO BE ANSWERED AND ALL BLANKS TO BE FILLED

Inspecting Firm (Contractor): **Fire Sprinkler, Ltd.** | MAIN OFFICE: 434-821-4222 INSPECTION OFFICE: 434-432-0938 | JOB # **R15-594**

Name of Inspected Property: ***Former Borum Electrical Building***

Inspector Name: **Edward Myers / Josh Mitchell** Date:

Items of 5 Year Frequency

System Installed	Y	N/A	N
H.1.0 System in service before conducting tasks			
H.2.0 Pertinent parties notified before conducting tasks.			
H.3.0 Dry pipe valve internally inspected			
H.3.1 Dry pipe valve strainers, filters, and restriction orifices internally inspected			
H.3.2 Dry pipe valve internal components cleaned/replaced as necessary			
H.3.3 Dry pipe valve internal components inspection/maintenance date:			
H.4.0 System gauges replace as necessary			
H.4.1 System gauges tested by comparison with calibrated gauge			
H.4.2 System gauges accurate within 3% of full scale			
H.4.3 System gauges recalibrated as necessary			
H.4.4 System gauges test/replacement date:			
H.5.0 Check valves internally inspected			
H.5.1 Check valve internal components operate correctly			
H.5.2 Check valve internal components move freely			
H.5.3 Check valve internal components in good condition			
H.5.4 Check valve internal components cleaned/repaired/replaced as necessary			
H.5.5 Check valve internal inspection date:			
H.6.0 Adequate drainage provided before flow testing			
H.7.0 Extra high temp solder type sprinklers tested/replaced date:			
H.7.1 Sprinklers in harsh environment tested/replaced-date:			
H.7.2 Dry sprinklers tested/replaced (10 years) - date:			

Items of 5 Year Frequency (continued.....)

	Y	N/A	N
H.7.3 Sprinklers with fast response elements tested/replaced (at 20 years, 10 thereafter)-date:			
H.7.4 All sprinklers tested/replaced (at 50 years, 10 thereafter)- date: at 75 years, 5 thereafter - date:			
H.7.5 All sprinklers manufactured before 1920 replaced-date:			
H.8.0 Obstruction investigation conducted - date:			
H.9.0 Pertinent parties notified after conclusion of tasks			
H.10.0 ALARM PANEL CLEAR			
H.11.0 SYSTEM RETURNED TO SERVICE			

H.12.0 COMMENTS: *Flushing Connection of one main and sprinkler head from one branch line from the opposite side of the inspector's Test removed to inspect internally. If more than one dry system, this is done for every other dry system (See below for which system was inspected) The remaining dry system(s) will be inspected at the next 5-year internal inspection.*

Our inspection is meant to identify the signs of normal wear and tear or aging of the system and its components. A NFPA-25 inspection assumes the system was installed according to code and without defects. Design defects and/or inadequacy of the sprinkler system cannot be determined from this inspection. Sprinkler systems are designed according to the adopted code in place at the time the system was installed-a NFPA-25 inspection does not evaluate the system(s)'s code compliance. Code compliance is the OWNER'S responsibility.

(All "NO" answers to be explained)

INSPECTOR'S INITIAL _____ **OWNER/DESIGNATED REP. INITIAL** M _____ **DATE:** _____

Report of 5-Year Internal Inspection

of Water Based Fire Protection Systems

Inspecting Firm (Contractor): Fire Sprinkler, Ltd Inspector: Edward Myers / Josh Mitchell

Inspector's office phone number: 434-432-0938 Date of This Inspection: 10-14-15 Job # R15-594

Name of Property: Former Borum Electrical Building

COMMENTS (continued)

System #1 Removed 2" screw cap off end of main, pulled sprinkler head in middle of Warehouse.

System #2 Removed 2" screw cap from end of the main, pulled sprinkler head in warehouse

The owner and/or designated representative acknowledges the responsibility of the operating condition of the component parts at the time of this inspection. It is agreed that the inspection service provided by the contractor as prescribed herein is limited to performing a visual inspection and/or routine testing, and any investigation or unscheduled testing, modification, maintenance, repair, etc. of the component parts is not included as part of the inspection work performed. It is further understood that all information contained herein is provided to the best of the knowledge of the part providing such information;

OWNER/DESIGNATED REPRESENTATIVE: Marshall Martin DATE: 10-15-15

INSPECTOR'S SIGNATURE: Josh Mitchell DATE: 10-14-15

Report of Inspection and Testing
of Water Based Fire Protection Systems

Inspecting Firm (Contractor):	**Fire Sprinkler, Ltd.** **8142 Wards Road** **Rustburg, VA 24588** **434-821-4222**	Inspector:	**Edward Myers**
		Inspector's office phone number:	**434-432-0938**
		Date of This Inspection:	10-14-15
		Inspection#:	C15-594

Name of Property: Former Borum Electric Building

Street Address: 15401 Goodes Bridge Road

City: Amelia Court House State: VA. Zip: 23002

Phone: Fax:

Contact Person Name:

Position: Authority to Approve Work? Y N/A N

Property Owner:

Street Address:

City: State: Zip:

Phone: Fax:

Responsible Party Name: Position:

Name of Supervisory Alarm Company: Phone:

Date of Last Inspection: 2004 Prior Inspector's Name:

		Y	N/A	N
1`.	Prior inspection reports, logs and test data are available for review:		X	
2`.	Original records for systems on site for review?		X	
3`.	Modifications made to systems reviewed and documented?		X	
4`.	Reports of sprinkler activation reviewed and documented?		X	
5`.	Copy of NFPA # 25 on file?		X	
6`.	Weekly logs of inspections required by NFPA # 25 on file?		X	
7`.	Owner/Owner's Representative verifies that the occupany and hazard are the same as reported on last inspection?		X	
8`.	All deficiencies reported at last inspection corrected?		X	
9`.	Material Safety Data Sheets reviewed and hazards to inspector removed?	X		
10)	Owner/Owner's Representative verifies that responsible occupants are aware of the location of the shut-off valves and procedure for shutting down the system.	X		

(Use separate sheet for additional information as may be needed. All "NO" answers to be explained.)
AFSA Form 104A should be completed by the Inspecting Firm/Contractor and provided to the Owner.

COMMENTS:

Any reference to the Owner anywhere in the accompanying inspection forms refers to the Owner or the Owner's Representative.

The owner and/or designated representative acknowledges the responsibility of the operating condition of the component parts at the time of this inspection. It is agreed that the inspection service provided by the contractor as prescribed herein is limited to performing a visual inspection and/or routine testing, and any investigation or unscheduled testing, modification, maintenance, repair, etc. of the component parts is not included as part of the inspection work performed. It is further understood that all information contained herein is provided to the best of the knowledge of the part providing such information;

OWNER/DESIGNATED REPRESENTATIVE: Marshall K Martin DATE: 10-15-15

INSPECTOR'S SIGNATURE: Josh Mitchell DATE: 10-14-15

Report of Inspection & Testing
of Water Based Fire Protection Systems

Inspecting Firm (Contractor): **Fire Sprinkler, Ltd** Inspector: **Edward Myers**

Inspector's office phone number: **434-432-0938** Date of This Inspection: 10-14-15 Inspection# C15-594

Name of Property:

Street Address:

City: State: Zip:

This report contains information resulting from a visual inspection of the following types of WATER BASED FIRE PROTECTION SYSTEMS: (Please check all that apply)

	Form Description	Form#	
X	REPORT OF INSPECTION (General Information Section)	103A	Cover Sheet
X	REPORT OF INSPECTION (Inspector's Section)	104A	Cover Sheet
	WET PIPE FIRE SPRINKLER SYSTEMS - Inspection/Testing/Maintenance	106A	No. of Systems
	DRY PIPE FIRE SPRINKLER SYSTEMS - Inspection/Testing/Maintenance	107A	No. of Systems
	FIRE PUMP ASSEMBLIES - Inspection/Testing/Maintenance	110A	No. of Pumps
	PREACTION/DELUGE FIRE SPRINKLER SYSTEMS - Inspection/Testing/Maintenanc	113A	No. of Systems
OTHER COMPONENTS - DESCRIPTION			
X	ATTACHMENT "A"		
	BACKFLOW TEST FORM(S)		
	5-YEAR INSPECTION		

The scheduled visual inspection is to be performed as indicated below. The inspector is to complete all questions and review the results of this inspection and any recommendations, corrections, testing, maintenance, etc. with the owner.
ALL "NO" ANSWERS ARE TO BE EXPLAINED.

Scheduled Inspection: *(Check one)* ☐ QUARTERLY ☐ SEMI-ANNUAL ☐ ANNUAL ☐ OTHER

RECOMMENDATIONS:

NOTE: THERE ARE SCHEDULED PERIODIC INSPECTION, TESTING AND MAINTENANCE TASKS THAT MUST BE CONDUCTED FOR THE CONTINUOUS RELIABILITY OF THE FIRE PROTECTION SYSTEM. THESE SHOULD BE PERFORMED AT THE INTERVALS INDICATED IN NFPA 25 STANDARD. THIS INFORMATION IS BEING PROVIDED AS A MATTER OF COURTESY. THESE TASKS SHOULD ONLY BE PERFORMED BY PROPERLY TRAINED PERSONNEL USING PROPER EQUIPMENT.

The Owner's or Designated Representative's signature shall be obtained acknowledging receipt of this report.
(Each page shall be initialed and dated by the owner or designated representative and inspector.)

OWNER/DESIGNATED REPRESENTATIVE: Marshall R Martin DATE: 10-15-15

INSPECTOR'S SIGNATURE: Jon L Mitchell DATE: 10-14-15

Report of Inspection & Testing
of Wet Pipe Fire Sprinkler Systems

ALL QUESTIONS ARE TO BE ANSWERED AND ALL BLANKS TO BE FILLED
(Weekly inspection tasks are NOT included in this report)

Inspecting Firm (Contractor): **Fire Sprinkler, Ltd.** | **Main Office: 434-821-4222** **Inspection Office: 434-432-0938** | Inspection#: C15-594

Name of Inspected Property:

Inspector Name: **Edward Myers**

Inspection Frequency: ☐ **QUARTERLY** ☐ **SEMI-ANNUAL** ☐ **ANNUAL** ☐ **OTHER**

Quarterly, Semi-Annual and Annual Inspection Items for Wet Pipe Sprinkler System

		Y	n/a	N
A.1.0	System in service on inspection			X
	GAUGES			
A.2.0	Supply pressure gauge			O psi
A.2.1	System pressure gauge			O psi
A.2.2	Gauges appear to be in good condition	X		
	CONTROL VALVES			
A.3.0	Control valves in normal open or closed position			X
A.3.1	Control valves properly locked or supervised		X	
A.3.2	Control valves accessible	X		
A.3.3	Control valves provided with appropriate wrenches	X		
A.3.4	Control valves free from external leaks		X	
A.3.5	Control valve identification signs in place	X		
A.3.6	System control valve sign indicates area served		X	
	BACKFLOW PREVENTION			
A.4.0	Backflow prevention assembly valves are locked or electrically supervised in open position		X	
A.4.1	Reduced pressure backflow prevention assembly not in continuous discharge		X	
	ALARM VALVE			
A.5.0	Alarm valve gauges indicate normal supply water pressure		X	
A.5.1	Alarm valve free of physical damage	X		
A.5.2	Alarm valve trim valves are in appropriate open or closed position	X		
A.5.3	Alarm valve retarding chamber or alarm drain not leaking		X	
A.6.0	System riser information sign in place showing area of coverage and location of any auxiliary systems. *		X	
	ALARM DEVICE			
A.7.0	Hydraulic nameplate attached and legible		X	
A.7.1	Alarm device free from physical damage	X	•	
	FDC			
A.8.0	FDC is visible	X		
A.8.1	FDC is accessible	X		
A.8.2	FDC swivels/couplings undamaged/rotate smoothly	X		
A.8.3	FDC plugs/caps in place/undamaged	X		
A.8.4	FDC gaskets in place and in good condition	X		
A.8.5	FDC identification sign in place	X		
A.8.6	FDC check valve is not leaking		X	
A.8.7	FDC automatic drain valve in place and operating properly	•	X	
A.8.8	FDC interior inspected where caps missing		X	
A.8.9	FDC obstruction removed as necessary		X	
	PRESSURE REDUCING VALVES			
A.9.0	Pressure reducing control valves (PRV) indicate open		X	
A.9.1	PRV not leaking		X	
A.9.2	PRV maintaining downstream pressure per design		X	
A.9.3	PRV in good conditon		X	
A.9.4	PRV handwheel installed and not broken		X	

This requirement is new and can also be found in the the 2007 edition of NFPA 13

(All "NO" answers to be explained)

INSPECTOR'S INITIAL J.M. OWNER/DESIGNATED REP. INITIAL MRM DATE: 10-14-15

Report of Inspection & Testing of Wet Pipe Fire Sprinkler Systems...*continued*

Inspecting Firm (Contractor): **Fire Sprinkler, Ltd.** | **Main Office: 434-821-4222** **Inspection Office: 434-432-0938** | Inspection#: CLS-594

Name of Inspected Property:

Inspector Name: **Edward Myers**

Inspection Frequency: ☐ **QUARTERLY** ☐ **SEMI-ANNUAL** ☐ **ANNUAL** ☐ **OTHER**

Quarterly, Semi-Annual and Annual Testing for Wet Pipe Sprinkler Systems

		Y	n/a	N
B.1.0	System in service before testing			✓
B.1.1	Pertinent parties notifed before testing	✓		
B.1.2	Adequate drainage provided before flow testing		✓	
B.2.0	A main drain test conducted downstream from backflow preventer		✓	
B.2.1	A main drain test conducted downstream from pressure reducing valve.		✓	
B.2.2	Supply water gauge reading before flow (static)		0 psi	
B.2.3	Gauge reading during stable flow (residual)		0 psi	
B.2.4	Time for supply pressure to return to normal		0 sec	
B.3.0	Supervisory switch initiates distinct signal during first two hand wheel revolutions or before valve stem moved one-fifth from normal position.		✓	
B.3.1	Signal restored only when valve returned to normal position		✓	
B.4.0	Water flow alarm tested and is operational		✓	
B.4.1	Test conducted with inspector's test connection		✓	
B.4.2	Test conducted with bypass connection (freezing weather)		✓	
B.4.3	Test conducted per manufacturer's instructions		✓	
B.5.0	Control valves (including backflow and PIVs) operated through full range and returned to normal position		✓	
B.5.1	PIVs opened until sprinkler or torsion felt in rod		✓	
B.5.2	PIVs and OS7Ys backed 1/4 turn from full open		✓	
B.6.0	**Pertinent parties notifed of test conclusion**	✓		
B.6.1	**ALARM PANEL CLEAR**		✓	
B.6.2	**SYSTEM RETURNED TO SERVICE**		✓	
B.6.3	**COMMENTS:**			

ALARM TIMES

N/A	SEC.	SEC.	SEC.
	SEC.	SEC.	SEC.
	SEC.	SEC.	SEC.
	SEC.	SEC.	SEC.
	SEC.	SEC.	SEC.
	SEC.	SEC.	SEC.
	SEC.	SEC.	**SEC.**

SYSTEM INFORMATION

SYSTEM INSTALLED IN 1969 - 1971

DRY SPRINKLERS INSTALLED N/A *(To be tested/replaced every 10 years)*

ANNUAL CONDUCTED DURING THE _____ INSPECTION *(for quarterly and semi-annual inspections)*

OTHER SYSTEM INFO:

FAST RESPONSE SPRINKLERS DATED 2006
(Tested/replaced at 20 years and every 10 thereafter)

OTHER SPRINKLERS DATED 1971 *(Tested/replaced at 50 years, 10 thereafter. All manufactured before 1920 to be replaced.)* ***Note-Extra high temp solder-type sprinklers and sprinklers in harsh environments may need replacing sooner.)*

5-YEAR INSPECTION DONE 10-14-15

(AFSA Form 106A)

(All "NO" answers to be explained)

INSPECTOR'S INITIAL J.M. OWNER/DESIGNATED REP. INITIAL MRM DATE: 10-14-15

Report of Inspection & Testing of Wet Pipe Fire Sprinkler Systems...*continued*

Inspecting Firm (Contractor): **Fire Sprinkler, Ltd.** | Main Office: 434-821-4222 | Inspection Office: 434-432-0938 | Inspection: C15-596

Name of Inspected Property:

Inspector Name: **Edward Myers**

Inspection Frequency: ☐ QUARTERLY ☐ SEMI-ANNUAL ☐ ANNUAL ☐ OTHER

ANNUAL ONLY TESTING FOR WET PIPE SPRINKLER SYSTEMS

	ANTIFREEZE SYSTEM(S)	Y	n/a	N
C.1.0	Antifreeze system has a test connection at the most remote portion, the interface with the wet pipe system, and when the capacity exceeds 150 gal. one additional connection for every 100 gal.*	X		
C.1.1	Antifreeze solution freezing point		+20 °F	
C.1.2	Antifreeze solution freezing point after adjustment		X	
	BACKFLOW PREVENTION			
C.2.0	Backflow prevention assembly valves are locked or electronically supervised in open position		X	
C.2.1	Reduced pressure backflow prevention assembly not in continuous discharge			
C.2.2	Backflow prevention assembly forward flow test conducted			
C.2.3	System demand flow was achieved through the device			
C.2.4	Forward flow test conducted at maximum rate possible (only where connections do not permit full flow test)			
C.2.5	Forward flow test conducted without measuring flow (device < 2" and outlet sized to flow system demand)			
C.2.6	Backflow prevention assembly internal inspection conducted (where shortages last more than 1 year and rationing enforced by AHJ)			
C.2.7	Forward flow test satisfied by annual fire pump flow test			
C.2.8	Backflow preventer performance test conducted as required by the AHJ			
	MAIN DRAIN TEST			
C.3.0	Main drain test conducted		X	
C.4.0	COMMENTS			

ANNUAL ONLY INSPECTION ITEMS FOR WET PIPE SPRINKLER SYSTEMS

		Y	n/a	N
D.1.0	Hangers and seismic bracing appears undamaged and tightly attached	X		
D.2.0	Piping appears free of mechanical damage	X		
D.2.1	Piping appears free of leakage	X		
D.2.2	Piping appears free of corrosion	X		
D.2.3	Piping appears free of external loading	X		
D.3.0	Sprinklers appear free of leakage	X		
D.3.1	Sprinklers appear free of corrosion	X		
D.3.2	Sprinklers appear free of foreign materials	X		
D.3.3	Sprinklers appear free of paint			X
D.3.4	Sprinklers appear free of physical damage	X		
D.3.5	Sprinklers appear to be properly oriented	X		
D.3.6	Clearance appears to be adequate between sprinkler and building contents			X
D.3.7	Glass bulbs appear full of liquid	X		
D.3.8	Spare sprinklers are of proper number (at least 6), type and temperature rating	X		
D.3.9	Spare sprinklers stored where temperature maximum is 100°F	X		
D.3.10	Wrench available for each type of sprinkler	X		
	PRIOR TO FREEZING WEATHER			
D.4.0	**Owner is responsible for securing the building such as not to expose piping to freezing conditions	MRM		**OWNER
D.4.1	**Owner assures adequate heat is provided to maintain temperatures at 40°F or higher	MRM		**OWNER

** *"Owner refers to the Owner or Owner's Representative*

**This requirement is new and can also be found in the the 2007 edition of NFPA 13*

(All "NO" answers to be explained)

INSPECTOR'S INITIAL S. M. OWNER/OWNER'S DESIGNATED REP. INITIAL MRM DATE: 10-14-15

Attachment "A"

A Note to the Owner or Owner's Representative

Name of property: Former Borum Electric Building Inspection #: C/S -594

Our inspection is meant to identify the signs of normal wear and tear or aging of the system and its components.

A NFPA-25 inspection assumes the system was installed according to code and without defects. Design defects and/or inadequacy of the sprinkler system can not be determined from a visual inspection. Sprinkler systems are designed according to the adopted code in place at the time the system is installed. A NFPA-25 inspection does not evaluate the system's code compliance. **The code compliance of a system is the OWNER'S responsibility. Any investigation into the code compliance of a system must be done by a registered and certified design specialist and at an additional charge.** Changes in occupancy, adding and/or deleting walls or partitions, etc. can change the performance of the system. **It is the OWNER'S responsibility to investigate the adequacy of the system after such changes. Any investigation into the adequacy of the system must be done by a registered and certified specialist and at an additional charge.**

Below are some observations that **are not a part of this inspection** that might warrant further investigation. We are pointing out what "appears to be" a problem, but it is outside the scope of this inspection to determine. **This is not meant to be a complete list of possible problems**, but things observed during the course of our visual inspection.

System #1 - Several overhead doors with no protection, Office in back of warehouse has no protection, Several new areas have no protection, Heads in bathrooms appear to have paint on them, No pendent heads in spare head box. Antifreeze tested at +20°

System #2 - Mechanic shop has no protection, Large wood mezzanine has no heads under it, 3 HVAC units have no heads under them, Several overhead doors have no heads under them, Inspectors test is not piped out of building, Heads in lower office area appear to have paint on them.

Tag #

For Your Convenience, A Typed Version of These Handwritten Comments is Attached

Owner's representative: Marshall R Martin Date: 10-15-15

Inspector's Signature: Josh Mitchell Date: 10-15-15

Fire Sprinkler, Ltd

8142 Wards Road
Rustburg, VA 24588
PH: (434) 821-4222
FAX: (434) 821-4321

PROPOSAL

To: **Amelia County IDA**
P.O. Box A
Amelia, VA 23002

Attn: **Mr. Daryl Gough**

Date: **November 6, 2015**
Project: **Various Sprinkler Work For The Borum Electrical Building**
Location: **15401 Goodes Bridge Road**
Amelia Courthouse, VA 23002

Gentlemen:

We propose to furnish labor and materials to design, fabricate and install a system of automatic sprinklers at the above project for the sum of **TWENTY-THREE THOUSAND FOUR HUNDRED DOLLARS ($23,400.00)**

DESCRIPTION OF WORK

Provide wet pipe sprinklers for the unprotected areas listed in our NFPA 25 inspection report, replace the existing painted pendent sprinkler heads noted on this report, and replace the antifreeze in the existing loading dock antifreeze system; all in accordance with NFPA 13 and state code.

The sheet metal shop and area under the wood framed mezzanine will be designed for an Ordinary Hazard Group 2 Occupancy (similar to a machine shop or automobile repair garage) and the newer office area will be designed for a Light Hazard Occupancy.

Ordinary Hazard Group 2 will also allow for the storage of Class I thru III commodities up to a height of 12'-0"; solid-piled, palletized, and/or shelf storage of Class IV commodities up to 12'-0" high; rack storage of Class IV commodities up to 10'-0" high; and storage of Group A plastics up to 5'-0" high. ***Please note that we have provided the NFPA 13 definitions & examples of the various commodity types as an attachment to this proposal for your review.***

---------- *continued on page 2 of 2* ----------

Price subject to revision if not accepted within 30 days.
We appreciate the opportunity of submitting this proposal.

Very truly yours,
Fire Sprinkler, Ltd.

Ruben B. Harris

Written execution of this Proposal shall constitute acceptance thereof and shall be deemed to form a written contract between the parties that specifically includes all terms and conditions set forth on the reverse side thereof.

Accepted: **Amelia County IDA**
By: _____
Date: _____

This pricing includes repairing the disconnected fire department connection (FDC) line for the FDC located on the exterior wall of the building facing Goodes Bridge Rd. by removing the existing wall-indicator post, installing a check valve in the line, and reconnecting the line.

<u>This proposal does not include</u>:

1) **Painting of piping or pipe I.D.**
2) **Fire extinguishers or inside hose stations.**
3) **Seismic design and/or sway bracing for the system piping.**
4) **Any insurance design requirements above or beyond NFPA 13 and state code.**
5) **Patching of the hole left in the exterior building wall by the removal of the existing wall-indicator post on the existing FDC line.**
6) **Removal and capping of the existing fire department connection located at the base on the existing private elevated water storage tank.** ***Please note that we are uncertain how or if this fire department connection supplies the existing sprinkler system(s), but it may no longer properly supply the systems once they have been connected to the county water main. We do know that the FDC on the exterior building wall only serves the sprinkler system that is closest to Goodes Bridge Road.***
7) **Sprinkler underneath the HVAC unit closest to the front office (it is our understanding that this unit is not being used and will be removed).**
8) **Any design analysis or hydraulic calculations of the existing sprinkler systems.** ***These systems appear to be pipe scheduled for an Ordinary Hazard occupancy (with the exception of the front office, which appears to be designed for Light Hazard and does not allow for any storage), which should allow for the same type of occupancy and storage as what is listed for the Ordinary Hazard Group 2 design on page 1. Please note that any higher storage or more hazardous types of occupancy within the existing buildings than what is listed for Ordinary Hazard Group 2 will require a full design and hydraulic evaluation of the existing systems, which most likely need additional sprinkler heads and larger system piping.***
9) **Any modifications to the existing sprinkler risers, including a backflow preventer for the sprinkler systems.**
10) **Any work associated with the existing above ground water storage tank (it is our understanding that this tank is to be abandoned, with the county water system being used to resupply the existing sprinkler systems).**
11) **Any required underground work to resupply the sprinkler systems from the county water main.**

Please ADD $<u>6,560.00</u> to provide (1) double-check backflow preventer inside the building for the sprinkler risers, based on capping off one of the 6" underground fire line supply flanges (above the existing floor) and supplying both systems from one of the existing 6" underground fire lines only. ***Please note that this pricing does not include the required electrical wiring for the (4) tamper switches that will be added as part of this work (two for the backflow preventer and two for the system butterfly control valves) <u>OR</u> any underground work that could be associated with supplying these systems from only (1) fire line.***

Please ADD $<u>4,300.00</u> to connect the sprinkler system that is furthest from Goodes Bridge Rd. to the FDC on the exterior wall of the building that is adjacent to Goodes Bridge Rd. so that both systems are supplied by this FDC. ***Please note that this pricing includes removing and capping the existing FDC (above the existing vault) that is located underneath the elevated private water storage tank as part of this work, but does not include any removal or capping of any underground supply lines that are connected to the FDC below the water tank.***

shall be protected in accordance with Chapter 12 and Chapter 13 as applicable.

5.3.2* Ordinary Hazard (Group 2). Ordinary hazard (Group 2) occupancies shall be defined as occupancies or portions of other occupancies where the quantity and combustibility of contents are moderate to high, where stockpiles of contents with moderate rates of heat release do not exceed 12 ft (3.66 m) and stockpiles of contents with high rates of heat release do not exceed 8 ft (2.4 m). Dedicated and miscellaneous storage shall be protected in accordance with Chapter 12 and Chapter 13 as applicable.

5.4 Extra Hazard Occupancies.

5.4.1* Extra Hazard (Group 1). Extra hazard (Group 1) occupancies shall be defined as occupancies or portions of other occupancies where the quantity and combustibility of contents are very high and dust, lint, or other materials are present, introducing the probability of rapidly developing fires with high rates of heat release but with little or no combustible or flammable liquids.

5.4.2* Extra Hazard (Group 2). Extra hazard (Group 2) occupancies shall be defined as occupancies or portions of other occupancies with moderate to substantial amounts of flammable or combustible liquids or occupancies where shielding of combustibles is extensive.

5.5* Special Occupancy Hazards.

5.6* Commodity Classification. See Section C.2.

5.6.1 General.

5.6.1.1* Classification of Commodities.

5.6.1.1.1 Commodity classification and the corresponding protection requirements shall be determined based on the makeup of individual storage units (i.e., unit load, pallet load).

5.6.1.1.2 When specific test data of commodity classification by a nationally recognized testing agency are available, the data shall be permitted to be used in determining classification of commodities.

5.6.1.2 Mixed Commodities.

5.6.1.2.1 Protection requirements shall not be based on the overall commodity mix in a fire area.

5.6.1.2.2 Unless the requirements of 5.6.1.2.3 or 5.6.1.2.4 are met, mixed commodity storage shall be protected by the requirements for the highest classified commodity and storage arrangement.

5.6.1.2.3 The protection requirements for the lower commodity class shall be permitted to be utilized where all of the following are met:

(1) Up to 10 pallet loads of a higher hazard commodity, as described in 5.6.3 and 5.6.4, shall be permitted to be present in an area not exceeding 40,000 ft^2 (3716 m^2).
(2) The higher hazard commodity shall be randomly dispersed with no adjacent loads in any direction (including diagonally).
(3) Where the ceiling protection is based on Class I or Class II commodities, the allowable number of pallet loads for Class IV or Group A plastics shall be reduced to five.

5.6.1.2.4 Mixed Commodity Segregation. The protection requirements for the lower commodity class shall be permitted to be utilized in the area of lower commodity class, where the higher hazard material is confined to a designated area and the area is protected to the higher hazard in accordance with the requirements of this standard.

5.6.2 Pallet Types.

5.6.2.1 When loads are palletized, the use of wood or metal pallets shall be assumed in the classification of commodities.

5.6.2.2 For Class I through Class IV, when unreinforced polypropylene or high-density polyethylene plastic pallets are used, the classification of the commodity unit shall be increased one class (e.g., Class III will become Class IV, and Class IV will become cartoned unexpanded Group A plastics). Unreinforced polypropylene or unreinforced high-density polyethylene plastic pallets shall be marked with a permanent symbol to indicate that the pallet is unreinforced.

5.6.2.3 For Class I through Class IV, when reinforced polypropylene or high-density polyethylene plastic pallets are used, the classification of the commodity unit shall be increased two classes except for Class IV commodity, which shall be increased to a cartoned unexpanded Group A plastic commodity (e.g., Class II will become Class IV, and Class III and Class IV will become a cartoned unexpanded Group A plastic commodity). Pallets shall be assumed to be reinforced if no permanent marking or manufacturer's certification of non-reinforcement is provided.

5.6.2.4 For Class I through Class IV when other than polypropylene or high-density polyethylene plastic pallets are used, the classification of the commodity unit shall be determined by specific testing conducted by a national testing laboratory or shall be increased two classes.

5.6.2.5 No increase in the commodity classification shall be required for Group A plastic commodities stored on plastic pallets.

5.6.2.6 For ceiling-only sprinkler protection, the requirements of 5.6.2.2 and 5.6.2.3 shall not apply where plastic pallets are used and where the sprinkler system uses spray sprinklers with a minimum K-factor of 16.8.

5.6.2.7 The requirements of 5.6.2.2 through 5.6.2.4 shall not apply to nonwood pallets that have demonstrated a fire hazard that is equal to or less than wood pallets and are listed as such.

5.6.3* Commodity Classes.

5.6.3.1* Class I. A Class I commodity shall be defined as a noncombustible product that meets one of the following criteria:

(1) Placed directly on wood pallets
(2) Placed in single-layer corrugated cartons, with or without single-thickness cardboard dividers, with or without pallets
(3) Shrink-wrapped or paper-wrapped as a unit load with or without pallets

5.6.3.2* Class II. A Class II commodity shall be defined as a noncombustible product that is in slatted wooden crates, solid wood boxes, multiple-layered corrugated cartons, or equivalent combustible packaging material, with or without pallets.

5.6.3.3* Class III.

5.6.3.3.1 A Class III commodity shall be defined as a product fashioned from wood, paper, natural fibers, or Group C plastics with or without cartons, boxes, or crates and with or without pallets.

5.6.3.3.2 A Class III commodity shall be permitted to contain a limited amount (5 percent by weight or volume or less) of Group A or Group B plastics.

5.6.3.4* Class IV.

5.6.3.4.1 A Class IV commodity shall be defined as a product, with or without pallets, that meets one of the following criteria:

(1) Constructed partially or totally of Group B plastics
(2) Consists of free-flowing Group A plastic materials
(3) Contains within itself or its packaging an appreciable amount (5 percent to 15 percent by weight or 5 percent to 25 percent by volume) of Group A plastics

5.6.3.4.2 The remaining materials shall be permitted to be metal, wood, paper, natural or synthetic fibers, or Group B or Group C plastics.

5.6.4* Classification of Plastics, Elastomers, and Rubber. Plastics, elastomers, and rubber shall be classified as Group A, Group B, or Group C.

5.6.4.1* Group A. The following materials shall be classified as Group A:

(1) ABS (acrylonitrile-butadiene-styrene copolymer)
(2) Acetal (polyformaldehyde)
(3) Acrylic (polymethyl methacrylate)
(4) Butyl rubber
(5) EPDM (ethylene-propylene rubber)
(6) FRP (fiberglass-reinforced polyester)
(7) Natural rubber (if expanded)
(8) Nitrile-rubber (acrylonitrile-butadiene-rubber)
(9) PET (thermoplastic polyester)
(10) Polybutadiene
(11) Polycarbonate
(12) Polyester elastomer
(13) Polyethylene
(14) Polypropylene
(15) Polystyrene
(16) Polyurethane
(17) PVC (polyvinyl chloride — highly plasticized, with plasticizer content greater than 20 percent) (rarely found)
(18) SAN (styrene acrylonitrile)
(19) SBR (styrene-butadiene rubber)

5.6.4.2 Group B. The following materials shall be classified as Group B:

(1) Cellulosics (cellulose acetate, cellulose acetate butyrate, ethyl cellulose)
(2) Chloroprene rubber
(3) Fluoroplastics (ECTFE — ethylene-chlorotrifluoro-ethylene copolymer; ETFE — ethylene-tetrafluoroethylene-copolymer; FEP — fluorinated ethylene-propylene copolymer)
(4) Natural rubber (not expanded)
(5) Nylon (nylon 6, nylon 6/6)
(6) Silicone rubber

5.6.4.3 Group C. The following materials shall be classified as Group C:

(1) Fluoroplastics (PCTFE — polychlorotrifluoroethylene; PTFE — polytetrafluoroethylene)
(2) Melamine (melamine formaldehyde)
(3) Phenolic
(4) PVC (polyvinyl chloride — flexible — PVCs with plasticizer content up to 20 percent)
(5) PVDC (polyvinylidene chloride)
(6) PVDF (polyvinylidene fluoride)
(7) PVF (polyvinyl fluoride)
(8) Urea (urea formaldehyde)

5.6.5* Classification of Rolled Paper Storage. For the purposes of this standard, the classifications of paper described in 5.6.5.1 through 5.6.5.4 shall apply and shall be used to determine the sprinkler system design criteria.

5.6.5.1 Heavyweight Class. Heavyweight class shall be defined so as to include paperboard and paper stock having a basis weight [weight per 1000 ft^2 (92.9 m^2)] of 20 lb (9.1 kg).

5.6.5.2 Mediumweight Class. Mediumweight class shall be defined so as to include all the broad range of papers having a basis weight [weight per 1000 ft^2 (92.9 m^2)] of 10 lb to 20 lb (4.5 kg to 9.1 kg).

5.6.5.3 Lightweight Class. Lightweight class shall be defined so as to include all papers having a basis weight [weight per 1000 ft^2 (92.9 m^2)] of 10 lb (4.5 kg).

5.6.5.4 Tissue.

5.6.5.4.1 Tissue shall be defined so as to include the broad range of papers of characteristic gauzy texture, which, in some cases, are fairly transparent.

5.6.5.4.2 For the purposes of this standard, tissue shall be defined as the soft, absorbent type, regardless of basis weight — specifically, crepe wadding and the sanitary class including facial tissue, paper napkins, bathroom tissue, and toweling.

Chapter 6 System Components and Hardware

6.1 General. This chapter provides requirements for correct use of sprinkler system components.

6.1.1* Listing.

6.1.1.1 Materials or devices not specifically designated by this standard shall be used in accordance with all conditions, requirements, and limitations of their special listing. All special listing requirements shall be included and identified in the product submittal literature and installation instructions.

6.1.1.2 Unless the requirements of 6.1.1.3, 6.1.1.4, or 6.1.1.5 are met, all materials and devices essential to successful system operation shall be listed.

6.1.1.3 Equipment as permitted in Table 6.3.1.1 and Table 6.4.1 shall not be required to be listed.

6.1.1.4 Materials meeting the requirements of 9.1.1.2, 9.1.1.4.2, and 9.1.1.4.3 shall not be required to be listed.

6.1.1.5 Components that do not affect system performance such as drain piping, drain valves, and signs shall not be required to be listed.

6.1.2 Reconditioned Components.

6.1.2.1 The use of reconditioned valves and devices as replacement equipment in existing systems shall be permitted.

6.1.2.2 Reconditioned sprinklers shall not be permitted to be utilized on any new or existing system.

6.1.3 Rated Pressure. System components shall be rated for the maximum system working pressure to which they are exposed but shall not be rated at less than 175 psi (12.1 bar) for components installed aboveground and 150 psi (10.4 bar) for components installed underground.

A.5.6.3.1 See Table A.5.6.3.1.

Table A.5.6.3.1 Examples of Class I Commodities

Alcoholic Beverages
  Cartoned or uncartoned
  - Up to 20 percent alcohol in metal, glass, or ceramic containers
Appliances, Major (e.g., stoves, refrigerators)
  - Not packaged, no appreciable plastic exterior trim
Batteries
  Dry cells (nonlithium or similar exotic metals)
  - Packaged in cartons
  Automobile
  - Filled*
Bottles, Jars
  Empty, cartoned
  - Glass
  Filled noncombustible liquids
  - Glass, cartoned
  - Plastic, cartoned [less than 5 gal (18.9 L)]
  - Plastic, PET
  Filled noncombustible powders
  - Glass, cartoned
Canned Foods
  In ordinary cartons
Cans
  Metal
  - Empty
Cement
  Bagged
Coffee
  Canned, cartoned
Fertilizers
  Bagged
  - Phosphates
File Cabinets
  Metal
  - Cardboard box or shroud
Fish or Fish Products
  Frozen
  - Nonwaxed, nonplastic packaging
  Canned
  - Cartoned
Frozen Foods
  Nonwaxed, nonplastic packaging
Fruit
  Fresh
  - Nonplastic trays or containers
  - With wood spacers
Ice Cream
Meat, Meat Products
  - Bulk
  - Canned, cartoned
  - Frozen, nonwaxed, nonplastic containers
Metal Desks
  - With plastic tops and trim
Milk
  - Nonwaxed-paper containers
  - Waxed-paper containers
  - Plastic containers
Motors
  - Electric
Nuts
  - Canned, cartoned
Paints
  Friction-top cans, cartoned
  - Water-based (latex)
Plastic Containers
  - Noncombustible liquids or semiliquids in plastic containers less than 5 gal (18.9 L) capacity
Poultry Products
  - Canned, cartoned
  - Frozen, nonwaxed, nonplastic containers
Salt
  Bagged
Syrup
  Drummed (metal containers)
Transformers
  Dry and oil filled
Wire
  Bare wire on metal spools on wood skids

*Most batteries have a polypropylene case and, if stored empty, should be treated as a Group A plastic. Truck batteries, even where filled, should be considered a Group A plastic because of their thicker walls.

A.5.6.3.2 See Table A.5.6.3.2.

Table A.5.6.3.2 Examples of Class II Commodities

Alcoholic Beverages
  Up to 20 percent alcohol in wood containers
Appliances, Major (e.g., stoves)
  Corrugated, cartoned (no appreciable plastic trim)
Baked Goods
  Cookies, cakes, pies
  - Frozen, packaged in cartons*
Batteries
  Dry cells (nonlithium or similar exotic metals) in blister pack in cartons
Bottles, Jars
  Filled noncombustible powders
  - Plastic PET
Boxes, Crates
  Empty, wood, solid walls
Fertilizers
  Bagged
  - Nitrates
Fish or Fish Products
  Frozen
  - Waxed-paper containers, cartoned
  - Boxed or barreled
Frozen Foods
  Waxed-paper containers, cartoned
Leather Hides
  Baled
Light Fixtures
  Nonplastic
  - Cartoned

(continues)

Table A.5.6.3.2 *Continued*

Marble
Artificial sinks, countertops
- Cartoned, crated
Meat, Meat Products
- Frozen, waxed-paper containers
- Frozen, expanded plastic trays
Pharmaceuticals
Pills, powders
- Glass bottles, cartoned
Nonflammable liquids
- Glass bottles, cartoned
Photographic Film
- Motion picture or bulk rolls of film in polycarbonate, polyethylene, or metal cans; polyethylene bagged in cardboard boxes
Plastic Containers
Noncombustible liquids or semiliquids (such as ketchup) in plastic containers with nominal wall thickness of ¼ in. (6.4 mm) or less and larger than 5 gal (18.9 L) capacity
Poultry Products
Frozen (on paper or expanded plastic trays)
Powders (ordinary combustibles — free flowing)
In paper bags (e.g., flour, sugar)
Salt
Packaged, cartoned
Shock Absorbers
Metal dust cover
Signatures
Book, magazines
- Solid array on pallet
Syrup
Barreled, wood
Wire
- Bare wire on wood or cardboard spools on wood skids
- Bare wire on metal, wood, or cardboard spools in cardboard boxes on wood skids
- Single- or multiple-layer PVC-covered wire on metal spools on wood skids
- Insulated (PVC) cable on large wood or metal spools on wood skids
Wood Products
Solid piles
- Lumber, plywood, particle board, pressboard (smooth ends and edges)

*The product is in a plastic-coated package in a corrugated carton. If packaged in a metal foil, it can be considered Class I.

A.5.6.3.3 See Table A.5.6.3.3.

Table A.5.6.3.3 Examples of Class III Commodities

Aerosols
Cartoned or uncartoned
- Level 1
Baked Goods
Cookies, cakes, pies
- Packaged, in cartons

Table A.5.6.3.3 *Continued*

Beans
Dried
- Packaged, cartoned
Bread
Wrapped, cartoned
Butter
Whipped spread
Candy
Packaged, cartoned
Cartons
Corrugated
- Unassembled (neat piles)
Cereals
Packaged, cartoned
Charcoal
Bagged
- Standard
Cheese
- Packaged, cartoned
- Wheels, cartoned
Chewing Gum
Packaged, cartoned
Chocolate
Packaged, cartoned
Cloth
Cartoned and not cartoned
- Natural fiber, viscose
Cocoa Products
Packaged, cartoned
Coffee
Packaged, cartoned
Coffee Beans
Bagged
Cotton
Packaged, cartoned
Diapers
Cotton, linen
Dried Foods
Packaged, cartoned
Fish or Fish Products
Frozen
- Plastic trays, cartoned
Frozen Foods
Plastic trays
Furniture
Wood
- No plastic coverings or foam plastic cushioning
Grains — Packaged in Cartons
- Barley
- Rice
- Oats
Margarine
Up to 50 percent oil (in paper or plastic containers)
Mattresses
Standard (box spring)
Nuts
- Packaged, cartoned
- Bagged

Table A.5.6.3.3 *Continued*

Paper Products
  Books, magazines, stationery, plastic-coated paper food containers, newspapers, cardboard games, cartoned tissue products
Paper, Rolled
  In racks or on side
  - Medium or heavyweight
Photographic Film
  - 35 mm in metal film cartridges in polyethylene cans in cardboard boxes
  - Paper, in sheets, bagged in polyethylene, in cardboard boxes
PVC (polyvinyl chloride)
  - Flexible (e.g., cable jackets, plasticized sheets)
  - Rigid (e.g., pipe, pipe fittings)
  - Bagged resins
Rags
  Baled
  - Natural fibers
Shingles
  Asphalt-coated fiberglass
Shock Absorbers
  Plastic dust cover
Skis
  Wood
Textiles
  Natural fiber clothing or textile products
  Synthetics (except rayon and nylon) — 50/50 blend or less
  - Thread, yarn on wood or paper spools
  - Fabrics
Tobacco Products
  In paperboard cartons
Wood Products
  - Spools (empty)
  - Toothpicks, clothespins, hangers in cartons
  - Doors, windows, wood cabinets, and furniture

A.5.6.3.4 See Table A.5.6.3.4.

Table A.5.6.3.4 Examples of Class IV Commodities

Ammunition
  Small arms, shotgun
  - Packaged, cartoned
Bottles, Jars
  Empty, cartoned
  - Plastic PET (polyethylene terephthalate)
  Filled noncombustible powders
  - Plastic, cartoned [less than 1 gal (3.8 L)]
Cartons
  Corrugated
  - Partially assembled
Cloth
  Cartoned and not cartoned
  - Synthetic[a]
Diapers
  Disposable with plastics and nonwoven fabric (in cartons)

Table A.5.6.3.4 *Continued*

Fiberglass Insulation
  - Paper-backed rolls, bagged or unbagged
Furniture
  Wood
  - With plastic coverings
Liquor
  100 proof or less, 1 gal (3.8 L) or less, cartoned
  - Glass (palletized)[b]
  - Plastic bottles
Matches
  Packaged, cartoned
  - Paper
Nail Polish
  1 oz to 2 oz (29.6 ml to 59.1 ml) glass, cartoned
Paints
  Friction-top cans, cartoned
  - Oil based
Paper, Rolled
  In racks
  - Lightweight
Paper, Waxed
  Packaged in cartons
Pharmaceuticals
  Pills, powders
  - Plastic bottles, cartoned
Photographic Film
  - Rolls in polycarbonate plastic cassettes, bulk wrapped in cardboard boxes
PVA (polyvinyl alcohol) Resins
  Bagged
Rags
  Baled
  - Synthetic fibers
Rubber
  Natural, blocks in cartons
Shingles
  Asphalt-impregnated felt
Skis
  Foam core
Textiles
  Synthetics (except rayon and nylon) — 50/50 blend or less
  - Thread, yarn on plastic spools
  Synthetics (except rayon and nylon) — greater than 50/50 blend
  - Thread, yarn on wood or paper spools
  - Fabrics
  Rayon and nylon
  - Baled fiber
  - Thread, yarn on wood or paper spools
  - Fabrics
Vinyl Floor Coverings
  Tiles in cartons
Wax-Coated Paper
  Cups, plates
  - Boxed or packaged inside cartons (emphasis is on packaging)

(continues)

Table A.5.6.3.4 *Continued*

Wire
- Bare wire on plastic spools in cardboard boxes on wood skids
- Single- or multiple-layer PVC-covered wire on plastic spools in cardboard boxes on wood skids
- Single, multiple, or power cables (PVC) on large plastic spools

Wood Products
Patterns

[a] Tests clearly indicate that a synthetic or synthetic blend is considered greater than Class III.
[b] Where liquor is stored in glass containers in racks, it should be considered a Class III commodity; where it is palletized, it should be considered a Class IV commodity.

A.5.6.4 The categories listed in 5.6.4.1, 5.6.4.2, and 5.6.4.3 are based on unmodified plastic materials. The use of fire- or flame-retarding modifiers or the physical form of the material could change the classification.

A.5.6.4.1 See Table A.5.6.4.1.

Table A.5.6.4.1 Examples of Group A Plastic Commodities

Batteries
Truck or larger
- Empty or filled[a]

Bottles, Jars
Empty, cartoned
- Plastic (other than PET), any size

Filled noncombustible liquids
- Plastic, open or solid plastic crates[b]

Filled noncombustible powders
- Plastic, cartoned or uncartoned [greater than 1 gal (3.8 L)]
- Plastic, solid plastic crates
- Plastic, open plastic crates

Candles
Packaged, cartoned
- Treat as expanded plastic

Carpet Tiles
Cartoned

Cartons
Wax coated, single walled

Diapers
Disposable with plastics and nonwoven fabric (uncartoned), plastic wrapped

Furniture
Wood
- With foam plastic cushioning

Lighters
Butane
- Blister-packed, cartoned

Margarine
Between 50 percent and 80 percent oil (in any packaging)

Matches
Packaged, cartoned
- Wood

Table A.5.6.4.1 *Continued*

Mattresses
Foam (in finished form)

Milk
Containers in plastic crates

Nail Polish
1 oz to 2 oz (29.6 ml to 59.1 ml) plastic bottles, cartoned

Paper Products
Tissue products, uncartoned and plastic wrapped

Plastic Containers
- Combustible or noncombustible solids in plastic containers and empty plastic containers
- Noncombustible liquids or semiliquids (such as ketchup) in plastic containers with nominal wall thickness greater than ¼ in. (6.4 mm) and larger than 5 gal (18.9 L) capacity

Polyurethane
Cartoned or uncartoned expanded

Rubber
Synthetic

Stuffed Toys
Foam or synthetic

Textiles
Synthetics (except rayon and nylon) — 50/50 blend or less
- Baled fiber

Synthetics (except rayon and nylon) — greater than 50/50 blend
- Baled fiber
- Thread, yarn on plastic spools

Rayon and nylon
- Thread, yarn on plastic spools

Vinyl-Coated Fabric
Cartoned

Vinyl Floor Coverings
Rolled

Wax-Coated Paper
Cups, plates
- Loose inside large cartons

Wax
Paraffin/petroleum wax, blocks, cartoned

Wire
Bulk storage of empty plastic spools

[a] Most batteries have a polypropylene case and, if stored empty, should be treated as a Group A plastic. Truck batteries, even where filled, should be considered a Group A plastic because of their thicker walls.
[b] As the openings in plastic crates become larger, the product behaves more like Class III. Conversely, as the openings become smaller, the product makeup behaves more like a plastic.

A.5.6.5 *Paper Classification.* These classifications were derived from a series of large-scale and laboratory-type small-scale fire tests. It is recognized that not all paper in a class burns with exactly the same characteristics.

Paper can be soft or hard, thick or thin, or heavy or light and can also be coated with various materials. The broad range of papers can be classified according to various properties. One important property is basis weight, which is defined as the weight of a sheet of paper of a specified area. Two broad categories are recognized by industry — paper and paperboard. Paperboard normally has a basis weight of 20 lb (9.1 kg) or

Dewberry

Phase I Environmental Site Assessment

Goodes Bridge Center

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October 21, 2015

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TABLE OF CONTENTS

List of Figures

List of Tables

List of Appendices

1. Summary

Dewberry Engineers Inc. (Dewberry) performed a Phase I Environmental Site Assessment (ESA) on 2.274 acres (referred to as the subject property here within) at 15401 Goodes Bridge Road in Amelia Court House, Virginia (**Figure 1**). The purpose of the Phase I ESA is to identify the presence of or the potential for, recognized environmental conditions (RECs) at the subject property, and past or current environmental impacts to the subject property.

Historical aerial photos and U.S. Geological Survey (USGS) topographic maps compiled by Environmental Data Resources (EDR) dating back to 1964 and 1897, respectively, appear to reveal that the subject property remained undeveloped until at least 1943.

The subject property was listed in the EDR Radius Map™ Report with GeoCheck® as having RECs (**Appendix A**).

Dewberry personnel conducted interviews with people who had knowledge of the subject property. Most interviewees determined that to their knowledge, there were no environmental concerns associated with the property. However, correspondence with the Virginia Department of Environmental Quality (VDEQ) determined that the subject property had participated in a Voluntary Remediation Program (VRP) (also referred to as the Voluntary Cleanup Program (VCP)), indicating that there were or had been potential environmental concerns associated with prior activities and operations at the subject property.

This assessment revealed evidence of recognized environmental conditions in connection with the activities and operations at the subject property. Dewberry recommends the following measures:

- An update to the limited Phase II ESA conducted by Froehling and Robertson (F&R) in 2004
- Soil sample(s) collected within the vicinity of the petroleum staining observed at the southwestern corner of the building (**Appendix B**)

The EDR Radius Map Report revealed two (2) off-site locations with recognized environmental concerns within the American Society for Testing and Materials (ASTM) approximate minimum search radius (one quarter mile) from the subject property. Based on historical documentation, two (2) off-site locations with recognized environmental conditions were identified to adjoin the subject property to the east and southeast. A detailed characterization and investigation of off-site RECs is not within the scope of this Phase I ESA.

Dewberry performed this Phase I ESA in conformance with the provisions, scope, and limitations of the EPA's All Appropriate Inquires (AAI) Rule and ASTM Standard Practice E-1527-13. Any exceptions to, or deletions from, this practice are described in **Section 2.3** of this report. This Phase I ESA included reviews of Federal and State records regarding hazardous materials; reviews of historical records and profiles; an on-site field reconnaissance including non-intrusive inspections of the subject property; and interviews with local officials and individuals with knowledge of the subject property.

Unless otherwise noted, the work was performed in general accordance with the provisions of the ASTM Standard Practice E1507-13, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process." The due diligence performed during the investigation and preparation of this Phase I ESA meets the requirements established by EPA's "All Appropriate Inquiry Rule," 40 CFR Part 312.

Dewberry cannot, and does not, imply guarantee or warrant sites as being contaminant free. Our services document only that information and those conditions found. Additional information, with respect to the site or adjacent properties, which was not available at the time of the assessment, could modify the conclusions and/or notes herein.

2. Introduction

2.1 Purpose

The purpose of this study is to identify RECs on the site in accordance with the ASTM standard E1527-13. ASTM (2013) defines RECs as "the presence or likely presence of any hazardous substances or petroleum products, in, on or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment".

Due to the impacts on the environment, Federal and State governments have enacted legislation requiring the clean-up of conditions which pose a risk, or a threat of risk, to the public health or the environment. These laws have been promulgated to prosecute any party deemed to be a potentially responsible party (PRP). This has far reaching implications, as the definition of a PRP is not limited to those parties responsible for the actual contamination, but also owners: past, present, or subsequent; lessors, managers, lien holders, transporters, and other parties having ownership or management responsibility. Furthermore, there is a no standard rule of assigning responsibility for a liability.

Within this context, the American Society for Testing and Materials developed ASTM E1527-13, "Environmental Site Assessments: Phase I Environmental Site Assessment Process." The ASTM E1527-13 process is intended to "permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on Comprehensive Environmental Response, Compensation, and Liability Act **(**CERCLA) liability." Though no guarantee should be inferred from this report, it summarizes the environmental inquiries, which were undertaken as specified by ASTM E1527-13.

2.2 Methodology

The method used for determining RECs on the subject property is outlined in ASTM E1527-13. This assessment included reviews of Federal and State records of environmental hazards on and in the vicinity of the subject property, reviews of historical records and interviews with local officials and other individuals with knowledge of the subject property. A site reconnaissance was performed to identify obvious and readily visible evidence of environmental conditions on the site, or current activities at the site, which would suggest an environmental concern. Adjacent properties were observed during the site reconnaissance from within the boundaries of the subject property and public right-of-ways.

2.3 Limitations and Exceptions of Assessment

This Phase I ESA is subject to the following limitations and exceptions:

- Aerial photos were not available at 5-year intervals.
- A comprehensive assessment and/or detailed testing were not performed for considerations beyond the scope of this Phase I ESA including but not limited to:
  A. Lead-Based Paint
  B. Asbestos

C. Lead in Drinking Water
D. Radon
E. Wetlands
F. Vapor Intrusion Investigation

- Please be aware of the following:

  - *Uncertainty not eliminated* – since no environmental site assessment can entirely eliminate uncertainty about the potential existence of recognized environmental conditions at a site, it is necessary to recognize that this assessment can only reduce, not wholly eliminate, such uncertainty. The standards relied on recognized reasonable limits of time and cost.

  - *Not exhaustive* – the standard practices followed in this assessment reflect a balance between limiting the time and costs required for the assessment and the reduction of uncertainty about unknown conditions that additional information might provide. "Appropriate inquiry" does not necessarily mean exhaustive investigation.

  - Technical guidelines exist on how to perform certain investigative actions; however, no "approved" or "standard" level of investigation has been required or adopted in a legal code sense.

  - There is no numerical definition of what is legally considered an acceptable level of environmental risk, only comparative standards (i.e. drinking water standards, risk based concentration calculations, etc.).

Based upon the foregoing, Dewberry cannot, and does not imply guarantee or warrant sites as being contaminant free. Our services document only that information and those conditions found. Additional information, with respect to the subject property and/or adjacent properties, which was not available at the time of the assessment, could modify the conclusion and/or notes herein. The client is responsible for making the final decision as to what is an acceptable level of risk.

3. Site Description

3.1 Location

The subject property is located approximately 1.5 miles northeast from the town center of Amelia Court House in Virginia at 15401 Goodes Bridge Road, Amelia Court House, Virginia. Access to the site is from Goodes Bridge Road (U.S. 360 Business) via Patrick Henry Highway (U.S. 360). Goodes Bridge Road borders the northern boundary of subject property (**Figures 1** and **2**).

3.2 Site and Vicinity Characteristics

The subject property consists of approximately 2.274 acres. Per the Amelia County, Virginia Real Estate website (www.ameliacountyrealestate.com) information on the subject property is as follows:

Map #: 31-186A
Owner: Sandy Creek Investments LLC
Acreage: 2.274 acres
Building(s): 1
Year Building Built: 1967
Office Area (ft^2): ±3,400
Warehouse Area (ft^2): ±13,680
Industrial Area (ft^2): ±19,800
Loading Platform Area (ft^2): ±1,040
Total Building Area (ft^2): ±37,920

A real estate summary pamphlet produced by Cushman & Wakefield / Thalhimer and property cards from the Amelia County, Virginia Real Estate website are included in **Appendix C**.

3.3 Current and Past Uses of Subject Property

The current and past uses of the subject property were determined by performing a site reconnaissance, interviews of persons having knowledge of the subject property, and reviewing available historical records such as aerial photographs and USGS topographic maps.

Currently, the subject property is used for commercial purposes. There is one (1) commercial building with a total area of ±37,920 ft^2. The building contains areas for offices, industrial and warehouse use, two (2) loading platforms, and parking (**Appendix C**). Southeast of the commercial building is a water tower.

Based on historical aerial photographs taken between the years of 1967 and 2012, construction on the subject property is shown in the 1964 photograph. In the aerial photograph taken in 1984, there is an apparent building and parking lots on the subject property. No obvious changes to the subject property were observed since the 1984 photograph.

USGS historical topographic maps were obtained between the years of 1897 and 1994. According to the 1987 and 1943 topographic maps, there appear to be no buildings on the subject property. The 1943 map shows the subject property as being wooded. The 1966 to 1994 maps show a building on the subject property.

According to a Phase I report prepared by URS Corporation (URS) dated June 12, 2003, the building currently located on the subject property was built in stages and completed in 1973. Prior to current use, the facility was used by the General Binding Corporation (GBC) to manufacture notebook binder and tabs until 2002. Before GBC used the facility, the Virginia Laminating Company (VLC) occupied the building. According to the February 1994 Preliminary Assessment (PA) report conducted on the subject property, the VLC is inferred to have been active between 1952 and 1962 (E&E 1994). See **Section 4.5** of this report for more information regarding historical uses of the subject property.

3.4 Current and Past Uses of Adjoining Properties

The current and past uses of the properties adjoining the subject property were determined by performing a site reconnaissance, interviews of persons having knowledge of the subject property, and reviewing available historical records including: aerial photography and USGS topographic maps.

Currently, land use adjoining the subject property is a mixture of commercial, forested, and maintained land. North of the subject property is U.S. 360 Business; north of U.S. 360 Business are railroad tracks. East of the subject property is maintained land that is periodically mowed; to the south and west are commercial businesses.

From the review of aerial photographs between the years of 1964 and 2012, land adjoining the subject property appears to have been historically maintained and used for residential and/or commercial purposes. In the 1984 aerial photograph, an apparent pond is located south of the subject property; in the 2000 aerial photograph, the pond has been removed. Additional buildings appear south of the subject property in the 1994 aerial photograph.

Based on USGS historical topographic maps obtained between the years of 1897 and 1943, properties adjoining the subject property do not appear to have any buildings. In the 1966 topographic map there is one building west of the subject property; south of the subject property is a pond. Additional buildings south and west of the subject property are observed in the 1994 topographic map.

According to a Preliminary Assessment, Phase I, and limited Phase II report conducted on the subject property, a holding pond was located east of the subject property prior to 1991. The holding pond had received liquid from settling tanks located on the subject property. After 1991, land southeast of the facility along U.S. Route 360 was used as a leach field for liquid from the settling tanks (E&E 1994).

4. Records Review

4.1 Standard Environmental Record Sources, Federal and State

Environmental Data Resources, Inc. was contracted to perform a search of environmental databases regarding the presence of hazardous/toxic substances on or near the subject property.

FEDERAL & STATE RECORDS

2020 COR ACTION:	2020 Corrective Action Program List
AHA Hospitals:	Sensitive Receptor - AHA Hospitals
AIRS:	Permitted Airs Facility list
AST:	Registered Aboveground Storage Tanks
BROWNFIELDS:	Brownfields Site Specific Assessments
BRS:	Biennial Reporting System
CEDS:	Comprehensive Environmental Data System
CERCLIS:	Comprehensive Environmental Response, Compensation, and Liability Information System
CERCLIS-NFRAP:	CERCLIS No Further Remedial Action Planned
COAL ASH:	Coal Ash Disposal Sites
COAL ASH DOE:	Steam-Electric Plan Operation Data
COAL ASH EPA:	Coal Combustion Residues Surface Impoundments List
CONSENT:	Superfund (CERCLA) Consent Decrees
CORRACTS:	Corrective Action Report
Daycare Centers:	Sensitive Receptor - Licensed Facilities
Delisted NPL:	National Priority List Deletions
DOD:	Department of Defense Sites
DOT OPS:	Incident and Accident Data
DRYCLEANERS:	Drycleaner List
EDR MGP:	EDR Proprietary Manufactured Gas Plants
EDR US Hist Auto Stat:	EDR Exclusive Historic Gas Stations
EDR US Hist Cleaners:	EDR Exclusive Historic Dry Cleaners
Electric Power Lines:	Electric Power Transmission Line Data
ENFORCEMENT:	Enforcement Actions Data
ENG CONTROLS:	Engineering Controls Sites Listing
EPA WATCH LIST:	EPA WATCH LIST
ERNS:	Emergency Response Notification System
FEDERAL FACILITY:	Federal Facility Site Information Listing
FEDLAND:	Federal and Indian Lands
FEMA UST:	FEMA owned Underground Storage Tank Listing
FINANCIAL ASSURANCE 1:	Financial Assurance Information Listing
FINANCIAL ASSURANCE 2:	Financial Assurance Information Listing
FINDS:	Facility Index System/Facility Registry System
FTTS:	FIFRA/TSCA Tracking System
FITTS INSP:	FIFRA/TSCA Tracking System
Flood Zones:	100-year and 500-year flood zones

FUDS:	Formerly Used Defense Sites
HIST FTTS:	FIFRA/TSCA Tracking System Administrative Case Listing
HIST FTTS INSP:	FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
HMIRS:	Hazardous Materials Information Reporting System
ICIS:	Integrated Compliance Information System
INST CONTROL:	Voluntary Remediation Program Database
LEAD SMELTER 1:	Lead Smelter Sites
LEAD SMELTER 2:	Lead Smelter Sites
LIENS 2:	CERCLA Lien Information
LTANKS:	Leaking Petroleum Storage Tanks
LUCIS:	Land Use Control Information System
LUST REG PD:	Leaking Underground Storage Tank Sites
Medical Centers:	Sensitive Receptor - Medical Centers
MLTS:	Material Licensing Tracking System
NPDES:	National Pollutant Discharge Elimination System
NPL:	National Priority List
NPL Liens:	Federal Superfund Liens
Nursing Homes:	Sensitive Receptor - Nursing Homes
NWI:	National Wetlands Inventory
ODI:	Open Dump Inventory
Oil/Gas Pipelines:	GeoData Digital Line Graphs from 1:100,000-Scale Maps
PADS:	PCB Activity Database System
PCB TRANSFORMER:	PCB Transformer Registration Database
Private Schools:	Sensitive Receptor - Private Schools
Proposed NPL:	Proposed National Priority Lists Sites
PRP:	Potentially Responsible Parties
Public Schools:	Sensitive Receptor - Public Schools
RAATS:	RCRA Administration Action Tracking System
RADINFO:	Radiation Information Database
RCRA-CESQG:	RCRA-Conditionally Exempt Small Quantity Generators
RCRA-LQG:	RCRA-Large Quantity Generators
RCRA-NonGen/NLR:	RCRA-Non Generators / No Longer Regulated
RCRA-SQG:	RCRA-Small Quantity Generators
RCRA-TSDF:	RCRA-Treatment, Storage and Disposal
RGA LF:	Recovered Government Archive Solid Waste Facilities List
RGA LUST:	Recovered Government Archive Leaking Underground Storage Tank
RMP:	Risk Management Plans
ROD:	Records of Decision
SCRD DRYCLEANERS:	State Coalition for Remediation of Drycleaners Listing
SHWS:	State Hazardous Waste Sites
SILLS:	Prep/Spills Database Listing
SPILLS 90:	SPILLS90 data from FirstSearch
SPILLS PC:	Pollution Complaint Database
SPILLS PD:	PREP Database

SPILLS BRL:	Prep/Spills Database Listing
SSTS:	Section 7 Tracking Systems
SWF/LF:	Solid Waste Management Facilities
TIER 2:	Tier 2 Information Listing
TRIS:	Toxic Chemical Release Inventory System
TSCA:	Toxic Substances Control Act
UIC:	Underground Injection Wells
UMTRA:	Uranium Mill Tailings Sites
US AIRS (AFS):	Aerometric Information Retrieval System Facility Subsystem (ASF)
US AIRS MINOR:	Air Facility System Data
US BROWNFIELDS:	A Listing of Brownfields Sites
US CDL:	Clandestine Drug Labs
US ENG CONTROLS:	Engineering Controls Sites List
US FIN ASSUR:	Financial Assurance Information
USGS 7.5' Topographic Map:	Scanned Digital USGS 7.5' Topographic Map (DRG)
US HIST CDL:	National Clandestine Laboratory Register
US INST CONTROLS:	Sites with Institutional Controls
US MINES:	Mines Master Index File
US MINES2:	Ferrous and Nonferrous Metal Mines Database Listing
US MINES3:	Active Mines & Mineral Plants Database Listing
UST:	Registered Petroleum Underground Storage Tanks
VRP:	Voluntary Remediation Program

TRIBAL RECORDS

INDIAN ODI:	Report on the Status of Open Dumps on Indian Lands
INDIAN RESERV:	Indian Reservations

EDR PROPRIETARY RECORDS

The findings of the EDR search are included in **Appendix A** of this report.

4.1.1 Summary of Mapped Sites

The EDR Radius Map Report identified two (2) sites with *recognized environmental conditions* identified in within the ASTM Standard E-1527-13 minimum search distance of a quarter mile (**Table 1**). The subject property was listed in environmental databases searched by EDR (**Appendix A** and **Table 1**).

Table 1. Recognized environmental conditions identified in the EDR Radius Map Report within a quarter mile radius from subject property. REC database, site location, and direction and distance from subject property are included in the table.

Site Name	Address	Database	Direction and Distance from Subject Property (Based on EDR Report)	Actual Site Location Based on Address
General Binding Corporation	15401 Goodes Bridge Road Amelia, VA	CERC-NFRAP, RCRA NonGen/NLR, VCP, FINDS	Subject Property	Subject Property
Winnerham Market	14701 Patrick Henry Highway Amelia, VA	UST, Financial Assurance	ESE, <1/8 mile	ENE, ~1.5 miles
N/A	14701 Patrick Henry Highway Amelia Court House, VA	EDR US Historical Auto	ESE, <1/8 mile	ENE, ~1.5 miles

According to the EDR Radius Map report, 14701 Patrick Henry Highway is located east-southeast of the subject property (**Appendix A**). However, when 14701 Patrick Henry Highway is entered into Google Maps (google.com/maps) or Map Quest (mapquest.com) it is located approximately 1.5 miles east-northeast of the subject property.

4.1.2 Orphan (unmapped) Sites

Orphan sites are sites that have been identified by the EDR database search as having potential environmental issues, but cannot be mapped within the Standard Environmental Site Assessment search radius, "…because they lack specific location or street address." They are included as a list based on a common zip code with the subject property.

There was one (1) record listed in the EDR Radius Map Report "Orphan Summary". Reasonable efforts were made to locate and identify potential the RECs at the orphan site including reviews of telephone directories, reviews of local highway maps and a search of the area by motor vehicle. Based on the information derived, the orphan site was not determined to be located within the ASTM minimum search distance (1/4 mile) from the subject property. **Appendix A** contains a description of the orphan site found by EDR.

4.2 Historical Use Sources

4.2.1 Historical Aerial Photographs

Historical aerial photographs were supplied in the EDR Aerial Photo Decade Package for the years of 1964, 1967, 1984, 1989, 1994, 2000, 2005, 2006, 2008, 2009, 2011, 2012.

1964 Aerial Photograph (1" = 500') – The subject property appears to have at least one (1) building on it. North of the subject property is present day U.S. Route 360 Business. The land

north of U.S. Route 360 Business seems to be undeveloped. Property east and south of the subject property appears to be undeveloped, partially forested land. West of the subject property is a driveway.

1967 Aerial Photograph (1" = 500') – No apparent changes have occurred to the subject property since the 1964 aerial photograph. A pond and a deforested area appear to be south of the subject property. There appear to be roads that connect the land west of the subject property to the deforested area and pond south of the subject property.

1984 and 1989 Aerial Photographs (scale varies) – The building on the subject property looks larger than the one seen in the 1967 the aerial photograph. Parking lots east and west of the building are apparent. The land east and south of the subject property still seems to be undeveloped. The pond is still present south of the subject property. There appear to be several buildings and parking areas west of the subject property.

1994 Aerial Photograph (1" = 500') – No apparent changes have occurred to the subject property since the 1989 aerial photograph. The pond south of the subject property appears to have decreased in area; the pond does not extend as far west as it did in previous years. Several buildings are present south of the subject property and southwest of the pond. No apparent changes have occurred to the land east and west of the subject property since the 1989 aerial photograph.

2000 Aerial Photograph (1" = 750') – No apparent changes have occurred to the subject property since the 1994 aerial photograph. The pond south of the subject property has been removed. No apparent changes have occurred to properties east and west of the subject property since the 1994 aerial photograph.

2005, 2006, and 2008 Aerial Photographs (1" = 500') – No apparent changes have occurred to the subject property since the 2000 aerial photograph. The property east of the subject property appears to have been partially cleared. A defined parking area is observed south of the subject property where the pond was previously located. No apparent changes have occurred to the property west of the subject property since the 2000 aerial photograph.

2009, 2011, 2012 Aerial Photographs (1" = 500') – No apparent changes have occurred to the subject property since the 2008 aerial photograph. The land east of the subject property appears to have been cleared and regraded. No apparent changes have occurred to the properties south and west of the subject property since the 2008 aerial photograph.

4.2.2 Historical Topographic Maps

The following historical USGS topographic maps were supplied in the EDR Historical Topographic Map Report for the years of 1897, 1943, 1966, 1979, 1984, and 1994.

The **1897 USGS** topographic map is a 30-minute quadrangle map, scale of 1:125,000 showing the target quadrant 'Amelia'. The map shows no buildings on the subject property or adjacent properties. There appears to be a road west of the subject property. A railroad track is shown north of the subject property. Present day U.S. 360 Business is not shown on the map.

The **1943 USGS** topographic map is a 7.5-minute quadrangle map, scale of 1:24,000 showing the target quadrant 'Amelia Court House'. Buildings are not shown on the subject property or land surrounding the subject property. The subject property and adjoining land is shown as forested. Present day U.S. 360 Business is shown on the map.

The **1966 USGS** topographic map is a 7.5-minute quadrangle map, scale of 1:24,000 showing the target quadrant 'Amelia Court House'. There are two (2) rectangular buildings on the subject property. A loop road separates the buildings. No buildings are shown on the property east of the subject property. South of the subject property is a pond and a stream which drains to the southeast. West of the subject property is one (1) building. The map depicts the subject property and adjoining land as unforested.

The **1979 USGS** topographic map is a 7.5-minute quadrangle map, scale of 1:24,000 showing the target quadrant 'Amelia Court House'. No obvious changes have occurred to the subject property or adjoining properties since the 1966 USGS topographic map.

The **1984 USGS** topographic map is a 7.5-minute quadrangle map, scale of 1:24,000 showing the target quadrant 'Amelia Court House'. No obvious changes are shown on the subject property or adjoining properties since the 1979 USGS topographic map.

The **1994 USGS** topographic map is a 7.5-minute quadrangle map, scale of 1:24,000 showing the target quadrant 'Amelia Court House'. There are no longer two (2) buildings on the subject property; one (1) square building is now shown on the map. The loop road is not shown on the map. The pond south of the subject property appears to be smaller. Three (3) buildings are shown south of the subject property; two (2) buildings are shown west of the subject property.

4.3 User Questionnaire

Mr. A. Taylor Harvie, III (804-561-3039), County Administrator with Amelia County completed the client questionnaire found in **Appendix D**. To his knowledge, there are no known environmental concerns associated with the subject property.

4.4 Environmental Liens or Activity and Use Limitations

As per ASTM E1527-13, environmental liens and activity use limitations (AULs) that are recorded or filed in any place other than recorded land title records are not considered to be reasonably ascertainable and therefore are beyond the scope of this Phase I ESA.

Reasonable efforts were made to obtain current deed(s) to the subject property. However, the deed(s) were not obtained in time for this report.

4.5 Other Sources

On October 13, 2015, J. Meade R. Anderson (804-698-4179), Brownfields & Voluntary Remediation Program Manager with the VDEQ, was contacted in regards to his knowledge of the subject property. Mr. Anderson was asked about his knowledge of the site, specifically the

Voluntary Remediation Program which the subject property had been enrolled in as identified in the EDR Report. The subject property was VRP eligible by VDEQ in 2005. According to Mr. Anderson, Pembelton Investments, LC terminated the VRP enrolment of the subject property in 2007. Mr. Anderson provided Dewberry with documents relating to the subject property, specifically a Preliminary Assessment, Phase I ESA, limited Phase II ESA, and documents relating to VRP enrolment and termination.

In February 1994, a Preliminary Assessment report was submitted to the United States Environmental Protection Agency (EPA). The report was prepared by Ecology and Environment, Inc. (E&E). According to E&E, the facility building had been occupied by the Virginia Laminating Company prior to GBC use. The report stated that GBC used two (2) settling tanks which were located northwest of the water tower, against the southern side of the facility. Wastewater from the photograph developer and screen washroom went into these tanks. Prior to 1991, a holding pond east of the facility received the liquid from the settling tanks. In 1991, the holding pond was closed by W.L. Black and Associates (WLBA) of Chesapeake, Virginia. The soil and liquid in the pond was analyzed and classified as nonhazardous. The remaining liquid in the pond was pumped out and sent to an industrial wastewater disposal facility. Removed soil was backfilled. According to WLBA personnel, a clay liner had been present in the holding pond, preventing groundwater contamination. E&E found no documentation that WLBA collected groundwater samples at the time of the holding pond closure. Following the pond closure, the liquid from the settling tanks went into a leach field southeast of the facility, located along U.S. Route 360 (E&E 1994). An excerpt of the report can be found in **Appendix E**.

The Preliminary Assessment Report also contained a letter dated July 8, 1991 from W.L. Black and Associates which documented the removal of a 5,000 gallon underground storage tank (UST) on June 12, 1991. The UST was located on the west side of building, near the southwestern corner of the building. The contents of the UST were transferred to a 2,000 gallon aboveground storage tank (AST). Laboratory analysis verified that the soil around the tank area was not contaminated. The former UST location was covered with asphalt (E&E 1994).

A Phase I ESA report was prepared for GBC and submitted by URS on June 12, 2003. According to the report, a Preliminary Assessment was conducted by the EPA in 1994. EPA's environmental concerns with the site in 1994 were two (2) settling tanks located northwest of the water tower, near the southern side of the building, and a surface impoundment (pond). The Phase I report states that between 1994 and 1999, wastewater from the settling tanks was rerouted to discharge into the Amelia County Sewer System. Printing operations ceased in 2002. According to the Comprehensive Environmental Response, Compensation, and Liability Information System Act (CERCLIS) database, the EPA designation of the facility noted that more information was needed in order to place the facility on the National Priorities List (NPL) (URS 2003). A copy of the report is included in **Appendix F**.

A limited Phase II ESA report dated June 17, 2004 was completed by F&R. The investigation was conducted in response to environmental concerns outlined in URS's Phase I dated June 12, 2003. Specific concerns outlined in the Phase I report were the settling tanks and associated drain field and former surface impoundment that received wastewater from the former screen wash operation. During the Phase II investigation, six (6) soil samples and one (1) drinking water sample were

collected from the site. Soil samples were collected southeast of the settling tanks and east and south of the water tower.

- Soil samples collected near the water tower to the north, east and south did not contain any volatile organic compound detections.
- A semi-volatile compound, bis(2-Ethylhexyl)phthalate, was detected in one (1) soil sample southeast of the settling tanks
- The pesticide endosulfan sulfate was detected in the eastern-most soil sample
- Resource Conservation and Recovery Act (RCRA) metals were detected in all soil samples

At the time, RCRA metal detections were below the regulatory limits for hazardous waste. Based on the analytical results and historical use of the subject property, F&R recommended that the property owner register the subject property with the Voluntary Remediation Program (F&R 2004). A copy of the report is included in **Appendix G**.

On behalf of Pembelton Investments, LC, F&R submitted a Voluntary Remediation Program application for the subject property to the VDEQ on November 24, 2004.

A letter correspondence from VDEQ dated February 15, 2005 confirmed that the subject property was eligible to enter into the VRP. On January 25, 2007 Pembelton Investments, LC decided to withdraw the subject property from the VRP.

5. Information from Site Reconnaissance and Interviews

5.1 Site Reconnaissance

Dewberry personnel performed a site reconnaissance on September 17, 2015. The reconnaissance consisted of visual observations while walking along the boundaries of the subject property. Properties adjoining the subject property were observed from the boundaries of the subject property and public access roads.

Dewberry personnel observed that there was one (1) building and one (1) water tower on the subject property. Parking lots were observed east and west of the building (**Appendices B** and **C**).

During site reconnaissance, the following was observed outside the building:

Building Exterior: North Side
- Overhead utility lines
- Electric boxes
- Telephone cable box
- 2 loading docks
- 1 stormwater drain

Building Exterior: East Side
- 2 air conditioning (AC) units
- Water tower
- 1 probable groundwater well pump
- 1 fire hydrant
- Overhead utility lines
- 1 water manhole cover

Building Exterior: South Side
- 2 - 5gallon buckets labeled as hydraulic oil; buckets filled with oil-like substance; staining was observed on ground around buckets
- 2 - 5 quart containers labeled as motor oil and diesel engine oil; staining was observed on ground around containers
- 1 unlabeled, partially full, aboveground storage tank (AST) with rotary pump. No apparent staining observed around the AST.
- 3 liquefied petroleum gas cylinders
- 2 air conditioning units
- 1 fire hydrant

Building Exterior: West Side
- 1 red AST; upon inspection, AST appeared to be empty

The building is currently used for the following activities: commercial use, storage, and office space. The majority of the building is used for commercial use and personal storage. The southern

half of the building is used for Borum Electrical, Plumbing & Heating Inc. Mr. Mark Borum (804-561-6001) is the owner of the business. Items for Mr. Borum's company were observed in the southern warehouse (**Appendix C**). Items seen included: maintenance parts for heating, ventilation, and air conditioning (HVAC) systems; AC units; a water heater; ladders; scaffolding; insulation and ducting insulation; and copper wire. Building materials were also observed and included: wood, doors, and house siding. These materials were stored on a second floor loft porch on the eastern side of the room. The shells of two (2) race cars, an antique truck, a forklift, and an RV were also noted during the site reconnaissance. In a separate room, metal working machines and a car lift with a car on the lift were observed. Outside the metal and car lift room was an air compressor machine. A 5 gallon bucket half filled with petroleum product was observed in a storage room containing petroleum products, aerosols, and paint. The northern wall of the warehouse was made of cement blocks. Along the southern side of the building is a second floor loft with two (2) office rooms. The offices had windows that looked out over the warehouse (**Appendices B** and **C**). Superficial staining was observed around the fork lift and below car lift.

The northwestern half of the building is currently used for personal and business storage. The two (2) loading docks observed on the northern side of the building connect directly to the northwestern storage area. One (1) truck and van, and two (2) race cars shells were observed. Car transmissions were observed near the race car shells. No apparent staining was observed below the transmissions. Several stacks of particleboard was observed, as well as what appeared to be an empty propane AST, an antique car, and personal possessions. Straight end line set boxes for Borum Electrical, Plumbing & Heating Inc. were also observed. Electric service panels were seen on the north central wall of the building. Entrances to Finally Fit were observed on the eastern side of the room (**Appendices B** and **C**).

The north-central portion of the building was used for a private company called Finally Fit: Gym and Tanning (**Appendices B** and **C**). It is no longer in operation. It is currently owned by Mrs. Stephanie Borum (804-561-6001), Mr. Mark Borum's wife.

The Finally Fit area was observed to have:

- 2 main rooms for exercising machines
- A children's play room and a group exercising room
- 4 tanning bed rooms
- A washer and dryer room
- 3 bathrooms; 1 bathroom with showers
- 1 shower room
- 1 small locker room

The northeastern corner of the building is currently being used as office space. A kitchenette is located in the office area (**Appendices B** and **C**).

5.1.1 On-Site Structures

Dewberry personnel performed a site reconnaissance of the subject property on September 17, 2015. One (1) building and one (1) water tower were observed. According to the water tower

plaque, the tower was erected on December 26, 1967 and stands at 124.0 feet (**Appendix B**). It has the capacity to hold 100,000 gallons.

5.1.2 Description of Site Improvements

Site improvements were observed during the site reconnaissance of the subject property on September 17, 2015 (**Appendix B**). The building on-site has access to telephone, electricity, and county water and sewer. Paved parking lots were observed on the east and west sides of the building.

5.2 Adjoining Properties

Dewberry personnel performed an initial site reconnaissance of the subject property on September 17, 2015. Reconnaissance of properties adjacent to the subject property consisted of visual observations while walking the subject property.

Adjoining the subject property to the north is U.S. 360 Business (Goodes Bridge Road). North of U.S. 360 Business are railroad tracks. East of the subject property is undeveloped land which appears to be periodically mowed. South and west of the subject property are commercial businesses.

5.3 Physical Setting Analysis

5.3.1 Topography

According to the EDR Radius Map Report, the subject property sits at an elevation of 382 feet above sea level. The general topographical gradient is east.

5.3.2 Hydrology/Floodplain

Topography is not necessarily an indicator of groundwater flow. Site specific data is needed to determine actual groundwater gradient. Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow is generally impacted by the nature of the geologic strata. However, when specific groundwater data is unavailable, topography may suggest a general trend in groundwater flow.

Based on the USGS topographic map (**Figure 1**), regional groundwater and surface water flow direction is inferred to flow east-southeast across the subject property. However, localized surface water and groundwater may vary due to unseen geologic and/or hydrogeologic conditions.
According to the EDR Radius Map Report, the subject property is not located within the 100 or 500 year flood zones (**Appendix A**).

5.3.3 Geology

The subject property lies within the Piedmont province.

The following geologic information is supplied in the EDR Radius Map Report (**Appendix A**) of this report.

Rock Stratigraphic Unit:
Era: Paleozoic
System: Pennsylvanian
Series: Felsic parageniss and schist
Code: mm1 (decoded above as Era, System, & Series

Geologic Age Identification:
Category: Metamorphic rocks

5.3.4 Soils

The following soil types displayed in **Table 2** are the primary types of soils found on the subject property.

Table 2: Characteristics of the primary soil types found at the subject property.

	Soil Type
Soil Component Name	Appling
Soil Surface Texture	Fine sandy loam
Hydrologic Group	Class B – Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class	Well drained
Hydric Status	Not hydric
Corrosion Potential – uncoated steel	Moderate
Depth to Bedrock Min	> 0 inches
Depth to Bedrock Max	> 0 inches

5.4 Interviews

Individuals familiar with the subject property were contacted regarding the presence of recognized environmental conditions and/or environmental concerns on or in the vicinity of the subject property.

On September 17, 2015 and October 8, 2015, Dewberry personnel interviewed Mr. Richard Jones (804-561-3039), Building Official with the Amelia County Inspector's Office. Mr. Jones was asked questions in regards to his knowledge of subject property and recognized environmental concerns associated with the site. Mr. Jones stated that to his knowledge, there were no buried oil tanks on the subject property. He mentioned that he had worked for the county for 10 years, but had had very limited contact with the subject property; he had only inspected the property on a few occasions. Mr. Jones recalled that the fitness center addition had been added to the main building around 2007. When asked if he knew the historical use of the site, Mr. Jones replied that the building had been a book binding company.

On September 17, 2013, Dewberry personnel interviewed Mrs. Stephanie Borum (804-561-6001), wife of the subject property owner, Mr. Mark Borum, in regards to her knowledge of environmental concerns associated with the site. Mrs. Stephanie Borum stated that she was not aware of any environmental concerns associated with the subject property. She informed Dewberry personnel that her husband used the southern half of the building for his business: Borum Electrical, Plumbing & Heating. Her business, Finally Fit, was located in the north central portion of the building. However, Finally Fit was no longer in operation. Mrs. Stephanie Borum told Dewberry personnel that the northwestern half of the building was used for personal and business storage (**Appendix B**). A cement block fire wall was built to divide Borum Electrical, Plumbing & Heating from the electric service panels that were located on the north wall inside the building. Mrs. Borum recalled that she and her husband moved into the building in 2004. Prior to their use, the building was used by the General Binding Corporation. Mrs. Borum estimated that the building was built in the 60's or 70's. The water tower southeast of the building was built for the GBC which fed the sprinkler system. However, currently the sprinkler system uses county water. Additionally, there is no longer any water in the tower due to a leak. Mrs. Borum recalled that when the tower sprung a leak, the water drained out of the bottom of the tower for days.

Mrs. Stephanie Borum was contacted on October 8, 2015 and October 15, 2015 with additional questions regarding the subject property. Voice messages were left both times. No returned phone calls from Mrs. Borum were received in time for this report.

On October 8, 2015, Dewberry personnel contacted the Amelia County Volunteer Fire Department (804-561-3332) in regards to any environmental concerns associated with the subject property. A voice message could not be left because there was no answering machine. An email was sent to the fire department on October 8, 2015 requesting the department to follow up with Dewberry personnel with a phone call or email regarding the subject property. On October 8, 2015, Dewberry personnel searched the Amelia County Volunteer Fire Department's call archives from September 2008 to October 2015. Per the Amelia County Volunteer Fire Department's Call Archives, Dewberry personnel did not identify any calls relating to environmental responses (releases of petroleum products or hazardous materials) that involved the subject property.

6. Findings and Conclusions

Dewberry performed a Phase I ESA in general accordance with the provisions of the ASTM Standard E-1527-13, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process". The objective of the study was to identify the presence of or the potential *for recognized environmental conditions* at the site.

The environmental site assessment included reviews of Federal and State records regarding hazardous materials, reviews of historical records, interviews with local officials and individuals with knowledge of the subject property.

According to EDR, the Radius Map Report lists the subject property as having recognized environmental conditions associated with the subject property.

Correspondence between Dewberry personnel and the VDEQ determined that the subject property was enrolled in a VRP. In 2007 VRP enrollment was terminated. Per documents provided by the VDEQ, a Preliminary Assessment, Phase I ESA, and a limited Phase II ESA were conducted on the site. Documentation regarding further matrix testing and cleanup of the subject property following admission into the VRP was not found. See **Section 4.5** for more detail.

Based on past uses of the subject property and accessible site studies and reports, this assessment revealed evidence of recognized environmental conditions in connection with the activities and operations at the subject property. Dewberry recommends the following measures:

- An update to the limited Phase II ESA conducted by F&R in 2004. An update to the limited Phase II ESA would involve resampling soil and groundwater to determine the extent of potential contamination.
- Soil sampling in the vicinity of the petroleum stain observed at the southwestern corner of the building (**Appendix B**).

The EDR Radius Map Report by EDR revealed two (2) off-site *recognized environmental conditions* within the ASTM approximate minimum search radius from the subject property (see **Table 1**). Based on historical reports provided by VDEQ, two (2) off-site recognized environmental conditions were identified to adjoin the subject property to the east and southeast: the former holding pond, closed in 1991, and the former leach field. A detailed characterization and investigation of the off-site RECs or their impact, if any, is not within the scope of this Phase I ESA.

As stated in the introduction of this document, Dewberry cannot, and does not, imply guarantee or warrant sites as being contaminant free. Our services document only that information and those conditions found. Additional information, with respect to the site or adjacent properties, which was not available at the time of the assessment, could modify the conclusions and/or notes herein.

7. References

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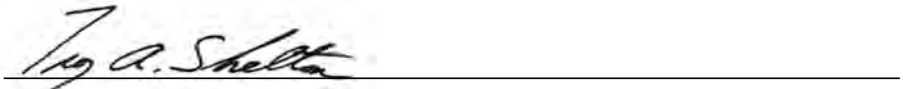
8. Environmental Professional's Statement of Qualifications

I declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in §312.10 of 40 CFR 312 and I have specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all the appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312.

Anna A. Oehser, Environmental Scientist

Anna Oehser is an Environmental Scientist in the Danville office of Dewberry. She has professional experience in the environmental field ranging from environmental, industrial, wetlands and waste management related activities. Ms. Oehser has a Bachelor's Degree in Geology from Allegheny College.



Troy A. Shelton, Environmental Department Manager, Danville Office

Troy A. Shelton is an Environmental Scientist and Environmental Department Manager in the Danville office of Dewberry. He has over 15 years of experience in the environmental field ranging from environmental, industrial, wetlands, and waste management related activities. Mr. Shelton has a Bachelor's Degree in Environmental Science from Ferrum College.

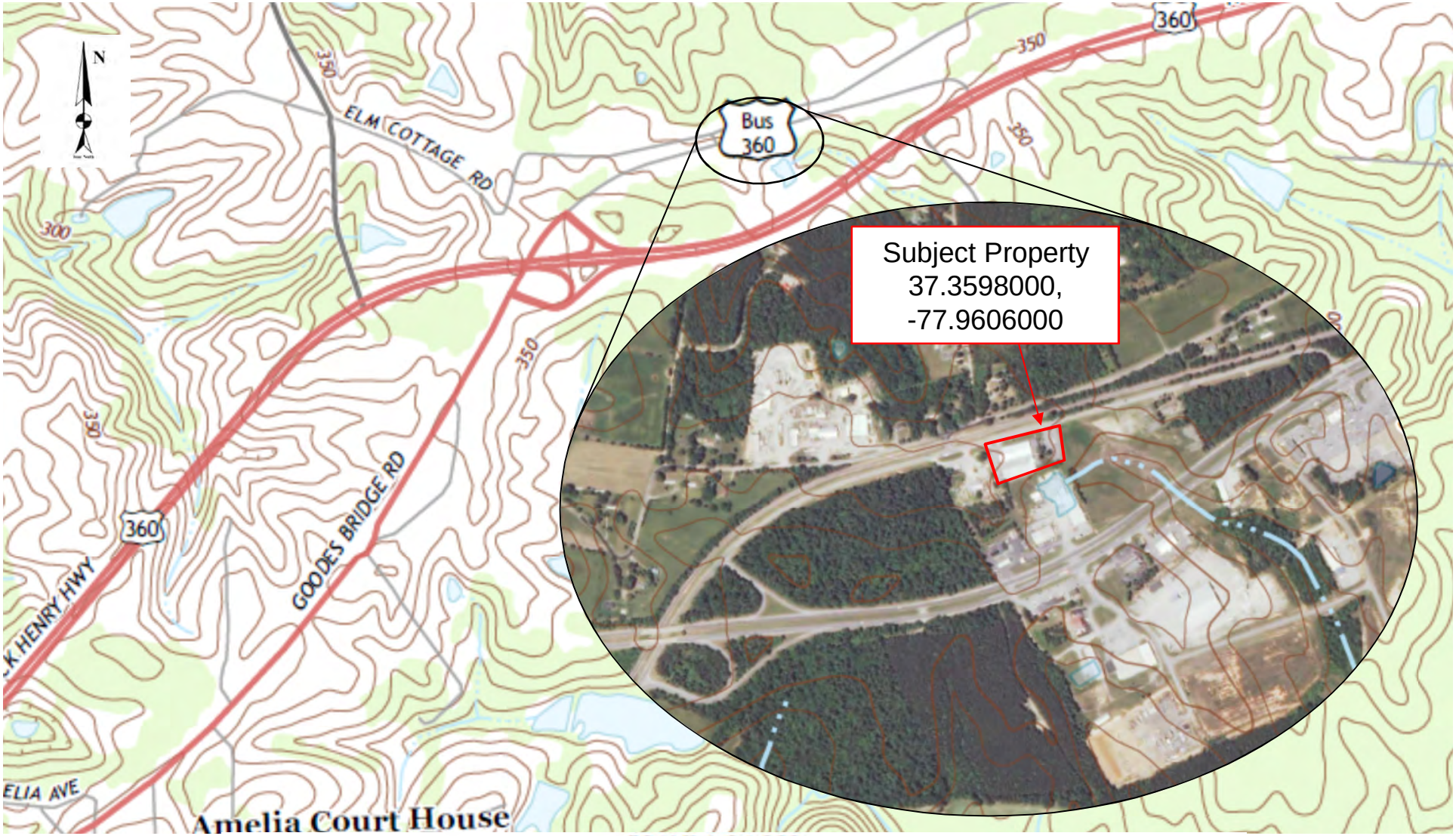
Brian K. Bradner, PE, CPESC, Associate Vice President, Office Manager, Danville Office

Brian Bradner, Branch Manager of Dewberry's Danville office, is involved with a variety of projects ranging from water and sewer infrastructure to building design and renovation. As Associate Vice President and Project Officer for this project, Mr. Bradner has firm-wide resources available to ensure each discipline is appropriately represented and available to the project manager for the duration of your project.

Dewberry is a leading professional services firm with a proven history of providing architecture, engineering, environmental and management and consulting services to a wide variety of public- and private-sector clients. Recognized for combining unsurpassed commitment to client service with deep subject matter expertise, Dewberry is dedicated to solving clients' most complex challenges and transforming their communities. Established in 1956, Dewberry is headquartered in Fairfax, Virginia, with more than 40 locations and 1,800+ professionals nationwide. To learn more, visit www.dewberry.com.

FIGURE 1

USGS Subject Property Location Map



SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2

1000 500 0 METERS 1000 2000

1 0.5 0 1

MILES

Dewberry®

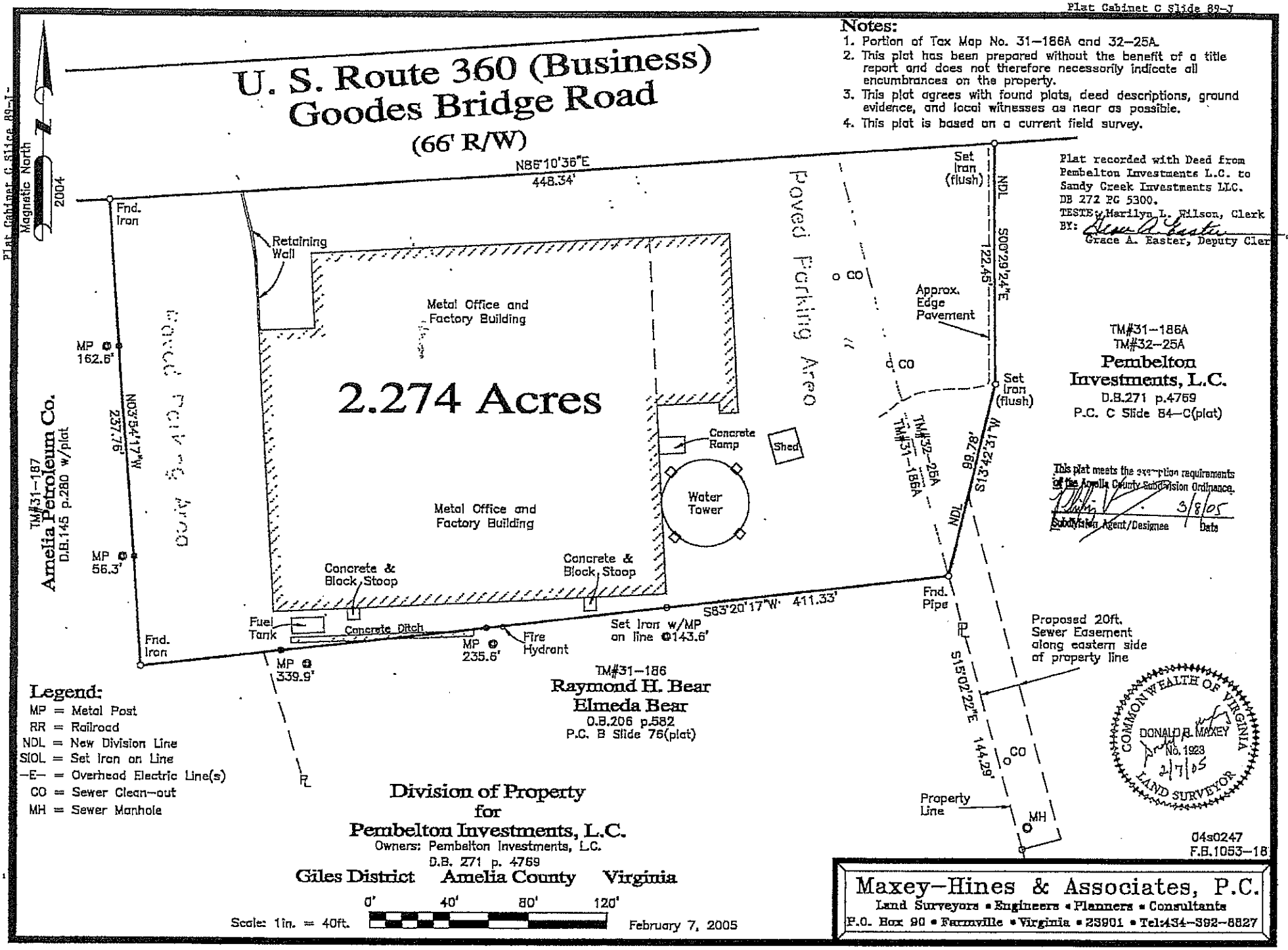
Figure 1: USGS Subject Property Location Map

USGS Topographic 7.5' Quadrangle Map
Amelia Court House, VA 2013

FIGURE 2

Subject Property Plat

Plat Cabinet C Slide 89-J



Notes:

1. Portion of Tax Map No. 31-186A and 32-25A.
2. This plat has been prepared without the benefit of a title report and does not therefore necessarily indicate all encumbrances on the property.
3. This plat agrees with found plats, deed descriptions, ground evidence, and local witnesses as near as possible.
4. This plat is based on a current field survey.

Legend:

MP = Metal Post
RR = Railroad
NDL = New Division Line
SIOL = Set Iron on Line
-E- = Overhead Electric Line(s)
CO = Sewer Clean-out
MH = Sewer Manhole

Division of Property for Pembelton Investments, L.C.

Owners: Pembelton Investments, L.C.
D.B. 271 p. 4769

Giles District Amelia County Virginia

Scale: 1in. = 40ft. 0' 40' 80' 120'

February 7, 2005

COMMONWEALTH OF VIRGINIA
DONALD R. MAXEY
No. 1923
2/7/05
LAND SURVEYOR

04s0247
F.B.1053-18

Maxey-Hines & Associates, P.C.
Land Surveyors • Engineers • Planners • Consultants
P.O. Box 90 • Farmville • Virginia • 23901 • Tel:434-392-8827

0 inch 1 2 3 4 5 6

APPENDIX A

EDR Radius Map™ Report with GeoCheck®

Goodes Bridge Center
15401 Goodes Bridge Road
Amelia Court House, VA 23002

Inquiry Number: 4408881.2s
September 11, 2015

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

15401 GOODES BRIDGE ROAD
AMELIA COURT HOUSE, VA 23002

COORDINATES

Latitude (North):	37.3598000 - 37° 21' 35.28''
Longitude (West):	77.9606000 - 77° 57' 38.16''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	237786.4
UTM Y (Meters):	4138696.2
Elevation:	382 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5951031 AMELIA COURT HOUSE, VA
Version Date:	2013
North Map:	5951115 CHULA, VA
Version Date:	2013

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20120520, 20120511
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
15401 GOODES BRIDGE ROAD
AMELIA COURT HOUSE, VA 23002

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	GENERAL BINDING CORP	GOODE'S BRIDGE ROAD	CERC-NFRAP, RCRA NonGen / NLR		TP
A2	GENERAL BINDING CORP	15401 GOODES BRIDGE	VCP		TP
A3	GENERAL BINDING CORP	15401 GOODES BRIDGE	FINDS		TP
B4	WINNERHAM MARKET	14701 PATRICK HENRY	UST, Financial Assurance	Lower	621, 0.118, ESE
B5		14701 PATRICK HENRY	EDR US Hist Auto Stat	Lower	621, 0.118, ESE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
GENERAL BINDING CORP GOODE'S BRIDGE ROAD AMELIA, VA 23002	CERC-NFRAP Site ID: 0304865 EPA Id: VAD040157323 RCRA NonGen / NLR EPA ID:: VAD040157323	VAD040157323
GENERAL BINDING CORP 15401 GOODES BRIDGE AMELIA, VA 23002	VCP Facility ID: VRP00410	N/A
GENERAL BINDING CORP 15401 GOODES BRIDGE AMELIA, VA 23002	FINDS Registry ID:: 110008182563	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
CERCLIS ---------- Comprehensive Environmental Response, Compensation, and Liability Information System

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

EXECUTIVE SUMMARY

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS ---------- This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Management Facilities

State and tribal leaking storage tank lists

LUST ---------- Leaking Underground Storage Tank Tracking Database
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land
LTANKS ---------- Leaking Petroleum Storage Tanks

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
AST ---------- Registered Petroleum Storage Tanks
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

ENG CONTROLS ---------- Engineering Controls Sites Listing
INST CONTROL ---------- Voluntary Remediation Program Database

State and tribal voluntary cleanup sites

INDIAN VCP ---------- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ---------- Brownfields Site Specific Assessments

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

EXECUTIVE SUMMARY

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands
ODI ---- Open Dump Inventory
DEBRIS REGION 9 ---- Torres Martinez Reservation Illegal Dump Site Locations

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---- National Clandestine Laboratory Register
US CDL ---- Clandestine Drug Labs

Local Land Records

LIENS 2 ---- CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
SPILLS ---- Prep/Spills Database Listing
SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ---- Formerly Used Defense Sites
DOD ---- Department of Defense Sites
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
2020 COR ACTION ---- 2020 Corrective Action Program List
TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System
SSTS ---- Section 7 Tracking Systems
ROD ---- Records Of Decision
RMP ---- Risk Management Plans
RAATS ---- RCRA Administrative Action Tracking System
PRP ---- Potentially Responsible Parties
PADS ---- PCB Activity Database System
ICIS ---- Integrated Compliance Information System
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---- Material Licensing Tracking System
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---- PCB Transformer Registration Database
RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data
CONSENT ---- Superfund (CERCLA) Consent Decrees
INDIAN RESERV ---- Indian Reservations
UMTRA ---- Uranium Mill Tailings Sites
LEAD SMELTERS ---- Lead Smelter Sites
US AIRS ---- Aerometric Information Retrieval System Facility Subsystem
US MINES ---- Mines Master Index File
AIRS ---- Permitted Airs Facility List

EXECUTIVE SUMMARY

NPDES ---------- Comprehensive Environmental Data System
COAL ASH ---------- Coal Ash Disposal Sites
DRYCLEANERS ---------- Drycleaner List
ENF ---------- Enforcement Actions Data
Financial Assurance ---------- Financial Assurance Information Listing
TIER 2 ---------- Tier 2 Information Listing
UIC ---------- Underground Injection Control Wells

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---------- EDR Proprietary Manufactured Gas Plants
EDR US Hist Cleaners ---------- EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Quality's Underground Storage Tank Data Notification Information.

A review of the UST list, as provided by EDR, and dated 05/01/2015 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WINNERHAM MARKET	***14701 PATRICK HENRY***	***ESE 0 - 1/8 (0.118 mi.)***	***B4***	***11***
Tank Status: CURR IN USE				
Tank Status: REM FROM GRD				

EXECUTIVE SUMMARY

Facility Id: 4021818
CEDS Facility ID: 200000178213

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there is 1 EDR US Hist Auto Stat site within approximately 0.25 miles of the target property.

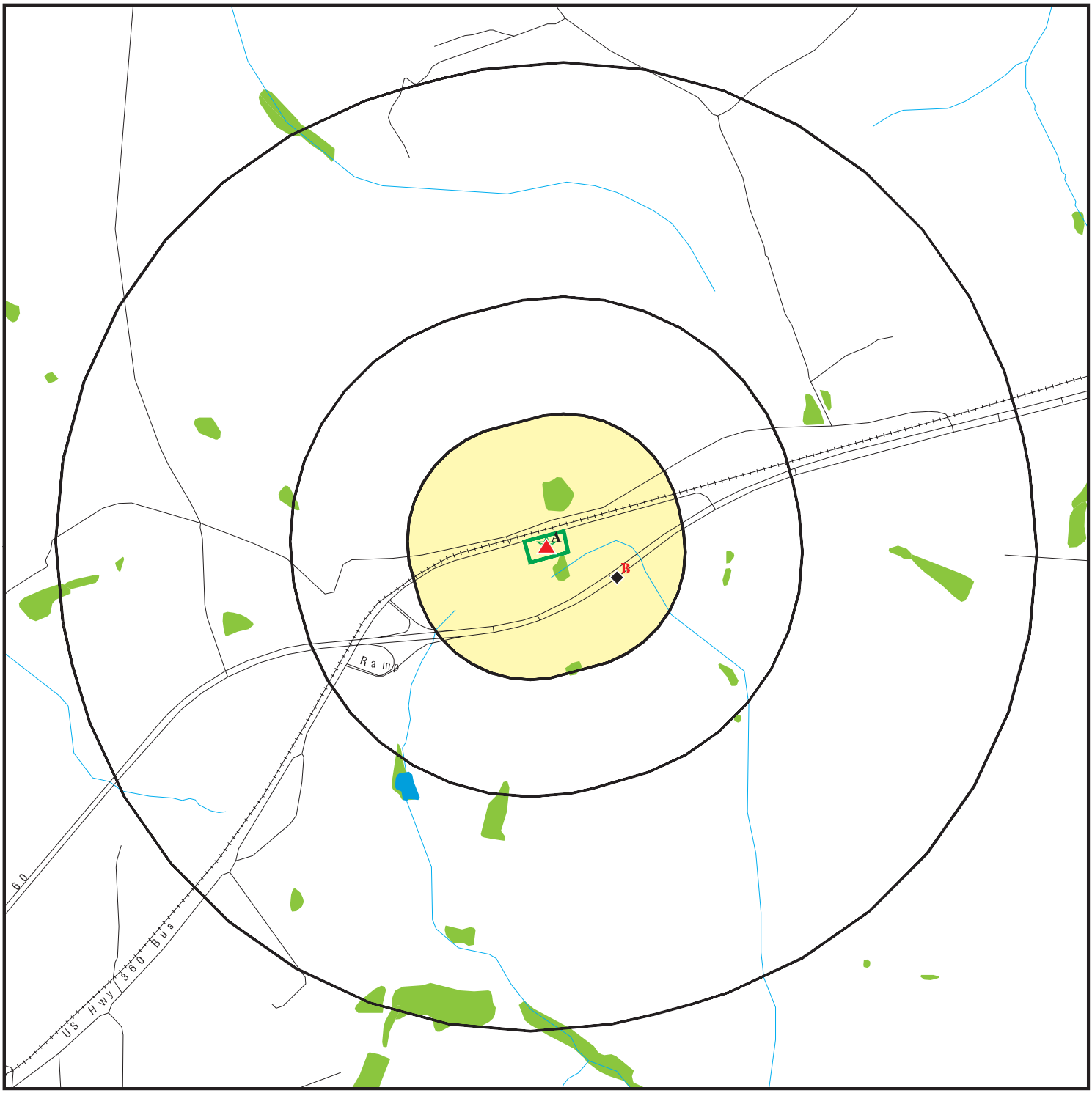
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	14701 PATRICK HENRY	ESE 0 - 1/8 (0.118 mi.)	B5	20

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
GENERAL STORE FORMER	LUST, LTANKS, UST

OVERVIEW MAP - 4408881.2S



Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
National Priority List Sites
Dept. Defense Sites

0 1/4 1/2 1 Miles

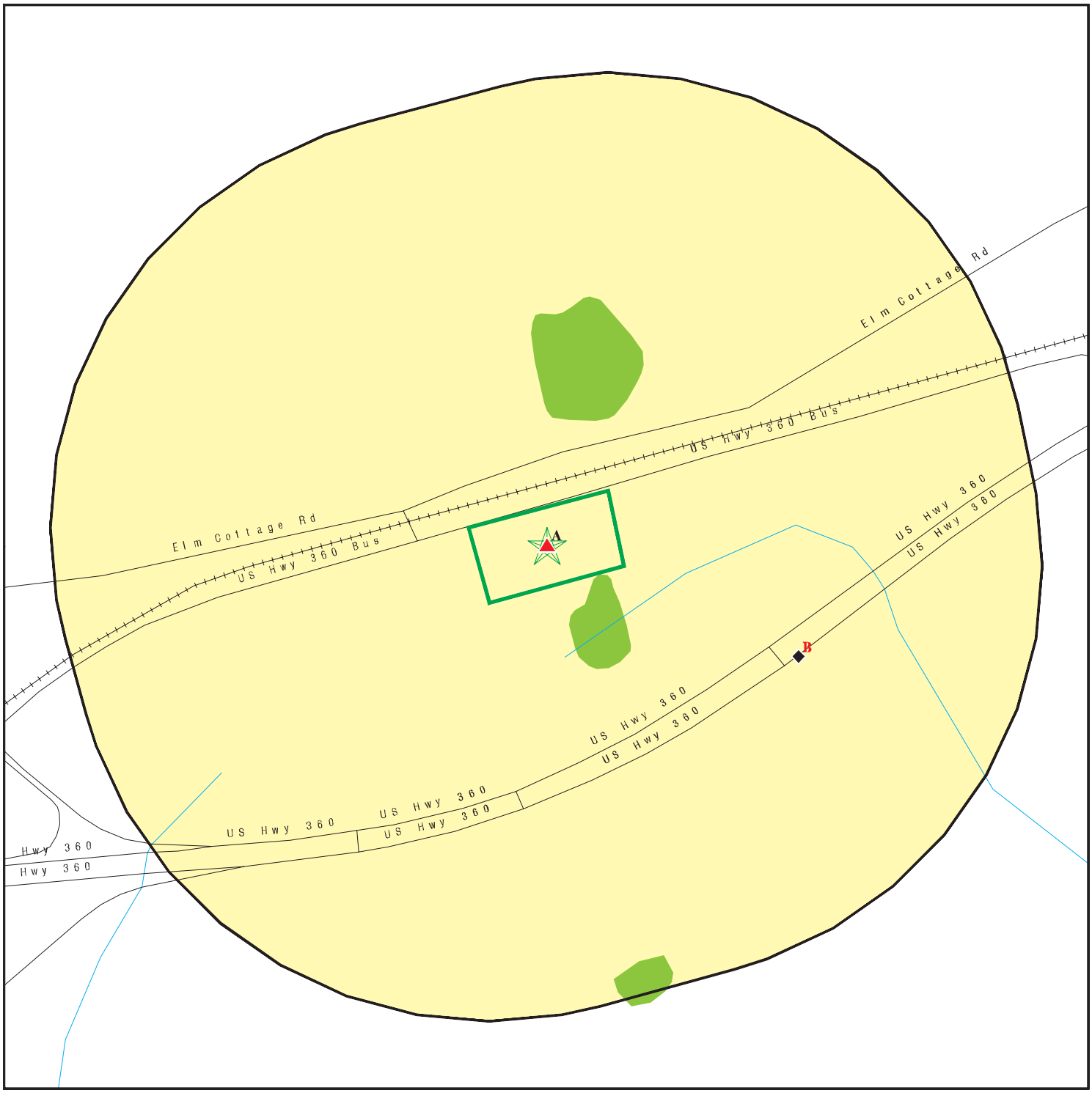
Indian Reservations BIA
100-year flood zone
500-year flood zone
National Wetland Inventory

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Goodes Bridge Center	CLIENT:	Dewberry & Davis
ADDRESS:	15401 Goodes Bridge Road Amelia Court House VA 23002	CONTACT:	Anna Oehser
LAT/LONG:	37.3598 / 77.9606	INQUIRY #:	4408881.2s
		DATE:	September 11, 2015 4:45 pm

DETAIL MAP - 4408881.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Goodes Bridge Center	CLIENT:	Dewberry & Davis
ADDRESS:	15401 Goodes Bridge Road Amelia Court House VA 23002	CONTACT:	Anna Oehser
LAT/LONG:	37.3598 / 77.9606	INQUIRY #:	4408881.2s
		DATE:	September 11, 2015 4:45 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
CERCLIS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500	1	0	0	0	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	N/A		N/A	N/A	N/A	N/A	N/A	N/A
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
LTANKS	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.250		1	0	NR	NR	NR	1
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500	1	0	0	0	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250	1	0	0	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
AIRS	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
TIER 2	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		1	0	NR	NR	NR	1
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		4	2	0	0	0	0	6

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.

A1 Target Property **GENERAL BINDING CORP GRAPHICS PRODUCTS**
GOODE'S BRIDGE ROAD
AMELIA, VA 23002

CERC-NFRAP **1000212679**
RCRA NonGen / NLR **VAD040157323**

Site 1 of 3 in cluster A

Actual: 382 ft.

CERC-NFRAP:
Site ID: 0304865
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assessment History:
Action: ARCHIVE SITE
Date Started: / /
Date Completed: 03/08/07
Priority Level: Not reported

Action: SITE INSPECTION
Date Started: 06/29/95
Date Completed: 02/13/96
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 08/25/94
Priority Level: Low priority for further assessment

Action: DISCOVERY
Date Started: / /
Date Completed: 06/29/93
Priority Level: Not reported

RCRA NonGen / NLR:
Date form received by agency: 11/20/1980
Facility name: Not reported
Facility address: GOODES BRIDGE ROAD
AMELIA, VA 23002
EPA ID: VAD040157323
Mailing address: PO BOX 215
AMELIA, VA 23002
Contact: JAMES_A VANCE
Contact address: GOODES BRIDGE ROAD
AMELIA, VA 23002
Contact country: US
Contact telephone: (804) 561-2531
Contact email: Not reported
EPA Region: Not reported
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: GENERAL BINDING CORPORATION
Owner/operator address: OWNERSTREET
OWNERCITY, AK 99999
Owner/operator country: Not reported
Owner/operator telephone: (215) 555-1212
Legal status: Private

GENERAL BINDING CORP GRAPHICS PRODUCTS (Continued) **1000212679**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: OPERNAME
Owner/operator address: OPERSTREET
OPERCITY, AK 99999
Owner/operator country: Not reported
Owner/operator telephone: (215) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

A2 **GENERAL BINDING CORPORATION** **VCP** **S106754937**
Target **15401 GOODES BRIDGE ROAD** **N/A**
Property **AMELIA, VA 23002**

Site 2 of 3 in cluster A

Actual:
382 ft.

VRP:

Facility ID:	VRP00410
Site Status:	Terminated
Site Status 2:	Not reported
DEQ Region:	Piedmont
Sizs in Acres:	11.2
Site Type:	Industry
Corrective Action Desc:	Not reported
Owner Name:	Same as Participant
Owner Contact:	Ronald Pembelton
Owner Address:	P.O. Box 561, Amelia, VA 23002
Owner Phone:	804-561-6055
Operator Name:	Not reported
Operator Owner:	Not reported
Operator Phone:	Not reported
Participant Name:	Pembelton Investments, LC
Relationship to Site:	Not reported
Participant Contact:	Not reported
Participant Phone:	Not reported
Participant Title:	Not reported
Participant Affiliation:	Not reported
Participant Address:	Not reported
Participant City,St,Zip:	Not reported
Additional Parts:	Not reported
Participation Notes:	Sent to RO & RCRA 12/22/04
Participant Rep/Contractor:	Patrick Davis
Participant Rep/Contractor Phone:	804-264-2701
Participant Rep/Contractor Title:	Project Manager
Participant Rep/Contractor Affiliation:	Froehling & Robertson, Inc.
Participant Rep/Contractor Address:	3015 Dumbarton Road
Participant Rep/Contractor City,St,Zip:	Richmond, VA 23261
Metal Contaminants Present in Soil:	Not reported
Organic Contaminants Present in Soil:	Not reported
Metal Contaminants Present in GW:	Not reported
Organic Contaminants Present GW:	Not reported
DEQ Staff Case Manager's Initials:	ESD
Cleanup Standards:	Not reported
No Further VRP Action Date:	Not reported
Date Participant Notified of NFA:	Not reported
Certification Date:	Not reported
Deed Received Date:	Not reported
Terms of NFA Determination:	VA-699; PA, SI, Arch 3-8-07
Date VRP Eligibility Declared by Participant:	12/09/2004
Date VRP Eligibility Determined by DEQ Region:	02/09/2005
Dt Office Of Waste Permitting Verified Site Eligblty:	01/05/2005
Date VRP Eligibility Determined by VRP:	02/15/2005
Date Signed Agreement Submitted By Participant:	Not reported
Date Agreement Executed by DEQ:	Not reported
Registration Fee Amount Submitted by Participant:	0
Date Registration Fee Submitted by Participant:	Not reported
Site Characterization Document Number:	Not reported
DEQ Concurrence with Site Characterization Date:	Not reported
Remedial Action Work Plan Document Number:	Not reported

GENERAL BINDING CORPORATION (Continued) **S106754937**

DEQ Concurs with Remedial Action Work Plan Date: Not reported
Completion Report Document Number: Not reported
DEQ Concurrs with Completion Report Date: Not reported
Submittal Date for Document Number 1: Not reported
Title of Submitted Document Number 1: Not reported
Submittal Date for Document Number 2: Not reported
Title of Submitted Document Number 2: Not reported
Submittal Date for Document Number 3: Not reported
Title of Submitted Document Number 3: Not reported
Submittal Date for Document Number 4: Not reported
Title of Submitted Document Number 4: Not reported
Submittal Date for Document Number 5: Not reported
Title of Submitted Document Number 5: Not reported
Submittal Date for Document Number 6: Not reported
Title of Submitted Document Number 6: Not reported
Submittal Date for Document Number 7: Not reported
Title of Submitted Document Number 7: Not reported
Submittal Date for Document Number 8: Not reported
Title of Submitted Document Number 8: Not reported
DEQ Response Incident ID Number: Not reported
EPA CERCLIS ID: VAD040157323
EPA RCRA ID NUMBER: Not reported
DEQ Pollution Complaint Number: Not reported
Latest Action Relative To Site: Not reported
Latest Action Relative To Site Date: Not reported
Next VRP Step Needed Relating To Site: Check
Pending Since: 02/16/2005
Date Next Step Should Be Completed: Not reported
Lat/Long: 0 / 0
Brownfield Tax Incentive: Not reported
Ground Water Use Restriction: Not reported
Res. User Restriction: Not reported
Excavattion Restruction: Not reported
Unrestricted: Not reported
Other Condition of Issuance: Not reported
GPS Lat: Not reported
GPS Long: Not reported
GPS Desc: Not reported
Notes: Not reported

A3 **GENERAL BINDING CORP GRAPHICS PRODUCTS** **FINDS** **1016259731**
Target **15401 GOODES BRIDGE ROAD** **N/A**
Property **AMELIA, VA 23002**

Site 3 of 3 in cluster A

Actual: 382 ft.

FINDS:

Registry ID: 110008182563

Environmental Interest/Information System
AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans

GENERAL BINDING CORP GRAPHICS PRODUCTS (Continued) **1016259731**

to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

CEDS (Virginia - Comprehensive Environmental Data System) is the Department of Environmental Quality's (DEQ) electronic data system for maintaining databases on sources of pollutants in all media.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

AIR MINOR

SPCC

B4 **WINNERHAM MARKET** **UST** **U003687482**
ESE **14701 PATRICK HENRY HWY** **Financial Assurance** **N/A**
< 1/8 **AMELIA, VA 23002**
0.118 mi.
621 ft. **Site 1 of 2 in cluster B**

Relative:
Lower

Actual:
363 ft.

Facility:

Facility Id:	4021818
Facility Type:	GAS STATION
CEDS Facility ID:	200000178213

Owner:

Owner Id:	33369
Owner Name:	AMELIA PETROLEUM COMPANY
Owner Address:	P.O. BOX 429
Owner Address2:	AMELIA
Owner City, State, Zip:	AMELIA, VA 23002
UST Status:	Not reported
AST Status:	Not reported

Owner Id:	44851
Owner Name:	JIM Incorporated
Owner Address:	14701 Patrick Henry Hwy
Owner Address2:	Not reported
Owner City, State, Zip:	Amelia, VA 23002
UST Status:	Reg
AST Status:	N/A

UST:

Facility ID:	4021818
Federally Regulated:	Yes

Tank Number:	1
Tank Capacity:	8000
Tank Contents:	GASOLINE
Tank Status:	**CURR IN USE**
Tank Type:	UST

WINNERHAM MARKET (Continued) **U003687482**

Tank Material:

Install Date:	19-MAR-1990
Tank Materials: Bare Steel	No
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	Yes
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported

Release Detection:

Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection:Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	Yes
Tank Release Detection: Spill Install	Yes
Tank Release Detection: Overfill Install	Yes
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Yes
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	Yes
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported

Pipe Type:	PRESSURE
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	No
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	Yes
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported

WINNERHAM MARKET (Continued) **U003687482**

Facility ID:	4021818
Federally Regulated:	Yes
Tank Number:	2
Tank Capacity:	4000
Tank Contents:	GASOLINE
Tank Status:	**CURR IN USE**
Tank Type:	UST

Tank Material:

Install Date:	19-MAR-1990
Tank Materials: Bare Steel	No
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	Yes
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported

Release Detection:

Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection:Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	Yes
Tank Release Detection: Spill Install	Yes
Tank Release Detection: Overfill Install	Yes
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Yes
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	Yes
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported
Pipe Type:	PRESSURE
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	No
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	Yes
Pipe Materials: Cath Protect	No

WINNERHAM MARKET (Continued) **U003687482**

Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported
Facility ID:	4021818
Federally Regulated:	Yes
Tank Number:	3
Tank Capacity:	4000
Tank Contents:	GASOLINE
Tank Status:	**CURR IN USE**
Tank Type:	UST

Tank Material:

Install Date:	19-MAR-1990
Tank Materials: Bare Steel	No
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	Yes
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported

Release Detection:

Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection:Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	Yes
Tank Release Detection: Spill Install	Yes
Tank Release Detection: Overfill Install	Yes
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	Yes
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	Yes
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No

WINNERHAM MARKET (Continued) **U003687482**

Pipe Release Detection: Other Note	Not reported
Pipe Type:	PRESSURE
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	No
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	Yes
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported
Facility ID:	4021818
Federally Regulated:	Yes
Tank Number:	R1
Tank Capacity:	3000
Tank Contents:	GASOLINE
Tank Status:	**REM FROM GRD**
Tank Type:	UST

Tank Material:

Install Date:	07-MAY-1981
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported

Release Detection:

Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection:Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported

WINNERHAM MARKET (Continued) **U003687482**

Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	No
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported
Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported
Facility ID:	4021818
Federally Regulated:	Yes
Tank Number:	R2
Tank Capacity:	2000
Tank Contents:	GASOLINE
Tank Status:	**REM FROM GRD**
Tank Type:	UST

Tank Material:

Install Date:	07-MAY-1981
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported

Release Detection:

Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection:Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No

WINNERHAM MARKET (Continued) **U003687482**

Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	No
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported

Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported

Facility ID:	4021818
Federally Regulated:	Yes

Tank Number:	R3
Tank Capacity:	1000
Tank Contents:	GASOLINE
Tank Status:	**REM FROM GRD**
Tank Type:	UST

Tank Material:

Install Date:	08-MAY-1979
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No
Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported

WINNERHAM MARKET (Continued) **U003687482**

Release Detection:

Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection:Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	No
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported

Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported

Facility ID:	4021818
Federally Regulated:	Yes

Tank Number:	R4
Tank Capacity:	550
Tank Contents:	KEROSENE
Tank Status:	**REM FROM GRD**
Tank Type:	UST

Tank Material:

Install Date:	08-MAY-1979
Tank Materials: Bare Steel	Yes
Tank Materials: Cath Protect Steel	No
Tank Materials: Epoxy Steel	No
Tank Materials: Fiberglass	No
Tank Materials: Concrete	No
Tank Materials: Composite	No
Tank Materials: Double Walled	No

WINNERHAM MARKET (Continued) **U003687482**

Tank Materials: Lined Interior	No
Tank Materials: Excav Liner	No
Tank Materials: Insulated Tank Jacket	No
Tank Materials: Repaired	No
Tank Materials: Unknown	No
Tank Materials: Other	No
Tank Materials: Other Note	Not reported

Release Detection:

Tank Release Detection: Leak Deferred	No
Tank Release Detection: Manual Gauge	No
Tank Release Detection: Auto Gauge	No
Tank Release Detection:Tank Tightness	No
Tank Release Detection: Vapor Monitor	No
Tank Release Detection: Inventory	No
Tank Release Detection: Stat Invent Recon	No
Tank Release Detection: Spill Install	No
Tank Release Detection: Overfill Install	No
Tank Release Detection: Groundwater	No
Tank Release Detection: Int Sec Containment	No
Tank Release Detection: Int Double Walled	No
Tank Release Detection: Other Method	No
Tank Release Detection: Other Note	Not reported
Pipe Release Detection: Leak Deferred	Not reported
Pipe Release Detection: Autoleak	No
Pipe Release Detection: Line Tightness	No
Pipe Release Detection: Stat Invent Recon	No
Pipe Release Detection: Groundwater	No
Pipe Release Detection: Int Sec Containment	No
Pipe Release Det: Interior Double Walled	No
Pipe Release Detection: Other Method	No
Pipe Release Detection: Other Note	Not reported

Pipe Type:	UNKNOWN
Pipe Materials: Bare Steel	No
Pipe Materials: Galvanized Steel	Yes
Pipe Materials: Copper	No
Pipe Materials: Fiberglass	No
Pipe Materials: Cath Protect	No
Pipe Materials: Double Walled	No
Pipe Materials: Sec Containment	No
Pipe Materials: Repaired	No
Pipe Materials: Unknown	No
Pipe Materials: Other	No
Pipe Materials: Other Note	Not reported

VA Financial Assurance 1:

Facility ID:	4021818
FRP Financial Assurance:	Full
Owner Name:	Winnerham Market
ROF Own Id:	44851
Tank Type:	UST
Mechanism:	Insurance
Gallonage:	Not reported
Per Occurence:	$250,000.00

WINNERHAM MARKET (Continued) **U003687482**

Third Party:	$250,000.00
Annual Aggregate:	$250,000.00
In Compliance:	Not reported
Total Capacity:	Not reported
CEDS Facility Name:	Winnerham Market
CEDS Facility Id:	200000178213
Tank Type Count:	3
Location:	Not reported

B5 **EDR US Hist Auto Stat** **1015232733**
ESE **14701 PATRICK HENRY HWY** **N/A**
< 1/8 **AMELIA COURT HOUSE, VA 23002**
0.118 mi.
621 ft. **Site 2 of 2 in cluster B**

Relative:
Lower

Actual:
363 ft.

EDR Historical Auto Stations:

Name:	WINNERHAM AUTO REPAIR
Year:	1999
Address:	14701 PATRICK HENRY HWY
Name:	WINNERHAM AUTO REPAIR
Year:	2000
Address:	14701 PATRICK HENRY HWY
Name:	WINNERHAM AUTO REPAIR
Year:	2001
Address:	14701 PATRICK HENRY HWY
Name:	WINNERHAM AUTO REPAIR
Year:	2002
Address:	14701 PATRICK HENRY HWY
Name:	WINNERHAM AUTO REPAIR
Year:	2003
Address:	14701 PATRICK HENRY HWY
Name:	WINNERHAM AUTO REPAIR
Year:	2004
Address:	14701 PATRICK HENRY HWY
Name:	VILLAGE AUTO
Year:	2011
Address:	14701 PATRICK HENRY HWY

Count: 1 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
AMELIA	U003688421	GENERAL STORE FORMER	ROUTE 640 AND 360	23002	LUST, LTANKS, UST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/26/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 75

Source: EPA
Telephone: N/A
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/26/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 75

Source: EPA
Telephone: N/A
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/26/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 75

Source: EPA
Telephone: N/A
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/10/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Varies

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/12/2015
Next Scheduled EDR Contact: 11/30/2015
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/31/2015
Next Scheduled EDR Contact: 12/14/2015
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/31/2015
Next Scheduled EDR Contact: 12/14/2015
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 63

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: Department of Environmental Quality
Telephone: 804-698-4236
Last EDR Contact: 06/18/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: N/A

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Management Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/17/2015
Date Data Arrived at EDR: 04/20/2015
Date Made Active in Reports: 04/24/2015
Number of Days to Update: 4

Source: Department of Environmental Quality
Telephone: 804-698-4238
Last EDR Contact: 06/04/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG TD: Leaking Underground Storage Tank Sites

Leaking underground storage tank site locations. Includes: counties of Accomack, Isle of Wight, James City, Northampton, Southampton, York; cities of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, Williamsburg.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 09/16/2013
Number of Days to Update: 73

Source: Department of Environmental Quality Tidewater Regional Office
Telephone: trofoia@deq.vir
Last EDR Contact: 06/24/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

LUST REG SW: Leaking Underground Storage Tank Database

Leaking underground storage tank site locations. Includes: counties of Bland, Buchanan, Carroll, Dickenson, Grayson, Lee, Russell, Scott, Smyth, Tazewell, Washington, Wise, Wythe; cities of Bristol, Galax, Norton.

Date of Government Version: 07/15/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 09/16/2013
Number of Days to Update: 60

Source: Department of Environmental Quality Southwest Regional Office
Telephone: 276-676-4800
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: No Update Planned

LUST REG SC: Leaking Underground Storage Tanks

Leaking underground storage tank site locations. Includes: counties of Amherst, Appomattox, Buckingham, Campbell, Charlotte, Cumberland, Halifax, Lunenburg, Mecklenburg, Nottoway, Pittsylvania, Prince Deward; cities of Danville, Lynchburg.

Date of Government Version: 09/06/2013
Date Data Arrived at EDR: 09/06/2013
Date Made Active in Reports: 09/17/2013
Number of Days to Update: 11

Source: Department of Environmental Quality, South Central Region
Telephone: 434-582-5120
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Semi-Annually

LUST REG PD: Leaking Underground Storage Tank Sites

Leaking underground storage tank site locaitons. Includes: counties of Amelia, Brunswick, Charles City, Chesterfield, Dinwiddie, Essex, Gloucester, Goochland, Greensville, Hanover, Henrico, King and Queen, King William, Lancaster, Mathews, Middlesex, New Kent, Northumberland, Powhatan, Prince George, Richmond, Surry, Sussex, Westmoreland; cities of Colonial Heights, Emporia, Hopewell, Petersburg.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/04/2014
Date Made Active in Reports: 01/16/2015
Number of Days to Update: 43

Source: Department of Environmental Quality Piedmont Regional Office
Telephone: 804-527-5020
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Quarterly

LUST REG VA: Leaking Underground Storage Tank List

Leaking underground storage tank site locations. Includes: counties of Albemarle, Augusta, Bath, Clarke, Fluvanna, Frederick, Greene, Highland, Nelson, Page, Rockbridge, Rockingham, Shenandoah, Warren; cities of Buena Vista, Charlottesville, Harrisonburg, Lexington, Staunton, Waynesboro, Winchester.

Date of Government Version: 12/06/2011
Date Data Arrived at EDR: 12/08/2011
Date Made Active in Reports: 01/16/2012
Number of Days to Update: 39

Source: Department of Environmental Quality Valley Regional Office
Telephone: 540-574-7800
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: No Update Planned

LUST REG WC: Leaking Underground Storage Tank List

Leaking underground storage tank site locations. Includes: counties of Alleghany, Bedford, Botetourt, Craig, Floyd, Franklin, Giles, Henry, Montgomery, Patrick, Pulaski, Roanoke; cities of Bedford, Clifton Forge, Covington, Martinsville, Radford, Roanoke, Salem.

Date of Government Version: 06/04/2015
Date Data Arrived at EDR: 06/05/2015
Date Made Active in Reports: 07/07/2015
Number of Days to Update: 32

Source: Department of Environmental Quality West Central Regional Office
Telephone: 540-562-6700
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: No Update Planned

LUST REG NO: Leaking Underground Storage Tank Tracking Database

Leaking underground storage tank site locations. Includes: counties of Arlington, Caroline, Culpeper, Fairfax, Fauquier, King George, Loudoun, Louisa, Madison, Orange, Prince William, Rappahannock, Spotsylvania, Stafford; cities of Alexandria, Fairfax, Falls Church, Fredericksburg, Manassas, Manassas Park.

Date of Government Version: 05/18/2004
Date Data Arrived at EDR: 05/22/2004
Date Made Active in Reports: 07/09/2004
Number of Days to Update: 48

Source: Department of Environmental Quality Northern Regional Office
Telephone: 703-583-3800
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 04/30/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 53

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Semi-Annually

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 03/17/2015
Date Data Arrived at EDR: 05/01/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 52

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/28/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 55
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/05/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 48
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 29
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 24
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

LTANKS: Leaking Petroleum Storage Tanks
Includes releases of petroleum from underground storage tanks and aboveground storage tanks.

Date of Government Version: 05/01/2015
Date Data Arrived at EDR: 06/03/2015
Date Made Active in Reports: 07/01/2015
Number of Days to Update: 28
Source: Department of Environmental Quality
Telephone: 804-698-4010
Last EDR Contact: 06/03/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/10/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Registered Petroleum Storage Tanks

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 05/01/2015
Date Data Arrived at EDR: 06/03/2015
Date Made Active in Reports: 07/01/2015
Number of Days to Update: 28

Source: Department of Environmental Quality
Telephone: 804-698-4010
Last EDR Contact: 06/03/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Semi-Annually

AST: Registered Petroleum Storage Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 05/01/2015
Date Data Arrived at EDR: 06/03/2015
Date Made Active in Reports: 07/01/2015
Number of Days to Update: 28

Source: Department of Environmental Quality
Telephone: 804-698-4010
Last EDR Contact: 06/03/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Semi-Annually

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 03/17/2015
Date Data Arrived at EDR: 05/01/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 52

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Semi-Annually

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/05/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 48

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 28

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/06/2015
Date Data Arrived at EDR: 05/19/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 34

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/26/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 27

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 04/30/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 53

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Controls Sites Listing

A listing of sites with Engineering Controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 06/23/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 07/01/2015
Number of Days to Update: 5

Source: Department of Environmental Quality
Telephone: 804-698-4228
Last EDR Contact: 09/29/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

INST CONTROL: Voluntary Remediation Program Database

Sites included in the Voluntary Remediation Program database that have deed restrictions.

Date of Government Version: 06/23/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 07/01/2015
Number of Days to Update: 5

Source: Department of Environmental Quality
Telephone: 804-698-4228
Last EDR Contact: 09/29/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/29/2014
Date Data Arrived at EDR: 10/01/2014
Date Made Active in Reports: 11/06/2014
Number of Days to Update: 36

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VRP: Voluntary Remediation Program
The Voluntary Cleanup Program encourages owners of elected contaminated sites to take the initiative and conduct voluntary cleanups that meet state environmental standards.

Date of Government Version: 06/23/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 07/01/2015
Number of Days to Update: 5

Source: Department of Environmental Quality
Telephone: 804-698-4228
Last EDR Contact: 09/29/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Site Specific Assessments
To qualify for Brownfields Assessment, the site must meet the Federal definition of a Brownfields and should have contaminant issues that need to be addressed and a redevelopment plan supported by the local government and community. Virginia's Department of Environmental Quality performs brownfields assessments under a cooperative agreement with the U.S. Environmental Protection Agency at no cost to communities, property owners or, prospective purchasers. The assessment is an evaluation of environmental impacts caused by previous site uses similar to a Phase II Environmental Assessment.

Date of Government Version: 07/28/2015
Date Data Arrived at EDR: 07/29/2015
Date Made Active in Reports: 08/24/2015
Number of Days to Update: 26

Source: Department of Environmental Quality
Telephone: 804-698-4207
Last EDR Contact: 07/28/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/22/2015
Date Data Arrived at EDR: 06/24/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/24/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/01/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: No Update Planned

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/25/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/25/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Annually

SPILLS: Prep/Spills Database Listing

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment. PREP staff often work to assist local emergency responders, other state agencies, federal agencies, and responsible parties, as may be needed, to manage pollution incidents. Oil spills, fish kills, and hazardous materials spills are examples of incidents that may involve the DEQ's PREP Program.

Date of Government Version: 05/01/2015
Date Data Arrived at EDR: 06/03/2015
Date Made Active in Reports: 07/01/2015
Number of Days to Update: 28

Source: Department of Environmental Quality
Telephone: 804-698-4287
Last EDR Contact: 06/03/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Varies

SPILLS PC: Pollution Complaint Database

Pollution Complaints Database. The pollution reports contained in the PC database include the initial release reporting of Leaking Underground Storage Tanks and all other releases of petroleum to the environment as well as releases to state waters. The database is current through 12/1/93. Since that time, all spill and pollution reporting information has been collected and tracked through the DEQ regional offices.

Date of Government Version: 06/01/1996
Date Data Arrived at EDR: 10/22/1996
Date Made Active in Reports: 11/21/1996
Number of Days to Update: 30

Source: Department of Environmental Quality
Telephone: 804-698-4287
Last EDR Contact: 03/08/2010
Next Scheduled EDR Contact: 06/21/2010
Data Release Frequency: No Update Planned

SPILLS NO: PREP Database

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/29/2009
Date Made Active in Reports: 10/30/2009
Number of Days to Update: 31

Source: Department of Environmental Quality, Northern Region
Telephone: 703-583-3864
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

SPILLS PD: PREP Database

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment.

Date of Government Version: 10/20/2009
Date Data Arrived at EDR: 10/29/2009
Date Made Active in Reports: 12/03/2009
Number of Days to Update: 35

Source: Department of Environmental Quality, Piedmont Region
Telephone: 804-527-5020
Last EDR Contact: 02/06/2012
Next Scheduled EDR Contact: 05/21/2012
Data Release Frequency: Quarterly

SPILLS SW: Reportable Spills

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment.

Date of Government Version: 01/21/2010
Date Data Arrived at EDR: 01/22/2010
Date Made Active in Reports: 02/16/2010
Number of Days to Update: 25

Source: Department of Environmental Quality, Southwest Region
Telephone: 276-676-4839
Last EDR Contact: 07/13/2012
Next Scheduled EDR Contact: 10/29/2012
Data Release Frequency: No Update Planned

SPILLS TD: PREP Database

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment.

Date of Government Version: 09/17/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/06/2009
Number of Days to Update: 13

Source: Department of Environmental Quality, Tidewater Region
Telephone: trofoia@deq.vir
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: Quarterly

SPILLS VA: PREP Database

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment.

Date of Government Version: 08/08/2012
Date Data Arrived at EDR: 08/09/2012
Date Made Active in Reports: 10/05/2012
Number of Days to Update: 57

Source: Department of Environmental Quality, Valley Regional Office
Telephone: 540-574-7800
Last EDR Contact: 05/06/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Quarterly

SPILLS WC: Prep Database

The Department of Environmental Quality's POLLUTION RESPONSE PROGRAM, known as PREP, provides for responses to air, water, and waste pollution incidents in order to protect human health and the environment.

Date of Government Version: 09/21/2009
Date Data Arrived at EDR: 09/29/2009
Date Made Active in Reports: 10/30/2009
Number of Days to Update: 31

Source: Department of Environmental Quality, West Central Region
Telephone: 540-562-6700
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

SPILLS BRL: Prep/Spills Database Listing

A listing of spills locations located in the Blue Ridge Regional area, Lynchburg.

Date of Government Version: 09/18/2009
Date Data Arrived at EDR: 09/18/2009
Date Made Active in Reports: 10/06/2009
Number of Days to Update: 18

Source: DEQ, Blue Ridge Regional Office
Telephone: 434-582-6218
Last EDR Contact: 11/28/2011
Next Scheduled EDR Contact: 03/12/2012
Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 09/01/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/15/2013
Number of Days to Update: 43

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 06/06/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 09/18/2014
Number of Days to Update: 8

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 07/08/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/14/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/14/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/21/2015
Next Scheduled EDR Contact: 08/31/2015
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/09/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 08/12/2015
Next Scheduled EDR Contact: 11/30/2015
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/14/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/25/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Every 4 Years

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 110

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 01/29/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/12/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/14/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 33
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/17/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31
Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/20/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/20/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/31/2015
Date Data Arrived at EDR: 04/09/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 63
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 06/04/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/12/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/07/2015
Date Data Arrived at EDR: 04/09/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/14/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/26/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Date Data Arrived at EDR: 11/26/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/07/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 07/22/2015
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 40

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 07/22/2015
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 40

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/22/2015
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/14/2015
Date Data Arrived at EDR: 06/03/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 91

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/01/2015
Next Scheduled EDR Contact: 12/14/2015
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/05/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/05/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/18/2015
Date Data Arrived at EDR: 02/27/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 26

Source: EPA
Telephone: (215) 814-5000
Last EDR Contact: 06/10/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Quarterly

AIRS: Permitted Airs Facility List

A listing of permitted Airs facilities.

Date of Government Version: 06/11/2015
Date Data Arrived at EDR: 06/12/2015
Date Made Active in Reports: 07/01/2015
Number of Days to Update: 19

Source: Department of Environmental Quality
Telephone: 804-698-4000
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Varies

CEDS: Comprehensive Environmental Data System

Virginia Water Protection Permits, Virginia Pollution Discharge System (point discharge) permits and Virginia Pollution Abatement (no point discharge) permits.

Date of Government Version: 06/08/2015
Date Data Arrived at EDR: 06/09/2015
Date Made Active in Reports: 07/01/2015
Number of Days to Update: 22

Source: Department of Environmental Quality
Telephone: 804-698-4077
Last EDR Contact: 06/04/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Semi-Annually

COAL ASH: Coal Ash Disposal Sites

A listing of facilities with coal ash impoundments.

Date of Government Version: 07/29/2009
Date Data Arrived at EDR: 07/31/2009
Date Made Active in Reports: 08/21/2009
Number of Days to Update: 21

Source: Department of Environmental Protection
Telephone: 804-698-4285
Last EDR Contact: 06/04/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

DRYCLEANERS: Drycleaner List

A listing of registered drycleaners.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 04/23/2015
Date Made Active in Reports: 04/24/2015
Number of Days to Update: 1

Source: Department of Environmental Quality
Telephone: 804-698-4407
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Varies

ENFORCEMENT: Enforcement Actions Data
A listing of enforcement actions.

Date of Government Version: 06/16/2015
Date Data Arrived at EDR: 06/18/2015
Date Made Active in Reports: 07/07/2015
Number of Days to Update: 19

Source: Department of Environmental Quality
Telephone: 804-698-4031
Last EDR Contact: 06/04/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/02/2015
Date Data Arrived at EDR: 05/08/2015
Date Made Active in Reports: 07/13/2015
Number of Days to Update: 66

Source: Department of Environmental Quality
Telephone: 804-698-4205
Last EDR Contact: 08/03/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information listing
Solid waste financial assurance information.

Date of Government Version: 05/02/2015
Date Data Arrived at EDR: 05/08/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 25

Source: Department of Environmental Quality
Telephone: 804-698-4123
Last EDR Contact: 08/03/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Varies

TIER 2: Tier 2 Information Listing
A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 12/21/2012
Date Made Active in Reports: 02/19/2013
Number of Days to Update: 60

Source: Department of Environmental Quality
Telephone: 804-698-4159
Last EDR Contact: 08/10/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Annually

UIC: Underground Injection Control Wells
A listing of underground injection controls wells.

Date of Government Version: 08/04/2015
Date Data Arrived at EDR: 08/06/2015
Date Made Active in Reports: 08/24/2015
Number of Days to Update: 18

Source: Department of Mines, Minerals and Energy
Telephone: 276-415-9700
Last EDR Contact: 08/06/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Virgina.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/20/2014
Number of Days to Update: 203

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Virgina and at the Regional VA Levels.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/15/2014
Number of Days to Update: 198

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/18/2015
Next Scheduled EDR Contact: 08/31/2015
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/12/2015
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2015
Date Data Arrived at EDR: 08/06/2015
Date Made Active in Reports: 08/24/2015
Number of Days to Update: 18

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/06/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/18/2015
Number of Days to Update: 25

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/20/2015
Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/26/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 03/19/2015
Date Made Active in Reports: 04/07/2015
Number of Days to Update: 19

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/11/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Oil/Gas Pipelines
Source: PennWell Corporation
Telephone: 281-546-1505
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
Telephone: 800-823-6277
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 804-692-1900

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

GOODES BRIDGE CENTER
15401 GOODES BRIDGE ROAD
AMELIA COURT HOUSE, VA 23002

TARGET PROPERTY COORDINATES

Latitude (North):	37.3598 - 37° 21' 35.28''
Longitude (West):	77.9606 - 77° 57' 38.16''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	237786.4
UTM Y (Meters):	4138696.2
Elevation:	382 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5951031 AMELIA COURT HOUSE, VA
Version Date:	2013
North Map:	5951115 CHULA, VA
Version Date:	2013

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

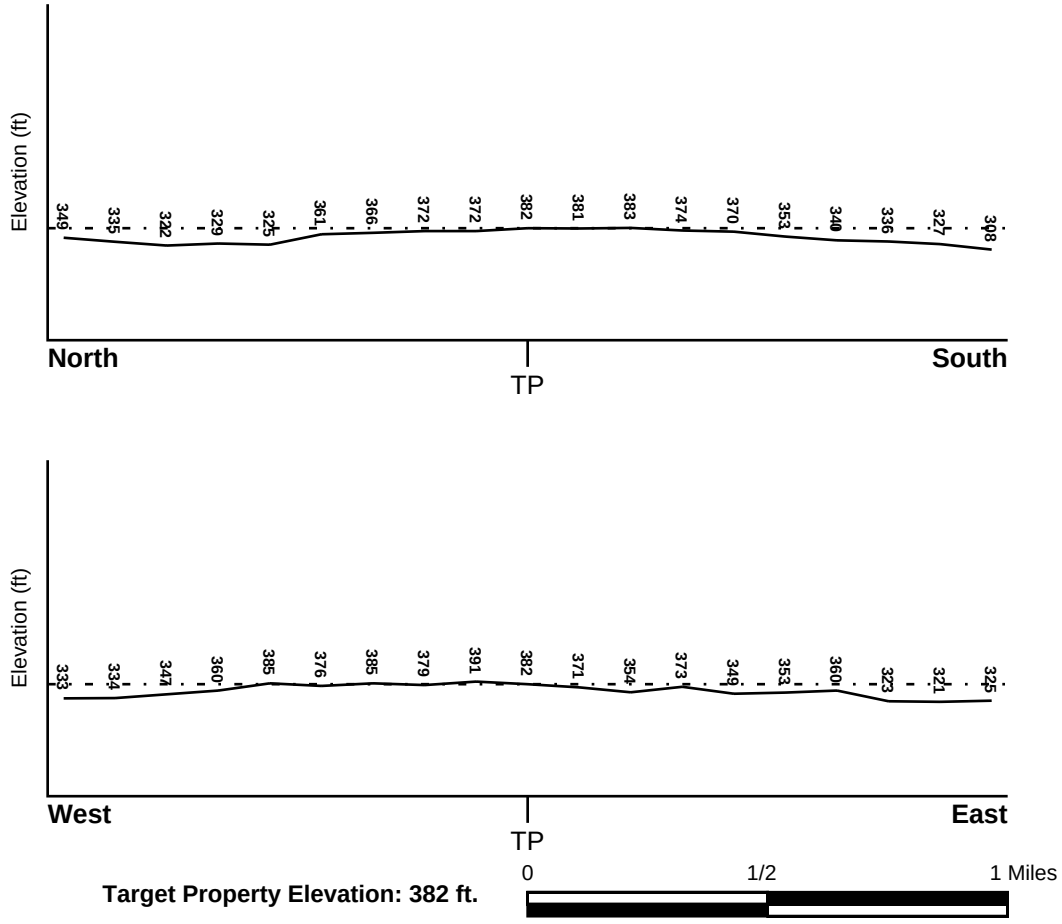
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 382 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
AMELIA, VA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 51007C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
AMELIA COURT HOUSE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

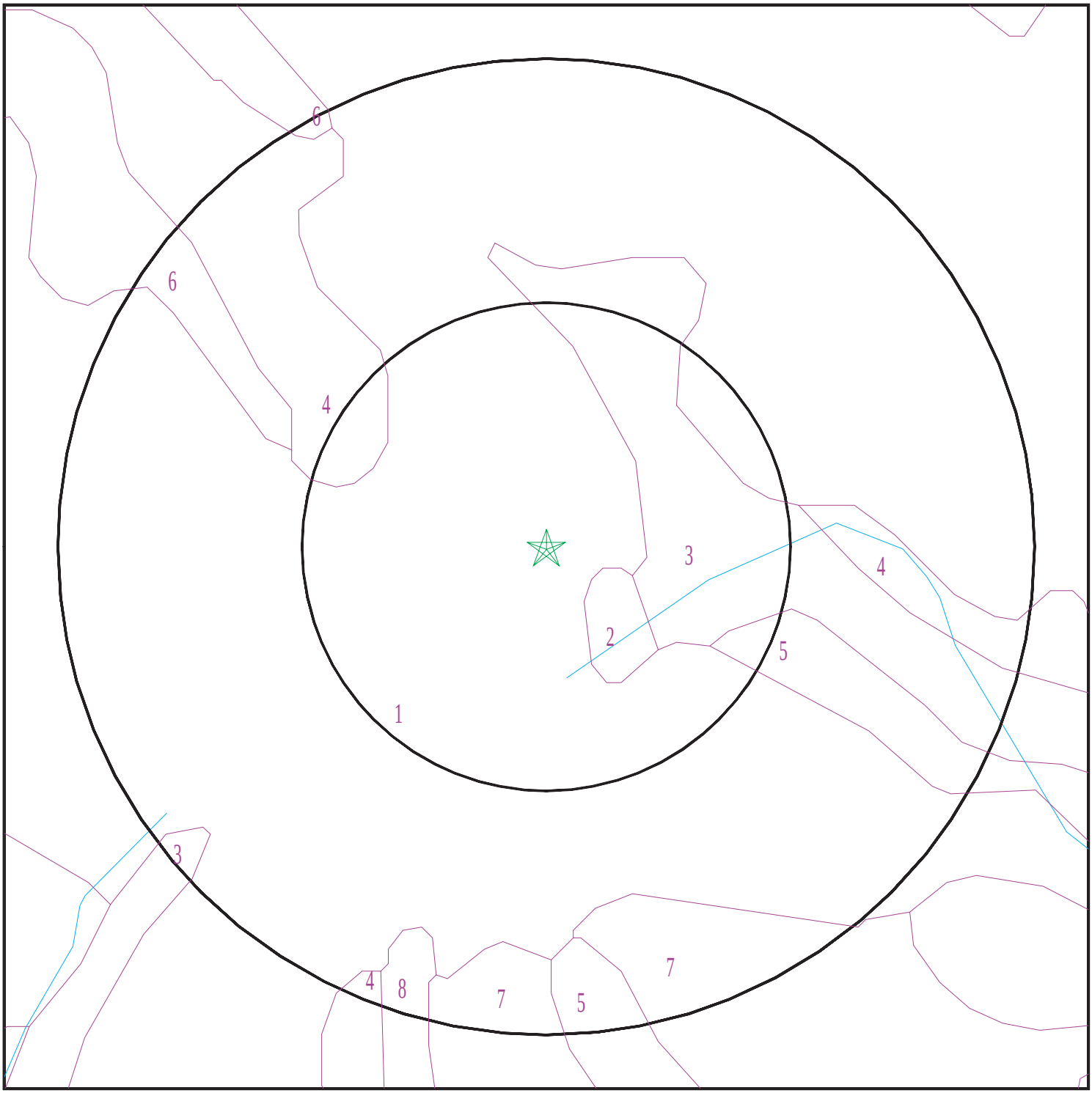
Era:	Paleozoic
System:	Pennsylvanian
Series:	Felsic paragneiss and schist
Code:	mm1 *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Metamorphic Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4408881.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Goodes Bridge Center	CLIENT:	Dewberry & Davis
ADDRESS:	15401 Goodes Bridge Road Amelia Court House VA 23002	CONTACT:	Anna Oehser
LAT/LONG:	37.3598 / 77.9606	INQUIRY #:	4408881.2s
		DATE:	September 11, 2015 4:46 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Appling

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 4.5
2	11 inches	37 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	37 inches	64 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 5.5 Min: 4.5

Soil Map ID: 2

Soil Component Name: Water

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 3

Soil Component Name: Partlow

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 15 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 42 Min: 14	Max: 5.5 Min: 4.5

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	5 inches	40 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	40 inches	64 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 42 Min: 14	Max: 5.5 Min: 4.5

Soil Map ID: 4

Soil Component Name: Appling

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 4.5

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	11 inches	37 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	37 inches	64 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 5.5 Min: 4.5

Soil Map ID: 5

Soil Component Name: Cecil

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 4.5

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	5 inches	14 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	14 inches	42 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
4	42 inches	64 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5

Soil Map ID: 6

Soil Component Name: Wedowee

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 5.5 Min: 3.6
2	7 inches	9 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 5.5 Min: 3.6
3	9 inches	35 inches	sandy clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 3.6
4	35 inches	64 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 5.5 Min: 3.6

Soil Map ID: 7

Soil Component Name: Cecil

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 4.5
2	5 inches	14 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	14 inches	42 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
4	42 inches	64 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5

Soil Map ID: 8

Soil Component Name: Helena

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 45 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 42 Min: 14	Max: 6.5 Min: 3.6
2	7 inches	14 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 5.5 Min: 3.6
3	14 inches	53 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 5.5 Min: 3.6
4	53 inches	64 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 5.5 Min: 3.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

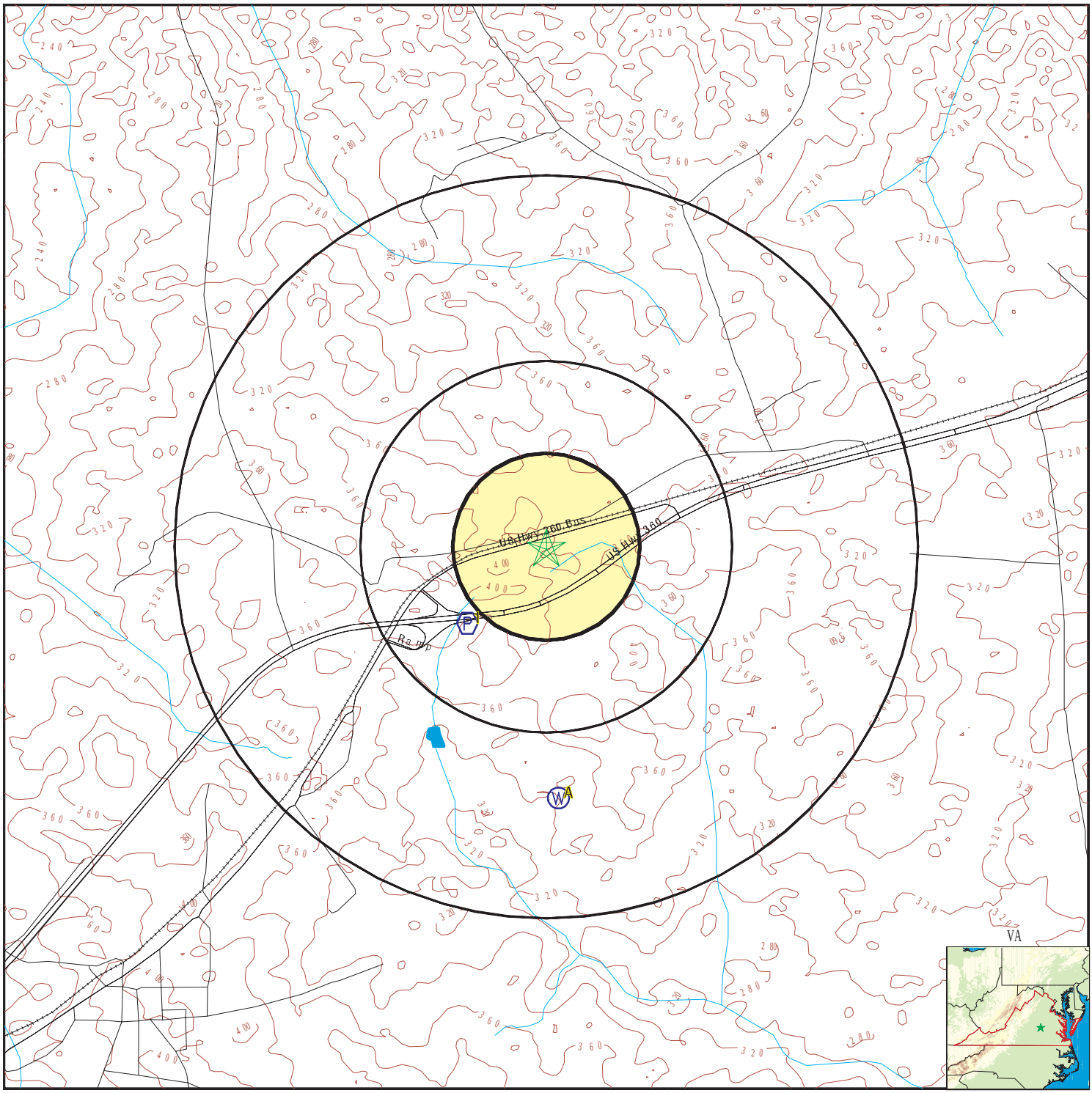
MAP ID	WELL ID	LOCATION FROM TP
1	VA5007310	1/4 - 1/2 Mile SW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	VA4000000002357	1/2 - 1 Mile South
A3	VA4000000002354	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 4408881.2s



County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
GI Indeterminate Groundwater Flow at Location
GV Groundwater Flow Varies at Location
HD Closest Hydrogeological Data

N

SITE NAME:	Goodes Bridge Center	CLIENT:	Dewberry & Davis
ADDRESS:	15401 Goodes Bridge Road Amelia Court House VA 23002	CONTACT:	Anna Oehser
LAT/LONG:	37.3598 / 77.9606	INQUIRY #:	4408881.2s
		DATE:	September 11, 2015 4:46 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
SW
1/4 - 1/2 Mile
Lower

FRDS PWS **VA5007310**

Epa region:	03	State:	VA
Pwsid:	VA5007310		
Pwsname:	MARIO'S PIZZERIA		
City served:	Not Reported	State served:	VA
Zip served:	Not Reported	Fips county:	51007
Status:	Closed	Pop srvd:	125
Pwssvcconn:	1	Source:	Groundwater
Pws type:	TNCWS	Owner:	Private
Contact:	MARANZANO, MARIO & LISA		
Contactor gname:	Not Reported		
Contact phone:	804-561-6100	Contact address1:	15415 PATRICK HENRY HIGHWAY
Contact address2:	P.O. BOX 257	Contact city:	AMELIA
Contact state:	VA	Contact zip:	23002
Activity code:	I		

Location Information:

Name:	MARIO'S PIZZERIA		
Pwstypcd:	TNCWS	Primsrccd:	GW
Popserved:	125		
Add1:	15415 PATRICK HENRY HIGHWAY		
Add2:	P.O. BOX 257		
City:	AMELIA	State:	VA
Zip:	23002	Phone:	804-561-6100
Cityserv:	Not Reported	Cntyserv:	Not Reported
Stateserv:	VA	Zipserv:	Not Reported

Enforcement Information:

Violation id:	2099604	Orig cd:	S
Enf fy:	2004	Enf act date:	04/27/2004
Enf act detail:	St Public Notif requested	Enf act cat:	Informal

Enforcement Information:

Violation id:	2099604	Orig cd:	S
Enf fy:	2004	Enf act date:	04/27/2004
Enf act detail:	St Formal NOV issued	Enf act cat:	Informal

Enforcement Information:

Violation id:	2099504	Orig cd:	S
Enf fy:	2004	Enf act date:	10/17/2003
Enf act detail:	St Public Notif requested	Enf act cat:	Informal

Enforcement Information:

Violation id:	2099504	Orig cd:	S
Enf fy:	2004	Enf act date:	10/17/2003
Enf act detail:	St Formal NOV issued	Enf act cat:	Informal

Enforcement Information:

Violation id:	2099403	Orig cd:	S
Enf fy:	2003	Enf act date:	07/09/2003
Enf act detail:	St Formal NOV issued	Enf act cat:	Informal

Enforcement Information:

Violation id:	2099403	Orig cd:	S
Enf fy:	2003	Enf act date:	07/09/2003
Enf act detail:	St Public Notif requested	Enf act cat:	Informal

Enforcement Information:

Violation id:	2099303	Orig cd:	S
Enf fy:	2003	Enf act date:	01/22/2003
Enf act detail:	St Formal NOV issued	Enf act cat:	Informal

Enforcement Information:

Violation id:	2099303	Orig cd:	S
Enf fy:	2003	Enf act date:	01/22/2003
Enf act detail:	St Public Notif requested	Enf act cat:	Informal

Violations Information:

Violoation id:	2099604	Orig cd:	S
State:	VA	Viol fy:	2004
Contamcd:	3100		
Contamnm:	Coliform (TCR)		
Viol code:	23		
Viol name:	Monitoring, Routine Major (TCR)		
Rule code:	110		
Rule name:	TCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	01/01/2004
Cmpedt:	03/31/2004		

Violations Information:

Violoation id:	2099504	Orig cd:	S
State:	VA	Viol fy:	2003
Contamcd:	3100		
Contamnm:	Coliform (TCR)		
Viol code:	23		
Viol name:	Monitoring, Routine Major (TCR)		
Rule code:	110		
Rule name:	TCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	07/01/2003
Cmpedt:	09/30/2003		

Violations Information:

Violoation id:	2099403	Orig cd:	S
State:	VA	Viol fy:	2003
Contamcd:	3100		
Contamnm:	Coliform (TCR)		
Viol code:	23		
Viol name:	Monitoring, Routine Major (TCR)		
Rule code:	110		
Rule name:	TCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported

State mcl:	Not Reported	Cmpbdt:	01/01/2003
Cmpedt:	03/31/2003		

Violations Information:

Violoation id:	2099303	Orig cd:	S
State:	VA	Viol fy:	2002
Contamcd:	3100		
Contamnm:	Coliform (TCR)		
Viol code:	23		
Viol name:	Monitoring, Routine Major (TCR)		
Rule code:	110		
Rule name:	TCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	10/01/2002
Cmpedt:	12/31/2002		

PWS ID:	VA5007310		
Date Initiated:	7801	Date Deactivated:	Not Reported
PWS Name:	COLONIAL ARMS RESTAURANT AMELIA COURT HOUSE, VA 23002		

Addressee / Facility:	Not Reported		
Facility Latitude:	37 21 24	Facility Longitude:	077 57 53
City Served:	AMELIA		
Treatment Class:	Untreated	Population:	00000180

Violations information not reported.

A2
South
1/2 - 1 Mile
Lower

VA WELLS **VA4000000002357**

Fid:	2357
Tinwsf is :	2649793
Pwsid:	5007135
Sysname:	AMELIA COURTHOUSE
D pws fed :	C
D fed prim:	GW
Cnty or ci:	AMELIA
External s:	2978
Type code:	WL
Facilityna:	WELL NO. 1 (4C)
Lat long r:	NAD 83
Roundlatit:	37.35
Roundlongi:	-77.96
D populati:	3100
Total dsgn:	207200 GPD
Avg daily :	Not Reported
Site id:	VA4000000002357

A3
South
1/2 - 1 Mile
Lower

VA WELLS **VA4000000002354**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	2354
Tinwsf is :	2677898
Pwsid:	5007135
Sysname:	AMELIA COURTHOUSE
D pws fed :	C
D fed prim:	GW
Cnty or ci:	AMELIA
External s:	29804
Type code:	WL
Facilityna:	WELL NO. 4 (4B2)
Lat long r:	NAD 83
Roundlatit:	37.35
Roundlongi:	-77.96
D populati:	3100
Total dsgn:	207200 GPD
Avg daily :	Not Reported
Site id:	VA4000000002354

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

EPA Region 3 Statistical Summary Readings for Zip Code: 23002

Number of sites tested: 20.

Maximum Radon Level: 4.5 pCi/L.
Minimum Radon Level: -0.1 pCi/L.

pCi/L <4	pCi/L 4-10	pCi/L 10-20	pCi/L 20-50	pCi/L 50-100	pCi/L >100
17 (85.00%)	3 (15.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

Federal EPA Radon Zone for AMELIA County: 1

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Virginia Public Water Supplies
Source: Department of Health, Office of Water Programs
Telephone: 804-786-1756

OTHER STATE DATABASE INFORMATION

Virginia Oil and Gas Wells
Source: Department of Mines, Minerals and Energy
Telephone: 804-692-3200
A listing of oil and gas well locations

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

EPA Region 3 Statistical Summary Readings
Source: Region 3 EPA
Telephone: 215-814-2082
Radon readings for Delaware, D.C., Maryland, Pennsylvania, Virginia and West Virginia.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

APPENDIX B

Site Photographs

1. Facing northwest near northeastern corner subject property. Photo taken from parking lot on east side of building.

2. Photo taken facing northeast down Goodes Bridge Road (U.S. 360 Business). Photo taken from east parking lot.

3. Facing southwest on Goodes Bridge Road. Photo taken from east parking lot.

4. East side of building. Entrances to Finally Fit and office areas. Photo taken from east parking lot.

5. Facing south from east parking lot.

6. Facing southeast from east parking lot.

7. Facing east from east parking lot.

8. Water manhole cover observed near northeastern corner of building.

9. Telephone box and cables observed on northern side of building.

10. Overhead electric lines, electric boxes, and cement manhole riser (yellow arrow) observed on northern side of building.

11. Loading docks and stormwater drain (below docks) observed on northern side of building.

12. Stormwater drain below loading docks.

13. Photo taken facing northeast on Goodes Bridge Road. Photo taken from parking on west side of building.

14. Photo taken southwest on Goodes Bridge Road. Photo taken from west parking lot.

15. Photo taken facing northwest across Goodes Bridge Road. Photo taken from west parking lot.

16. Photo taken facing southeast on west side of building. A dumpster is shown in center frame.

17. West side of building. The northern storage area (yellow arrow) and the southern storage area used for Borum Electrical, Plumbing & Heating (orange arrow) are shown in the frame.

18. Adjoining property to the west. A sign for “Nibbs Creek Construction” was observed.

19. AST located behind dumpster on west side of building. AST appeared to be empty. Staining below the AST was not observed.

20. Photo taken at southwestern corner of building. Staining observed around 5 gallon buckets.

21. AST on southern side of building. AST appeared to be partially empty.

22. Tanks containing liquefied petroleum observed on southern side of building.

23. Adjoining property to the south. Photo taken from southern side of building.

24. Photo taken facing southwest from southeast corner of building. Fire hydrant and AC units are shown in the photo.

25. Photo taken northwest from southeast corner of building. Water tower located near southeastern corner of building.

26. Photo taken facing southwest. A fire hydrant, suspected groundwater well, and two cement manhole risers are shown in the photo.

27. Office areas and kitchenette located in northeastern corner of building.

28. Photo taken in the Finally Fit area, south of the office area.

29. Photo taken in the northern warehouse storage area.

30. Empty propane tank observed in the northern warehouse.

31. Race car shells observed in the northern warehouse.

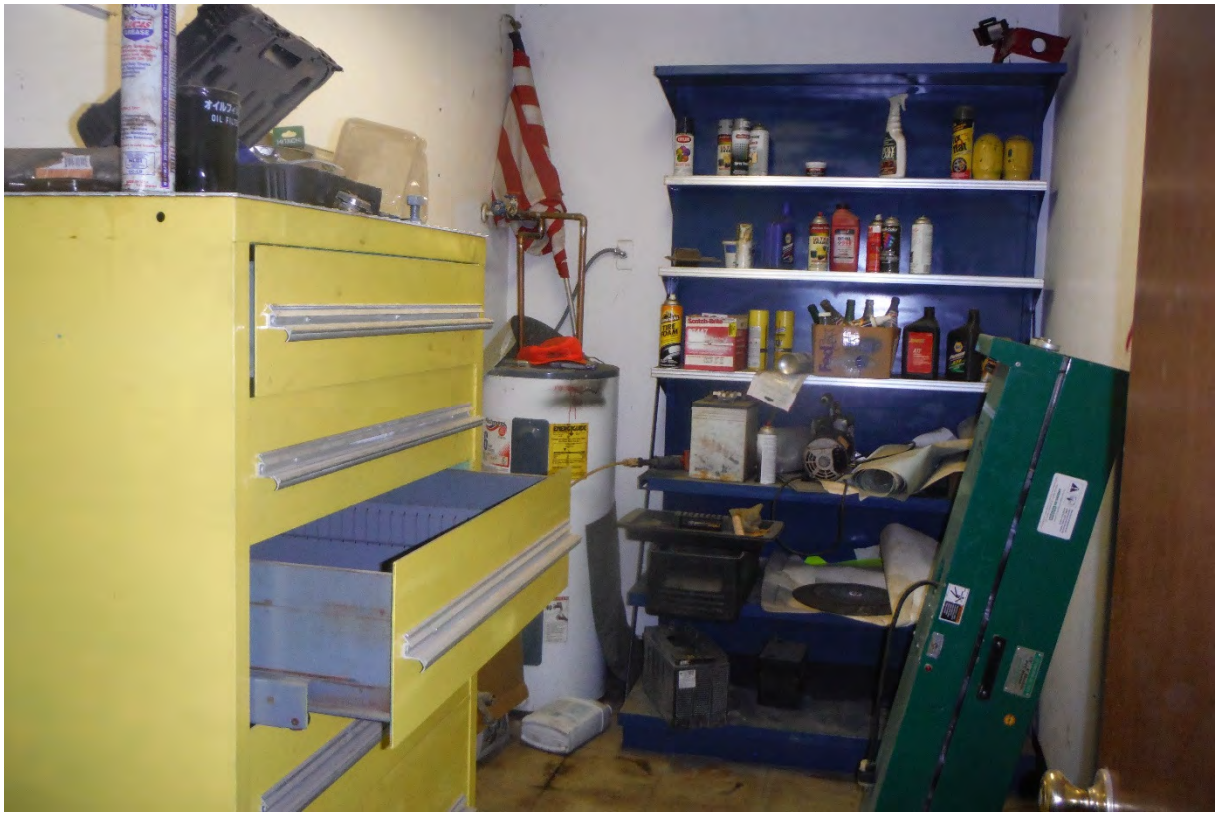
32. Transmissions observed near the race cars. No staining was observed around the transmissions.

33. Photo of the southern warehouse used for Borum Electrical, Plumbing & Heating Inc.

34. Storage for electrical, plumbing and heating parts.

35. Photo taken of eastern side of southern warehouse. Second floor storage seen in the center of frame.

36. Photo taken of the southern wall of the southern warehouse. Second floor offices seen in center of frame. Minor superficial staining observed around the forklift.



37. Photo taken of petroleum, aerosol, and paint storage area.

38. Uncovered bucket observed in petroleum/aerosol/paint storage area. No staining observed around the bucket.

39. Water heaters and AC fan unit observed in southern warehouse.

40. Air compressor observed on the southern wall of the warehouse. No staining was observed around the air compressor. The door shown on the right side of the photograph leads to a metal working and car lift room located at the southwestern corner of the building.

41. Metal working and car lift room.

42. Car on car lift. Superficial staining observed below car.

APPENDIX C

Subject Property Real Estate Information

GOODES BRIDGE CENTER

15401 GOODES BRIDGE ROAD
AMELIA COURTHOUSE, VA

INDUSTRIAL FOR SALE

39,000 SF

CUSHMAN & WAKEFIELD | THALHIMER
INDEPENDENTLY OWNED AND OPERATED

PROPERTY FEATURES

- Directly located off Route 360
- 2 docks, 6 drive-in doors
- 800 amp 240V 3-Phase
- Vehicle maintenance shop onsite
- Subdividable – 19,500 sf
- County water & sewer
- Fire suppression system with onsite water tower
- Adjacent to Amelia Industrial Park
- 10 minutes from Magnolia Green

BUILDING FEATURES	
TOTAL SQUARE FEET	39,000 sf
SF OFFICE	4,500 sf
PARKING	Plenty; paved
ZONING	M2, C-1
SALE PRICE	$780,000 ($20.00 psf)

For more information, please contact:

ISAAC DEREGIBUS
(804) 697 3426
Isaac.deregibus@thalhimer.com

MATT BRAUN
(804) 697 3419
matt.braun@thalhimer.com

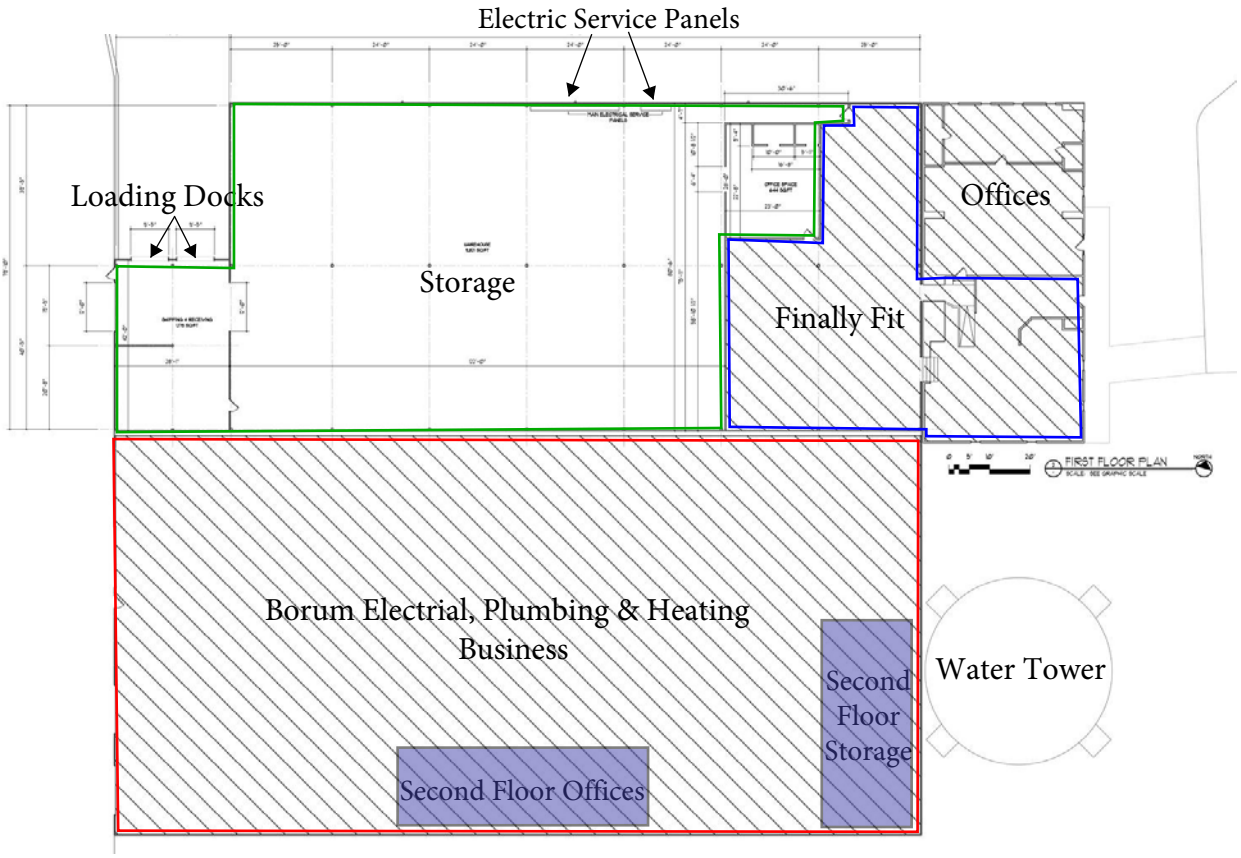
CUSHMAN & WAKEFIELD | THALHIMER
Thalhimer Center
1100 W. Broad Street
Glen Allen, VA 23060
www.thalhimer.com

GOODES BRIDGE CENTER

Industrial For Sale

35,000 SF
FOR SALE

FIRST FLOOR PLAN



*Second floor office and storage areas not to scale

SITE PLAN

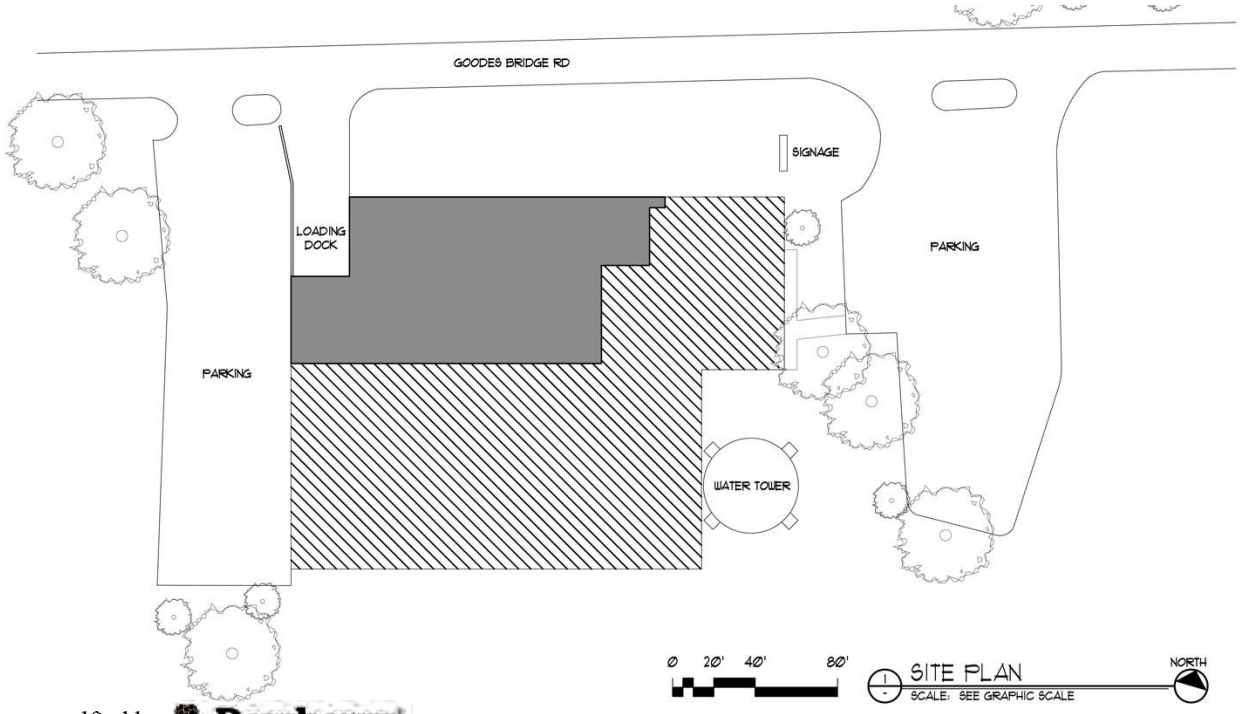


Figure modfied by Dewberry

For more information, please contact:

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(804) 697 3426
Isaac.deregibus@thalhimer.com

MATT BRAUN
(804) 697 3419
matt.braun@thalhimer.com

CUSHMAN & WAKEFIELD | THALHIMER
Thalhimer Center
11100 W. Broad Street
Glen Allen, VA 23060
www.thalhimer.com

Amelia County, Virginia

Property Values and Property Cards

Our Real Estate Tax Rate for 2015 is **51 cents per $100** due annually on December 5th.

Displaying 2 Search Results. Search Again - Print Results

Name & Address	Values	
Map: 31-186A	Land:	$67,300
SANDY CREEK INVESTMENTS LLC	Imprv:	$1,159,200
	Total:	$1,226,500
15401 GOODESBRIDGE RD		
AMELIA COURT HOUSE VA 23002		

Page 1 of 2 - View Property Card - Print Property Card
Page 2 of 2 - View Property Card - Print Property Card

Search Again - Print Results

Return to Property Card or Search Results

Property Identification Run Dt: 10/01/2015

Map #: 31 186A
Acct #: 000005458-001
Address: 015401 GOODES BRIDGE RD
City/St: AMELIA COURT HOUSE, VA 23002

Occupancy: COMMERCIAL
Dwl Type: Heavy Manu MH/Type: /
Use/Class: /COMMERCIAL & INDUSTRIAL
Year Assd: 2012
Zoning:
Dist: 01 GILES

Owner Name/Address

SANDY CREEK INVESTMENTS LLC
15401 GOODESBRIDGE RD
AMELIA COURT HOUSE VA 23002

Year Built: 1967
Year Rmld:
Year Efft: 1999
Condition: AVERAGE
On Site Date: (LW) 1/18/2011
Review Date: (FP) 8/24/2011

Legal Description 001 of 02

PARCEL 1

2.274 AC

Deed Bk/Pg: 272 /5300
Acreage: 2.274
Land Use:
Total Mineral:
Total Land: 67300
Total Imp: 1159200
Total Value: 1226500

Commercial Valuation

Cls	Grad	YEff	Description	Str/#	Size	Rate	Pct	Value
100M	C	1985	SPRINKLER		36880	2.10	.34	51116
064M	C	1985	OFFICE	1.0	3400	65.00	.34	145860
094P	C	1985	WAREHOUSE ST	1.0	13680	20.24	.34	182743
048P	C	1985	INDUSTRIAL M	1.0	19800	46.92	.34	613151
053P	C	1985	LOAD PLTFRM CV	1.0	1040	13.80	.34	9472
Total Market Value								1002342

Other Improvements Valuation

Desc	Length	Width	Size	Grade	Rate	FV/Pct	Value
ELEV'D TA			100000				140000
ASPHALT			27000				16800
Total Imp Value							156800

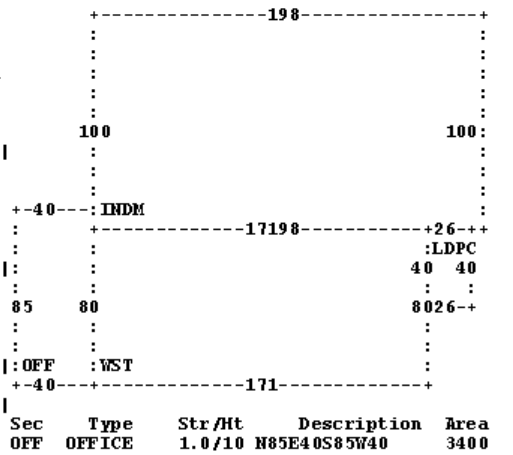
Land Valuation

M	Cls	Desc	G	Size	Dpth	Rate	FV/Pct	Value
A	40	COMM/INDUS	F	2.274		28750.00	.03	67338
Total Land Value				2.274				67300

Comments

B&L BUSINESS CENTER

Total Property Value 224100



Sec	Type	Str/Ht	Description	Area
OFF	OFFICE	1.0/10	N85E40S85W40	3400
W ST	WAREHOUSE	1.0/20	E171N80W171S80	3680
INDM	INDUSTRIA	1.0/20	N100E198S100W198	9800
LDPC	LOAD PLTF	1.0	E26S40W26N40	1040

	Cur. Value	Prev. Value	%Chg.
Land	67300	67300	%
Improvements	1159200	1064400	9%
Total	1226500	1131700	8%
Average Price Per Acre	28750		

Return to Property Card or Search Results

Property Identification		Run Dt: 10/01/2015	Owner Name/Address		Legal Description	002 of 02
Map #:	31 186A		SANDY CREEK INVESTMENTS LLC		PARCEL 1	
Acct #:	000005458-001		15401 GOODESBRIDGE RD			
Address:	015401 GOODES BRIDGE RD		AMELIA COURT HOUSE VA 23002		2.274 AC	
City/St:	AMELIA COURT HOUSE, VA 23002					
				Bk/Pg:	272 /5300	
			Sale Date/Amount	9/09/2005	700000	

APPENDIX D

Client Questionnaire

ATTACHMENT B
DEWBERRY ENGINEERS INC.

CLIENT QUESTIONNAIRE

ENVIRONMENTAL SITE ASSESSMENT
(Please complete and return with Consummated Agreement)

SITE CONTACT PERSON: DARYL GOUGH

PHONE: (804) 561-4565

SEND REPORT TO: DARYL GOUGH

ADDRESS: P.O. BOX A
AMELIA CH, VA. 23002

Has a previous environmental assessment been performed on this site? [ ] yes [ ] no [✓] unsure

Do you have knowledge of any previous environmental clean-up associated with the property? [ ] yes [✓] no

Has a title report been prepared within the past 12 months? [ ] yes [✓] no

Is a property plat or other site plans available? [✓] yes [ ] no

Are buildings located on the site? [✓] yes [ ] no, if yes how many? 01

Are underground storage tanks known to exist on the property? [ ] yes [✓] no

Do you have knowledge of existing significant environmental conditions on the subject site? [ ] yes [✓] no

Special comments or instructions regarding the property:

Completed by: R. Taylor Harris III Date: 9/16/15

APPENDIX E

Preliminary Assessment Report

Prepared by

Ecology and Environment, Inc.

ZE5631_D4387

FINAL

PRELIMINARY ASSESSMENT FOR THE
GENERAL BINDING CORPORATION
GRAPHICS PRODUCTS SITE
AMELIA, AMELIA COUNTY, VIRGINIA

Dump Site No. VA-669
EPA ID No. VAD040157323

Prepared under:

EPA Work Assignment No. 85-12-3JZZ
ARCS Contract No. 68-W8-0085

February 1994

Prepared for:

U.S. Environmental Protection Agency
Hazardous Waste Management Division

Prepared by:

Ecology and Environment, Inc.
1700 North Moore Street
Arlington, Virginia 22209

ecology and environment, inc.
International Specialists in the Environment

140 West Germantown Pike, Plymouth Meeting, Pennsylvania 19462
Tel: 215/832-1370, Fax: 215/832-2110

recycled paper

PRELIMINARY ASSESSMENT FOR THE GENERAL BINDING CORPORATION GRAPHICS PRODUCTS SITE AMELIA, AMELIA COUNTY, VIRGINIA

Dump Site No. VA-669
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February 1994

Prepared for:

U.S. Environmental Protection Agency
Hazardous Waste Management Division

Prepared by:

Ecology and Environment, Inc.
Arlington, Virginia

Submitted By:

Nermin K. Ahmad
E & E Project Task Leader

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

1. INTRODUCTION

1.1 AUTHORIZATION

The Preliminary Assessment (PA) for the General Binding Corporation Graphics Products (GBC) site in Amelia, Virginia, was performed by Ecology and Environment, Inc. (E & E) under Contract No. 68-W8-0085 for the U.S. Environmental Protection Agency (EPA), Region III, Alternative Remedial Contracting Strategy (ARCS), EPA Work Assignment Number 85-12-3JZZ. This PA was conducted under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA). It was performed in accordance with EPA Region III guidance, CERCLA, SARA, and the National Contingency Plan of 1990.

1.2 SCOPE OF WORK

The subject of this PA investigation is the GBC custom notebook manufacturing facility in Amelia, Virginia. The purpose of this investigation was to collect information concerning conditions at the site sufficient to assess the threat posed to human health and the environment, and to determine the need for additional action. The scope of the investigation included a review of available file information, interviews with people knowledgeable of previous activities at the site, a comprehensive target survey, and a site reconnaissance visit. Information gathered during the course of this investigation is included in appendices to this report. Appendix A presents photos taken during the site visit; Appendix B presents the EPA Preliminary Assessment Form 2070-12; Appendices C and D contains analytical data from previous sampling efforts; and Appendices E, F, and G present Material Safety Data Sheets (MSDSs) for photographic chemicals, cleaning agents, and ultraviolet ink used at the site.

1.3 SUMMARY

The GBC site is located approximately 0.67 mile northeast of the village of Amelia, in Amelia County, Virginia. The approximately 2.1-acre site is situated on two parcels of land: Parcel A is an approximately 2-acre plot located on Goodes Bridge Road (also known as Old Route 360, Business Route 360, and Main Street); and Parcel B, an approximately 0.1-acre parcel located southeast of Parcel A near U.S. Route 360, that includes a leach field used by GBC (Ref. 4). WN Research, a holding company that merged with General Binding in 1975, currently owns both parcels.

Parcel A consists of a building that houses the production facility and the immediate surrounding area. The production facility includes offices where graphics are produced, a dark room, a developer room, a supply storage area, binder production lines, an exposure room, a washroom, a cafeteria, and a loading dock. Outside the building are a drum storage shed, a water tower, three wells, settling and septic tanks, and a grassy field that is the site of a former holding pond. Parcel B consists of the area used as a leach field by GBC and a wooded area southeast of the production facility.

Prior to GBC activities at the site, the Virginia Laminating Company (VLC) operated a laminating facility on a 0.59-acre portion of the site. The exact location of VLC's activities could not be determined. VLC is believed to have been active at the site from 1952 to 1962.

Residents within the 4-mile-radius study area of the site rely on private well sources for drinking water. The nearest water supply well is located on site and provides drinking water for 87 facility employees. The nearest residential water well is presumed to be located at a house approximately 0.2 mile east of the production facility on Business Route 360. No information pertaining to this well could be obtained.

Drainage from the facility flows along two surface water pathways. Surface drainage from the site consists only of storm water runoff from the roof, the site grounds, and the parking lot. The first drainage pathway originates in the rear of the facility, flows through a concrete drain pipe, and enters a small pond located adjacent to the site. The pond drains into an intermittent stream that enters Smacks Creek 1.2 miles downstream. Smacks Creek enters the Appomattox River 11 miles downstream of the site. The limit of the 15-mile surface pathway study area is located on the Appomattox River, 1.5 miles south of Bevil's Bridge (Route 602). Several fisheries and wetlands are associated with this surface water pathway, and local residents reportedly fish in the pond south of the facility. The second drainage pathway flows southeast through a grassy area that is the former site of a holding pond, into

wooded areas east and southeast of the site, and ultimately into the intermittent stream that flows into Smacks Creek.

According to a site representative, no floor drains exist within the production facility, and no floor drains were noted during the site visit. The only identified discharges from the production area are from the photographic developer and the screen washroom. Drain lines from these units lead to two settling tanks located outside of the building. Solids settle out in these tanks, and liquids flow to the leach field located southeast of the site along U.S. Route 360. Prior to 1991, the liquid from the settling tanks flowed into a holding pond located east of the facility. Both the area of the former holding pond and the leach field drain toward the intermittent stream that flows into Smacks Creek.

Prior to 1991, liquid in the tanks drained to a holding pond located east of the facility. In 1986, analysis of settling tank solids and liquids by a GBC contractor indicated the presence of several heavy metals and organic compounds at concentrations above background. Analysis of holding pond liquid and solids in 1986 also indicated the presence of several heavy metals and organic compounds at concentrations above background.

In 1991, the holding pond was closed. The remaining liquids were drained and disposed of after GBC (and its contractor W.L. Black and Associates) classified the liquids as nonhazardous. Toxicity Characteristic Leaching Procedure (TCLP) analysis of the drained liquids indicated a level of 0.321 parts per million (ppm) of chromium and 0.31 ppm of silver. TCLP analysis of a soil composite sample indicated the presence of silver at a concentration of 0.019 ppm, and other tested constituents at concentrations below the detection limit. The soil removed from the holding pond was placed back in the excavation. The remedial contractor stated in a letter to GBC that testing of the soil confirmed that the clay barrier prevented infiltration and prevented groundwater contamination. No groundwater sampling was conducted at the time of the holding pond closure. This closure was not overseen by any regulatory officials.

Currently, there are three potential sources of hazardous waste streams at the site: chemicals associated with photographic development, compounds used in the cleaning of silk screens, and waste inks. A variety of chemicals, which are often diluted with water, are used to develop photographs at the site. These chemicals contain a variety of hazardous constituents in various concentrations. Used solutions pass from the developer machine through a silver recovery unit prior to being piped to the site's two settling tanks.

Photoimages are transferred to silkscreens through the use of a photosensitive emulsion. Some of this emulsion is removed prior to printing and the remainder is removed when an image is no longer required. Various compounds are used to prepare the screens and clean them after their use. Hazardous constituents are present in some of these cleaning compounds in various concentrations. These cleaning agents are diluted during the wash process and drain from the wash basins to the settling tanks.

GBC uses inks cured by ultraviolet light. These inks replace the solvent-based inks that were used prior to 1980. Waste inks that exceed their shelf life or are no longer used are manifested and disposed of as "nonregulated, removable ink," though they have been handled under a uniform hazardous waste manifest.

2. SITE DESCRIPTION AND HISTORY

2.1 LOCATION

The GBC site is located approximately 0.67 mile northeast of the village of Amelia, in Amelia County, Virginia. It is located on the south side of Goodes Bridge Road (also known as Old Route 360 or Business Route 360), approximately 0.5 mile east of where Goodes Bridge Road passes under U.S. Route 360 bypass. The coordinates of the site are latitude 37°21'36" north and longitude 77°57'36" west. The site can be found by measuring approximately 5-5/8 inches south and 2-5/8 inches east of the northwest corner of the United States Geological Survey (USGS) 7.5-Minute Series topographical map for the Amelia Court House, Virginia, quadrangle (see Figure 2-1).

2.2 SITE LAYOUT

WN Research, a holding company that merged with GBC in 1975, owns the properties referred to in this report as Parcel A and Parcel B. Parcel A consists of 2 acres and contains the site facility described below (see Figure 2-2). Parcel B consists of the site's leach field, which is located southeast of the GBC facility near U.S. Route 360 (Refs. 4, 8).

The GBC production facility consists of several connected buildings that contain offices, a graphics production area, a dark room, a developer room, a supply storage area, binder production lines, an exposure room, a wash room, a cafeteria and a loading dock. Outside the facility buildings the site includes a drum storage shed, a water tower, three wells, settling and septic tanks, a grassy field that is the former site of a holding pond, and two paved parking lots (see Figure 2-2) (Ref. 8). For the purposes of this PA, areas of concern associated with the site include the developer room, the exposure room, the washroom, their connections to the settling tanks and leach field, the drum storage shed, and a holding pond that was closed and backfilled in 1991.

The facility is used by GBC to produce notebook binders and tabs. Specific activities performed at the facility include creating designs, photography, imprinting designs on silk

screens, transferring screen image to binders, and assembling binders according to customer requests (Ref. 8).

The developer room is used to develop photographs and contains the developing machine and chemicals. The developer is used to produce an image. Silver is recovered by a unit attached to the developer. This unit is removed periodically by Laurence Recovery, Inc., who recycles the silver. Used film is removed by Morris, Inc. for recycling. Many of the developer chemicals are diluted in the developing process. Catchment basins surround the chemical containers and used fluids from the developer flow through connections to the settling tanks (Ref. 8).

After the photographic image is produced, it is transferred to silk screens in the exposure room through the use of a photosensitive emulsion. The screen with emulsion is exposed to the photographic image and the emulsion hardens in areas surrounding the image. The screen is washed to remove the nonhardened emulsion covering the image from the screen prior to use. The screens are then used to transfer the image to the binders. GBC currently uses ultraviolet inks, which change from liquid to solid phase upon exposure to ultraviolet light (Refs. 8, 12).

After the screens have been used, the photo emulsion is removed from the screen with cleaning solvents, and the screen is washed and scrubbed prior to the next use. This cleanup is performed in the wash room, which houses several metal basins. These basins drain into pipes that are connected to the settling tanks located outside of the building (Refs. 8, 12).

The main production area includes cutting machines, production lines for different types of binders, a maintenance shop, and a supply storage area. There are also several printing presses, where various insert material is printed. No floor drains were noted anywhere in the production area during the site visit, and site representatives stated that no floor drains exist in the production area (Ref. 8).

Two concrete settling tanks, each approximately 32 inches in diameter and 3 feet deep, are located outside of the facility building. These tanks receive wash water from the washroom and liquids from the developer. Reportedly, the sludge in these tanks has only been cleaned out twice in 20 years. Liquid from these tanks flows to Parcel B, the leach field located southeast of the facility near U.S. Route 360 (not shown on Figure 2-2). The leach field is connected to the settling tanks by a pipe that runs through the dam of the adjacent pond (Refs. 8, 12).

Prior to 1991, the liquids from the settling tanks flowed into a contained holding pond where the liquid was allowed to evaporate. This holding pond was closed in 1991 by removing the remaining liquids and backfilling the pond. Today, this area is an open grassy field (Ref. 8).

Several wells, a water tower, and a drum storage shed are located on the east side of the facility. The wells include a fire water well, an unused shallow well, and a well used to provide drinking water to the facility. The storage shed is used to store drummed hydraulic oil, isopropyl alcohol, blanket and roller wash, screening sludge, waste oil, and waste ink prior to their use or disposal (Ref. 8).

The facility heater is located outside of the building behind the maintenance area and cafeteria. A concrete drainage path channels runoff from the west parking lot past the heater and continues east to a small pond adjacent to the site. Several drainage paths channeling roof stormwater or air-conditioning condensate also lead in to the pond (Ref. 8).

Drainage from the north side of the facility flows toward Goodes Bridge Road or through a culvert that crosses the road from the east parking lot. Drainage from the south side of the facility, including the rear of the building, stormwater drainage, the former holding pond area, and the settling tanks, flows east and southeast to the small pond adjacent to the site. The pond drains into an intermittent stream that flows east and southeast of the facility toward U.S. Route 360 (Ref. 8).

2.3 OWNERSHIP HISTORY

WN Research, a holding company that merged with GBC in 1975, currently owns both Parcel A and Parcel B. The exact relationship between WN Research and GBC throughout the history of the site could not be determined.

According to records maintained at the Amelia County Clerk's office, the following presents the ownership history of each parcel of site property (Ref. 4):

Parcel A

January 22, 1973	GBC purchases 2.04 acres from F.J. and Mary Rudershausen.
December 11, 1963	F.J. and Mary Rudershausen purchase 1.45 acres from the Amelia Oil Company.
September 12, 1963	Amelia Oil Company purchases 28.42 acres, including 1.45 acres of Parcel A, from Lewis L. Davenport.

September 7, 1962	F.J. and Mary Rudershausen lease 0.59 acre to the VLC.
August 17, 1962	F.J. and Mary Rudershausen purchase 0.59 acre from the VLC.
November 16, 1960	VLC purchases 0.59 acre from C.F. and Rachel Bowlin.
June 12, 1957	C.F. Bowlin purchases 0.59 acre from Sam Davenport.
November 21, 1950	Sam Davenport acquires land, including 0.59 acre of Parcel A, in a deed of partition with C.F. Bowlin.

Parcel B (Note: Parcel B is located on a plot of land presently consisting of 29.23 acres)

October 25, 1979	GBC, as successor to WN Lane Research, gives 0.9 acre of the original plot to the Bank of Amelia; the size of the plot is reduced from 30.13 acres to 29.23 acres.
April 1, 1965	WN Lane Research purchases 30.13 acres from William Lane, acting under the name of Eldon.
October 31, 1963	WN Lane, acting under the name of Eldon, purchases 30.13 acres from C.F. and Rachel Bowlin.
November 21, 1950	C.F. Bowlin acquires 33.65 acres in a deed of partition with Sam Davenport.
November 21, 1950	C.F. Bowlin purchases 63.50 acres from Edward P. Abbott on November 21, 1950.

2.4 SITE USE HISTORY

GBC began operations at the site in 1973. Graphics and artwork for custom-ordered binder covers is performed on site, including photography, development, and transfer of images onto silk screens for printing; production; and assembly. Currently, 87 full-time employees work at the site (Ref. 8).

Prior to GBC's use of the site, VLC operated a laminating facility on a 0.59-acre parcel of the site during the 1950s and 1960s. VLC purchased the 0.59-acre parcel in November 1960, and subsequently sold the property in August 1962. GBC and VLC merged in 1962. VLC then leased the 0.59 acre property in September, 1962. It is unknown whether VLC actually used the property after September 1962, and it is unknown whether any activities took place at the site between 1962 and 1973. According to the current site representative, VLC may have moved onto the site as early as 1952 and made laminating

machines and film on site. These operations were reportedly moved to a GBC facility in Chicago at the time of the merger in 1962. According to a current employee of GBC, one laminating machine remained on site when GBC purchased the site in 1973. Further details on the activities of VLC were not identified (Refs. 4, 12).

A 1.45-acre portion of Parcel A was owned by the Amelia Oil Company from at least September to December 1963. Amelia Oil operated a fuel storage and filling station in an area west of the site. Several aboveground storage tanks and an apparently abandoned filling station are located on the adjacent property to the west of the site (Ref. 4, 8).

Information was not available concerning the use of the property prior to its use by VLC.

2.5 PERMIT AND REGULATORY HISTORY

According to files obtained from EPA Region III, the Virginia Department of Environmental Quality (VDEQ), Waste Division, and GBC, the following is a summary of permit and regulatory activities concerning the GBC site. No information could be located concerning events prior to 1980 (Ref. 1, 13).

November 20, 1980	GBC Graphics Products files a Notification of Hazardous Waste Activity (EPA Form 8700-12) for activity at the Amelia facility. Hazardous waste activity noted was the use of "under 2,200 pounds monthly" and "treat, store, dispose." RCRA hazardous waste codes from nonspecific sources, F003 and F005, were checked on the form. The form was apparently amended on March 23, 1981, to delete the "treat, store, dispose" category. A Virginia Department of Health inspector later identified that this form was filed due to the use of solvents at the facility only; it was not filed due to the generation of hazardous waste.
September 20, 1982	Virginia Department of Health, Division of Solid and Hazardous Waste Management inspects the GBC facility in Amelia. The inspector notes that solvents classified as hazardous waste categories F003 and F005 are used by this industry, and the inspection report states that this was why the facility filed a Notification of Hazardous Waste Activity. The inspector states that "no spent solvents or still bottoms are produced at this plant" and "this facility does not generate, transport, treat, store or dispose of hazardous waste."
May 6, 1987	GBC provides the Virginia State Water Control Board (SWCB) with analytical results of samples of the solids and liquids collected from the solids separator tanks and the holding pond. Sampling was performed

by Environmental Laboratories, Inc. (ELI), a consultant to GBC, and the presence of solvents and metals were noted (see Appendix C).

June 16, 1987 — The Virginia Department of Waste Management inspects the GBC facility in Amelia. The inspector notes that solvent-based inks were used prior to 1980, when they were replaced by ultraviolet inks. Two chemicals in use at the time of the inspection were identified as hazardous if disposed of in their original form: haze remover paste (containing 25 percent sodium hydroxide [NaOH], i.e., caustic soda) and General Binding Blend LT1800 (methyl ethyl ketone and xylene, flash point 23°F). These compounds are used to clean the silk screens and are applied with rags. The rags are picked up and cleaned by National Linen Service.

Screens used at the facility are washed with high-pressure water. The water travels to two in-gravel concrete tanks where solids settle out. The liquid flows through the tanks to the holding pond. The inspector reported that the impoundment had accidentally overflowed due to liquid sent to it during a second shift. Dikes on the holding pond were reportedly raised to contain any future overflow. However, current site representatives could not recall any overflow incidents. No liner was apparent in the impoundment. The inspection report notes the analysis of wastewater and sludge at the facility does not correspond with the correct practice of solvent management. In a follow-up letter to the company, the Division of Waste Management requests that sampling be conducted on the sludge in the settling tanks for methyl ethyl ketone, xylene, cyclohexanone, and all EP toxic metals. No record of this sampling could be located, and it is unknown if any subsequent action was taken in response to this request.

2.6 REMEDIAL ACTION TO DATE

The only remedial action performed at the GBC site was the closure of the facility's holding pond in 1991, which was performed at GBC's initiative. The holding pond had been used to hold liquids after they passed through the two settling tanks where solids settled out.

The approximately 15-foot by 30-foot holding pond was used as a surface impoundment prior to 1991. According to a site representative, the pond had a clay liner and no discharge outlet; liquid was allowed to evaporate. According to documentation from the Virginia SWCB, the pond reportedly overflowed at times during its use and the dikes were raised sometime prior to 1987. According to the site representative, however, the dikes were raised to prevent any overflow and to the best of his knowledge no overflow incidents had occurred (Refs. 8, 12).

Separator (settling tank) liquids and solids and holding pond liquids and solids were collected and sampled in early 1986 by ELI, of Ashland, Virginia, a contractor to GBC. Sample analysis indicated levels above background of cadmium, chromium, and lead in the holding pond and separation solids. In addition, levels above background of t-butanol, cyclohexanone, methyl ethyl ketone, naphthalene, phenol, and other organic compounds were detected in the separation solids. Various metals and organic compounds were detected in levels above background in the holding pond and separation liquids. Cyclohexanone, acetone, and methyl ethyl ketone were also identified in the separator liquid (see Appendix C) (Refs. 1, 13).

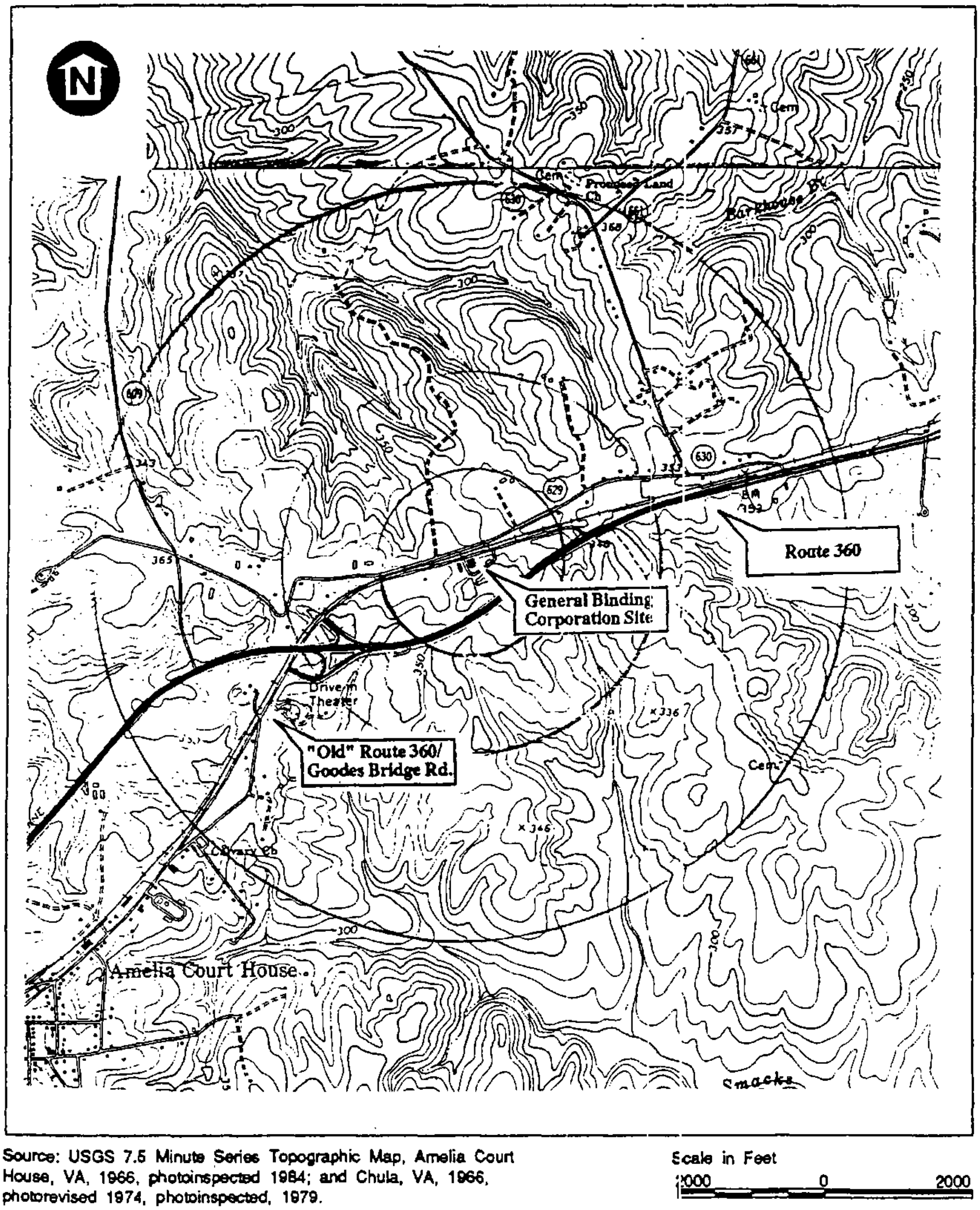
Further sampling of wastewater at the site was performed by ELI in 1987. Sampling indicated the presence of many of the same constituents as the 1986 analysis, and 0.735 mg/L of 1,1,1-trichloroethane. It is unclear whether wastewater was collected from the holding pond or the settling tank (Refs. 1, 13, 14).

In the spring of 1991, GBC decided to close the holding pond. Samples of pond liquids were collected at that time, and samples of soil beneath the pond were collected later. The soil in the clay liner was removed and staged on a plastic pad nearby pending the sampling results. Chromium and silver were detected in holding pond liquids at concentrations below 1 ppm, and silver was detected in a composite soil sample at a concentration below 1 ppm (see Appendix D) (Ref. 14). Apparently, sample analysis did not include testing for several compounds that had elevated levels in the 1986 testing (Ref. 14).

Based on the 1991 sample results, GBC classified the holding pond liquids and soil as nonhazardous. Approximately 19,920 gallons of liquid were transported under a nonhazardous waste document to a permitted industrial wastewater disposal facility in Richmond, Virginia. The soil removed from the holding pond was used as backfill for the area of the holding pond. The remedial contractor, WL Black and Associates of Chesapeake, Virginia, stated in a letter to the site manager that, "tests [of the soil] confirm that the clay barrier prevented infiltration and prevented groundwater contamination." The testing of groundwater was not mentioned in the remedial report, and thus was presumably not done. The GBC closure was performed independently without any oversight from state officials (Refs. 12, 14).

According to the current site manager, GBC has changed the types of inks, cleaning fluids, solvents, and other chemicals in an effort to use materials with constituents that are

less hazardous. The facility converted from solvent-based inks to ultraviolet-activated inks in 1980 and has changed numerous other products since then (Ref. 8).



Source: USGS 7.5 Minute Series Topographic Map, Amelia Court House, VA, 1966, photoinspected 1984; and Chula, VA, 1966, photorevised 1974, photoinspected, 1979.

Scale in Feet
2000 0 2000

Figure 2-1
SITE LOCATION MAP, GENERAL BINDING CORPORATION
AMELIA, AMELIA COUNTY, VIRGINIA

3. ENVIRONMENTAL SETTING

3.1 WATER SUPPLY

The 4-mile-radius study area of the GBC site is entirely within Amelia County. Residents within the study area rely solely on private wells for drinking water. According to a sanitarian with the Amelia County Health Department, no municipal water systems serve the village or county of Amelia. A water well is located on the GBC site, which provides drinking water for the 87 facility employees. This well is approximately 200 feet deep, has a static water level of approximately 40 feet below ground surface (bgs), and yields approximately 12 gallons per minute (gpm). The nearest residential water well is presumed to be located at a house approximately 0.2 mile east of the site on Goodes Bridge Road. No information could be obtained pertaining to this well (Refs. 7, 8).

The distribution of private wells and the estimated number of private well users within a 4-mile radius of the site are presented below:

Distance From Site (miles)	Number of Wells	Estimated Number of Users
On site	1	87
0 to 0.25	2	6
0.25 to 0.5	8	22
0.5 to 1	52	146
1 to 2	249	697
2 to 3	232	650
3 to 4	181	507
Total within 4 miles:	725	2,115

Well data are based on the following assumptions:

- The intervals presented are distances from the site. The data presented within each interval are not cumulative;
- The on-site well was observed during the PA site visit and the number of full-time employees was provided by the site representative at that time. All full-time employees were included as users of the GBC well;
- The number of private well users was estimated by counting structures located within each distance interval as indicated on the USGS topographic maps for the Amelia Courthouse, Jeffersville, Ballsville, and Chula, Virginia, quadrangles (Ref. 7); and
- Each structure, except for churches and cemeteries, was assumed to be a residence. Each residence is assumed to have one private well for household drinking water use; and
- Each residence is assumed to have 2.80 persons, based on the average household size for Amelia County as indicated by 1990 census data (Ref. 16).

A 4-mile radius map of the study area is included as Figure 3-1, which is located in the back pocket at the end of this report. Distance intervals are noted on this map.

3.2 SURFACE WATERS

According to site representatives, the main production area contains no floor drains and none were observed during the site visit. Pipes lead from the photo developer and from the screen wash area to two concrete tanks located outside, immediately east of the main production area. Solids settle out from the liquid before the liquid is discharged to the facility's leach field. The leach field, which is located in an open field located southeast of the facility along U.S. Route 360, is linked to the settling tanks by a pipe that runs through the dam on the adjacent pond (Refs. 7, 8, 12).

No other obvious drainage paths from the inside of the facility to the surrounding area were noted during the site visit, but the facility includes stormwater channels to carry rainwater from the roof. Liquid that accumulates in any part of the facility is reportedly mopped up and disposed of through the washroom basin in the screen waste area that is connected to the settling tanks (Ref. 8).

Surface runoff from the south side of the facility flows either south toward a small pond located adjacent to the site, or southeast through the grassy area that is the site of a

former holding pond and into a wooded area east and southeast of the site. The probable point of entry (PPE) of drainage from the site is assumed to be the small pond. The pond drains through an earthen dam into an intermittent stream that flows south across U.S. Route 360. This stream becomes perennial at a point 0.75 mile downstream of the pond and enters Smacks Creek at a point 1.2 miles downstream of the pond. Smacks Creek then flows east for approximately 3 miles through several wetland areas, turns northeast and enters the Appomattox River approximately 11 miles downstream from the pond. The Appomattox River flows east from this point; the 15-mile downstream study area limit is located approximately 1.5 miles downstream of where Bevil's Bridge (Route 602) crosses the Appomattox River. Drainage from the north side of the facility is toward Old Route 360, or through a culvert that crosses the road from the east parking lot (Refs. 7, 8, 11).

Prior to its closure in 1991, any overflow from the holding pond would probably have followed the same route as drainage originating from the south side of the facility. According to a site representative and documents provided by GBC, there was no outlet on the former holding pond that allowed for regular or periodic drainage. Site representatives recalled no overflow incidents (Refs. 12, 13).

No stream flow data could be obtained for Smacks Creek. A water gauge on the Appomattox River at Mattoax, upstream of the mouth of Smacks Creek, indicated an annual mean flow of 706 cubic feet per second (cfs) for the water years 1926 to 1991 (Ref. 9). It is assumed that the pond adjacent to the site, the small stream at the point it becomes perennial, Smacks Creek, and the Appomattox River are used as recreational fisheries. According to the site maintenance supervisor, the pond contains bluegills and local residents fish in it (Ref. 8).

No surface water intakes were identified along the 15-mile surface water study area by either the Amelia County Health Sanitarian or by a senior engineer from the Chesterfield County Department of Utilities (Ref. 8).

3.3 HYDROGEOLOGY

The geological and hydrogeological conditions in this study area were researched as part of the site investigation. A preliminary literature review was conducted to determine surface and subsurface geologic conditions, soil character, and the status of groundwater transport and storage.

3.3.1 Geology

The site is located in the eastern portion of the Piedmont physiographic province in Virginia. This province is comprised of gently rolling hills and northeast-southwest trending ridges. The region consists primarily of metamorphic rocks with igneous intrusions of various sizes. Major rocks in the region include gneiss, slate, quartzite, marble, and schist. A fairly continuous layer of loose, weathered material covers the bedrock. Due to the type of rock, water follows a dendritic drainage pattern. Clay, which has a high porosity and low permeability, is predominant in much of the region (Refs. 2, 3, 10).

The specific geology of Amelia County has not been mapped. Overall, the surficial geology of the county consists of metamorphic rocks and igneous intrusions consisting of slate, schist, phyllite, quartzite, metamorphosed arkose and conglomerate, greenstone, diorite, and gabbro. The western part of the county contains north-south trending intrusions of granite and gneiss that include granite, granodiorite, augengneiss, and granite gneiss. No specific information was available concerning the geology underlying the site (Ref. 3).

3.3.2 Soils

Amelia County has not been mapped by the Soil Conservation Service; therefore, specific information on the types of soil found at the GBC site was not available. Information concerning soil conditions in the central portion of Amelia County was provided by a member of the Soil Conservation Service, based on data representative of the center of Amelia County (Ref. 6).

Three soil types are present: fine sandy loam, Poindexter loam, and Poindexter sandy loam. The fine sandy loam has a moderately rapid permeability in the surface soil and a moderate permeability in the subsoil. The Poindexter loam and Po ndexter sandy loam have a moderately rapid permeability in the surface and subterranean soils, and a moderate permeability in the subsoil. Slopes generally range from 7% to 15% (Ref. 6).

3.3.3 Groundwater

Specific information concerning the hydrological conditions associated with the GBC site is not available. The information presented is based on a profile of general hydrologic features appropriate to non-triassic areas of the Piedmont physiographic province.

Groundwater in the Piedmont section of the James River basin occurs in pore spaces and joints in fractured quartz veins within saprolite and in fractures in the underlying

unweathered rock. The unweathered rock may be composed of dense granite, gneiss, schist, or other varieties of acid or base intrusive rocks that have been altered by metamorphism (Ref. 10).

Saprolite contains a greater percentage of void space and holds more water in storage than the underlying unweathered rock. However, joints and fractures in the highly weathered zone are usually filled with fine material. Although the porosity may be high, the permeability of the highly weathered zone is usually low. Studies of the permeability of saprolite derived from mica schist in the Georgia section of the Piedmont physiographic province show that the permeability of the highly weathered zone is usually low. Studies of the permeability of saprolite derived from mica schist in the Georgia section of the Piedmont show that the permeability of the saprolite ranged from 0.007 to 9.0 gallons per day per square foot, and the permeability of the underlying unweathered rock ranged from 0.001 to 0.00004 gallons per day per square foot (Refs. 2, 10).

Wells in the Piedmont are typically 6 inches in diameter, 50 to 150 feet deep, and are cased to the top of the unweathered zone. Well yields typically range from 0.14 to more than 100 gpm. Water-bearing fractures are usually most prevalent in the top 200 feet of the unweathered rock; below this depth, fractures are usually smaller and have finer interconnections (Refs. 2, 10).

Studies of the Piedmont physiographic province in Pittsylvania and Halifax counties in southern Virginia showed that in approximately 90% of the wells most of the water available is reached at a depth of less than 175 feet. In approximately 80% of the wells most of the water is reached at a depth of less than 125 feet. Average depth of wells was 156 feet and had an average yield of 14 gpm (Refs. 2, 10).

The GPC on-site well used for drinking water is approximately 200 feet deep, has a static water level of 40 feet bgs, and yields approximately 12 gpm. A second on-site well provides water for fire protection. This well is 300 feet deep and yields 10 gpm (Ref. 8).

3.4 CLIMATE AND METEOROLOGY

The GBC site lies in a the Piedmont region of Virginia, which experiences a mild, humid climate. The average daily maximum temperature for summer is 88°F, and the average daily minimum temperature is 64°F. The average daily maximum temperature for winter is 46°F, and the average daily minimum temperature is 22°F (Ref. 2).

Precipitation is evenly distributed throughout the year; however, there are usually slight increases in the late spring and summer and slight decreases in the winter (Ref. 2). The average annual precipitation is 43 inches. The two-year, 24-hour rainfall event for the area produces approximately 3.7 inches (Ref. 5).

No information for evapotranspiration rates on lake evaporation was available for Amelia County. The primary source of groundwater infiltration is from local precipitation. Evapotranspiration may be responsible for some of the water loss; otherwise, water is discharged into streams or springs. During periods of low precipitation, the flow of large streams is maintained by base flow. The average yearly precipitation total in the study area is 43 inches. *Studies of hydrologic cycles in the Maryland portions of the Piedmont* estimate that effective recharge (water not lost due to evaportranspiration) ranges from 8.5 to 11.3 inches and 20 to 27 percent of precipitation received. Applying these percentages to the local precipitation total yields a range of effective recharge from 8.6 to 11.6 inches per year. Records kept at a gauging station on the Appomattox River near Mattoax, Amelia County, indicated average annual runoff of 13.21 inches (Refs. 9, 2).

3.5 LAND USE

Land use within a 4-mile radius of the site is predominantly rural; residences occur sporadically, and much of the area consists of farmland and dense forests. Land surrounding the site consists of a relatively level area between and around Route 360 and Business Route 360.

A gas station, a convenience store, and a building housing a feed and farm supply store are located south of the site on Route 360. The feed store is immediately south of the pond that abuts the GBC site (Ref. 8). A hotel, a restaurant, and several other commercial developments are located south of Route 360. The village of Amelia is located approximately 0.75 mile southwest of the site. No other towns are located within 4 miles of the site (Ref. 8).

3.6 POPULATION DISTRIBUTION

Land within the 4-mile-radius study area of the site includes the village of Amelia and rural areas. Population counts within the study area are as follows:

Distance From Site (miles)	Estimated Population
On site	87
0 to 0.25	6
0.25 to 0.5	22
0.5 to 1	146
1 to 2	697
2 to 3	650
3 to 4	507
Total within 4 miles	2,115

Population data was based on the following:

- The intervals are taken as distances from the site and the data presented within each interval are not cumulative;
- The population count was estimated by making a count of structures located within each distance interval as noted on the USGS topographic maps for the Amelia Courthouse, Jeffersonville, Ballsville, and Chula, Virginia, quadrangles (Ref. 7);
- Each structure, except churches and cemeteries, is assumed to be a residence; and
- Each residence is assumed to have 2.80 persons, based on the average household size for Amelia County as indicated by 1990 census data. (Ref. 16).
- The on-site population consists of employees of GBC.

3.7 CRITICAL ENVIRONMENTS

A records search of the Virginia Division of Natural Heritage (DNH) was performed using the Biological and Conservation Data System to determine the occurrences of natural heritage resources within a 1-mile radius of the site and along the 15-mile surface water pathway (Ref. 17). DNH has no record of any rare, threatened, or endangered species within in the study area. However, the data system is not complete, and the absence of documented sightings in the DNH files does not exclude the possibility of critical species occurring in the area (Ref. 17).

Several wetlands are located along the 15-mile surface water pathway of the site. Drainage from the site flows south for 1.2 miles, joins Smacks Creek, and flows through several wetlands before entering the Appomattox River. The locations of wetland areas proximate to the site are presented below (Ref. 11):

Distance Interval (miles)	Wetland Area (acres)	NWI Classification
0 to 0.25	1	Intermittently exposed, open water, palustrine.
0.25 to 0.5	< 0.1	Temporary, broad-leaved deciduous, palustrine.
0.5 to 1	5	Intermittently exposed, open water, palustrine.

The most probable drainage route from the site was identified and used as the baseline for the wetland characterization below. The following wetlands were identified within the 15-mile surface water pathway from the site.

Stream Miles From Site	Total Wetland Frontage (miles)
1.2	2.4
2.8	2.0
4.0	3.0
6.0	10.0
10.8	0.2
11.2	0.5
11.7	6.0

4. WASTE TYPES AND QUANTITIES

There are three potential hazardous waste streams at the GBC site: chemicals associated with photographic development, compounds used in the cleaning of silk screens, and waste inks.

A variety of developer chemicals are used to develop photographs on site. Listed below are compounds identified by a GBC representative as currently used at the site (Ref. 15.):

Material	Principle Hazardous Components	Percentage
Pitgo hardener	aluminum sulfate acetic acid	20 to 25 0.5 to 5
Pitgomatic 33 fixer	ammonium thiosulfate acetic acid	10 to 20 1 to 5
Kodalite Blender Concentrate Solution No. 1	potassium hydroxide dietnanolamine	1 to 5 7
Kodalite Blender Concentrate Solution No. 2	hydroquinone methanol	10 2
Kodalite Blender Concentrate Solution No. 3	hydroquinone methanol	8 2

Some of these materials are mixed with water prior to their use. The used solutions pass from the developer through a silver recovery unit prior to being piped to two settling tanks (Ref. 8). Material Safety Data Sheets (MSDSs) for these compounds are included in Appendix E.

A positive photo image is transferred to silk screens by use of a photosensitive emulsion. Under exposure to light, the emulsion hardens in areas surrounding the desired image. The emulsion covering the image does not harden and is washed off prior to printing. When an image is no longer required, the image is cleaned off the screen by the use of

cleaning solvents so that the screen can be reused (Refs. 8, 12). During screen preparation and cleaning, the following compounds are reportedly used (MSDSs for these compounds are included in Appendix F) (Ref. 15):

Material	Principle Hazardous Components	Percentage
CPX Haze Remover Liquid (EPA hazardous waste No. D002) (caustic water solution)	sodium hydroxide trade secrets	15 (maximum) Unknown
ICC 757 - Ghost/Haze Remover	sodium hydroxide cyclohexanone	not identified not identified
CPS Screen Wash A(8) (EPA hazardous waste No. D001) (organic solvent mix)	trade secrets	not identified
ICC 833 Stencil Remover	none indicated	not identified
"ICC 831 Ink Degradient"	glycol ethers	15 (maximum)
"ICC 845 Spray/Wipe"	glycol ethers	35 (maximum)
Plate Gum	none indicated	not identified

Screens are washed in the rinse basins and the washroom. Drains from these basins lead to the two settling tanks where solids separate out. The remaining liquids drain to the leach field located southeast of the facility. A pipe leads from the settling tanks through the dam on the pond located adjacent to the site. Prior to 1991, these tanks were linked to an on-site holding pond. This holding pond was drained in spring 1991, and 19,920 gallons of liquid were transported under a nonhazardous waste manifest to a permitted water treatment facility (Refs. 8, 12, 14).

Analysis of the settling tank liquids and solids collected from the facility in 1986 indicated the presence of cadmium, chromium, lead, cyclohexanone, acetone, methyl ethyl ketone, and other hazardous constituents at levels above background. Analytical results for samples collected from the holding pond in 1986 indicated cadmium, chromium, and lead in solids. Analytical results for liquids indicated the presence of cadmium, chromium, lead, acetone, methyl ethyl ketone, and other analytes at concentrations above background (see Appendix C) (Refs. 1, 13).

Holding pond liquids and solids were also analyzed in 1991 at the time of closure. Arsenic, chromium, and silver were detected at concentrations below 1 ppm in liquid samples, and arsenic and silver were detected at concentrations less than 1 ppm in soil

samples. Apparently, the 1991 analysis did not include all of the parameters detected above background in the 1986 sampling (see Appendix D) (Ref. 14).

Currently, GBC uses inks that change from a liquid to a solid state under exposure to ultraviolet light. (An MSDS for a representative of the UV inks is included in Appendix G.) These inks replace the solvent inks that were employed prior to 1980. No information could be located concerning events and site processes prior to 1980. According to a site representative, chemicals used for photographic development and screen cleaning have reportedly been changed over the years to use "less hazardous" materials (Ref. 8). Waste inks that exceed their shelf life or are no longer used are manifested as "nonregulated removable ink," but they are included on a uniform hazardous waste manifest and disposed of at Allworth, Inc. in Mount Pleasant, Tennessee, under GBC's EPA generator number VAD040157323 (Ref 18).

The drum storage shed is used to store hydraulic oil, isopropyl alcohol, blanket and roller wash, screening sludge, waste oil, and waste ink prior to their use or disposal. The waste oil is reportedly hauled to an oil recycler.

Screening sludge, which originates in GPC's settling tanks, is currently being profiled for hazardous constituents prior to its disposal. E & E has requested a copy of the profile results from GBC; when received, it will be added to the site file (Ref. 12). Reportedly, the sludge has only been cleaned out twice in the history of its use. GBC could not locate a manifest for the sludge that was previously removed from the tanks (Refs. 8, 12).

5. FIELD TRIP REPORT

On Wednesday, August 18, 1993, E & E personnel Dave Bailey and Rich Walter visited the Amelia County Department of Health to gather information on wells and water supplies, and met with George Sawyer, a sanitarian with Amelia County. The team then visited the Amelia County Clerk's Office to review property deed records concerning the site.

On Thursday, August 19, 1993, the team conducted a site visit of the GBC site in Amelia, Virginia. The team arrived at the site at 10:00 a.m. and met Jerry Morris, the plant manager. The team interviewed Mr. Morris concerning current and past plant operations prior to inspecting the facility.

The team and the site representative toured the entire interior of the plant and walked outside the facility perimeter (see Appendix A). The only discolored water noted during the facility visit was in the concrete settling tanks. No odors were noted, due to operational difficulties associated with the Organic Vapor Analyzer. No elevated readings of ethane or methane were detected on the OVA during the site visit. The radiation detector (rad mini) indicated no levels above background.

5.1 PERSONAL INTERVIEWS CONDUCTED

5.1.1 Prior to Field Trip

Mr. George Sawyer
Sanitarian
Amelia County Health Department
Amelia, Virginia 23002

5.1.2 During the Site Visit

Mr. Jerry Morris
GBC Plant Manager
Box 215
Amelia, Virginia 23002
(804) 561-2531

6. REFERENCES

1. Virginia Department of Environmental Quality (DEQ), Waste Management Division, RCRA file on General Binding Corporation (GBC), Richmond, Virginia.

2. Powell, John and Joseph M. Abe, 1985, *Availability and Quality of Ground Water in the Piedmont Province of Virginia*, United States Geological Survey (USGS), Water Resources Investigations Report. No. 85-4235.

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13. United States Environmental Protection Agency (EPA), Region III, file on General Binding Corporation (GBC), EPA ID No. VAD040157323.

14. WL Black and Associates, General Binding Corporation (GBC), July 17, 1991, laboratory sampling and related documents (holding pond closure).

15. General Binding Corporation (GBC), October 1, 1993, Material Safety Data Sheets provided by Betsy T. Cadden, Attorney, General Binding Corporation (GBC).

16. Bureau of the Census, August 1991, *1990 Census of Population and Housing, Virginia.*

17. O'Connell, Timothy, August 19, 1993, Department of Conservation and Recreation, Division of National Heritage Information, letter to R. Walter, Ecology and Environment, Inc. (E & E), Arlington, Virginia.

18. Uniform Hazardous Waste Manifest, May 14, 1993, Non-Regulated U.V. Curable Ink, EPA ID No. VAD040157323, Document No. 03789.

APPENDIX F

Phase I Environmental Site Assessment Report

Prepared by

URS Corporation

URS

2.1 AC only

PHASE I ENVIRONMENTAL SITE ASSESSMENT GENERAL BINDING CORPORATION – AMELIA FACILITY

15401 Goodes Bridge Road
Amelia, Virginia

Prepared for:

General Binding Corporation
1 GBC Plaza
Northbrook, Illinois 60062

Prepared by:

URS Corporation
1701 Golf Road, Suite 1000
Rolling Meadows, Illinois 60008
June 12, 2003
URS Project No: 32974-012

EXECUTIVE SUMMARY

URS Corporation (URS) was retained by General Binding Corporation (GBC) to conduct a Phase I Environmental Site Assessment (ESA) of the GBC – Amelia Facility located at 15401 Goodes Bridge Road in Amelia County, Virginia (subject property).

This Phase I ESA was conducted in general conformance with American Society for Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (Standard Designation E 1527-00), published July 2000, URS' proposal dated May 9, 2003, and Harris Bank's Minimum Phase I Environmental Site Assessment Standards.

The subject property is approximately 2.1 acres in size and is developed with an office and manufacturing building (subject building), two outbuildings, a water tower, two paved parking areas and roadways, limited grassy areas, and a vegetated undeveloped parcel east of the developed area. The subject building is a one-story structure on concrete slab that includes approximately 7,000 square feet of office space and 36,000 square feet of manufacturing space. The subject building was constructed in stages, with completion in 1973. The subject building is currently utilized as an office and manufacturing facility by GBC.

A review of historical reports and interviews with GBC personnel revealed that the subject property was previously occupied by Virginia Laminating Company.

Based on information obtained by URS during this Phase I ESA, the following on-site Recognized Environmental Condition (REC) was identified:

- The facility is currently listed in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database. A review of available information from the U.S. Environmental Protection Agency (USEPA) and historic reports provided by Mr. John Moynihan of GBC indicates that a Preliminary Assessment (PA) was conducted by the USEPA in 1994. The CERCLIS database indicates that a Site Investigation (SI) is needed at the site.

  Available information indicates that the USEPA's environmental concern at the facility relates to two settling tanks and a surface impoundment. Prior to the termination of custom printing operations in 2002, wastewater from the screenwash operations discharged to the settling tanks. Prior to 1991, the wastewater from the settling tanks discharged to the surface impoundment. In 1991, the surface impoundment was emptied and backfilled. After 1991, the wastewater from the settling tanks discharged to a drain field that is described in the 1994 PA as being southeast of the subject building. At some point between 1994 and 1999 the wastewater from the settling tanks was redirected to discharge to the Amelia County Sewer System. Note that the location of the former surface impoundment and drain field are unclear, but believed to be on the current GBC property.

  The USEPA designation of the facility in the CERCLIS database indicates that more information is needed in order to determine whether to place the facility on the National Priorities List.

No off-site RECs were identified associated with the subject property.

The following environmental issue was identified associated with the subject property:

- Based on the age of the subject building (1962 to 1973), it is possible that asbestos-containing material (ACM) exists in the subject building. Prior to demolition, renovation, etc., suspect materials observed in the subject building should be sampled and tested for asbestos.

APPENDIX G

Limited Phase II Environmental Site Assessment

Prepared by

Froehling & Robertson, Inc.

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FROEHLING & ROBERTSON, INC
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LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT
GENERAL BINDING CORPORATION SITE
Amelia, Virginia

F&R PROJECT NO. F54-103E

Prepared For:
F&P Enterprises, L.C.
15961 Goodes Bridge Road
Amelia, Virginia 23002

Prepared By:
Froehling & Robertson, Inc.
3015 Dumbarton Road
Richmond, Virginia 23228
Telephone: (804) 264-2701
Facsimile: (804) 266-1275

Issue Date: June 17, 2004

Prepared By:

Ron W. Etter, CHMM
Environmental Manager

Reviewed By:

Jeffrey M. Hudson
Director, Environmental Services

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TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

Froehling and Robertson, Inc. (F&R) conducted a Limited Phase II Environmental Site Assessment (ESA) of the General Binding Corporation (GBC) Site located at 15401 Goodes Bridge Road in Amelia, Virginia. The site is currently vacant and formerly used for manufacturing notebook binders and tabs. F&R was retained by F&P Enterprises L.C. to conduct the Limited Phase II ESA in response to concerns outlined in the Phase I ESA prepared by URS dated June 12, 2003. Specifically these concerns relate to the settling tanks and associated drain field and former surface impoundment which received wastewater from the screen wash operation.

The work consisted of a subsurface assessment in various locations down gradient of the settling tanks as identified on the URS Photo Location Map. F&R advanced a hand auger between six and fourteen feet below grade in six locations. Five soil probes were conducted between the settling tanks and the eastern property boundary and one soil probe was conducted in the area of the former site pond southeast of the site building. Additionally, the on site shallow drinking water well was sampled. Please refer to Appendix A for the soil probe locations.

Composite samples were taken from depths of two feet to twelve feet in soil probes SP-1 through SP-5. A grab sample was collected at a depth of four and one half feet from SP-6 due to evidence of possible contamination at that depth. Samples were submitted to F&R's analytical laboratory for analysis of semi-volatile organic compounds, Volatile organic compounds, pesticides and RCRA Metals. The analytical results indicate that volatile organic compounds were below the quantifiable limits in all of the soil samples analyzed. Semi-volatile compounds were below the quantifiable limits for all of the samples analyzed, with the exception SP-2 which had a bis(2-Ethylhexyl)phthalate concentration of 0.6 milligrams per kilogram (mg/kg). Pesticide concentrations were below the quantifiable limits, with the exception of SP-6 which had a endosulfan sulfate concentration of 0.05 mg/kg. RCRA metals concentrations were below the quantifiable limits for arsenic, selenium, mercury, and silver, with the exception of SP-2 which had a selenium concentration of 20 mg/kg. Barium, cadmium, chromium and lead were above the detection limits in all of the soil samples analyzed, but below the regulatory limits for hazardous waste.

The drinking water well sample analysis indicates concentrations below the quantifiable limits for all analyzed compounds, with the exception of barium which had a concentration of 0.17 mg/kg.

2.0 OBJECTIVES

F&R was retained by F&P Enterprises, L.C. to conduct sampling and analysis of the General Binding Corporation Site located at 15401 Goodes Bridge Road in Amelia, Virginia. Our work was conducted in general accordance with industry standards.

2.1 PURPOSE AND SCOPE OF SERVICES

The purpose of the scope of work was to determine if the site has been impacted by the historical and current uses of the property outlined in the URS Phase I ESA dated June 12, 2003. The tasks completed by F&R as part of the assessment of the site included the following:

- Advancement of six soil probes to depths of zero to twelve feet in the former pond area southeast of the main site building and down gradient of the settling tanks that serviced the screen wash operation;

- Collection of one soil sample from each soil probe location for laboratory analysis of Semi-Volatile Organics, Volatile Organics, Pesticides and RCRA Metals;

- Collection of one water sample from the shallow drinking water well for laboratory analysis of Semi-Volatile Organics, Volatile Organics, Pesticides and RCRA Metals;

- Preparation of the Report.

2.2 LIMITATIONS

This report has been prepared for the exclusive use of F&P Enterprises, L.C. on this specific project. Our tasks have been performed in accordance with generally accepted environmental practices. As with any subsurface investigation, actual conditions exist only at the precise locations from which the samples were taken and do not include a complete evaluation of the groundwater on-site. Certain inferences are based on the results of sampling and related testing to form a professional opinion of condition in areas beyond those from which the samples were taken. No other warranty, expressed or implied, is made. Our conclusion and recommendations are based upon information provided to us by others and our site observations. Our observations are based upon conditions readily visible at the time of our site visit. The content of the report should not be construed in any way as a recommendation to purchase, sell, or develop the project site.

F&R by virtue of providing the services described in this report, does not assume the responsibility of the person(s) in charge of the site, or otherwise take responsibility for reporting to local, state, or federal public agencies any conditions at he site that may

present a potential danger to public health safety or the environment. We understand that the client will notify appropriate regulatory agencies of potential impact, risks, or other requirements as necessary. F&R assumes no responsibility for investigation, remediation, or liability associated with environmental impact to or from the project property regardless of the date of impact discovery.

3.0 SAMPLING AND ANALYTICAL RESULTS

3.1 DESCRIPTION OF SAMPLING ACTIVITIES

On June 9, 2004, F&R advanced six soil probes on the subject site with a stainless steel hand auger. Soil samples collected from each probe location were placed in glass jars. The soil was observed for evidence of contamination. The visual inspection of the soil did not reveal obvious evidence of contamination in five of the six probe locations. SP-6 did show evidence of possible contamination at a depth of four and one half feet. The evidence was in the form of discolored soil and a slight, atypical odor. Soil probe SP-1 consisted of organic material form 0 to 3 inches and red clay from 3 inches to 12 feet below ground surface. SP-3, SP-4 and SP-5 consisted of organic material from 0 to 6 inches, red sand from 6 inches to 3 feet and red clay from 3 feet to 12 feet. SP-6 consisted of organic material and gravel from 0 to 18 inches and red clay from 18 inches to 3 feet. From 3 feet to 4.5 feet a tan clayey sand was encountered with a slight odor which was inconsistent with the previous soil probes. The soil samples were placed in an iced cooler, entered into formal chain-of-custody control and transported to F&R's analytical laboratory by F&R personnel. A Site Observation Map is included in Appendix A.

The on site drinking water well was sample by lowering a collection jar directly into the well to retrieve the sample. The water sample was placed in an iced cooler, entered into formal chain-of-custody control and transported to F&R's analytical laboratory by F&R personnel. A Site Observation Plan is included in Appendix A.

3.2 ANALYTICAL RESULTS

The soil samples from the six probe locations and the drinking water well were submitted to F&R's analytical laboratory for analysis of Semi-volatile organics, volatile organics, pesticides and RCRA Metals.

The analytical results indicate that volatile organic compounds were below the quantifiable limits in all of the soil samples analyzed. Semi-volatile compounds were below the quantifiable limits for all of the samples analyzed, with the exception SP-2 which had a bis(2-Ethylhexyl)phthalate concentration of 0.6 milligrams per kilogram (mg/kg). Pesticide concentrations were below the quantifiable limits, with the exception of SP-6 which had an endosulfan sulfate concentration of 0.05 mg/kg. RCRA metals concentrations were below the quantifiable limits for arsenic, selenium, mercury, and

silver, with the exception of SP-2 which had a selenium concentration of 20 mg/kg. Barium, cadmium, chromium and lead were above the detection limits in all of the soil samples analyzed, but below the regulatory limits for hazardous waste.

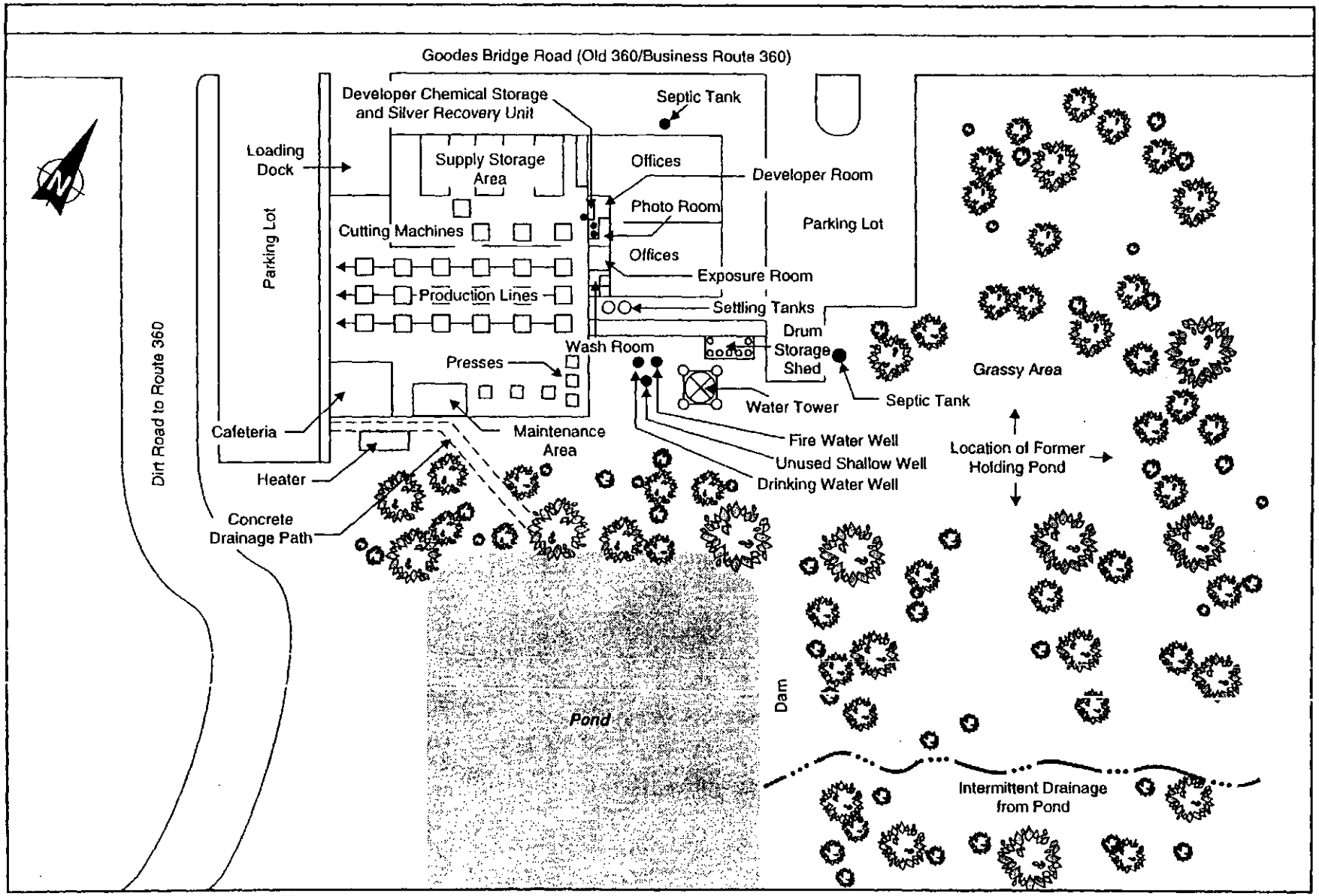
The following table presents the results of the metals analysis results for the samples collected:

Analysis	SP-1	SP-2	SP-3	SP-4	SP-5	SP-6	DW-1
Arsenic	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Barium	48	36	17	13	37	37	0.17
Cadmium	4	6	4	3	3	1	BQL
Chromium	30	47	45	33	26	13	BQL
Lead	34	36	30	20	26	14	BQL
Selenium	BQL	20	BQL	BQL	BQL	BQL	BQL
Silver	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Mercury	BQL	BQL	BQL	BQL	BQL	BQL	BQL

The drinking water well sample analysis indicates concentrations below the quantifiable limits for all analyzed compounds, with the exception of barium which had a concentration of 0.17 mg/kg. The Certificate of Analysis is included in Appendix B.

APPENDIX A
SITE OBSERVATION PLAN

11: ZE5631.CDR

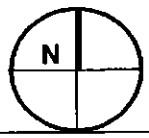


SOURCE: Ecology and Environment, Inc. 1993

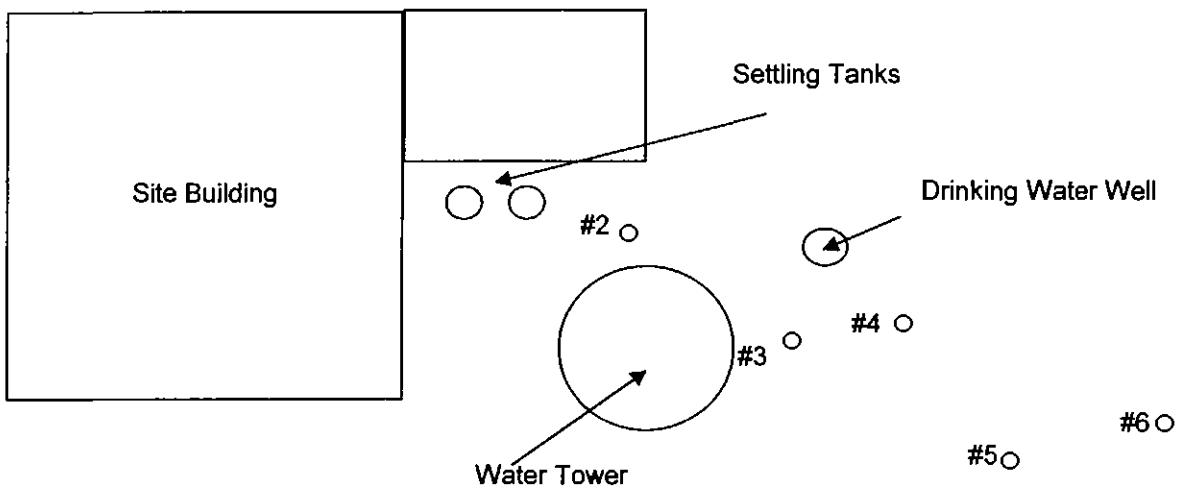
NOT TO SCALE

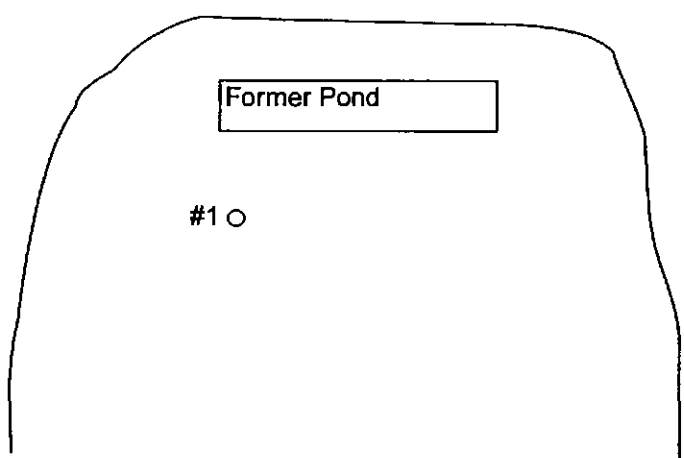
NOTE: One of leach field is north of Old 360 (not included in figure).

Figure 2-2 SITE LAYOUT, GENERAL BINDING CORPORATION, AMELIA, VIRGINIA



ROUTE 360





Froehling & Robertson, Inc.

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SITE OBSERVATION PLAN

General Binding Corporation Site
15401 Goodes Bridge Road
Amelia, Virginia

DRAWN:	RWE	SCALE:	NTS	PROJ NO:	F54-103E
CHKD:	RWE	DATE:	17-Jun	DWG NO:	1

APPENDIX B
CERTIFICATES OF ANALYSIS

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CERTIFICATE OF ANALYSIS

June 16, 2004

LAB #: 0406103

CLIENT: F&R Environmental
Ron Etter

PROJECT NAME: General Binding
PROJECT NO OR PO: F54-103E
LAB RECEIPT: 6/9/2004
SAMPLED BY: Ron Etter

PARAMETER	ANALYSIS DATE/TIME	METHOD	ANALYST
Metals Digest	6/15/04, 0800	SW846/3050 B	TG
Mercury	6/15/08, 1540	SW846/7471 A	EO
RCRA Metals	6/15/04, 1800	SW846/6010	TG
Organochlorine Pesticides	6/15/04, 1005	SW846/8081A	LML
8081 Extraction	6/14/04, 1500	SW846/3540C	LML
Volatile Organic Compounds	6/14/04, 1504	SW846/8260B	SPF
Semivolatile Organic Compounds	6/13/04, 0944	SW846/8270C	SPF
8270 Extraction	6/14/04, 1500	SW846/3540C	SPF
Metals Digest	6/16/04, 0900	SW846/6010	TG
Mercury	6/16/04, 1600	EPA 245.1	EO
RCRA Metals	6/16/04, 1400	SW846/6010	TG

Audrey N. Brubeck
Chemical Services Manager

RESULTS:

F&R# :	0406103-01	0406103-02	0406103-03	
SAMPLE ID :	1	2	3	
DATE/TIME :	6/9/04, 1145	6/9/04, 1210	6/9/04, 1231	
MATRIX :	Soil/g	Soil/g	Soil/g	
				QL:
RCRA Metals, mg/kg				
Arsenic	BQL	BQL	BQL	15
Barium	48	36	17	1
Cadmium	4	6	4	1
Chromium	30	47	45	1
Lead	34	36	30	10
Selenium	BQL	20	BQL	15
Silver	BQL	BQL	BQL	5
Mercury	BQL	BQL	BQL	0.25
Organochlorine Pesticides, mg/kg				
Aldrin	BQL	BQL	BQL	0.01
alpha - BHC	BQL	BQL	BQL	0.01
beta - BHC	BQL	BQL	BQL	0.01
delta - BHC	BQL	BQL	BQL	0.01
gamma-BHC (Lindane)	BQL	BQL	BQL	0.01
4,4'-DDD	BQL	BQL	BQL	0.01
4,4-'DDE	BQL	BQL	BQL	0.01
4,4'-DDT	BQL	BQL	BQL	0.01
Dieldrin	BQL	BQL	BQL	0.01
Endosulfan I	BQL	BQL	BQL	0.01
Endosulfan II	BQL	BQL	BQL	0.01
Endosulfan sulfate	BQL	BQL	BQL	0.01
Endrin	BQL	BQL	BQL	0.01
Endrin aldehyde	BQL	BQL	BQL	0.01
Heptachlor	BQL	BQL	BQL	0.01
Methoxychlor	BQL	BQL	BQL	0.01
Chlordane	BQL	BQL	BQL	0.1
Toxaphene	BQL	BQL	BQL	1
Volatile Organic Cmpds, mg/kg				
Benzene	BQL	BQL	BQL	0.005
Bromobenzene	BQL	BQL	BQL	0.005
Bromochloromethane	BQL	BQL	BQL	0.005
Bromodichloromethane	BQL	BQL	BQL	0.005
Bromoform	BQL	BQL	BQL	0.005
Bromomethane	BQL	BQL	BQL	0.005
n-Butylbenzene	BQL	BQL	BQL	0.005
sec-Butylbenzene	BQL	BQL	BQL	0.005
tert-Butylbenzene	BQL	BQL	BQL	0.005
Carbon tetrachloride	BQL	BQL	BQL	0.005
Chlorobenzene	BQL	BQL	BQL	0.005
Chloroethane	BQL	BQL	BQL	0.005
Chloroform	BQL	BQL	BQL	0.005

RESULTS:

F&R# :	0406103-01	0406103-02	0406103-03	
SAMPLE ID :	1	2	3	
DATE/TIME :	6/9/04, 1145	6/9/04, 1210	6/9/04, 1231	
MATRIX :	Soil/g	Soil/g	Soil/g	
				QL:
Chloromethane	BQL	BQL	BQL	0.005
2-Chlorotoluene	BQL	BQL	BQL	0.005
4-Chlorotoluene	BQL	BQL	BQL	0.005
Dibromochloromethane	BQL	BQL	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	BQL	BQL	0.005
1,2-Dibromoethane	BQL	BQL	BQL	0.005
Dibromomethane	BQL	BQL	BQL	0.005
1,2-Dichlorobenzene	BQL	BQL	BQL	0.005
1,3-Dichlorobenzene	BQL	BQL	BQL	0.005
1,4-Dichlorobenzene	BQL	BQL	BQL	0.005
Dichlorodifluoromethane	BQL	BQL	BQL	0.005
1,1-Dichloroethane	BQL	BQL	BQL	0.005
1,2-Dichloroethane	BQL	BQL	BQL	0.005
1,1-Dichloroethene	BQL	BQL	BQL	0.005
cis-1,2-Dichloroethene	BQL	BQL	BQL	0.005
trans-1,2-Dichloroethene	BQL	BQL	BQL	0.005
1,2-Dichloropropane	BQL	BQL	BQL	0.005
1,3-Dichloropropane	BQL	BQL	BQL	0.005
2,2-Dichloropropane	BQL	BQL	BQL	0.005
1,1-Dichloropropene	BQL	BQL	BQL	0.005
Ethylbenzene	BQL	BQL	BQL	0.005
Hexachlorobutadiene	BQL	BQL	BQL	0.005
Isopropylbenzene	BQL	BQL	BQL	0.005
p-Isopropyltoluene	BQL	BQL	BQL	0.005
Methylene chloride	BQL	BQL	BQL	0.02
Naphthalene	BQL	BQL	BQL	0.005
n-Propylbenzene	BQL	BQL	BQL	0.005
Styrene	BQL	BQL	BQL	0.005
1,1,1,2-Tetrachloroethane	BQL	BQL	BQL	0.005
1,1,2,2-Tetrachloroethane	BQL	BQL	BQL	0.005
Tetrachloroethene	BQL	BQL	BQL	0.005
Toluene	BQL	BQL	BQL	0.005
1,2,3-Trichlorobenzene	BQL	BQL	BQL	0.005
1,2,4-Trichlorobenzene	BQL	BQL	BQL	0.005
1,1,1-Trichloroethane	BQL	BQL	BQL	0.005
1,1,2-Trichloroethane	BQL	BQL	BQL	0.005
Trichloroethene	BQL	BQL	BQL	0.005
Trichlorofluoromethane	BQL	BQL	BQL	0.005
1,2,3-Trichloropropane	BQL	BQL	BQL	0.005
1,2,4-Trimethylbenzene	BQL	BQL	BQL	0.005
1,3,5-Trimethylbenzene	BQL	BQL	BQL	0.005
Vinyl chloride	BQL	BQL	BQL	0.005
m,p-Xylene	BQL	BQL	BQL	0.01
o-Xylene	BQL	BQL	BQL	0.005

RESULTS:

F&R# :	0406103-01	0406103-02	0406103-03	
SAMPLE ID :	1	2	3	
DATE/TIME :	6/9/04, 1145	6/9/04, 1210	6/9/04, 1231	
MATRIX :	Soil/g	Soil/g	Soil/g	
				QL:
Semivolatile Org Cmpds, mg/kg				
Acenaphthene	BQL	BQL	BQL	0.4
Acenaphthylene	BQL	BQL	BQL	0.4
Aniline	BQL	BQL	BQL	0.4
Anthracene	BQL	BQL	BQL	0.4
Benzo[a]anthracene	BQL	BQL	BQL	0.4
Benzo[b]fluoranthene	BQL	BQL	BQL	0.4
Benzo[k]fluoranthene	BQL	BQL	BQL	0.4
Benzo[g,h,i]perylene	BQL	BQL	BQL	0.4
Benzo[a]pyrene	BQL	BQL	BQL	0.4
bis(2-Chloroethoxy)methane	BQL	BQL	BQL	0.4
bis(2-Chloroethyl)ether	BQL	BQL	BQL	0.4
bis(2-Chloroisopropyl)ether	BQL	BQL	BQL	0.4
bis(2-Ethylhexyl)phthalate	BQL	0.6	BQL	0.4
4-Bromophenylphenylether	BQL	BQL	BQL	0.4
Butylbenzylphthalate	BQL	BQL	BQL	0.4
4-Chloroaniline	BQL	BQL	BQL	0.4
4-Chloro-3-methylphenol	BQL	BQL	BQL	0.4
2-Chloronaphthalene	BQL	BQL	BQL	0.4
2-Chlorophenol	BQL	BQL	BQL	0.4
4-Chlorophenylphenylether	BQL	BQL	BQL	0.4
Chrysene	BQL	BQL	BQL	0.4
Dibenz[a,h]anthracene	BQL	BQL	BQL	0.4
Dibenzofuran	BQL	BQL	BQL	0.4
Di-n-butylphthalate	BQL	BQL	BQL	0.4
1,2-Dichlorobenzene	BQL	BQL	BQL	0.4
1,3-Dichlorobenzene	BQL	BQL	BQL	0.4
1,4-Dichlorobenzene	BQL	BQL	BQL	0.4
3,3'-Dichlorobenzidine	BQL	BQL	BQL	0.4
2,4-Dichlorophenol	BQL	BQL	BQL	0.4
Diethylphthalate	BQL	BQL	BQL	0.4
2,4-Dimethylphenol	BQL	BQL	BQL	0.4
Dimethylphthalate	BQL	BQL	BQL	0.4
4,6-Dinitro-2-methylphenol	BQL	BQL	BQL	1.6
2,4-Dinitrophenol	BQL	BQL	BQL	1.6
2,4-Dinitrotoluene	BQL	BQL	BQL	0.4
2,6-Dinitrotoluene	BQL	BQL	BQL	0.4
Di-n-octylphthalate	BQL	BQL	BQL	0.4
Fluoranthene	BQL	BQL	BQL	0.4
Fluorene	BQL	BQL	BQL	0.4
Hexachlorobenzene	BQL	BQL	BQL	0.4
Hexachlorobutadiene	BQL	BQL	BQL	0.4
Hexachlorocyclopentadiene	BQL	BQL	BQL	0.4

RESULTS:

F&R# :	0406103-01	0406103-02	0406103-03	
SAMPLE ID :	1	2	3	
DATE/TIME :	6/9/04, 1145	6/9/04, 1210	6/9/04, 1231	
MATRIX :	Soil/g	Soil/g	Soil/g	
				QL:
Hexachloroethane	BQL	BQL	BQL	0.4
Indeno[1,2,3-cd]pyrene	BQL	BQL	BQL	0.4
Isophorone	BQL	BQL	BQL	0.4
2-Methylnaphthalene	BQL	BQL	BQL	0.4
2-Methylphenol	BQL	BQL	BQL	0.4
4-Methylphenol	BQL	BQL	BQL	0.4
Naphthalene	BQL	BQL	BQL	0.4
2-Nitroaniline	BQL	BQL	BQL	0.4
3-Nitroaniline	BQL	BQL	BQL	0.4
4-Nitroaniline	BQL	BQL	BQL	0.4
Nitrobenzene	BQL	BQL	BQL	0.4
2-Nitrophenol	BQL	BQL	BQL	0.4
4-Nitrophenol	BQL	BQL	BQL	1.6
n-Nitrosodimethylamine	BQL	BQL	BQL	0.4
N-Nitrosodiphenylamine	BQL	BQL	BQL	0.4
n-Nitroso-di-n-propylamine	BQL	BQL	BQL	0.4
Pentachlorophenol	BQL	BQL	BQL	1.6
Phenanthrene	BQL	BQL	BQL	0.4
Phenol	BQL	BQL	BQL	0.4
Pyrene	BQL	BQL	BQL	0.4
1,2,4-Trichlorobenzene	BQL	BQL	BQL	0.4
2,4,5-Trichlorophenol	BQL	BQL	BQL	0.4
2,4,6-Trichlorophenol	BQL	BQL	BQL	0.4

mg/kg = milligrams per kilogram
BQL = Below Quantitation Limit

RESULTS:

F&R# :	0406103-04	0406103-05	0406103-06
SAMPLE ID :	4	5	6
DATE/TIME :	6/9/04, 1248	6/9/04, 1320	6/9/04, 1336
MATRIX :	Soil/g	Soil/g	Soil/g

				QL:
RCRA Metals, mg/kg				
Arsenic	BQL	BQL	BQL	15
Barium	13	37	37	1
Cadmium	3	3	1	1
Chromium	33	26	13	1
Lead	20	26	14	10
Selenium	BQL	BQL	BQL	15
Silver	BQL	BQL	BQL	5
Mercury	BQL	BQL	BQL	0.25
Organochlorine Pesticides, mg/kg				
Aldrin	BQL	BQL	BQL	0.01
alpha - BHC	BQL	BQL	BQL	0.01
beta - BHC	BQL	BQL	BQL	0.01
delta - BHC	BQL	BQL	BQL	0.01
gamma-BHC (Lindane)	BQL	BQL	BQL	0.01
4,4'-DDD	BQL	BQL	BQL	0.01
4,4-'DDE	BQL	BQL	BQL	0.01
4,4'-DDT	BQL	BQL	BQL	0.01
Dieldrin	BQL	BQL	BQL	0.01
Endosulfan I	BQL	BQL	BQL	0.01
Endosulfan II	BQL	BQL	BQL	0.01
Endosulfan sulfate	BQL	BQL	0.05	0.01
Endrin	BQL	BQL	BQL	0.01
Endrin aldehyde	BQL	BQL	BQL	0.01
Heptachlor	BQL	BQL	BQL	0.01
Methoxychlor	BQL	BQL	BQL	0.01
Chlordane	BQL	BQL	BQL	0.1
Toxaphene	BQL	BQL	BQL	1
Volatile Organic Cmpds, mg/kg				
Benzene	BQL	BQL	BQL	0.005
Bromobenzene	BQL	BQL	BQL	0.005
Bromochloromethane	BQL	BQL	BQL	0.005
Bromodichloromethane	BQL	BQL	BQL	0.005
Bromoform	BQL	BQL	BQL	0.005
Bromomethane	BQL	BQL	BQL	0.005
n-Butylbenzene	BQL	BQL	BQL	0.005
sec-Butylbenzene	BQL	BQL	BQL	0.005
tert-Butylbenzene	BQL	BQL	BQL	0.005
Carbon tetrachloride	BQL	BQL	BQL	0.005
Chlorobenzene	BQL	BQL	BQL	0.005
Chloroethane	BQL	BQL	BQL	0.005
Chloroform	BQL	BQL	BQL	0.005

RESULTS:

F&R# :	0406103-04	0406103-05	0406103-06	
SAMPLE ID :	4	5	6	
DATE/TIME :	6/9/04, 1248	6/9/04, 1320	6/9/04, 1336	
MATRIX :	Soil/g	Soil/g	Soil/g	
				QL:
Chloromethane	BQL	BQL	BQL	0.005
2-Chlorotoluene	BQL	BQL	BQL	0.005
4-Chlorotoluene	BQL	BQL	BQL	0.005
Dibromochloromethane	BQL	BQL	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	BQL	BQL	0.005
1,2-Dibromoethane	BQL	BQL	BQL	0.005
Dibromomethane	BQL	BQL	BQL	0.005
1,2-Dichlorobenzene	BQL	BQL	BQL	0.005
1,3-Dichlorobenzene	BQL	BQL	BQL	0.005
1,4-Dichlorobenzene	BQL	BQL	BQL	0.005
Dichlorodifluoromethane	BQL	BQL	BQL	0.005
1,1-Dichloroethane	BQL	BQL	BQL	0.005
1,2-Dichloroethane	BQL	BQL	BQL	0.005
1,1-Dichloroethene	BQL	BQL	BQL	0.005
cis-1,2-Dichloroethene	BQL	BQL	BQL	0.005
trans-1,2-Dichloroethene	BQL	BQL	BQL	0.005
1,2-Dichloropropane	BQL	BQL	BQL	0.005
1,3-Dichloropropane	BQL	BQL	BQL	0.005
2,2-Dichloropropane	BQL	BQL	BQL	0.005
1,1-Dichloropropene	BQL	BQL	BQL	0.005
Ethylbenzene	BQL	BQL	BQL	0.005
Hexachlorobutadiene	BQL	BQL	BQL	0.005
Isopropylbenzene	BQL	BQL	BQL	0.005
p-Isopropyltoluene	BQL	BQL	BQL	0.005
Methylene chloride	BQL	BQL	BQL	0.02
Naphthalene	BQL	BQL	BQL	0.005
n-Propylbenzene	BQL	BQL	BQL	0.005
Styrene	BQL	BQL	BQL	0.005
1,1,1,2-Tetrachloroethane	BQL	BQL	BQL	0.005
1,1,2,2-Tetrachloroethane	BQL	BQL	BQL	0.005
Tetrachloroethene	BQL	BQL	BQL	0.005
Toluene	BQL	BQL	BQL	0.005
1,2,3-Trichlorobenzene	BQL	BQL	BQL	0.005
1,2,4-Trichlorobenzene	BQL	BQL	BQL	0.005
1,1,1-Trichloroethane	BQL	BQL	BQL	0.005
1,1,2-Trichloroethane	BQL	BQL	BQL	0.005
Trichloroethene	BQL	BQL	BQL	0.005
Trichlorofluoromethane	BQL	BQL	BQL	0.005
1,2,3-Trichloropropane	BQL	BQL	BQL	0.005
1,2,4-Trimethylbenzene	BQL	BQL	BQL	0.005
1,3,5-Trimethylbenzene	BQL	BQL	BQL	0.005
Vinyl chloride	BQL	BQL	BQL	0.005
m,p-Xylene	BQL	BQL	BQL	0.01
o-Xylene	BQL	BQL	BQL	0.005

RESULTS:

F&R# :	0406103-04	0406103-05	0406103-06
SAMPLE ID :	4	5	6
DATE/TIME :	6/9/04, 1248	6/9/04, 1320	6/9/04, 1336
MATRIX :	Soil/g	Soil/g	Soil/g

				QL:
Semivolatile Org Cmpds, mg/kg				
Acenaphthene	BQL	BQL	BQL	0.4
Acenaphthylene	BQL	BQL	BQL	0.4
Aniline	BQL	BQL	BQL	0.4
Anthracene	BQL	BQL	BQL	0.4
Benzo[a]anthracene	BQL	BQL	BQL	0.4
Benzo[b]fluoranthene	BQL	BQL	BQL	0.4
Benzo[k]fluoranthene	BQL	BQL	BQL	0.4
Benzo[g,h,i]perylene	BQL	BQL	BQL	0.4
Benzo[a]pyrene	BQL	BQL	BQL	0.4
bis(2-Chloroethoxy)methane	BQL	BQL	BQL	0.4
bis(2-Chloroethyl)ether	BQL	BQL	BQL	0.4
bis(2-Chloroisopropyl)ether	BQL	BQL	BQL	0.4
bis(2-Ethylhexyl)phthalate	BQL	BQL	BQL	0.4
4-Bromophenylphenylether	BQL	BQL	BQL	0.4
Butylbenzylphthalate	BQL	BQL	BQL	0.4
4-Chloroaniline	BQL	BQL	BQL	0.4
4-Chloro-3-methylphenol	BQL	BQL	BQL	0.4
2-Chloronaphthalene	BQL	BQL	BQL	0.4
2-Chlorophenol	BQL	BQL	BQL	0.4
4-Chlorophenylphenylether	BQL	BQL	BQL	0.4
Chrysene	BQL	BQL	BQL	0.4
Dibenz[a,h]anthracene	BQL	BQL	BQL	0.4
Dibenzofuran	BQL	BQL	BQL	0.4
Di-n-butylphthalate	BQL	BQL	BQL	0.4
1,2-Dichlorobenzene	BQL	BQL	BQL	0.4
1,3-Dichlorobenzene	BQL	BQL	BQL	0.4
1,4-Dichlorobenzene	BQL	BQL	BQL	0.4
3,3'-Dichlorobenzidine	BQL	BQL	BQL	0.4
2,4-Dichlorophenol	BQL	BQL	BQL	0.4
Diethylphthalate	BQL	BQL	BQL	0.4
2,4-Dimethylphenol	BQL	BQL	BQL	0.4
Dimethylphthalate	BQL	BQL	BQL	0.4
4,6-Dinitro-2-methylphenol	BQL	BQL	BQL	1.6
2,4-Dinitrophenol	BQL	BQL	BQL	1.6
2,4-Dinitrotoluene	BQL	BQL	BQL	0.4
2,6-Dinitrotoluene	BQL	BQL	BQL	0.4
Di-n-octylphthalate	BQL	BQL	BQL	0.4
Fluoranthene	BQL	BQL	BQL	0.4
Fluorene	BQL	BQL	BQL	0.4
Hexachlorobenzene	BQL	BQL	BQL	0.4
Hexachlorobutadiene	BQL	BQL	BQL	0.4
Hexachlorocyclopentadiene	BQL	BQL	BQL	0.4

RESULTS:

F&R# :	0406103-04	0406103-05	0406103-06	
SAMPLE ID :	4	5	6	
DATE/TIME :	6/9/04, 1248	6/9/04, 1320	6/9/04, 1336	
MATRIX :	Soil/g	Soil/g	Soil/g	
				QL:
Hexachloroethane	BQL	BQL	BQL	0.4
Indeno[1,2,3-cd]pyrene	BQL	BQL	BQL	0.4
Isophorone	BQL	BQL	BQL	0.4
2-Methylnaphthalene	BQL	BQL	BQL	0.4
2-Methylphenol	BQL	BQL	BQL	0.4
4-Methylphenol	BQL	BQL	BQL	0.4
Naphthalene	BQL	BQL	BQL	0.4
2-Nitroaniline	BQL	BQL	BQL	0.4
3-Nitroaniline	BQL	BQL	BQL	0.4
4-Nitroaniline	BQL	BQL	BQL	0.4
Nitrobenzene	BQL	BQL	BQL	0.4
2-Nitrophenol	BQL	BQL	BQL	0.4
4-Nitrophenol	BQL	BQL	BQL	1.6
n-Nitrosodimethylamine	BQL	BQL	BQL	0.4
N-Nitrosodiphenylamine	BQL	BQL	BQL	0.4
n-Nitroso-di-n-propylamine	BQL	BQL	BQL	0.4
Pentachlorophenol	BQL	BQL	BQL	1.6
Phenanthrene	BQL	BQL	BQL	0.4
Phenol	BQL	BQL	BQL	0.4
Pyrene	BQL	BQL	BQL	0.4
1,2,4-Trichlorobenzene	BQL	BQL	BQL	0.4
2,4,5-Trichlorophenol	BQL	BQL	BQL	0.4
2,4,6-Trichlorophenol	BQL	BQL	BQL	0.4

mg/kg = milligrams per kilogram
BQL = Below Quantitation Limit

RESULTS:

F&R# :	0406103-07
SAMPLE ID :	DW-1
DATE/TIME :	6/9/04, 1345
MATRIX :	Water/g

		QL:
RCRA Metals, mg/L		
Arsenic	BQL	0.2
Barium	0.17	0.02
Cadmium	BQL	0.02
Chromium	BQL	0.02
Lead	BQL	0.2
Selenium	BQL	0.3
Silver	BQL	0.02
Mercury	BQL	0.0002
Organochlorine Pesticides, µg/L		
Aldrin	BQL	0.05
alpha - BHC	BQL	0.05
beta - BHC	BQL	0.05
delta - BHC	BQL	0.05
gamma-BHC (Lindane)	BQL	0.05
4,4'-DDD	BQL	0.05
4,4-'DDE	BQL	0.05
4,4'-DDT	BQL	0.05
Dieldrin	BQL	0.05
Endosulfan I	BQL	0.05
Endosulfan II	BQL	0.05
Endosulfan sulfate	BQL	0.05
Endrin	BQL	0.05
Endrin aldehyde	BQL	0.05
Heptachlor	BQL	0.05
Methoxychlor	BQL	0.05
Chlordane	BQL	1
Toxaphene	BQL	1
Volatile Organic Cmpds, µg/L		
Benzene	BQL	5
Bromobenzene	BQL	5
Bromochloromethane	BQL	5
Bromodichloromethane	BQL	5
Bromoform	BQL	5
Bromomethane	BQL	5
n-Butylbenzene	BQL	5
sec-Butylbenzene	BQL	5
tert-Butylbenzene	BQL	5
Carbon tetrachloride	BQL	5
Chlorobenzene	BQL	5
Chloroethane	BQL	5
Chloroform	BQL	5

RESULTS:

F&R# :	0406103-07
SAMPLE ID :	DW-1
DATE/TIME :	6/9/04, 1345
MATRIX :	Water/g

		QL:
Chloromethane	BQL	5
2-Chlorotoluene	BQL	5
4-Chlorotoluene	BQL	5
Dibromochloromethane	BQL	5
1,2-Dibromo-3-chloropropane	BQL	5
1,2-Dibromoethane	BQL	5
Dibromomethane	BQL	5
1,2-Dichlorobenzene	BQL	5
1,3-Dichlorobenzene	BQL	5
1,4-Dichlorobenzene	BQL	5
Dichlorodifluoromethane	BQL	5
1,1-Dichloroethane	BQL	5
1,2-Dichloroethane	BQL	5
1,1-Dichloroethene	BQL	5
cis-1,2-Dichloroethene	BQL	5
trans-1,2-Dichloroethene	BQL	5
1,2-Dichloropropane	BQL	5
1,3-Dichloropropane	BQL	5
2,2-Dichloropropane	BQL	5
1,1-Dichloropropene	BQL	5
Ethylbenzene	BQL	5
Hexachlorobutadiene	BQL	5
Isopropylbenzene	BQL	5
p-Isopropyltoluene	BQL	5
Methylene chloride	BQL	5
Naphthalene	BQL	5
n-Propylbenzene	BQL	5
Styrene	BQL	5
1,1,1,2-Tetrachloroethane	BQL	5
1,1,2,2-Tetrachloroethane	BQL	5
Tetrachloroethene	BQL	5
Toluene	BQL	5
1,2,3-Trichlorobenzene	BQL	5
1,2,4-Trichlorobenzene	BQL	5
1,1,1-Trichloroethane	BQL	5
1,1,2-Trichloroethane	BQL	5
Trichloroethene	BQL	5
Trichlorofluoromethane	BQL	5
1,2,3-Trichloropropane	BQL	5
1,2,4-Trimethylbenzene	BQL	5
1,3,5-Trimethylbenzene	BQL	5
Vinyl chloride	BQL	5
m,p-Xylene	BQL	10
o-Xylene	BQL	5

RESULTS:

F&R# :	0406103-07
SAMPLE ID :	DW-1
DATE/TIME :	6/9/04, 1345
MATRIX :	Water/g

		QL:
Semivolatile Org Cmpds, µg/L		
Acenaphthene	BQL	5
Acenaphthylene	BQL	5
Aniline	BQL	5
Anthracene	BQL	5
Benzo[a]anthracene	BQL	5
Benzo[b]fluoranthene	BQL	5
Benzo[k]fluoranthene	BQL	5
Benzo[g,h,i]perylene	BQL	5
Benzo[a]pyrene	BQL	5
bis(2-Chloroethoxy)methane	BQL	5
bis(2-Chloroethyl)ether	BQL	5
bis(2-Chloroisopropyl)ether	BQL	5
bis(2-Ethylhexyl)phthalate	BQL	5
4-Bromophenylphenylether	BQL	5
Butylbenzylphthalate	BQL	5
4-Chloroaniline	BQL	5
4-Chloro-3-methylphenol	BQL	5
2-Chloronaphthalene	BQL	5
2-Chlorophenol	BQL	5
4-Chlorophenylphenylether	BQL	5
Chrysene	BQL	5
Dibenz[a,h]anthracene	BQL	5
Dibenzofuran	BQL	5
Di-n-butylphthalate	BQL	5
1,2-Dichlorobenzene	BQL	5
1,3-Dichlorobenzene	BQL	5
1,4-Dichlorobenzene	BQL	5
3,3'-Dichlorobenzidine	BQL	5
2,4-Dichlorophenol	BQL	5
Diethylphthalate	BQL	5
2,4-Dimethylphenol	BQL	5
Dimethylphthalate	BQL	5
4,6-Dinitro-2-methylphenol	BQL	20
2,4-Dinitrophenol	BQL	20
2,4-Dinitrotoluene	BQL	5
2,6-Dinitrotoluene	BQL	5
Di-n-octylphthalate	BQL	5
Fluoranthene	BQL	5
Fluorene	BQL	5
Hexachlorobenzene	BQL	5
Hexachlorobutadiene	BQL	5
Hexachlorocyclopentadiene	BQL	5

RESULTS:

F&R# :	0406103-07
SAMPLE ID :	DW-1
DATE/TIME :	6/9/04, 1345
MATRIX :	Water/g

		QL:
Hexachloroethane	BQL	5
Indeno[1,2,3-cd]pyrene	BQL	5
Isophorone	BQL	5
2-Methylnaphthalene	BQL	5
2-Methylphenol	BQL	5
4-Methylphenol	BQL	5
Naphthalene	BQL	5
2-Nitroaniline	BQL	5
3-Nitroaniline	BQL	5
4-Nitroaniline	BQL	5
Nitrobenzene	BQL	5
2-Nitrophenol	BQL	5
4-Nitrophenol	BQL	20
n-Nitrosodimethylamine	BQL	5
N-Nitrosodiphenylamine	BQL	5
n-Nitroso-di-n-propylamine	BQL	5
Pentachlorophenol	BQL	20
Phenanthrene	BQL	5
Phenol	BQL	5
Pyrene	BQL	5
1,2,4-Trichlorobenzene	BQL	5
2,4,5-Trichlorophenol	BQL	5
2,4,6-Trichlorophenol	BQL	5

mg/L = milligrams per Liter
µg/L = micrograms per Liter
BQL = Below Quantitation Limit

CHAIN OF CUSTODY RECORD

FRUEHLING & ROBERTSON, INC.
3015 Dumbarton Rd.
RICHMOND, VIRGINIA 23228
TEL: (804) 264-2701
FAX: (804) 264-0782

Please Print CLIENT Environmental
ADDRESS
ATTN R. Etter
PHONE/FAX

Terms and Conditions: This Agreement shall be subject to all of the terms and conditions set forth on the reverse side hereof, which terms and conditions are expressly made a part of this Agreement and any reports issued by F&R pursuant to this Agreement.

LAB PROJECT #: 0406103
PROJECT NAME/NUMBER - Please Print: General Binding ES4-103E
SAMPLED BY - Please Print: RW Etter

LAB I.D.	DATE SAMPLED	TIME SAMPLED	GRAB	COMP	SAMPLE IDENTIFICATION - Please Print	# OF CONTAINERS	SAMPLE MATRIX	Semi Vol	Vol	Pest	RCRA Metals
1	6/9/04	11:45			1	3	Soil	✓	✓	✓	✓
2	↓	12:10			2	3	↓	↓	↓	↓	↓
3	↓	12:31			3	3	↓	↓	↓	↓	↓
~~4~~	↓	~~12:48~~			~~4~~	~~3~~	↓	↓	↓	↓	↓
5	↓	1320			5	3	↓	↓	↓	↓	↓
6	↓	1336			6	3	↓	↓	↓	↓	↓
7	↓	1345			DW-1	6	Water	✓	✓	✓	✓

pH @ lab receipt

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
[signature]	6/9/04	1510			
			[signature]	6/9/04	1520

COMMENTS: Please Print
~~6/14~~ [initials]

SHIPPED VIA Hand Delivery on Ice DATE 6/9/04

pH
Sample Temp.
Cooler Temp.

LAB

FORM 203 REV. 04/00

SINCE
1881

FROEHLING & ROBERTSON, INC.
GEOTECHNICAL • ENVIRONMENTAL • MATERIALS
ENGINEERS • LABORATORIES
"OVER ONE HUNDRED YEARS OF SERVICE"

ADDENDUM

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT
GENERAL BINDING CORPORATION SITE
AMELIA, VIRGINIA
F&R Project No. F54-103E

Recommendations

Based on the past use of the site, the limited sampling data and the results of the laboratory analysis, F&R cannot preclude the possibility of contamination of the soil and/or groundwater at this site. F&R recommends that the property owner register the site with the VRP. The VRP was designed by the DEQ to encourage the cleanup of contaminated sites in order to facilitate the sale and reuse of contaminated commercial properties. Upon completion of the remediation process, if required, a "certification of satisfactory completion of remediation" is issued by the DEQ. This certification provides that the site will not become the target of state and federal enforcement action unless new issues are discovered.

The VRP is a six step program:

- Eligibility
- Registration Fee
- Submittal Requirements
- Remediation Goals
- Public Participation
- Certification of Satisfactory Completion of Remediation

Prior to registering for the VRP, the DEQ recommends that the Regional Office, in this case the Piedmont Regional Office in Richmond, be consulted in order to identify any significant issues and minimize delay and expense in the remediation process if required.

F&R also recommends that, prior to soil being removed from the site, further sampling and analysis should be conducted to determine the proper disposal options for the soil.

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