



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 1111 E. Main Street, Suite 1400, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

[www.deq.virginia.gov](http://www.deq.virginia.gov)

Matthew J. Strickler  
Secretary of Natural Resources

David K. Paylor  
Director

(804) 698-4000  
1-800-592-5482

July 26, 2018

Mark Kleiman  
Remediation Manager  
Univar USA Inc.  
[mark.kleiman@univar.com](mailto:mark.kleiman@univar.com)

### VIA ELECTRONIC MAIL

RE: **Long Term Stewardship Report**  
**Univar Martinsville site**  
EPA ID VAD003111416

Dear Mr. Kleiman:

The Department of Environmental Quality, Office of Remediation Programs (Department) has prepared the attached report following the Long Term Stewardship inspection performed on July 11, 2018 at the Univar Martinsville site located in Henry County, Virginia. The inspection found no outstanding items with compliance of engineering and institutional controls. You may contact me to discuss any questions. I can be reached at 804-698-4218 or by email at [tara.mason@deq.virginia.gov](mailto:tara.mason@deq.virginia.gov)

Respectfully,

A handwritten signature in blue ink that reads "Tara D. Mason".

Tara D. Mason  
Corrective Action Project Manager

cc: Caleb Krouse, AECOM  
Brett Fisher, Leslie Romanchik, Allyson Lackey - DEQ-CO  
Cassie McGoldrick, EPA Region III (3LC50)  
Beth Lohman, DEQ-BRRO

Attachment



**Long-Term Stewardship Assessment Report**  
**Univar Martinsville Site**  
**EPA ID VAD003111416**

Prepared by: Tara Mason

Date: July 26, 2018

**Introduction:** Long-term stewardship (LTS) refers to the activities necessary to ensure that engineering controls (ECs) are maintained and that institutional controls (ICs) continue to be observed. The purpose of the EPA Region 3 LTS program is to periodically assess the efficacy of the implemented remedies (i.e., ECs and ICs) and to update the community on the status of the Resource Conservation & Recovery Act (RCRA) Corrective Action facilities. The assessment is conducted in two fold, which consists of a record review and a field inspection, to ensure that the remedies are implemented and maintained in accordance to the final decision.

**Site Background:** In 1947, Prillaman Chemical Corporation established a chemical distribution and solvent recycling, blending, and processing operation on the property located at 825 Fisher Street, Martinsville, Virginia. The facility operated until 2001 when it was sold to Univar (formerly operating as Volpak USA). No known industrial usage occurred on the site prior to 1947. In 2003, Univar initiated closure of the facility's industrial operations. The facility is no longer in use and the Property is fully fenced to restrict access. A description of historical operations conducted at the Property, contaminants present in soil and groundwater, and Virginia Department of Environmental Quality's (VDEQ) final remedy for the Property is presented in the July 24, 2013 Statement of Basis in the Administrative Record for the Facility.

The site remediation system targets benzene, toluene, ethyl benzene, and xylenes (BTEX), methyl tert-butyl ether (MTBE), chlorinated volatile organic compounds (CVOCs), and ketones in soil and groundwater.

**Current Site Status:** The site remediation systems were constructed in incremental fashion as individual Interim Measures (IMs) beginning in 2005 and include an aeration trench, oxygen and air injection system, soil vapor extraction (SVE) system, and light non-aqueous phase liquid (LNAPL) recovery system. VDEQ issued the final remedy decision for the Univar facility through a modification of the Facility's Hazardous Waste Management Permit in September 26, 2013. The Permit required the continued operation and maintenance of the remediation systems as Engineering Controls (ECs). Additional remedial measures may be implemented as contingent remedies based on the effectiveness of the proposed remedies described. The remedy also requires the implementation of ICs to restrict groundwater use and land use.

**Long-term Stewardship Site Visit:** On July 11, 2018, DEQ conducted a long-term stewardship site visit to discuss and assess the status of the implemented remedies at the site. The following people were present for the LTS inspection.

Name	Organization	Email Address	Phone No.
Tara Mason, DEQ Project Manager	VADEQ – Central Office	<a href="mailto:tara.mason@deq.virginia.gov">tara.mason@deq.virginia.gov</a>	804-698-4218
K. Allyson Lackey, DEQ Permit Writer	VADEQ – Central Office	<a href="mailto:kari.lackey@deq.virginia.gov">kari.lackey@deq.virginia.gov</a>	804-698-4421
Mark Kleiman, Univar Project Manager	Univar	<a href="mailto:mark.kleiman@univar.com">mark.kleiman@univar.com</a>	NA
Caleb Krouse, Consultant	AECOM	<a href="mailto:caleb.krouse@aecom.com">caleb.krouse@aecom.com</a>	NA
Conan Fitzgerald, Consultant	AECOM	<a href="mailto:conan.fitzgerald@aecom.com">conan.fitzgerald@aecom.com</a>	NA

**Engineering Controls (ECs)**

The selected remedy required the Facility to operate and maintain an aerobic bioremediation enhancement system, a SVE system, and recovery of LNAPL. The remedy included an expansion of the existing systems which were implemented as IMs. The current remediation system includes a 180-foot long aeration trench near and along the unnamed creek, a source area SVE system and an oxygen injection well network. Expansion of the site oxygen injection system continued through 2012, and a biovent system was installed in early 2013 within and adjacent to the former virgin tank farm. The expanded system targeted the source area vadose zone soil, capillary fringe soil, and shallow groundwater. The oxygen injection system was again expanded in early 2015. The biovent system has not been operated since 2015 due to operation of the source area air injection wells.

We observed the active remediation systems during the site walkover and did not observe any deficiencies. They systems appeared to properly maintained in accordance with the approved Operation and Maintenance Manual.

Constituents of Concern (COC) concentrations in environmental media have decreased at the site, and these trends can be attributed to corrective measures implementation (CMI) activities performed since 2005 in addition to natural degradation. The facility is in the process of evaluating site remediation system shutdown to assess HCOC rebound and develop final remedial action recommendations based on a site-specific risk assessment.

**Institutional Controls (ICs) (Entire Facility):**

The Facility filed an environmental covenant with the Martinsville Circuit Court on August 15, 2014 to implement the following ICs:

- Notify prospective buyers of the Property of the environmental conditions at the Property and of VDEQ's selected corrective measures as part of the remedy for the Property under RCRA Corrective Action.
- Prohibit use of the Property for residential purposes (including single family homes, multiple family dwellings, schools, day care facilities, child care centers, apartment buildings, dormitories, other residential style facilities, hospitals, and in-patient health care facilities) within the surveyed footprint of the Property boundaries.
- Prohibit the use of groundwater beneath the Property except for non-contact cooling water and purposes selected to support corrective measures.
- Restrict activities that would interfere with or adversely impact the integrity of the remedy.
- Restrict surface and subsurface soil excavation except in conformance with an appropriate Materials Management Plan.

We did not observe any deficiencies in maintaining the above ICs.

**Financial Assurance:** Financial Assurance is up to date for corrective action activities at the Facility.

**Reporting Requirements/Compliance:**

**Permit Reporting requirements for Corrective Measures Action Implementation:** The permittee shall submit an Annual Groundwater Monitoring and CMI progress report no later than March 1<sup>st</sup> of each calendar year, unless an alternate frequency has been approved by the Department. The Permittee shall submit Corrective Measures three-year assessment reports that evaluates the effectiveness of the corrective measures in meeting human health and environmental protection objectives. The required three-year assessment report that coincides with annual reports may be compiled with the annual report. The last Annual Report, which included the Three Year Assessment, was submitted on February 28, 2018.

**Uniform Environmental Covenants Act (UECA) Reporting requirements:** By the end of 2014 and every December thereafter following the Agency's approval of the UECA covenant, until the specified remediation standards are met and the Agency agrees in writing that reporting is no longer required, and whenever else requested in writing by the Agency, the then current owner of the Property shall submit to the Agency and any Holder listed in the Acknowledgments of the covenant written documentation stating whether or not the activity and use limitations in this environmental covenant are being observed. This documentation shall be signed by a qualified and certified professional engineer who has inspected and investigated compliance with this environmental covenant.

*Univar Martinsville  
2018 Long Term Stewardship Inspection*

In addition, within one (1) month of after any of the following events, the then current owner of the Property shall submit to the Agency and any Holder listed written documentation describing the following: noncompliance with the activity and use limitations in the covenant; transfer of the Property; changes in use of the Property; or filing of applications for building permits for the Property and any proposals for any site work, if such building or proposed site work will affect the contamination on the Property subject to the covenant. The most recent UECA Compliance Letter was submitted on December 20, 2017.

The Department did not identify any noncompliance issues with reporting requirements.

**Mapping:** The EPA Facility website figure has been updated with a Geospatial PDF showing the use restriction boundaries. The map was field-verified and no issues were noted.

**Follow-up Activities:** No follow up activities related to the LTS are required.

**Conclusion:** The ECs and ICs selected are implemented and remain intact and undamaged. No EC/IC deficiencies have been identified.

**VDEQ Long Term Stewardship Inspection Site Map**  
Univar Martinsville Site – Milford, Virginia



Univar Martinsville  
2018 Long Term Stewardship Inspection

VADEQ - Long Term Stewardship Checklist  
Univar Martinsville site  
VAD003111416

July 11, 2018  
Tara D. Mason

DEQ Personnel

Tara Mason, Remediation Project Manager  
K. Allyson Lackey, Permit Writer/HW Inspector

OnSITE 10:00 AM  
OFFSITE 11:30 AM

Facility Representatives

Caleb Krouse - 919-665-7680  
Conan Fitzgerald 614-270-1661  
Mark Kleiman 919-259-6261

Selected Remedies:

Groundwater contamination that was migrating toward the unnamed downgradient tributary to Mulberry Creek that runs along the north side of the Property is being mitigated. Potential surface water exposure is limited by posting of No Trespassing signs and warning signs cautioning people to avoid contact with the surface water posted along the Property boundary and along the unnamed tributary.

The site remediation system targets benzene, toluene, ethyl benzene, and xylenes (BTEX), methyl tert-butyl ether (MTBE), chlorinated volatile organic compounds (CVOCs), and ketones in soil and groundwater. The remediation system includes a 180-foot long aeration/bioremediation trench near and along the unnamed creek, a source area soil vapor extraction (SVE) system, an oxygen injection bioremediation well network and a source area biovent system.

AULs:

- Notify prospective buyers of the Property of the environmental conditions at the Property and of VDEQ's selected corrective measures as part of the remedy for the Property under RCRA Corrective Action.
- Prohibit use of the Property for residential purposes (including single family homes, multiple family dwellings, schools, day care facilities, child care centers, apartment buildings, dormitories, other residential style facilities, hospitals, and in-patient health care facilities) within the surveyed footprint of the Property boundaries.
- Prohibit the use of groundwater beneath the Property except for non-contact cooling water and purposes selected to support corrective measures.
- Restrict activities that would interfere with or adversely impact the integrity of the remedy.
- Restrict surface and subsurface soil excavation except in conformance with an appropriate Materials Management Plan.

<b>IC Review and Inspection Questions:</b>	<b>Yes</b>	<b>No</b>	<b>Notes</b>
• Have the ICs specified in the CA remedy been fully implemented in accordance with any applicable schedule?	✓		
• Do the ICs provide control for the entire extent of contamination (entire site or a specific portion)?	✓		
• Are the ICs eliminating or reducing exposure of all potential receptors to known contamination?	✓		
• Are the ICs sufficiently meeting the risk goals and applicable standards specified in the CA remedy?	✓		
• Are the ICs effective and reliable for the activities (current and future) at the property to which the controls are applied?	✓		
• Are the ICs suitable for the period/length of time which the controls are intended to be used as specified in the CA remedy?	✓		
• Are the ICs being maintained as required by the CA remedy in order to ensure that the controls remain effective?	✓		
• Are additional ICs necessary to achieve the intended goals of the CA remedy?	✓		
• Are modifications to the ICs needed?			may evaluate shutdown of ECS and monitor rebound
<b>EC Review and Inspection Questions:</b>			
• Have the ECs specified in the CA remedy been fully implemented and constructed in accordance with any applicable plans and schedule?	✓		
• Are the ECs fully intact? Any damage visible? Have any repairs been necessary?	✓		Small in acc. w/ O+M plan as needed
• Do the ECs provide control for the entire extent of contamination (lateral and vertical)?	✓		
• Are the ECs effective at reducing contaminant migration? Is data available to provide supporting evidence?	✓		
• Are the ECs eliminating or mitigating exposures to all potential receptors?	✓		
• Are the ECs sufficiently meeting the risk goals and applicable standards specified in the CA remedy?	✓		
• Are the ECs effective and reliable for the activities (current and future) and climatic conditions at the property to which the controls are applied?	✓		

