

Long-Term Stewardship Assessment Report
DC Department of Corrections
(Former Lorton Correctional Complex)
EPA ID VAD980830988

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Remedy Review Summary

The Long-Term Stewardship Assessment showed that engineering and institutional controls selected and defined within the 2018 Statement of Basis are implemented and remain intact and undamaged.

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, 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 Facility is located on approximately 2,700 acres of residential, improved land in southern Fairfax County, Virginia. The former Facility has been subdivided and is owned by a combination of government entities, developers, and private homeowners. The majority of the former Facility has been redeveloped into single and multi-family residential dwellings. In May 2009, the U.S. Environmental Protection Agency (EPA) contracted a RCRA Site Visit Report (Report) for the Facility. The purpose of the Report was to consolidate relevant information and redevelopment activities that have occurred at the Facility.

The Lorton Correctional Complex was established circa 1911 and included dormitories, cell blocks, residences, maintenance facilities, a large oil and coal-fired boiler house (steam plants), industrial facilities such as furniture manufacturing and repair facilities, vehicle repair centers, a hog farm, a dairy farm, a water treatment plant, and wastewater treatment plants. The correctional Complex consisted of several facilities including the following: Central Facility, Maximum Security Facility, Modular Facility, Occoquan Facility, Minimum Security Facility, Youth Facility, and Medium Security Facility. The following table summarizes these facilities.

Facility	Date	Location	Buildings	Size	Inmates
Central	1920	Silverbrook Road	83	647,028 ft ²	1,429
Maximum	1936	Silverbrook Road	20	143,894 ft ²	646
Modular	1986	Silverbrook Road	5	103,290 ft ²	800
Occoquan	1925-1930	Ox Road & Lorton Road	65	335,361 ft ²	1,099
Youth	1960	Furnace Road	29	242,394 ft ²	406
Medium	No information available				
Minimum	1955	Furnace Road & Hooes	16	124,585 ft ²	1,012

Industrial operations primarily took place in the Central Facility, including wood furniture and upholstery furniture manufacturing and repair, printing operations, metal working and fabrication, clothing manufacturing, vehicle maintenance and repair, auto body work, an industrial laundry operation, and a large industrial boiler or steam plant for heating the Central Facility.

Within the Occoquan Facility, operations included landscaping, plumbing, carpentry, tractor repair, and blacksmithing. The Youth Facility also included shoe and metal fabrication. With the exception of the Modular Facility, various buildings within each inmate facility contained administrative offices, chapels, kitchens, laundry, health clinics, gymnasiums, educational centers, and boiler plants. The DC Department of Corrections Industries began the shutdown operations in July 2001; the Furniture Shop, Metal Works, and Print Shops closed in September 2001. The Vehicle Maintenance Division and the entire prison facility shut down in December 2001. The following facilities also existed at the Site.

Nike Missile Battery

A Nike Missile Battery and Nike Missile Control Center operated at two separate locations at the site between 1954 and 1974. The former Nike Missile Battery was later used as a Minimum Security Complex at the Lorton facility. The Nike Missile Battery was the location of the former underground missile silos, Nike missiles, and support facilities. The former Nike Missile Control Center was located approximately one mile from the Nike Missile Battery. The site was closed and decommissioned by the Department of Defense (DoD) in 1974.

Landfill

In 1972, a major landfill was established at the site. This landfill was commonly referred to as the I-95 Landfill.

Energy/Resource Recovery Facility (E/RRF)

The E/ERF was built adjoining the I-95 landfill and began operations in 1990. It consists of several inter-connected buildings that housed refuse pits, furnaces, boilers, cooling towers, and residue ash pits to process municipal solid waste into energy. It is designed and operated in a similar manner to a typical power plant. Steam is produced from the combustion of MSW, and is used to spin turbine-generators that produce over 80MW of electricity. The facility is regulated by the DEQ air emissions program.

Current Site Status:

No operations currently exist at the Facility. A portion of the property currently remains in public ownership by Fairfax County and is planned to be developed for recreational and open space, educational and cultural facilities, and historic preservation. A significant portion of the original Facility has been sold and developed into residential, single-family detached housing. A portion of the former prison buildings has been repurposed as apartments. Approximately 116 acres of the have been developed into public schools. The I-95 Landfill Complex, a permitted solid waste landfill, and Covanta Fairfax, a waste to energy facility, are located on the southeast portion of the former Facility.

Element 1: Legal Authorities

The Final Remedy Decision was issued under the authority of 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 and 6992k.

Element 2: Information Regarding Engineering and Institutional Controls

The following controls were described in the Final Remedy Decision signed on August 6, 2018 and are Facility-Wide with some applicable to specific areas.

Associated Area	Restriction
Entire Facility	1. All earth moving activities including excavation, drilling and construction activities that would result in direct exposure to soil or disturbance of the soil on those portions of the Property associated with the closed landfills shall be prohibited without DEQ approval of a Materials Management Plan. 2. Groundwater at the Property shall not be used for any purpose other than for the facility's operation and maintenance and in addition for monitoring activities. 3. No new wells shall be installed on Property unless it is demonstrated to EPA, in consultation with DEQ, that such wells are necessary to implement the final remedy.
SWMU-8	1. Maintain cap and comply with all applicable VA solid waste regulations at the closed solid waste landfill

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

Areas requiring long term facility oversight, monitoring, and maintenance are being overseeing by other regulatory programs, LTS will continue to ensure remedy remains in place.

Element 4 – Recordkeeping and Tracking

The Final Remedy provide visual representation of the activity and use limitations.

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.

Element 5 – Meaningful Engagement and Consultation

The Facility has no active operations related to the operation of the Facility as a correctional institution, and it has no off-site impacts. The Statement of Basis (SB) was publicly noticed on June 18, 2018 in The Lorton Connection newspaper and other outlets in accordance with EPA Public participation guidance. DEQ received one comment on its proposed remedy for the Facility; the Final Remedy did not change from the remedy proposed in the SB.

Element 6 – Funding

The Statement of Basis noted that the proposed remedy did not require any further engineering actions to remediate soil or groundwater contamination. Financial Assurance for Corrective Action was therefore not required for the Facility.

Element 7 – Enforcement

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

Element 8 – Enforceable Mechanisms

There is not a specific Corrective Action remedies enforceable document for this Facility due to the nature of the site and complex ownership and purview of other regulatory programs. DEQ will evaluate that the remedy remains in place through its Long-Term Stewardship Program and EPA retains its authority to enforce if any discrepancies in compliance are identified.

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 Site Visit: On August 21, 2024

DEQ conducted a LTS site visit to assess the status of the implemented remedies at the site. A field report is included with this letter. The following notes were included in the field report:

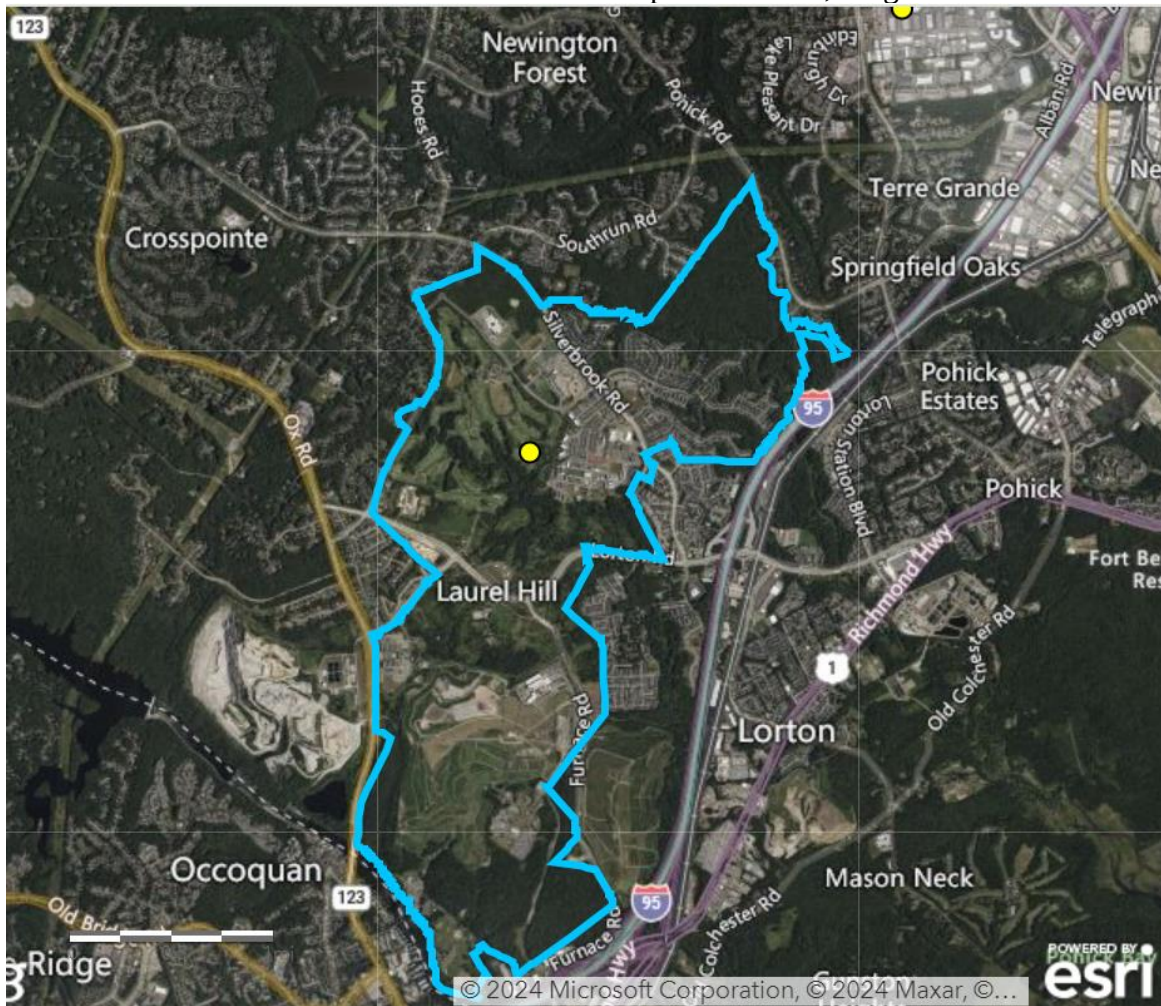
- No waste piles were observed on the surface throughout the Facility.
- A planned commercial shopping area has been completed since the issuance of the Remedy decision.

Follow-up Activities:

No follow-up activities are required for this LTS evaluation.

Former Lorton Correctional Complex
2024 Long Term Stewardship Inspection

DEQ Long Term Stewardship Facility Map
Former Lorton Correctional Complex – Lorton, Virginia



Former Lorton Correctional Complex
2024 Long Term Stewardship Inspection

Select Site Photos

Photos by: Kurt Kochan

August 21, 2024



Entrance to Liberty Commons Shopping Center



Former gymnasium converted to office space

Former Lorton Correctional Complex
2024 Long Term Stewardship Inspection



Former clarifier which is still vacant



Former prisoner cells that have been repurposed as apartments

Former Lorton Correctional Complex
2024 Long Term Stewardship Inspection



Typical example of new townhomes developed on property



Entrance to Liberty Commons (former guardhouse in background)

Former Lorton Correctional Complex
2024 Long Term Stewardship Inspection

Field Checklist

Site visit: 8/21/2024

Time of visit: 11:00 AM

People Present (name/phone/e-mail):

- N/A

<u>IC Review and Assessment Questions:</u>	<u>Yes</u>	<u>No</u>	<u>Notes</u>
• Have the ICs specified in the remedy been fully implemented? Implementation mechanism in place?	X		
• Do the ICs provide control for the entire extent of contamination (entire site or a specific portion)?	X		
• Are the ICs eliminating or reducing exposure of all potential receptors to known contamination?	X		
• Are the ICs effective and reliable for the activities (current and future) at the property to which the controls are applied?	X		
• Have the risk of potential pathway exposures addressed under Corrective Action changed based on updated screening levels and new technologies?		X	
• Are modifications to the IC implementation mechanism needed? (i.e. UECA Covenant, Permit or Order)		X	
• Are there plans to develop or sell the property?		X	Property completely redeveloped
• Have all reporting requirements been met?	X		

<u>Groundwater Review and Assessment Questions:</u>	<u>Yes</u>	<u>No</u>	<u>Notes</u>
• Is groundwater onsite used for potable purposes?		X	No potable wells identified in former facility footprint. Potable water provided by Fairfax water
• Is the Facility connected to a public water supply?	X		
• Have any new wells been installed at the facility?		X	

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• Are the current groundwater flow rate and direction similar as mentioned in the previous studies?	X		
• Groundwater contaminants stable or decreasing in concentration?	X		
• Are groundwater monitoring wells still in place (# wells)?	X		
• Any evidence or reason to re-evaluate the number and location of monitoring points and/or monitoring frequency?		X	
• For wells where groundwater monitoring is no longer required, have the wells been decommissioned?	X		
• Is there evidence of monitored natural attenuation occurring in groundwater?	X		

<u>Surface and Subsurface Soil Review and Assessment Questions:</u>	<u>Yes</u>	<u>No</u>	<u>Notes</u>
• Is the facility being used for residential purposes?	X		
• Have there been recent construction or earth-moving activities or plans for such?	X		Planned commercial shopping area completed

<u>Miscellaneous Review and Assessment Questions:</u>	<u>Yes</u>	<u>No</u>	<u>Notes</u>

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Other Notes

- None