



**VIRGINIA DEPARTMENT OF ENVIRONMENT QUALITY
DIVISION OF LAND PROTECTION AND REVITALIZATION
OFFICE OF REMEDIATION PROGRAMS**

STATEMENT OF BASIS

KLI, Incorporated

MILFORD, VIRGINIA

EPA ID NO. VAD052356623

October 11, 2012

TABLE OF CONTENTS

SECTION	PAGE
1.0 Introduction.....	2
1.1 Facility Name.....	2
1.2 Proposed Decision.....	2
1.3 Importance of Public Input.....	2
2.0 Facility Background.....	3
3.0 Summary of the Environmental History.....	3
4.0 Summary of Proposed Remedy.....	6
4.1 Soil.....	7
4.2 Groundwater.....	7
4.3 Institutional Controls.....	7
5.0 Corrective Action Objectives.....	8
6.0 Evaluation of Proposed Remedy.....	9
6.1 Threshold Criteria.....	9
6.1.1 Overall Protection of Human Health and the Environment.....	9
6.1.2 Achieve Media Cleanup Objectives.....	9
6.1.3 Source Control.....	10
7.0 Environmental Indicators.....	10
8.0 Financial Assurance.....	10
9.0 Public Participation.....	10

Figures:

Figure 1 - Facility Map showing SWMUs and AOCs

Figure 2 - Groundwater Monitoring Wells

1.0 INTRODUCTION

1.1 Facility Name

The Virginia Department of Environmental Quality (VDEQ) has prepared this Statement of Basis (SB) for KLI, Incorporated located at 16174 Industrial Drive in Milford, Virginia 22527, (hereinafter referred to as the Facility or Site).

The Facility is subject to the Corrective Action 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. Sections 6901 to 6992k. 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 hazardous constituents that have occurred at their property.

Information on the Corrective Action program as well as a fact sheet for the Facility can be found by navigating <http://www.epa.gov/reg3wcmd/correctiveaction.htm>.

VDEQ has prepared this SB in cooperation with the United States Environmental Protection Agency (EPA). VDEQ reviewed all available site data. Based on its review, VDEQ is proposing its final remedy for the Facility in this SB and associated permit modification, including providing the opportunity for public comment and review on its proposal.

1.2 Proposed Remedy

This SB explains VDEQ's proposed remedy to require the Facility to maintain a groundwater monitoring program and to develop and maintain groundwater use restrictions known as Institutional Controls (ICs). The proposed ICs are detailed in Section 6, below. These controls will provide assurance that the groundwater use, as anticipated when the remedy was proposed, does not change until the groundwater objectives are met.

This SB summarizes information that can be found in greater detail in the work plans and reports reviewed by VDEQ and EPA, which can be found in the Administrative Record (AR).

1.3 Importance of Public Input

Before VDEQ makes a final decision on its proposal for the Facility, the public may participate in the remedy selection process by reviewing this SB and documents contained in the AR for the Facility and providing written comments to VDEQ during the comment period. The AR contains the complete set of reports that document Facility conditions, including a map of the Facility, in support of VDEQ's proposed decision. VDEQ encourages anyone interested to review the AR. The AR is available for public review, in paper or electronic format, from the VDEQ contact person listed in Section 9.0 below.

When making a determination regarding the selection of a final remedy, VDEQ will consider all written comments received during the comment period (see Section 9.0), and requirements of the

Virginia Hazardous Waste Management Regulations and 40 CFR Part 124. Each person who has submitted comments will receive a written response from VDEQ. If VDEQ determines that new information or public comments warrant a modification to the proposed decision, VDEQ will modify the proposed decision or select other alternatives based on such new information and/or public comments. VDEQ is proposing to incorporate the remedy selection in its modification of the Facility's Hazardous Waste Management Post-Closure Permit (Permit).

2.0 FACILITY BACKGROUND

The Facility is located south of the town of Milford in Caroline County, Virginia. The Facility consists of a 21.33-acre parcel bounded by Industrial Drive (Route 640) to the west, Route 773 to the south, Hoover Wood Products to the east, and Jones Chemical to the north.

From 1968 to 1988, the following three businesses operated at the Facility: Keller Extrusions of Virginia, Inc., Keller Building Products of Virginia, Inc., and Keller Ladders of Virginia. The Site is a RCRA Treatment, Storage, or Disposal ("TSD") facility that contains a closed hazardous water surface impoundment formerly operated by the Keller entities mentioned above. The surface impoundment received wastewater from the chemical conversion of hexavalent chromium. This wastewater was a listed hazardous waste designated as F019. VDEQ approved closure of the surface impoundment on June 29, 1989. This closed unit is undergoing post-closure care pursuant to a Post-closure Care Permit dated May 27, 2006 issued to KLI. The Permit also contains the requirements for site-wide corrective action that are discussed below.

3.0 SUMMARY OF ENVIRONMENTAL HISTORY

EPA Region III completed a RCRA Facility Assessment (RFA) in January 1989 which identified 13 Solid Waste Management Units (SWMUs) and 2 Areas of Concern (AOCs). The SWMUs and AOCs identified are described below, and shown in Figure 1.

SWMU #1 – Aluminum Extrusion Collection Basin: located inside the main plant building, this unit consisted of a concrete collection basin situated under two aluminum extruders. This basin collected any water leaking from the extrusion; this water contained 1 to 2% used hydraulic oil. This basin also recovered any overflow of quenching water within a trough used to cool extruded aluminum. The RFA indicated that there were no known or documented releases and no evidence of releases.

SWMU #2 – Oil-Water Separator: located outside on the east side of the main manufacturing building, this separator collected wastewater from the aluminum extrusion collection basin (SWMU #1). Once separation occurred, the water was recycled back to the quenching operation and the oil was placed in the aluminum extrusion wastewater storage tank (SWMU #3). The RFA indicated that there were no known or documented releases and no evidence of releases.

SWMU #3 – Aluminum Extrusion Wastewater Storage Tank: located outside the main manufacturing building and adjacent to the aluminum extruders, this tank received wastewater and used hydraulic oil from the collection basin (SWMU #1), and eventually

only the separated oil from SWMU # 2. The RFA notes that from the initiation of the extrusion process until 1985, the wastewater and used hydraulic oil contained in the storage tank was pumped onto the ground approximately 4 to 5 times per year.

SWMU #4 – Spent Caustic Storage Tank: located outside near the northeast corner of the building, the tank was taken out of service in 1986 because of a suspected leak. It was removed in mid-1987 because it was no longer needed. This tank received wastes generated by extrusion die cleaning. The extrusion dies were cleaned in hot caustic. This process generates waste caustic liquid and a solid residue of aluminum oxides. The waste caustic liquid and solid residue was stored in this tank.

SWMU #5 – Chrome Treatment Wastewater Collection Pit: this unit was a large collection pit located inside the main plant building, and began operation in early to mid-1970s. The RFA indicated that there were no known or documented releases and no evidence of releases. After confirmatory rinsate sampling of the concrete bottom of the pit, VDEQ approved clean-closure of the pit on April 16, 1997.

SWMU #6 – Chrome Wastewater Treatment System: located inside the main plant building, the unit began operation in 1985. The system received wastewater stored in the chrome conversion wastewater collection pit. The RFA indicated that there were no known or documented releases and no evidence of any releases.

SWMU #7 – Drum Storage Area: located within the manufacturing plant adjacent to the chrome wastewater treatment system (SWMU #6), the area was used to store drums that collected sediment from SWMU #6. The RFA indicated that there were no known or documented releases and no evidence of releases.

SWMU #8 – Outdoor Sump: this unit was an outdoor below grade concrete sump with a manhole cover. Until 1985, the sump received wastewater directly from the chrome conversion wastewater collection pit (SWMU #5); after 1985, when the chrome wastewater treatment system went on-line, the sump received only treated wastewater. At the time of the RFA, there was no documentation that the sump was cleaned of any F019 sediment which may have settled to the bottom prior to 1985. The sump was later cleaned by the facility, and there is no longer sediment located in the sump. The RFA indicated that there were no known or documented releases and no evidence of releases.

SWMU # 9 – First Surface Impoundment: evidence of a surface impoundment located adjacent to SWMU #10 appears to have been identified on an undated site photograph. The first impoundment was a non-discharging surface impoundment utilized for an indeterminate period of time, and was drained and filled with soil in 1976.

SWMU #10 – Second Surface Impoundment: this unit received F019 wastewater from the electrostatic plating operation (wastewater treatment sludge from the chemical conversion coating of aluminum). The aqueous phase was evaporated in the impoundment, leaving the metals and a paint residue (non-lead containing paint). The impoundment underwent closure in 1988. All liquid wastes were removed and then

treated to reduce the hexavalent chromium and precipitate the soluble metals. The resulting water was tested and discharged to a publicly owned treatment works (POTW). Closure certification for the unit was received on December 8, 1988. However, a closure inspection by DEQ revealed deficiencies in the cap construction and design, and final closure was not verified. Corrections were made and closure was approved on June 9, 1989 after a follow-up inspection. SWMU #10 was certified closed with waste in place, and was not included in the Phase I RCRA Facility Investigation (RFI) because groundwater at the unit boundary is monitored as part of post-closure care under the facility's current Permit. As part of post-closure care for the surface impoundment, eleven monitoring wells are either gauged or sampled. Six monitoring wells (SP-1, SS-4, SP-2, SP-3, SP-9, and SP-7) are gauged semiannually to evaluate groundwater flow direction. Five monitoring wells (SP-4, SP-6, SP-8, MW-7S, and MW-7I) are gauged and monitored in accordance with the Permit. All monitoring wells are shown in Figure 2.

SWMU #11 – Evaporation Tank System: this unit consists of two concrete evaporation tanks which began operation in 1984, and were constructed to replace the second surface impoundment (SWMU #10). As reported in the RFA, the tanks were clean-closed as hazardous waste management (storage) units. Following closure, the east tank managed only non-hazardous wastewater and the west tank served as a backup. These tanks have not received hazardous waste since 1985.

SWMU #12 – Concrete Drum Storage Area: the unit was an outdoor concrete drum storage area located south of the manufacturing plant. The structure was built in the early 1980s for scrap metal and drum storage. The RFA indicated that there were no known or documented releases and no evidence of releases.

SWMU #13 – Former Drum Storage Area: this unit was an outside-unpaved open area located at the northeast corner of the manufacturing building. It was used to store drums containing wastewater generated by the aluminum extrusion process.

AOC #1A – Wastewater Evaporation System: this unit consisted of a 3,000-gallon metal heating tank and a metal cooling tower. Wastewater that entered this evaporation system was non-hazardous wastewater discharged to the two evaporation tanks (SWMU #11) following batch treatment. The RFA indicated that there were no known or documented releases and no evidence of releases.

AOC #2A – this unit consisted of two steel 700-gallon paint wastewater collection tanks located inside the main plant. These tanks were used to store the cascade water which removed paint overspray from the air. The RFA indicated that there were no known or documented releases and no evidence of releases. This unit was clean-closed and closure certification was submitted to DEQ on January 27, 1998. Therefore, no further investigation of the area was deemed warranted as part of the RFI.

A preliminary RFI for the Facility (excluding SWMU #5 and AOC #2A) was conducted in October 2001. No constituents of concern in site-wide soil or groundwater samples exceeded screening criteria at any SWMU or AOC, except at SWMU #2. Total petroleum hydrocarbons

(diesel range organics) and several volatile organic compounds (VOCs) exceeding tap water RBCs were detected in groundwater at SWMU #2. However, the Department concluded, in a letter to the facility dated March 9, 2001, that no corrective action was necessary for the exceedances of VOCs at SWMU #2.

The Facility conducted an RFI for potential releases of hazardous waste or hazardous constituents at specified SWMUs (# 1, 2, 3, 4, 6, 7, 8, 9, 11, 12, and 13) and at AOC 1A. The Phase I RFI field activities were conducted in December 2007 with some confirmatory sampling in March 2008. The Facility submitted a Phase I RFI Report to the VDEQ on June 3, 2008. The DEQ approved the Phase I RFI Report on December 12, 2008, and required that the facility submit a Supplemental Phase I RFI Work Plan. The Supplemental Phase I RFI Work Plan was required by the DEQ to address a thallium exceedance of the residential risk level in soil in the vicinity of SWMU #11 and a PCE exceedance of the Maximum Contaminant Level (MCL) in groundwater collected from monitoring well SP-5. The Supplemental Phase I RFI Work Plan was approved by the DEQ on August 4, 2009 and included the following; a proposed deed restriction on a portion of the property around SWMU-11 limiting future use to industrial use only, and quarterly groundwater monitoring of wells SP-4 (background well for the post-closure care groundwater monitoring of the closed surface impoundment) and SP-5 for VOCs.

The Facility implemented one year of quarterly groundwater monitoring at monitoring wells SP-5 and SP-4 to further characterize impacts to groundwater. The RFI was determined to be complete by the Department in a letter dated January 13, 2011. The results of the RFI indicate that concentrations of certain constituents of concern (COCs) in groundwater exceed their Maximum Contaminant Levels (MCLs) or risk-based screening levels (RLs). The exceedances are limited to PCE (concentration range from 6.5 to 11.8 ug/l) in well SP-5 and do not extend beyond the property boundary. One soil sample adjacent to SWMU #11 exceeded the risk-based screening levels for residential use for thallium but met the risk-based screening levels for industrial use. The area is adjacent to the closed surface impoundment.

On June 28, 2012, the Facility conducted excavation activities to address the thallium detection above the residential screening level. The excavation was conducted on a 5-foot by 5-foot area around the location of the thallium detection until the soil level was below the residential screening value for thallium. The goal of the excavation was to eliminate the need for land and activities use restrictions in the area adjacent to the closed surface impoundment as part of the proposed remedy for the Facility. Therefore, groundwater monitoring and groundwater use restrictions were identified as the final remedy for the facility.

4.0 SUMMARY OF PROPOSED REMEDY

Based on the findings set forth in the RFA and RFI reports, VDEQ has determined that past operations at the Facility have resulted in soil and groundwater contamination. The soil contamination has been addressed through the excavation of the contaminated area adjacent to the closed surface impoundment. VDEQ additionally proposes that continued groundwater monitoring be conducted to ensure that the clean up objective is met. Finally, VDEQ will require institutional controls be implemented as necessary to prevent current and potential future exposure to groundwater contamination. VDEQ's proposed remedy is;

4.1 Soil

Based on the available information, there are currently no unacceptable risks to human health and the environment via the soil or vapor intrusion pathways for the present and anticipated use of the property. Because soil contaminant concentrations were addressed during the excavation activities conducted on June 28, 2012, there are no proposed remedies and no use restrictions for soils at the site.

The Facility is required to operate and maintain the closed surface impoundment as required by the facility's Permit.

4.2 Groundwater

The existing groundwater monitoring program for the post closure care of the closed surface impoundment will continue to be implemented as specified in the Permit. As part of the groundwater remedy for Corrective Action, the Facility will implement a groundwater monitoring program that will require the monitoring of wells SP-5, SP-6, MW-7s and MW-7I for PCE and 1,1-DCA at the frequencies specified in the Facility's Corrective Measure Implementation (CMI) Work Plan. Both monitoring programs will be implemented at the facility until it is demonstrated that drinking water standards are met and maintained. Changes to the groundwater monitoring programs may be proposed by the facility based on results from groundwater sampling.

4.3 Institutional Controls

1. Under this proposed remedy, some concentrations of contaminants will remain in the groundwater at the Facility above levels appropriate for drinking uses. In response, the proposed remedy will require the Facility to implement Institutional Controls (ICs) to restrict the use of groundwater at the Facility property while groundwater remains contaminated. ICs are generally non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination by limiting land or resource use. Institutional controls to be utilized at the site will require operation and maintenance of the closed surface impoundment and associated groundwater monitoring system and deed notice. A Plat showing the location of the closed surface impoundment and the property boundaries at the Facility was filed by the Clerk of the Circuit Court of Caroline County in Plat Cabinet A, Page 262-A when the Notification of Hazardous Waste Activity was filed.
2. Require a groundwater monitoring program pursuant to a groundwater monitoring plan submitted to and approved by the Department in accordance with the Facility's Permit.
3. Implement additional activity and use limitations at the Facility as described below.

Institutional controls described above will be implemented at the site through the following

mechanisms:

- A groundwater monitoring program that, at a minimum, proposes the groundwater monitoring wells to be monitored and the constituents for which monitoring shall be performed.
- A declaration of Restrictive Covenants that contains the following:
 - i. A groundwater use restriction preventing the use of groundwater at the property for potable purposes, unless it is demonstrated to the Department that use for such purposes will not pose an unreasonable threat to human health or the environment, and the Department agrees in writing to modify or terminate the groundwater use restriction.
 - ii. Activity restriction on the property prohibiting well drilling without prior written approval by the Department, to prevent inadvertent exposure to the contaminated groundwater and adverse affects to the Final Remedy.

Upon approval by the Department, the Facility shall record the Declaration of Restrictive Covenants in the Clerk's Office of the Circuit Court of Caroline County, provide a copy of the same to the Department, and shall implement the groundwater monitoring program.

The Facility will also be required to provide coordinate surveys for both use and activity restrictions and for the closed surface impoundment that define the boundary of each activity and use restriction as a polygon for mapping on publicly accessible viewers such as Google Earth.

These ICs are enforceable through the Facility's Hazardous Waste Management Post-Closure Care Permit and will be required to be recorded with the deed for the Facility property. If the Facility fails to meet its institutional control obligations or VDEQ, in its sole discretion, deems that additional ICs are necessary to protect human health or the environment, VDEQ has the authority to require and enforce additional ICs.

5.0 CORRECTIVE ACTION OBJECTIVES

VDEQ's Corrective Action Objectives for the Facility are the following:

A. Soil

The Corrective Action objectives for the Facility's soils is to continue the operation and maintenance of the closed surface impoundment in accordance with the Facility's Permit, as described in section 4.3.3 above. The excavation conducted to address the thallium detection above residential screening levels has eliminated the contamination in the Facility soils adjacent to the surface impoundment. Therefore, there are no land use restrictions as the Facility soils do not pose a threat to human health and the environment.

B. Groundwater

The Corrective Action Objectives for contaminated groundwater at the Facility is to restore groundwater to drinking water standards. These standards are established by the Maximum Contaminant Levels (MCLs) promulgated at 40 CFR 141, pursuant to Section 1412 of the Safe Drinking Water Act (SDWA), 42 USC Section 300g-1. Therefore, VDEQ's corrective action objective for groundwater at the Facility is to restore groundwater in well SP-5 to concentrations below 5 ug/L for PCE, and to implement Institutional Controls as described in Section 6.0 below.

6.0 EVALUATION OF PROPOSED REMEDY

This section provides a description of the criteria VDEQ uses to evaluate proposed remedies under the Corrective Action Program. The criteria are applied in two phases. In the first phase, VDEQ evaluates three criteria, known as Threshold Criteria. In the second phase, EPA sometimes uses seven balancing criteria to select among alternative solutions, if more than one is proposed. The Facility has demonstrated that the current conditions meet the threshold criteria established by VDEQ. Because VDEQ is not selecting among alternatives, a complete evaluation of the balancing criteria is not necessary.

6.1 Threshold Criteria

6.1.1 Overall Protection of Human Health and the Environment

This proposed remedy protects human health and the environment from exposure to contamination. VDEQ's proposed remedy meets this standard for current and anticipated use by requiring continued operation and maintenance of the closed surface impoundment, continued groundwater monitoring as well as groundwater use restrictions as detailed in Section 4 above.

6.1.2 Achieve Media Cleanup Objectives

VDEQ's proposed remedy meets the appropriate cleanup objectives based on assumptions regarding current and reasonably anticipated water resource use(s). While the Facility has derived its drinking water from an on-site well in the past, the plant is no longer operational and there is no groundwater use. However, for groundwater, the drinking water use is considered the most beneficial future use, requiring groundwater monitoring of monitoring wells SP-5, SP-6, MW-7S and MW-7I until the applicable clean-up targets are met. COCs are 1,1-DCA (RL = 24 ug/l), and PCE (MCL = 5 ug/l).

6.1.3 Source Control

In all remedy decisions, VDEQ seeks to eliminate or reduce further releases of hazardous wastes or hazardous constituents that may pose a threat to human health and the environment. The Facility has remediated the sources of releases by meeting the closure requirements for hazardous waste management units. No other sources were identified during the RFI.

7.0 ENVIRONMENTAL INDICATORS

Under the Government Performance and Results Act (GPRA), EPA has set national goals to address RCRA corrective action facilities. Under GPRA, EPA evaluates two key environmental clean-up indicators for each facility: (1) Current Human Exposures Under Control (HH EI) and (2) Migration of Contaminated Groundwater Under Control (GW EI). The Facility met both these indicators on September 25, 2003. Both determinations are considered current.

8.0 FINANCIAL ASSURANCE

The Facility is already providing financial assurance for the post-closure care activities required by the Facility's Permit. Additional assurances of financial responsibility for corrective action must be provided in accordance with conditions in the Facility's Permit. Cost estimates will address groundwater monitoring and implementation of the use restrictions outlined above.

9.0 PUBLIC PARTICIPATION

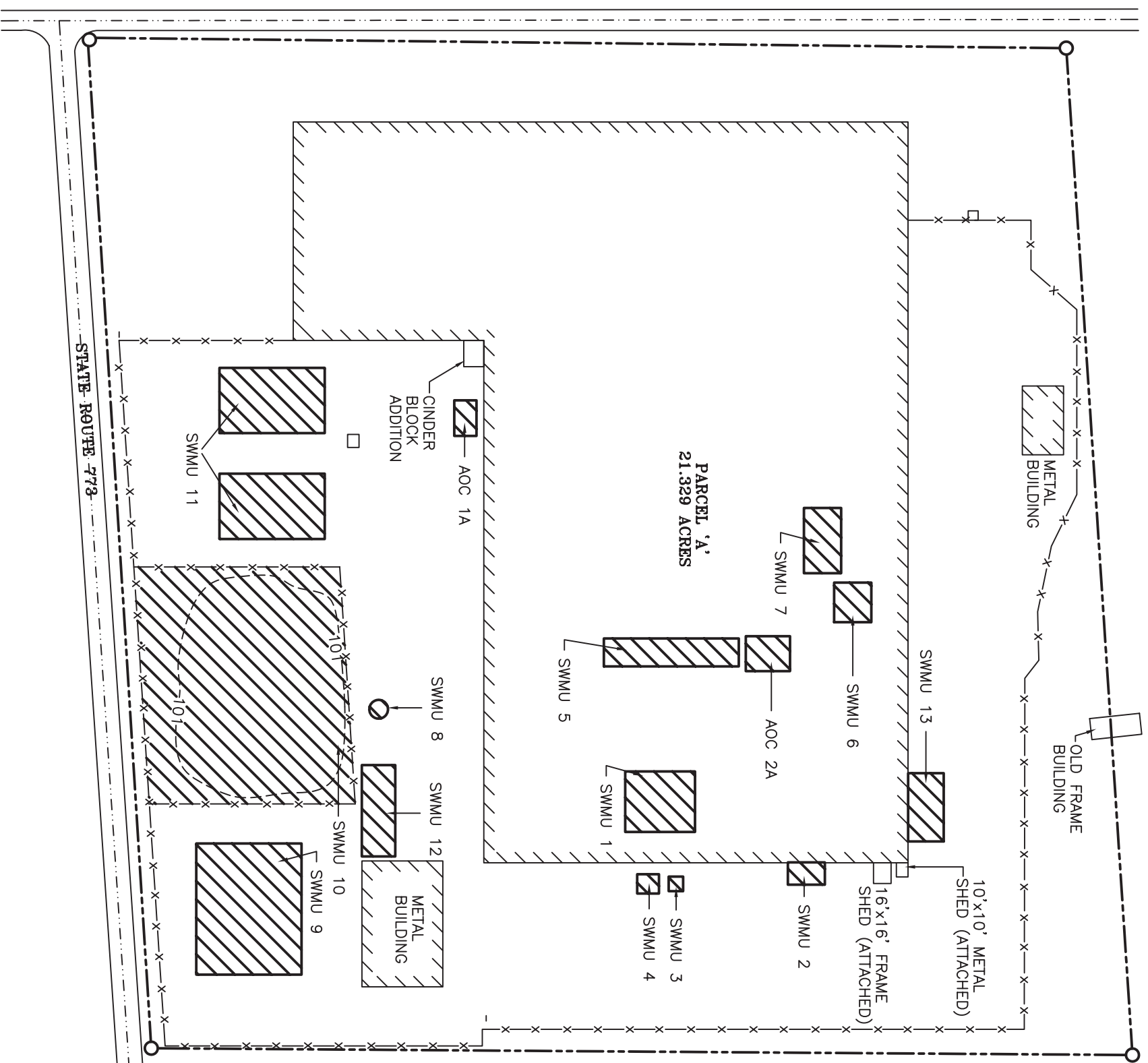
Interested persons are invited to comment on VDEQ's proposed decision. The public comment period will last sixty (60) calendar days from the date the notice is published in a local newspaper. Comments may be submitted by mail, fax, e-mail, or phone to Ms. Laura Galli at the address listed below.

A public meeting will be held fifteen (15) calendar days from the date the notice is published in a local newspaper. The Administrative Record contains all the information considered by VDEQ for its proposed remedy for the Facility. To receive a copy of the Administrative Record, contact Ms. Laura Galli at the address below:

Virginia Department of Environmental Quality
629 East Main Street
P.O. Box 1105
Richmond, VA 23218
Contact: Ms. Laura Galli
Phone: (804) 698 - 4218
Fax: (804) 698-4234
Email: laura.galli@deq.virginia.gov

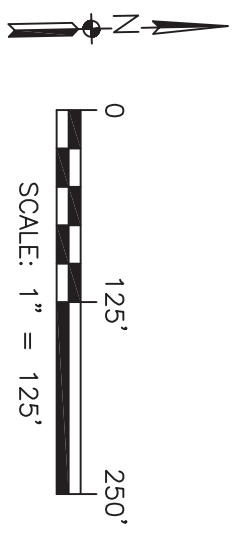
VDEQ encourages interested persons to participate in the remedy selection process by reviewing this SB and documents contained in the AR. The AR contains the complete information that VDEQ reviewed prior to this proposed decision.

VDEQ will make a final decision after considering all comments, consistent with applicable RCRA requirements and regulations. If the decision is substantially unchanged from the one in this notice, VDEQ will issue a final decision and inform all persons who submitted written comments or requested notice of VDEQ's final determination. If the final decision is significantly different from the one proposed, VDEQ will issue a public notice explaining the new decision and will reopen the comment period.



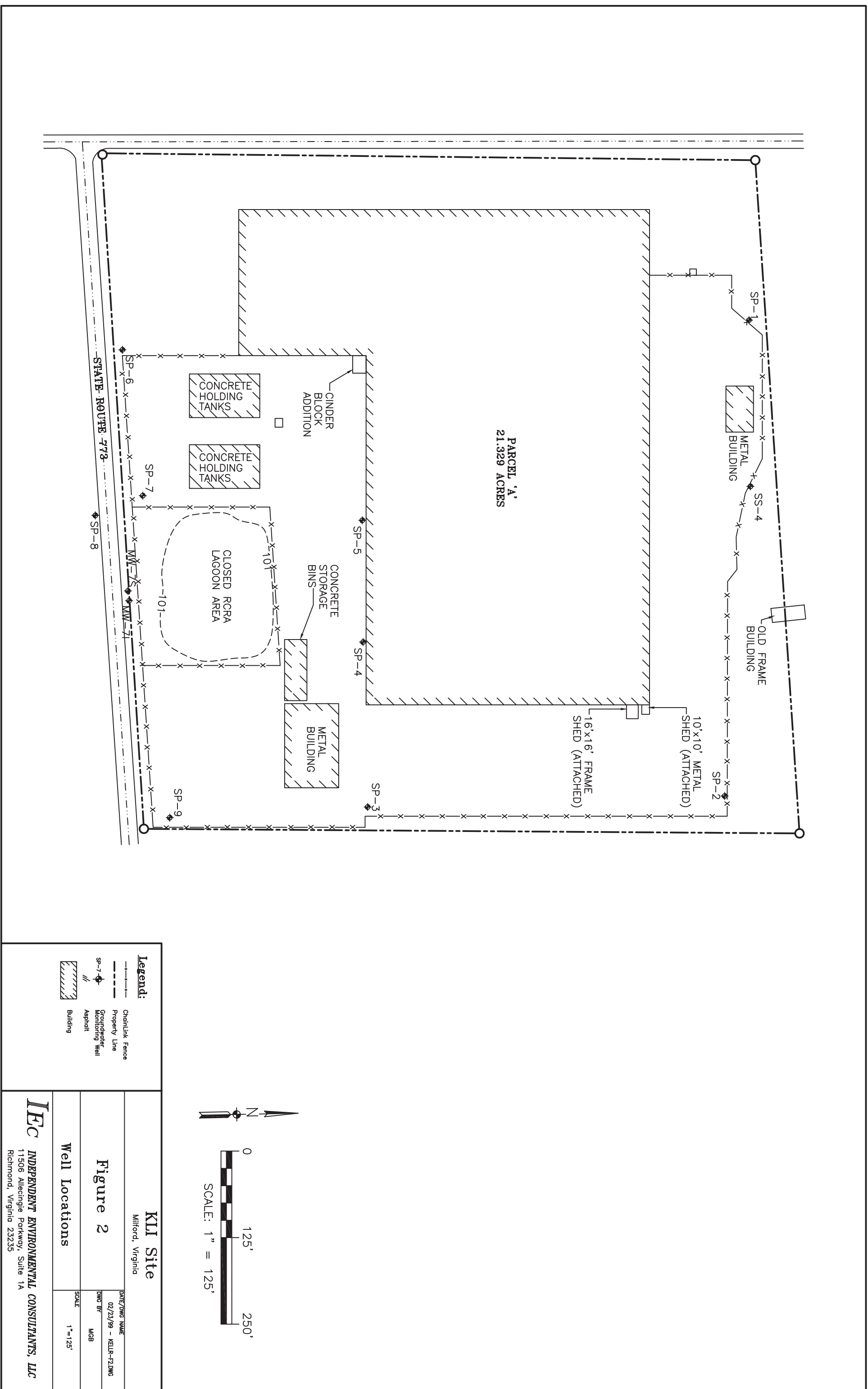
Legend:

	ChainLink Fence
	Property Line
	Groundwater Monitoring Well
	Asphalt
	Building



KLI Site	
Mifford, Virginia	
Figure 1	
HSWA SWMU/AOC Locations	
DATE/DWG NAME	08/17/06 - KLI-F3.DWG
DWG BY	MSB
SCALE	1"=125'

IEC INDEPENDENT ENVIRONMENTAL CONSULTANTS, LLC
 11506 Allecingle Parkway, Suite 1A
 Richmond, Virginia 23235



Legend:	
	Chainlink Fence
	Property Line
	Groundwater Monitoring Well
	Asphalt
	Building

KLI Site
Mifflord, Virginia

Figure 2

Well Locations

DATE/DWG NAME	02/23/99 - KELR-F2.DWG
DWG BY	MSB
SCALE	1"=125'

IEC INDEPENDENT ENVIRONMENTAL CONSULTANTS, LLC
11506 Allecingle Parkway, Suite 1A
Richmond, Virginia 23235