

Public Informational Meeting



Response Action Plan

**Gateway South Phase I and Warner
Street Properties
Baltimore, Maryland 21230**



April 11, 2013

Agenda

- Introductions
- Maryland Voluntary Cleanup Program and VCP Process
- Gateway South Phase I and Warner Street Properties
 - Site Description
 - Environmental Investigations
 - Future Development
 - Exposure Assessment
 - Response Action Plan
- Comments

Introductions

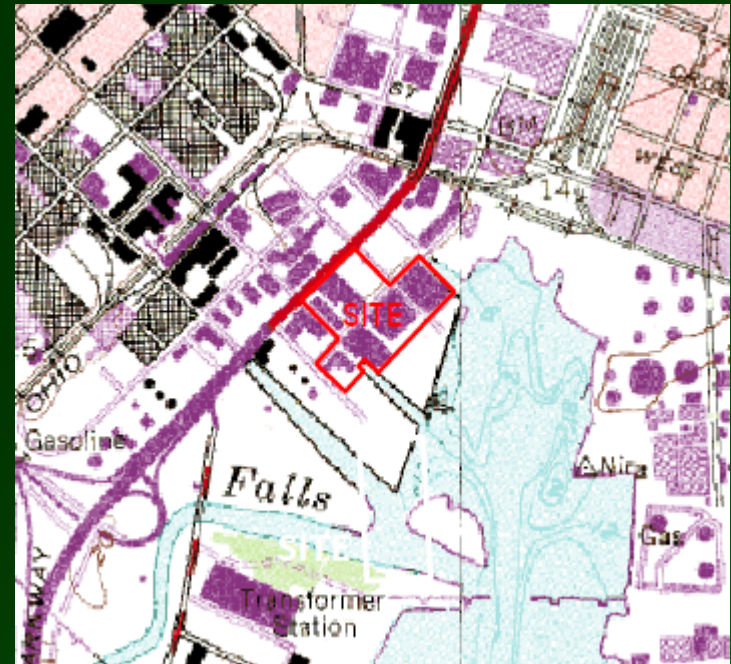
- Regulatory Agency
 - *Maryland Department of the Environment*

- Participant
 - *CBAC Gaming, LLC*

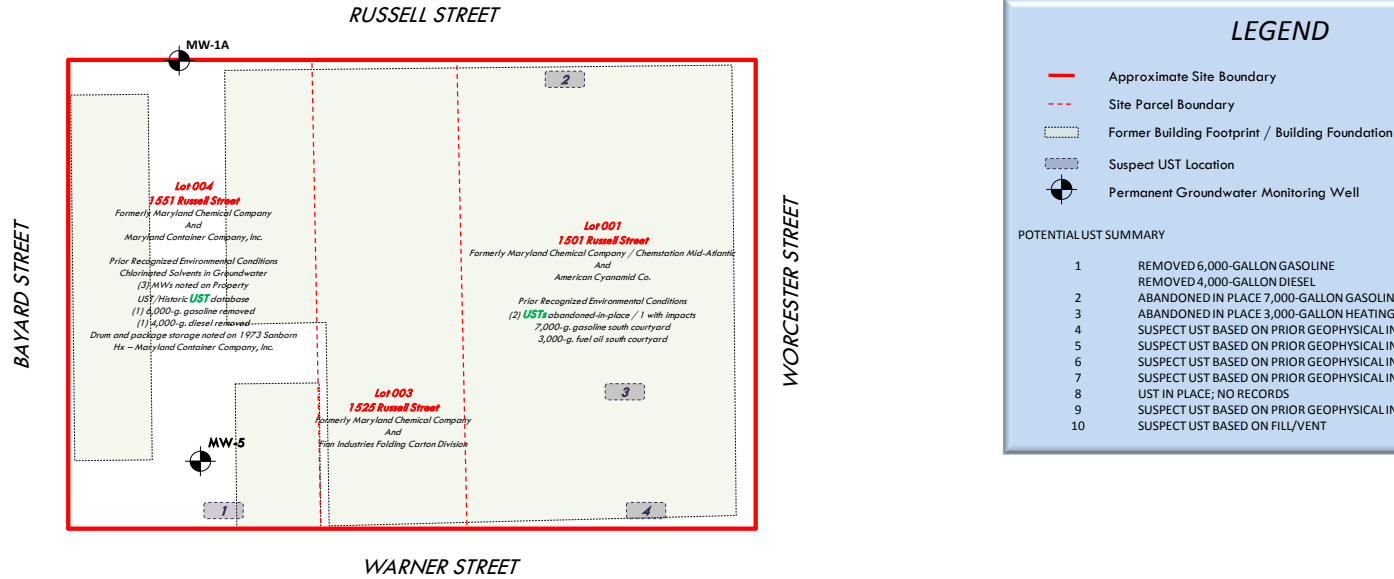
- Environmental Consultant
 - *Urban Green Environmental, LLC*

Gateway South Phase I and Warner Street Properties Site Description

- 8.58 acres of land
- 11 adjoining parcels
 - 1501, 1601, 1629, 1633 and 1645 Warner Street
 - 2119 Haines Street
 - 2102 Oler Street
 - 1501, 1525, and 1551 Russell Street
- Site History
 - Gateway South Phase I:
 - American Cyanamid and Maryland Chemical Company
 - Warner Street Parcels:
 - Industrial use since the 1800s
- Utilities (Site and surrounding area)
 - Municipal water and sewer
 - Natural gas and electric
 - No known active water supply wells



Gateway South Phase I and Warner Street Properties Environmental Investigations – Historic Site Uses



LEGEND

- Approximate Site Boundary
- - - Site Parcel Boundary
- ▭ Former Building Footprint / Building Foundation
- ⊞ Suspect UST Location
- ⊙ Permanent Groundwater Monitoring Well

POTENTIAL UST SUMMARY

1	REMOVED 6,000-GALLON GASOLINE
2	REMOVED 4,000-GALLON DIESEL
3	ABANDONED IN PLACE 7,000-GALLON GASOLINE
4	ABANDONED IN PLACE 3,000-GALLON HEATING OIL
5	SUSPECT UST BASED ON PRIOR GEOPHYSICAL INVESTIGATION
6	SUSPECT UST BASED ON PRIOR GEOPHYSICAL INVESTIGATION
7	SUSPECT UST BASED ON PRIOR GEOPHYSICAL INVESTIGATION
8	UST IN PLACE; NO RECORDS
9	SUSPECT UST BASED ON PRIOR GEOPHYSICAL INVESTIGATION
10	SUSPECT UST BASED ON FILL/VENT

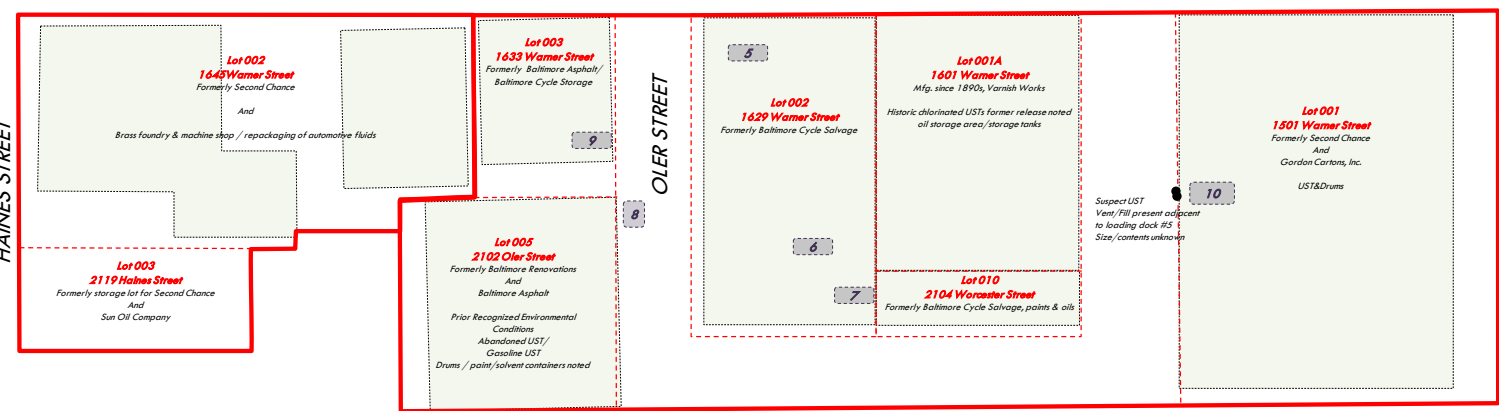


Figure 3 Site Plan and Summary of Historic Site Uses
Gateway South Phase I and Warner Street Properties
Baltimore, Maryland 21230

Gateway South Phase I and Warner Street Properties Environmental Investigations

- 2007 *KCI Phase I Environmental Site Assessment (ESA) - Gateway South*
- 2007 *KCI Phase II ESA - Gateway South*
- 2007 *KCI Phase I ESA - Gateway South*
- 2008 *KCI Phase II ESA - Gateway South*
- 2009 *KCI Phase I ESA Update – Gateway South*
- 2009 *KCI Phase II ESA - Gateway South Redevelopment, Former Warner Street Properties*
- 2009 *KCI Phase II ESA - Gateway South Redevelopment, Former Maryland Chemical Corp*
- 2009 *KCI Addendum to Phase II ESA - Gateway South Redevelopment, Former Warner Street Properties*
- 2009 and 2010 *MDE Toxicological Evaluations*
- 2011 *GTA Report of Preliminary Geotechnical Exploration*

Gateway South Phase I and Warner Street Properties Environmental Investigations

- **Phase I Environmental Site Assessment Results**
 - **Recognized Environmental Conditions (RECs) Identified**
 - *Former Industrial Uses*
 - *Former Regulatory Case Files (RCRA)*
 - *Suspect and Historic USTs*
 - *Former Regulated Materials Handling and Use*
 - *Off-Site parcels*
- **Phase II Environmental Site Assessments**
 - **Site-Wide Media Sampling to Evaluate RECs**
 - *Over 90 Soil Samples*
 - *20 Groundwater Samples*
 - *15 Soil Gas Samples*

Gateway South Phase I and Warner Street Properties Environmental Investigations – Media Sample Locations

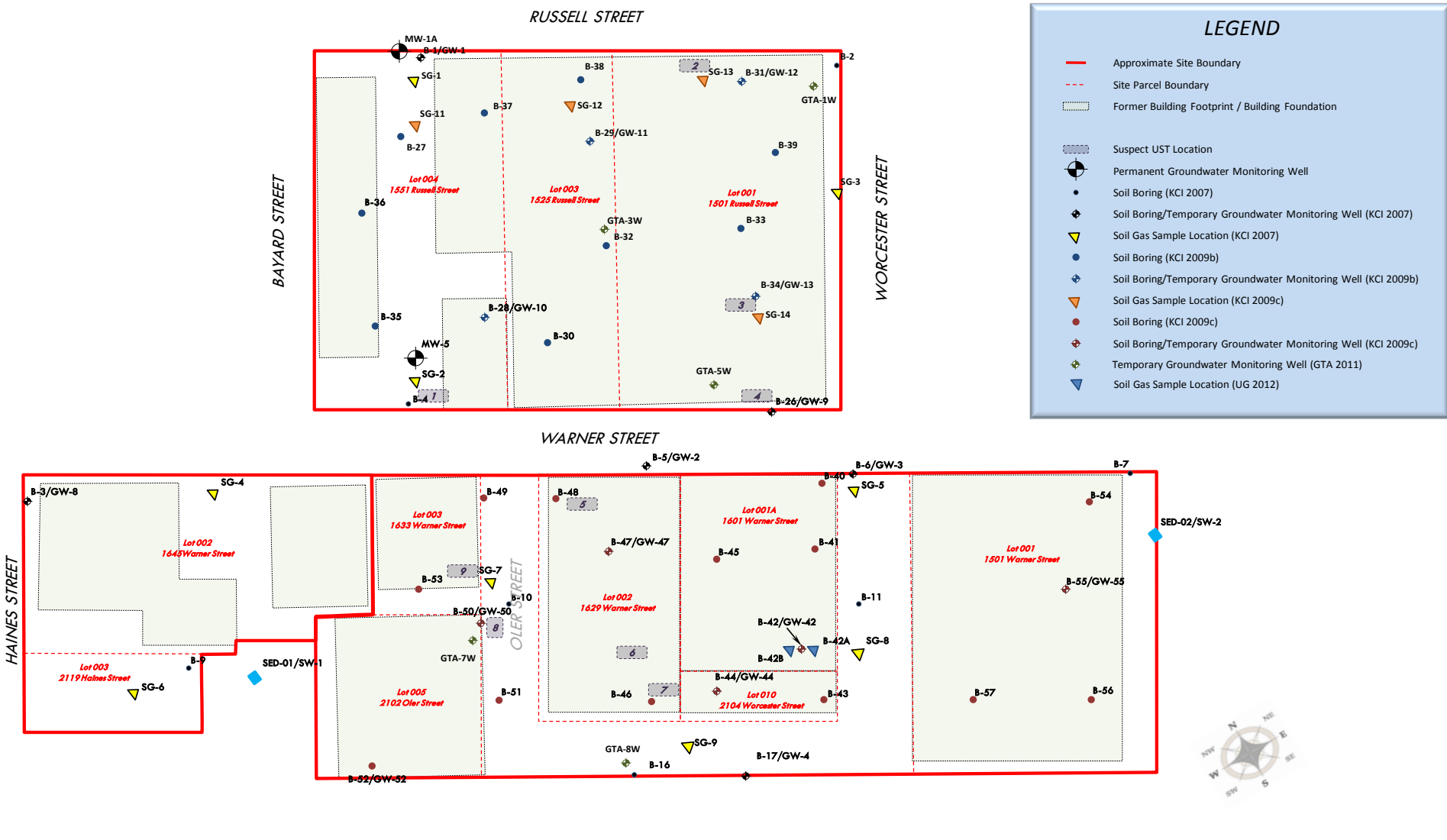


Figure 4 Summary of Prior Media Sample Locations
Gateway South Phase I and Warner Street Properties
Baltimore, Maryland 21230

Date:	April 2013	Figure:	4
Approximate Scale:	Not to Scale	Project Number:	078-001-12

Gateway South Phase I and Warner Street Properties Environmental Investigations

- **Environmental Investigation Results**
 - ◆ **Surface and Subsurface Soil**
 - ◆ Volatile organic compounds (VOCs)
 - ◆ Heavy metals
 - ◆ Semi-volatile organic compounds (SVOCs)
 - ◆ Petroleum compounds, and

 - ◆ **Groundwater**
 - ◆ VOCs (predominantly on the Gateway South property)
 - ◆ SVOCs
 - ◆ Petroleum hydrocarbons
 - ◆ Metals
 - ◆ Pesticides

 - ◆ **Soil Gas**
 - ◆ VOCs (predominantly on the Gateway South property)

Future Site Use – Tier 2B, Restricted Non-Residential

Proposed VCP Future Land Use: Tier 1B, Restricted Commercial.

The term restricted commercial refers to the planned use of the property that allows exposure and access by the general public, workers, and other expected users, including customers, patrons, or visitors. Commercial purposes allow access to the property and duration consistent with a typical business day. Tier 2 properties typically include shopping centers, retail businesses, vehicle service stations, medical offices, hotels, office space, religious institutions and restaurants.

Restricted Commercial also indicates that one or more land use controls are imposed on the property as a condition for the future use of the Site. At a minimum, it is anticipated that a groundwater use restriction will be placed on the property.

Future development includes construction of a two-story casino structure (including additional restaurant and retail space) and associated open air multi-level parking on the northern portion of the Site (Gateway South Phase I Parcel), and an open air multi-level parking structure and facility service areas on the southern portion of the Site (Warner Street Properties Parcel).

Gateway South Phase I and Warner Street Properties Response Action Plan

Exposure Assessment

- **Without a remedy, potential exposure pathways include**
 - *Future Construction Worker*
 - Incidental ingestion of soil*
 - Inhalation of soil particles/fugitive dust*
 - Dermal contact with soil*
 - Dermal contact with groundwater*
 - Inhalation of subsurface gases*
 - *Future on-Site Commercial Worker and On-Site Visitor*
 - Incidental ingestion of soil*
 - Inhalation of soil particles/fugitive dust*
 - Dermal contact with soil*
 - Dermal contact with groundwater*
 - Inhalation of subsurface gases*

Gateway South Phase I and Warner Street Properties Response Action Plan

Exposure Assessment

Summary of Exposure Pathways and Response Action	
Exposure Pathway	Response Action
Ingestion of Soil	ENVIRONMENTAL CAP
	Health and Safety Plan and Environmental Monitoring
Inhalation of Soil / Dust	ENVIRONMENTAL CAP
	Environmental Monitoring / Dust Monitoring and Dust Suppression
Contact with Soil	ENVIRONMENTAL CAP
	Health and Safety Plan and Environmental Monitoring
Inhalation of Soil Gases	VAPOR MITIGATION SYSTEM
	Health and Safety Plan and Environmental Monitoring
Contact with Groundwater	Groundwater use restriction
	Health and Safety Plan and Environmental Monitoring

Response Action Plan

- *Engineering Controls (ENVIRONMENTAL CAP)*

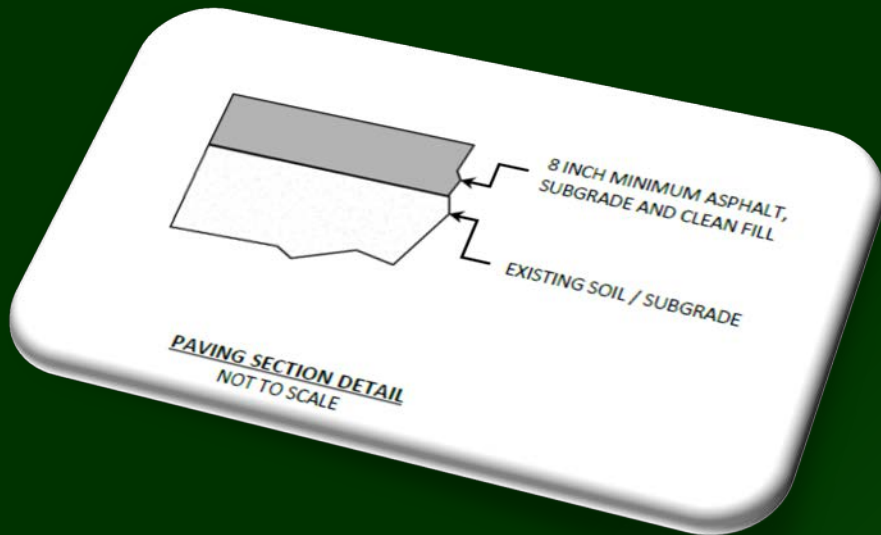
- ◆ Paved and Concrete Covered Areas

- 8-inch asphalt pavement and clean fill sub-base, or
- 4 to 5-inch thick concrete slab

- ◆ Landscaped Areas

- Geotextile Barrier/Warning Barrier
- 2-foot clean soil fill (minimum)

- ◆ Shallow Utility Trenching



Response Action Plan

- **VAPOR MITIGATION SYSTEM**

- ◆ Vapor Barrier and Passive Subslab Depressurization System
 - Clean stone sub-base
 - Perforated PVC piping network underlying the entire slab foundation
 - Fresh air intakes
 - Vents (to roof)
 - Upgradable to active system



Example SSDS Installation

- ◆ Post-Construction Confirmatory Indoor Air Sampling Events
 - Three events to evaluate system performance
 - Immediately following building enclosure
 - 30-days
 - 60-days

Response Action Plan

- *Future Use Restrictions / Institutional Controls*
 - ◆ Land Use Restriction (Restricted Commercial)
 - ◆ Groundwater Use Restriction
 - ◆ Notification to the MDE for any future excavations which penetrate the cap
 - ◆ Requirements for future excavations (characterization and disposal of any material excavated in the future; health and safety requirements)
 - ◆ Long term maintenance and inspection (Annual Inspections)
 - ◆ Land use restrictions must be recorded on the Deed for the property

Response Action Plan

- *Health and Safety Protocols During Development*

- ◆ *Maintain a Secured Site*
- ◆ *Environmental Monitoring and Environmental Oversight*
- ◆ *Dust Suppression*
- ◆ *OSHA Compliance*
- ◆ *Monthly Reporting to MDE*

- *Additional Remedial / Response Action Elements*

- ◆ *Removal of existing drums and regulated materials*
- ◆ *Removal and closure of all Underground Storage Tanks*
- ◆ *Excess Soil Sampling and Removal*
- ◆ *Clean Fill*
- ◆ *Unknown or Unanticipated Conditions*

Comments, questions or requests should be submitted to the VCP project manager by April 23, 2013:

Richelle Hanson

Maryland Department of the Environment

Voluntary Cleanup Program

1800 Washington Boulevard, Suite 625

Baltimore, Maryland 21230

Telephone 410-537-3493