



*Commonwealth of Virginia*

**VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY**

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August 15, 2024

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**VIA ELECTRONIC MAIL**

**RE: Long Term Stewardship Evaluation Report  
Former Emerson Electric, Alco Controls - Wytheville VA  
EPA ID VAD065415457**

Dear Mr. Rathgeb and Mr. Riley:

The Virginia Department of Environmental Quality, Office of Remediation Programs (DEQ) has prepared the attached report following the Long-Term Stewardship inspection performed on the former Emerson Electric, Alco Controls site located in Wytheville, Virginia. The inspection found multiple concerns with compliance of engineering/institutional controls and the RCRA Corrective Action (CA) Final Remedy, as detailed within the attached report. DEQ will work with Copeland/Emerald and Riley Construction (current property owner) to address soil disturbance and management from recent construction activities at the facility. DEQ will also consider the need to establish an enforcement mechanism for the on-going RCRA CA obligations at the facility.

Sincerely,

A handwritten signature in cursive script that reads "Ryan J. Kelly".

Ryan J. Kelly  
Corrective Action Project Manager  
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Former Emerson Electric, Alco Controls  
2024 Long Term Stewardship Evaluation

ECC: Tara Mason, – VDEQ-CO  
Stacy Bowers – VDEQ-SWRO  
Kristin Koroncai – USEPA Region III  
Dave Sarr, WSP

Attachments



## **Long-Term Stewardship Assessment Report Former Emerson Electric, Alco Controls**

**EPA ID VAD065415457**

Prepared by: Ryan Kelly

Date: August 15, 2024

### **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 RCRA Corrective Action facilities. The assessment is conducted in two-fold, which consists of a record review and a field inspection (if needed), to ensure that the remedies are implemented and maintained in accordance to the final decision.

The RCRA Corrective Action Program has identified key elements of effective Long-Term Stewardship for Corrective Action cleanups. The LTS Report took into consideration the following elements while preparing this report:

- Element 1 – Legal Authorities
- Element 2 – Information Regarding Engineering and Institutional Controls
- Element 3 – Long-Term Facility Oversight, Monitoring, and Maintenance
- Element 4 – Recordkeeping and Tracking
- Element 5 – Meaningful Engagement and Consultation
- Element 6 – Funding
- Element 7 – Enforcement
- Element 8 – Enforceable Mechanisms
- Element 9 – Dedicated Resources

### **Site Background:**

The former Emerson Electric Facility is located at 555 Peppers Ferry Road, Wytheville, Wythe County, Virginia. The Facility originally consisted of four buildings which were situated on a 21.8-acre parcel. The entire Emerson Facility contains three distinct parcels (lots). Lot 1 is 1.5 acres in

size and is located at the north end of the site, next to Peppers Ferry Road. The area was formerly used as an employee parking lot, and there were no buildings on the lot. Lot 2 is located to the south of the Facility and consists of 8.428 acres. No manufacturing or operations were conducted on Lot 2. Lot 3 consists of approximately 12 acres and contains the former Emerson manufacturing plant and surrounding land. All manufacturing operations took place on Lot 3, where the original Facility buildings were constructed.

The former Emerson Facility is located in a commercial and light industrial area on the north side of Wytheville. The Facility is currently bordered by two hotels, Wytheville community center and Wytheville Community College to the north and east, the Wytheville Regional Housing Agency to the south, and Peppers Ferry Road to the north and west. Interstate 81 is located farther to the north (approximately 0.5 mile) of the Facility.

The former Facility is situated on a topographic high point, at an elevation of approximately 2,440 feet above mean sea level. The land gently slopes away on all sides of the buildings. The closest surface water body is a spring fed pond approximately 1,000 feet east of the Facility.

Reportedly, the original Facility buildings were constructed in 1935 on farmland. The Facility operated as a textile mill and then as a knitting mill (Wyomissing Corporation) until approximately 1974, when Tuttle Electric (a division of Emerson) began operations. Tuttle Electric manufactured heating elements for commercial dryers and refrigerators. Chromolox (a division of Emerson) leased the southern portion of the building from approximately 1974 to 1977.

The facility buildings covered approximately 139,000 square feet of space, which consisted of approximately 2,500 square feet of office space, 120,000 square feet of manufacturing space, and 11,500 square feet of storage space. Former outdoor features included a chip storage area and two paved parking lots.

Raw materials previously used at the Facility include nitric acid, sulfuric acid, hydrochloric acid, chromic acid, Freon, and 1,1,1-trichloroethane (TCA). Small quantities of nitric acid and sulfuric acid were present in the wastewater laboratory.

Operations ceased at the Facility in approximately 2001 and the Facility was closed. The site was held by Emerson Charitable Trust until the entire site sold to Riley Construction Company, Inc. on February 7, 2013. Emerson retained responsibility for ongoing RCRA requirements and obligations. Riley Construction subsequently sold Lot 2 to the Wytheville Regional Housing Agency, Inc. on February 28, 2013. EPA and VDEQ determined that corrective action on Lot 2 was complete without controls and issued a Final Decision for Lot 2 on April 16, 2015.

The entire facility is currently under continued industrial use with Riley Construction utilizing Lots 1 and 3, including the former main building, for commercial storage purposes. A majority ownership interest of Emerson's Climate Technologies business was sold in 2023 in a newly formed joint venture named Emerald JV Holdings L.P. (Emerald).

**Current Site Status:**

Initial investigation and remediation of soil and groundwater were conducted under the Virginia Department of Environmental Quality (DEQ) Voluntary Remediation Program (VRP) from 2004 through 2006. A deed restriction prohibiting any use of groundwater for purposes other than environmental monitoring of the former Alco Controls property was added to the deed for the former Alco property on February 2, 2006. The deed restriction also prohibits residential use of the property on Lots 1 and 3.

On September 10, 2008, the US EPA Region III invited Emerson to participate in the RCRA Corrective Action program for the Facility under a Facility Lead Agreement (FLA). On October 8, 2008, Emerson submitted a Facility Lead Agreement to the VDEQ and EPA Region III. Subsequent environmental investigations were conducted under the requirements of the FLA.

On September 12, 2017, the Final Decision and Response to Comments was issued by the DEQ, which represents Remedy Selection and Remedy Construction Complete determination in accordance with the Corrective Action process. The remedy included in-situ Biogeochemical Reductive Dechlorination (BiRD) groundwater treatment, groundwater monitoring and institutional controls. In April 2017 the BiRD injections were completed.

The Facility continues to monitor groundwater in accordance with the Groundwater Monitoring Plan dated May 5, 2022. The most recent annual site report was submitted on December 6, 2023.

**Element 1: Legal Authorities**

The Facility is subject to the Corrective Action (CA) Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6901 et seq. (Corrective Action Program). The Corrective Action Program is designed to ensure that certain facilities subject to RCRA have investigated and cleaned up any releases of hazardous waste and waste constituents that have occurred at their site.

**Element 2: Information Regarding Engineering and Institutional Controls and Remedy**

The following controls and components are required as part of the CA remedy:

<b>Associated Tax Parcel</b>	<b>Restriction</b>	<b>Applies to Polygon</b>
<u>Tax Parcel ID:</u> Parcel 83B Tax Map 41A3 Parcel 84A Tax Map 41A3	A. Lots 1 and 3 shall not be used for residential purposes or for children's (under the age of 16) daycare facilities, schools, or playground purposes.	Lots 1 and 3

Associated Tax Parcel	Restriction	Applies to Polygon
	<p>B. Groundwater beneath the property shall not be used for any purposes except for environmental monitoring and testing, or for non-contact industrial use as may be approved by VDEQ. Any new groundwater wells installed at the Facility area must be approved by VDEQ.</p> <p>C. Excavation and/or management of soil shall be conducted in accordance with a VDEQ-approved Materials Management Plan.</p>	
	<p>The Facility shall continue to monitor groundwater pursuant to an approved groundwater monitoring plan, and any revisions thereto, until such time as it can be shown that the concentrations of hazardous constituents have met the remedial goals or until such time as it can be shown that the concentrations of hazardous constituents demonstrate a generally stable or decreasing trend.</p>	<p>Lots 1 and 3, plus offsite</p>

**Element 3 – Long-Term Facility Oversight, Monitoring and Maintenance**

Emerald maintains responsibility for ongoing RCRA requirements and obligations. Emerald’s consultants (WSP) continue to monitor groundwater in accordance with the Groundwater Monitoring Plan dated May 5, 2022. The most recent annual site report was submitted on December 6, 2023.

No portions of the Facility are located within the Regulatory Floodway or Flood Hazard Areas based on review of [FEMA’s National Flood Hazard Layer \(NFHL\) Viewer](#).

**Element 4 – Recordkeeping and Tracking**

DEQ maintains a complete historical and current administrative record for the Facility.

**Mapping:** The EPA Facility website includes a figure with a Geospatial PDF showing the use restriction boundaries.

### **Element 5 – Meaningful Engagement and Consultation**

The Facility is currently active under commercial/industrial use. The EPA Region 3 website maintains updated information and key documents for the facility. In addition, the community may request information and documents from the VDEQ Office of Remediation Programs.

### **Element 6 – Funding**

**Financial Assurance:** Financial Assurance is required and in-place for this Facility.

### **Element 7 – Enforcement**

EPA, without limitation, reserves its right to take administrative enforcement action under RCRA or other applicable federal law for violations.

### **Element 8 – Enforceable Mechanisms**

A deed restriction prohibiting any use of groundwater for purposes other than environmental monitoring of the former Alco Controls property was added to the deed for the former Alco property on February 2, 2006. The deed restriction also prohibits residential use of the property on Lots 1 and 3.

The Facility Lead Agreement, dated 10/08/2008, with EPA served as the mechanism through the final remedy decision. DEQ has had recent discussions with Emerald and their consultant (WSP) to establish an appropriate legal mechanism for the remaining RCRA CA obligations.

### **Element 9 – Dedicated Resources**

The Performance Partnership Grant Workplan provides for Long-Term Stewardship activities. The Programmatic goal is to evaluate 20% of facilities with remedies older than 10 years.

### **Long-term Stewardship Information Review:**

DEQ conducted a long-term stewardship information review to assess the status of the implemented remedies at the site. The review consisted of inspecting recent google earth imagery along with contacting the current consultant (WSP) to review a checklist of site-specific items. The checklist is included with this letter and was verified by the consultant per an email dated July 1, 2024.

### **Documents Reviewed:**

EPA Region 3 Corrective Action Sites Webpage - Facility Fact Sheet  
Facility Lead Agreement (10/08/2008)  
2018 Annual Report with well abandonment report (04/15/2019)  
Final Decision and Response to Comments (09/12/2017)

Google Earth imagery (04/24/2023)  
2023 Annual Report (12/06/2023)

**Follow-up Activities:**

DEQ will work with Copeland/Emerald and the current property owner (Riley Construction) to address soil disturbance and management from recent construction activities at the facility. The final remedy requires that soil disturbance/management be conducted in accordance with DEQ approved Soil Management Plan.

DEQ will also consider the need to establish an enforcement mechanism for the on-going RCRA CA obligations at the facility.

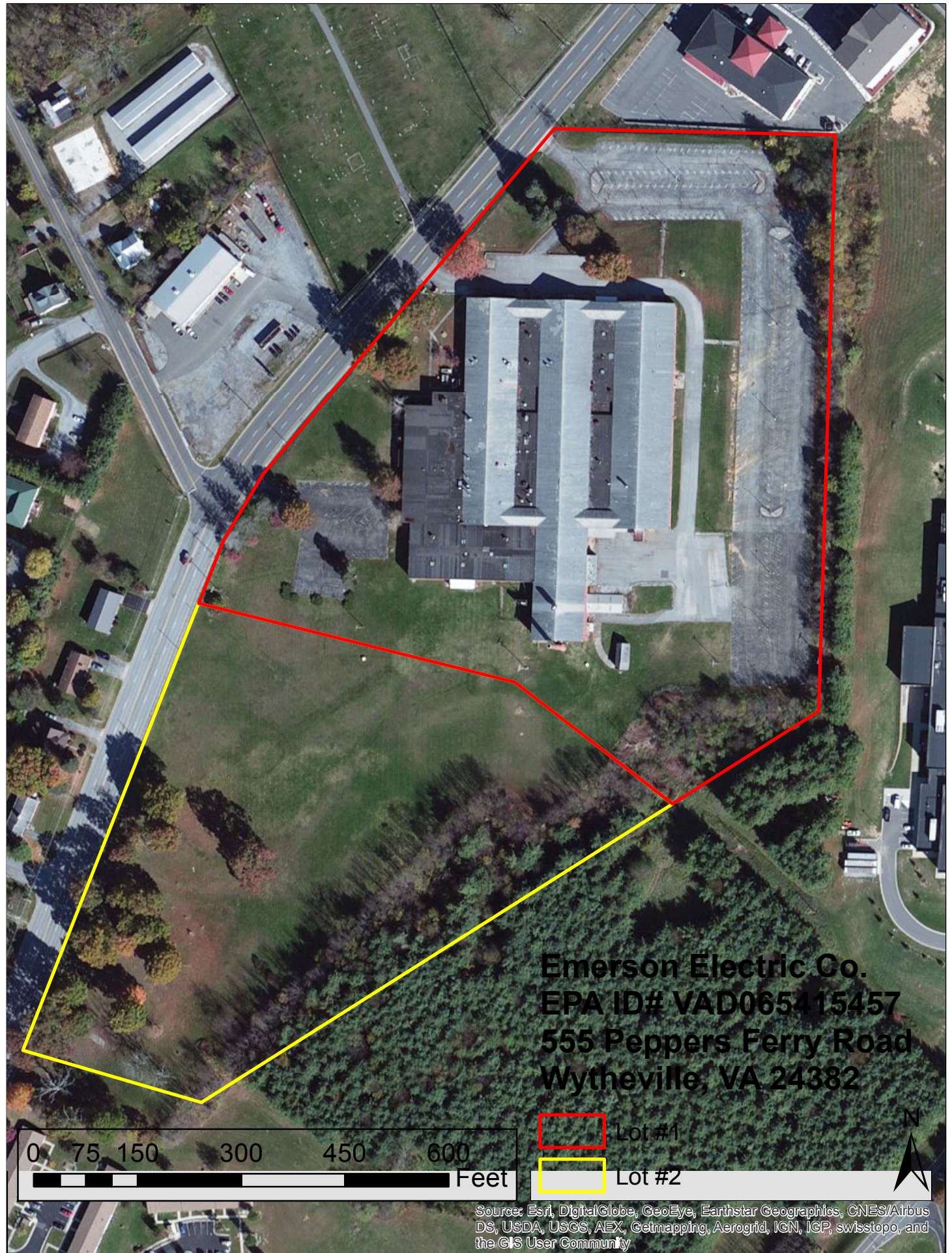
**Conclusion:**

The institutional controls selected and defined within the 2017 FDRTC are implemented and remain intact and undamaged. Follow up activities are needed to address issues noted above.



Former Emerson Electric, Alco Controls  
2024 Long Term Stewardship Evaluation

**DEQ Long Term Stewardship Facility Map**  
Former Emerson Electric, Alco Controls – Wytheville, Virginia



**Emerson Electric Co.**  
**EPA ID# VAD065415457**  
**555 Peppers Ferry Road**  
**Wytheville, VA 24382**



-  Lot #1
-  Lot #2



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



VADEQ - Long Term Stewardship Checklist  
 Former Emerson Electric, Alco Controls Facility  
 EPA ID NO. VAD065415457

Date of Site Visit

Desktop Evaluation Only

DEQ Personnel

Ryan Kelly, Corrective Action PM

Facility Representatives

Dave Sarr, Environmental Consultant, WSP USA

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Selected Remedies:

Groundwater Treatment, Groundwater Monitoring, Compliance with and Maintenance of Institutional Controls (ICs):

Associated Tax Parcel	Remedy Component or Restriction	Applies to Polygon
<u>Tax Parcel ID:</u> Parcel 83B Tax Map 41A3 Parcel 84A Tax Map 41A3	A. Lots 1 and 3 shall not be used for residential purposes or for children’s (under the age of 16) daycare facilities, schools, or playground purposes. B. Groundwater beneath the property shall not be used for any purposes except for environmental monitoring and testing, or for non-contact industrial use as may be approved by VDEQ. Any new groundwater wells installed at the Facility area must be approved by VDEQ. C. Excavation and/or management of soil shall be conducted in accordance with a VDEQ-approved Materials Management Plan.	Lots 1 and 3
	The Facility shall continue to monitor groundwater pursuant to an approved groundwater monitoring plan, and any revisions thereto, until such time as it can be shown that the concentrations of hazardous constituents have met the remedial goals or until such time as it	Lots 1 and 3, plus offsite

Associated Tax Parcel	Remedy Component or Restriction	Applies to Polygon
	can be shown that the concentrations of hazardous constituents demonstrate a generally stable or decreasing trend.	

<b><u>IC Review and Assessment Questions:</u></b>	<b><u>Yes</u></b>	<b><u>No</u></b>	<b><u>Notes</u></b>
• Have the ICs specified in the remedy been fully implemented? Implementation mechanism in place?		<b>X</b>	<i>No mechanism under the RCRA program has been established. VRP certificate in 2006 requires deed restrictions.</i>
• Do the ICs provide control for the entire extent of contamination (entire site or a specific portion)?	<b>X</b>		
• Are the ICs eliminating or reducing exposure of all potential receptors to known contamination?	<b>X</b>		
• Are the ICs effective and reliable for the activities (current and future) at the property to which the controls are applied?	<b>X</b>		
• Have the risk of potential pathway exposures addressed under Corrective Action changed based on updated screening levels and new technologies?		<b>X</b>	
• Are modifications to the IC implementation mechanism needed? (i.e. UECA Covenant, Permit or Order)	<b>X</b>		Additional mechanism may be needed
• Are there plans to develop or sell the property?		<b>X</b>	
• Have all reporting requirements been met?	<b>X</b>		Annual Report submitted, dated 12/6/2023
<b><u>Groundwater Remedy Review and Assessment Questions:</u></b>	<b><u>Yes</u></b>	<b><u>No</u></b>	<b><u>Notes</u></b>
• For wells where groundwater monitoring is no longer required, have the wells be decommissioned?	<b>X</b>		Well Abandonment in November 2018 documented in 2018 Annual Report dated 4/15/2019

<b><u>Surface and Subsurface IC Review and Assessment</u></b> <b><u>Questions:</u></b>	<b><u>Yes</u></b>	<b><u>No</u></b>	<b><u>Notes</u></b>
• Is the facility being used for residential purposes?		<b>X</b>	
• Have there been recent construction or earth-moving activities or future plans for such?	<b>X</b>		Google earth imagery indicates newer structures (assumed to be storage units) constructed on the eastern side of property between asphalt areas. In addition, consultant reported new storage buildings constructed on eastern side of property near tree line.

<b><u>Engineered Cap or Cover Review and Assessment</u></b> <b><u>Questions:</u></b>	<b><u>Yes</u></b>	<b><u>No</u></b>	<b><u>Notes</u></b>
• Have covers/caps been properly maintained?			NA
• Does vegetative cover in Riparian Buffer area remain intact?			NA
• Have any repairs been necessary? (i.e. paving, sealing, regrading, filling, root removal)			NA
• Is the leachate collection system operating and effectively preventing groundwater contamination?			NA

