



Defense Logistics Agency

Defense Supply Center Richmond

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 1417-1

FINAL

2025 LAND USE CONTROL REPORT
FOR
DEFENSE SUPPLY CENTER RICHMOND

Prepared For



Defense Logistics Agency

And



United States Army Corps of Engineers
Baltimore District

January 2026

Prepared for:

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Acronyms and Abbreviations

CLIN	Contract Line Item Number
COC	Constituent of Concern
DM-FR	Defense Logistics Agency Management Front Office
DM-FRE	Defense Logistics Agency Management Front Office Environmental
DSCR	Defense Supply Center Richmond
EPA	United States Environmental Protection Agency
LUC	Land Use Control
LUCIP	Land Use Control Implementation Plan
MCL	Maximum Contaminant Level
Meadows	Meadows CMG, Inc.
OSA	Open Storage Area
OU	Operable Unit
ROD	Record of Decision
USACE	United States Army Corps of Engineers
VDEQ	Virginia Department of Environmental Quality
VOC	Volatile Organic Compound

1. Introduction

This document presents the results of the 2025 Land Use Control (LUC) Implementation Plan Inspections conducted at the Defense Supply Center Richmond (DSCR). The LUC inspections occurred on June 2, 2025, by Meadows CMG, Inc. (Meadows) under United States Army Corps of Engineers (USACE), Baltimore District Contract [REDACTED] with Meadows and under contract line item number (CLIN) [REDACTED]. Identifying and verifying intrusive activities are determined and documented during communication with Defense Logistics Agency (DLA) Installation Management, Environmental Management Division Restoration Program meetings. This document is prepared on behalf of DLA and DLA Installation Operations. Inspections occurred as described in the Final Environmental Site-Wide Land Use Control Remedial Design for Defense Supply Center Richmond (AECOM 2015).

The document organization includes separate sections (2 through 12) for annual LUC inspections conducted at operable units (OU) OU 1, OU 2, OU 3, OU 6, OU 7, OU 8, OU 10, OU 12, OU 13, and the Former PX Gas Station. Figures and photograph exhibits are included at the end of the section where referenced. Figure 1-1 shows the layout of DSCR, and location of sites subject to LUC. Table 1 below summarizes current LUCs associated with each OU and the Former PX Gas Station and their status.

Table 1 Summary of DSCR Land Use Controls

Sites in Land Use Control Remedial Design	Current Status	Access Restrictions	Deed Restrictions	Preconstruction or Pre-intrusive Activity Assessment	Ambient Air and/or Personnel Monitoring During Construction	Five-Year Review	Groundwater Use Restrictions	Cover Maintenance	Annual Inspections	Ground or Surface Water Monitoring	Air Sampling and/or Vapor Barriers	On Installation Restriction to Industrial Land Use
OU 1	LTM	X	X	X	X	X		X	X			
OU 2	LTM	X	X	X		X	X	X	X			X
OU 3	LTM	X	X	X		X		X	X	X		
OU 6	RA-O		X	X	X	X	X			X	X	X
OU 7	RA-O		X	X	X	X	X			X	X	X
OU 8	RA-O		X	X	X	X	X	X	X	X		X
OU 10	LTM		X	X		X	X	X	X			X
OU 11	LTM		X	X		X	X	X	X			X
OU 12	LTM					X	X	X	X	C		
OU 13	RA-C	X	X	X		X		X	X			X
PX Gas Station	LTM	X	X	X	X		X	X	X	X	X	X

Source: LTM = long term monitoring, RA-O = remedial action ongoing, RA-C = remedial action complete, C = completed in 2011

The Virginia Department of Environmental Quality (VDEQ) maintains a groundwater beneficial use policy (AECOM 2015). For OUs with groundwater plumes that extend into off installation areas, installation of new drinking water wells or consumptive use from existing wells within the off-installation plume areas is prohibited until groundwater quality complies with applicable regulatory levels. Applicable regulatory levels identified in the Final Environmental Site-Wide Land Use Control Remedial Design include National

Primary Drinking Water Regulations¹, VDEQ drinking water standards, or risk-based levels where standards do not exist (AECOM 2015).

For each groundwater-impacted OU, the installation is required to forward a plume map for each groundwater-impacted OU to the Chesterfield County Health Department when a Record of Decision (ROD) is finalized. The plume maps identify off-installation areas where drinking water well installation and existing well consumptive use is prohibited until attainment of applicable regulatory levels. The installation has forwarded groundwater plume maps for OUs 6, 7, and 8, and the PX Gas Station after ROD issuance. On September 21, 2020, the installation forwarded updated plume maps to the Chesterfield County Health Department for OUs 6, 7, and 8.

Table 2 has a summary of deficiencies observed during the 2024 calendar year and the status of repairs completed. Deficiencies observed during the fiscal year 2024 LUC inspection (AECOM and Meadows, 2024) at OU12 and OU13 remained during the fiscal year 2025 inspection with updated schedules to complete actions to address these deficiencies (Appendix A).

Table 2 Status of Deficiencies Observed During the 2024 Calendar Year Inspection

Location	2024 Observations	Observed in 2025	Repairs Completed
OU 7	Two damaged monitoring wells, P1BWA58 and P1BWA66.	Yes	No. Planned well abandonments have a scheduled completion date in FY2026.
OU 8	OU8-MW-119 was covered during paving work.	Yes	No. If well OU8-MW-119 is located, a well condition assessment will determine if the well requires abandonment or if repairs will allow for use of the well, as applicable.
OU 12	Minor cracks in asphalt. Dead or missing vegetation around the OU 12 cap.	Yes	No. Maintenance and mitigation measures for asphalt repair and vegetation replacement have a scheduled completion date of no later than December 31, 2027.
OU 13	Soil settlement observed within biowall area in the central portion of OU 13 with two damaged monitoring wells.	Yes	No. Re-grading or filling of the depression area is not recommended at this time because of potential ground instability with use of heavy equipment in the area. Continued inspections performed during groundwater monitoring events annually will verify ground cover conditions in the area. Planned well abandonments have a scheduled completion date in FY2026.

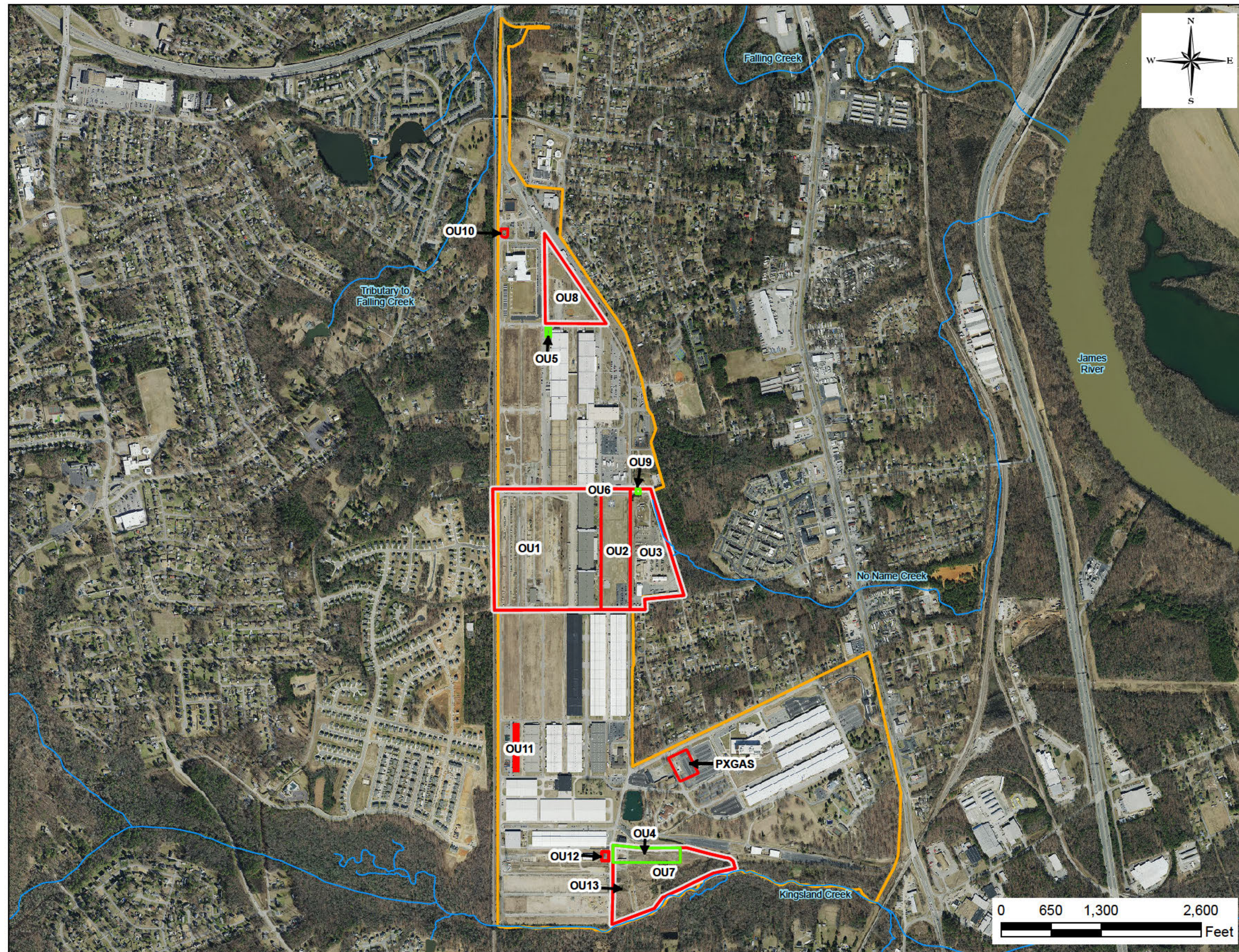
Table 3 has a summary of deficiencies observed during the calendar year 2025 LUC inspection performed on June 2, 2025, planned corrective actions, and planned schedules for corrective actions.

Table 3 Deficiencies Observed During the 2025 Calendar Year Inspection

Location	2025 Observations	Implemented or Planned Corrective Actions and Schedule
OU 1	Missing or partially missing sediment filter barriers at some storm drain inlets within the area. Two "OU" and "No Dig Zone" signs faded.	The installation will install sediment filter barrier at storm water inlets with partial or missing filter barriers. Maintenance action is planned for calendar year 2025. Two "OU" and "No Dig Zone" signs replaced July 2025.
OU 7	Two damaged monitoring wells, P1BWA58 and P1BWA66.	Planned well abandonments have a scheduled completion date in FY2026.

¹ Code of Federal Regulations, Title 40 Chapter I Subchapter D Part 141 Subpart G—National Primary Drinking Water Regulations: Maximum Contaminant Levels and Maximum Residual Disinfectant Levels. <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-141/subpart-G>

Location	2025 Observations	Implemented or Planned Corrective Actions and Schedule
OU 8	One of the "No Dig Zone" signs is faded. OU8-MW-119 covered during paving work completed in FY2024.	One faded "No Dig Zone" sign replaced in the eastern site of the site in July 2025. If well OU8-MW-119 is located, a well condition assessment will determine if the well requires abandonment or if repairs will allow for use of the well, as applicable.
OU 11	Three signs are faded.	Three faded "OU" and "No Dig Zone" signs replaced. Two along the western boundary and one on the eastern boundary.
OU 12	Minor cracks in asphalt. Dead or missing vegetation around the OU 12 cap.	Asphalt repair and resealing and replacement of dead vegetation. The scheduled completion date is no later than December 31, 2027.
OU 13	Two damaged monitoring wells P1BWA58 and P1BWA66.	Planned well abandonments have a scheduled completion date in FY2026.



Legend

-  Streams
-  Operable Unit Boundaries with no LUC
-  Operable Unit Boundaries with LUC
-  OU 6, OU 7, and OU 8 Boundaries
-  Installation Boundary

Notes:
 OU6 Includes Groundwater Impacts Beneath OU's 1, 2, & 3
 OU7 Includes Groundwater Impacts Beneath OU 4
 OU8 Includes Groundwater Impacts Beneath OU 5
 Orthoimagery Source: VGIN (2021)

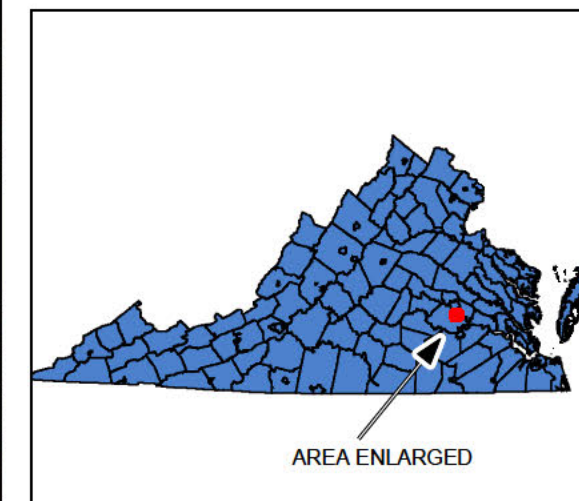


Figure 1-1
 DSCR Operable Units

2025 Annual LUC Inspection Report
 Defense Supply Center Richmond
 Richmond, VA

Prepared By:
 GC

Reviewed By:
 KL

Scale:
 1" = 1,300'

Date:
 September 09, 2025

2. Annual Site Inspection Form Operable Unit 1

Defense Supply Center Richmond Annual Site Inspection Form

In accordance with the *Final Environmental Land Use Control Remedial Design [LUC RD] (AECOM 2015)* for Defense Supply Center Richmond (DSCR), [REDACTED] with Meadows completed an inspection of OU 1 on 02 June 2025.

Land use restrictions at OU 1 as presented in the LUC RD (AECOM, 2015):

The description of the Selected Remedy in the 1992 ROD includes:

- “Continued operation of the site as a restricted area in which access to the site is controlled by a dual system of fences and gates. Security personnel also restrict access to the fenced area.”
- “Institutional Controls including deed restrictions to restrict future development of the area. Restrictions which will limit future development include limitations on the transfer of the property, maintenance protocol, and which require environmental sampling prior to the start of any construction at the area, and ambient air testing and personnel monitoring during the construction phase.”

Specifics of Selected Remedy from 1992 ROD:

- “Access Restrictions: These generally consist of fencing, warning signs, and sometimes, active security measures such as guards and patrols. Since the DGSC [now Defense Supply Center Richmond] is a secure federal facility, site access is already and further access restrictions would not be required. Access control to the OSA source area itself is provided by a separate security system in addition to that of the main post. Therefore, a dual security system is in effect and will continue to be provided at the OSA site.”
- “Long-Term Institutional Controls: Institutional controls will include deed restrictions which will limit future development as follows:
- “Transfer of Property:
 - “The transfer of the property known as the Defense General Supply Center [now the Defense Supply Center Richmond] shall be in accordance with Section 120 (h) of CERCLA, 42 U.S.C. § 9620 (h) and any regulations promulgated pursuant to Section 120 (h); (see 40 C.F.R. S 373 [1990]).”

“Maintenance and Construction within the physical boundaries of the Open Storage Area:

- “Maintenance: The DGSC’s [currently Defense Supply Center Richmond] regulation, *DGSCR 4150.1* [currently, Maintenance Regulation 4150.1], shall be modified to require an environmental review in section III which is a statement of policy. The ROD shall be incorporated in the section I, which is a list of the references.”
- “Military Construction Projects: An environmental site assessment shall be performed in accordance with the guidance provided in the DLA-W Policy Memorandum dated 27 December 1989, and shall be completed prior to project design within the OSA.”

“Monitoring:

- “Any monitoring that is required as a result of the environmental site assessment described above will include soil gas sampling prior to the start of the project, and soil analysis, ambient air testing, and personnel monitoring during the construction phase of the project.”
- “No further site restrictions (such as fences or signs) are required because the site is already operated as a restricted area. No measures are taken which constitute remediation of the site. If activities include new construction regrading or reworking of soils, measures will be taken to ensure that workers and the public are adequately protected during site

activities. These measures will include environmental sampling and personnel monitoring. Should hazardous waste be encountered during any construction or excavation activities, prearranged plan, which shall be approved by the EPA and Commonwealth of Virginia, will be available and will be invoked. This alternative would require a five-year review in accordance with Section 121 (c) of CERCLA, 42 U.S.C. §9621 (c).”

OU 1 has the following LUC elements and implementation measures:

- Access restrictions.
- Deed restrictions.
- Property transfer restrictions.
- Notice of land use restrictions, in the event of property transfer.
- Zoning restrictions.
- Preconstruction assessments.
- Maintenance activities require an environmental review.
- Monitoring during construction activities.
- Maintenance of signs identifying operable unit and designation as a no dig area.
- Groundwater monitoring as part of OU 6 activities.
- Groundwater well restrictions.
- Engineering controls.
- Annual inspections and five year reviews.

Verification that land use restrictions are being accomplished and LUCs remain effective:

- Verify that any boundary fence in the OU vicinity is intact.
- Verify that no residential housing, development, or child daycare activities are occurring at the OU.
- Verify that no groundwater wells have been installed at the OU (except for monitoring and injection wells that were installed as part of the remedy) and that no consumptive use of groundwater is occurring.
- Verify that applicable LUCs are intact, meet specifications, and/or are in good working order.
- Verify that vapor mitigation systems have been incorporated in existing or newly constructed buildings (if applicable).

Review of land use restrictions and LUCs in effect:

OU 1 is within the secured, fenced DSCR facility with limited access enforced by Base Security.

The 2025 inspection did not identify potable groundwater use, residential housing, development, or child daycare activities at OU 1. The boundary fence is intact at the facility. Signs identifying the operable unit and denoting the area as a “no dig” zone remain intact. The sign locations are identified on Figure 2-1. Site photos are provided in Exhibit 2-1.

Current land use at OU 1 includes the DSCR Hazardous Waste Storage Facility (Building 40), alternative dispatch unit building (Building 41), military vehicle parking, pipe and tubing storage, a liquid propane gas refueling area, and open space formerly used as a pallet dunnage area. The remainder of the area is gravel, soil, concrete, and asphalt covered.

Operable unit monitoring wells are flush mount. Although protection is not required for flush mount wells, barricades and “t-posts” are installed in the former pallet dunnage area and in the area where the military vehicles are staged because of previous well damage in these areas.

Storm drains around the site had evidence of sedimentation accumulating around them. Sediment filter socks are in place or partially in place at most storm drains.

In 2020, DLA completed improvements to the entire storm sewer system at the installation that included inspection, relining, and repairs of more than 23 miles of storm drains and pipes (DLA 2020).

Description of any intrusive activities that occurred in the past year:

FY2025 includes activities from October 2024 to September 2025. Underground cable repair work occurred during 2025. Appendix B includes intrusive activities within the past five years at OU 1.

Description of any deficiency or violation of the land use restrictions:

Missing or partially missing sediment filter barriers at some storm drain inlets within the area. Two "OU" and "No Dig Zone" signs are fading and require replacement.

Description of any proposed measures or corrective actions taken to remediate a deficiency or violation:

Install and maintain sediment filter barriers. Meadows replaced the two faded "OU" and "No Dig Zone" signs at the southern border of the site in July 2025.

Certification Statement:

I, the undersigned, document that the inspection was performed as indicated above, and that the above information is true and correct to the best of my knowledge and belief. I have reviewed the OU-specific appendix of the Environmental LUC RD (AECOM 2015) to verify requirements and restrictions.

Name and Title: [REDACTED] (Meadows Project Manager)

Signature

[REDACTED]

Date: 6/2/2025



Legend

- Sign Locations
- ▭ Operable Unit 1 Boundary
- ▭ DSCR Boundary
- ← 8 Photo ID and Direction

Notes:
Orthomagery Source: VGIN (2021)

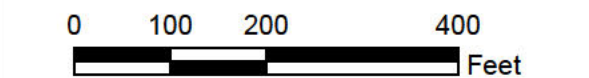
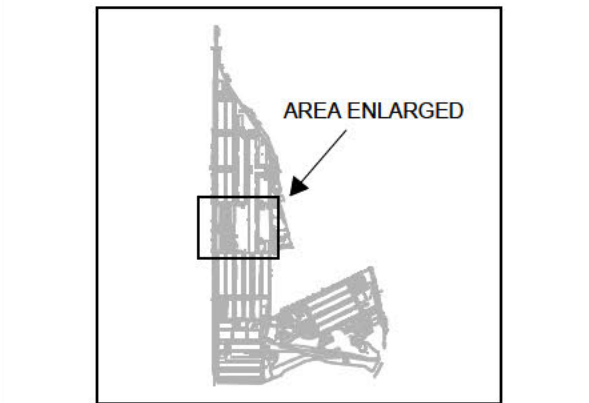


Figure 2-1
Operable Unit 1

2025 Annual LUC Inspection Report
Defense Supply Center Richmond
Richmond, VA

Prepared By: GC	Reviewed By: KL
Scale: 1" = 200'	Date: September 10, 2025

Exhibit 2-1



Photograph 1. OU sign on the western side of OU 1.



Photograph 2. View of OU 1 eastern edge looking south from the northeast corner of the site.



Photograph 3. View of OU 1 eastern edge looking north from southeast corner of the site.



Photograph 4. View of laydown area west of Bldg. 40, fresh crush and run base material visible.



Photograph 5. View of OU 1 looking north from southwest corner of the site.



Photograph 6. View of propane fuel tank east of Bldg. 40.



Photograph 7. View of OU 1 looking north from west side of Warehouse 54.



Photograph 8. View of typical flush mount well, abandoned during monitoring network optimization activity.



Photograph 9. View of former pallet dunnage area in northern portion of OU 1.



Photograph 10. View of pipe and tubing storage area.



Photograph 11. View of area previously marked as and used for concrete washout.



Photograph 12. View of monitoring wells in pallet dunnage area, with T-posts to protect wells.



Photograph 13. Northern part of OU 1, typical completed storm drain.



Photograph 14. Storm drain repaired in northwestern area of OU 1 during FY24.



Photograph 14. Storm drain repair in northern area of OU 1 completed FY24.



Photograph 15. Underground cable repair work in southern area of OU 1.



Photograph 16. Underground cable repair work in southwestern area of OU 1.



Photograph 18. View of typical flush mount completion in open storage area, installed in 2021.



Photograph 19. View of typical flush mount completion in concrete, installed in 2021.



Photograph 20. Drainage ditch west of Bldg. 54 with vegetation.



Photograph 21. Drainage ditch west of Bldg. 54.



Photograph 22. Depression following the water line in the open storage area.



Photograph 23. View of storm drain with grass and sediment; a sediment filter sock is in place.



Photograph 24. Area that previously underwent subsurface work in Northeast corner of OU 1.



Photograph 25. Streetlamp installed in 2022, surface disturbance no longer visible.



Photograph 26. Looking north along the western road, streetlamps installed in 2022.



Photograph 27. New lamp post, looking towards Bldg. 40.



Photograph 28. Above ground markers installed denoting the location of a gas line.



Photograph 29. Looking south from northern end of OU 1, showing asphalt deterioration in open storage area.



Photograph 30. West side of Bldg. 54 with abandoned monitoring location during network optimization activity.

3. Annual Site Inspection Form Operable Unit 2

Defense Supply Center Richmond Annual Site Inspection Form

In accordance with the *Final LUC RD (AECOM 2015)* for Defense Supply Center Richmond (DSCR), [REDACTED] with Meadows completed an inspection of OU 2 on 02 June 2025.

Land use restrictions at OU 2 as presented in the LUC RD (AECOM, 2015):

Per the 2008 ROD LUCs for OU 2 will include:

- “Land use restricted to industrial uses and restriction of groundwater use as a drinking water source”
- “Intrusive activity restrictions and signage”
- “Fencing, soil cover, and storm sewer maintenance and inspection”
- “Property transfer deed restrictions in the event of transfer of the property out of the ownership, custody or control of DLA”
- “Pre-construction assessments and reviews”

Specifics

- “Land use will be solely for industrial purposes until conditions allow for unlimited use and unrestricted exposure to soil. Groundwater use has been prohibited throughout the county in accordance with county ordinances (Code, County of Chesterfield, Virginia Chapter 18 Section 18-60).”
- “Annual inspections will be conducted to assess the integrity of the soil cover, fencing, signage, and storm sewer system, and the effectiveness of the institutional controls in place. The annual inspections will describe deficiencies or violations and proposed measures or corrective actions taken or required. In the unlikely event of a failure of the LUCs, DSCR will take appropriate corrective action. LUCs will be attached to the property deed to restrict groundwater use and prohibit residential development and land use for schools or childcare facilities, should the property change ownership in the future. DLA retains sole responsibility for remedy integrity, including LUCs, in accordance with this ROD and the subsequent LUCIP [herein the Land Use Control Remedial Plan], even if the agency transfers procedural responsibilities to another party by contract, property transfer agreement, or other means.”

Implementation

- Groundwater Use Restrictions: Potable groundwater use has been prohibited at OU 2. The installation has currently modified Maintenance Regulation 4150.1 to prohibit potable use of groundwater throughout the installation.
- Access Restrictions: OU 2 will continue operation as a restricted industrial area. Because Defense Supply Center Richmond is a secured Department of Defense facility, access is already restricted. In addition, the OU 2 area has a separate fence. This additional security provides a layering of controls and will continue to be maintained. Installation police conduct routine security checks of this area. Signs identifying the OU will be posted on the OU 2 fence.

- Preconstruction Assessment:
 - Minor construction activities, such as site grading or well installation, are not precluded. In the event of these construction activities, health and safety measures will be followed. The installation's environmental and safety office, Defense Logistics Agency Management Front Office (DM-FR) must be consulted prior to execution of these activities. DM-FR will issue an environmental review document, which will outline the contaminant data in the area of the construction activity. In the event that impacted soils are removed in the future, they will be disposed of in a permitted facility and replaced with clean fill to prevent exposure. In addition, if the impacted soils are disturbed in the future, erosion and sediment controls will be required to prevent migration to the storm sewer. Due to the presence of VOCs in the groundwater underneath OU 2, vapor barriers will be required for any new building constructed over the OU 6. In addition, prior to initiating intrusive activities over the OU 6 plume, soil gas/vapor monitoring may be required. This will include monitoring for oxygen, carbon monoxide, carbon dioxide, combustible gas (methane), hydrogen sulfide, total volatile hydrocarbons, in addition to the VOCs.
 - If military construction projects are planned at OU 2, an environmental site assessment will be conducted. The environmental assessment will be completed prior to project design and submitted to DM-FRE for review. Monitoring may include soil, soil gas and groundwater sampling prior to construction. DM-FRE may also issue an environmental review document, if necessary. Soil and groundwater analyses, ambient air testing, and personnel monitoring may be required during construction. In addition, supervision by an OE expert (e.g., unexploded ordnance [UXO] technician) may be required during subsurface intrusion activities.
 - For non-military construction projects (i.e., routine maintenance or utility operations requiring excavation or trenching) within the OU 2 footprint, an environmental review document will be issued by DM-FRE as specified in the installation's Maintenance Regulation 4150.1. Soil and groundwater analyses, ambient air testing, and personnel monitoring may be required during construction. In addition, supervision by an OE expert (e.g., UXO technician) may be required during subsurface intrusion activities.
 - Depending on the type of construction activity, a health and safety plan may be required by the DM-FRE prior to work commencement. The plan may include air monitoring, personal protective equipment, dust suppression and runoff control during construction, as necessary.
- Maintenance and Monitoring: Soil, soil gas and groundwater analysis, ambient air testing, and personnel monitoring may be undertaken during construction activities, depending upon the type and location of the construction activity and the results of the preconstruction sampling. A soil cover has been installed at the site as part of the final remedy. The cover will be inspected on an annual basis after installation. Requirements for additional top soil or seeding will be determined during these annual inspections. Maintenance activities (if required) will be performed after the annual inspection site visits. Routine groundwater monitoring will continue as part of the OU 6 activities.
- Property Transfer Restrictions: If the U.S. Army were to transfer OU 2 out of federal ownership, deed restrictions would apply to monitor future development within the site's physical boundaries. An environmental review would be required before construction. Residential development or school or childcare related facility development would be prohibited, if the transfer occurs before property conditions allow for unlimited use and unrestricted exposure.
- Inspections and Five-Year Reviews: An annual site inspection will be conducted until OU 2 is deemed acceptable for unrestricted use. The annual site inspection will be documented and certified with the form provided as Figure 3 of the Land Use Control Remedial Design. A five-year review will be conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act until the termination provisions are met. The

five-year review is required for sites where constituents remain in place at concentrations that preclude unlimited use and unrestricted exposure. Five-year reviews occurred in 1997, 2003, 2008, 2013, 2019, and 2023. The next five-year review is planned for 2028.

OU 2 has the following LUC elements and implementation measures:

- Access restrictions.
- Deed restrictions.
- Property transfer restrictions.
- Notice of land use restrictions, in the event of property transfer.
- Zoning restrictions.
- Preconstruction assessments.
- Fencing, soil cover, and storm sewer maintenance and inspection.
- Monitoring for pre-construction and construction activities.
- Maintenance of signs identifying operable unit and designation as a no dig area.
- Groundwater monitoring as part of OU 6 activities.
- Groundwater well restrictions.
- Engineering controls.
- Annual inspections and five year reviews.

Verification that land use restrictions are being accomplished and LUCs remain effective:

- Verify that any boundary fence in the OU vicinity is intact.
- Verify that no residential housing, development, or child daycare activities are occurring at the OU.
- Verify that no groundwater wells have been installed at the OU (except for monitoring and injection wells that were installed as part of the remedy) and that no consumptive use of groundwater is occurring.
- Verify that applicable LUCs are intact, meet specifications, and/or are in good working order.
- Verify that vapor mitigation systems have been incorporated in existing or newly constructed buildings (if applicable).
- Verify that the soil cover integrity is adequate to prevent exposure to contaminated soils.

Review of land use restrictions and LUCs in effect:

OU 2 is within the secured, fenced DSCR facility with limited access enforced by Base Security.

The 2025 inspection did not identify potable groundwater use, residential housing, development, or child daycare activities at OU 2. The boundary fence is intact at the facility and the soil cover with vegetation appears intact. Signs identifying the operable unit and denoting the area as a “no dig” zone are intact. The sign locations are identified on Figure 3-1. Site photos are provided in Exhibit 3-1.

Current land use at OU 2 is an open grass covered field and a helipad.

The inspection did not identify signs of erosion or sedimentation.

In 2020, DLA completed improvements to the entire storm sewer system at the installation that included inspection, relining, and repairs of more than 23 miles of storm drains and pipes (DLA 2020).

Description of any intrusive activities that occurred in the past year:

FY2025 includes activities from October 2024 to September 2025. No intrusive work occurred in 2025. Appendix B includes intrusive activities within the past five years at OU 2.

Description of any deficiency or violation of the land use restrictions:

No deficiencies or violations observed.

Description of any proposed measures or corrective actions taken to remediate a deficiency or violation:

None.

Certification Statement:

I, the undersigned, document that the inspection was performed as indicated above, and that the above information is true and correct to the best of my knowledge and belief. I have reviewed the OU-specific appendix of the Environmental LUC RD (AECOM 2015) to verify requirements and restrictions.

Name and Title: [REDACTED] (Meadows Project Manager)

Signature: [REDACTED]

6/2/2025



Legend

- Sign Locations
- ▭ DSCR Boundary
- ▭ Operable Unit 2 Boundary
- ← 8 Photo ID and Direction

Notes:
Orthoimagery Source: VGIN (2021)

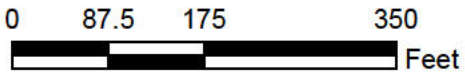
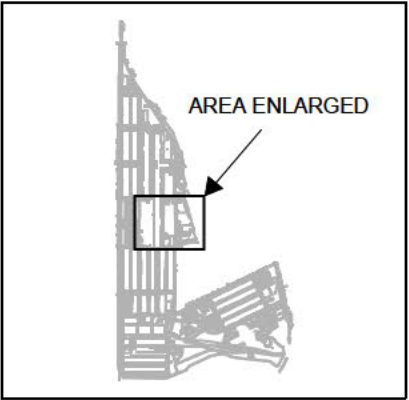




Figure 3-1
Operable Unit 2

2025 Annual LUC Inspection Report
Defense Supply Center Richmond
Richmond, VA

Prepared By: GC	Reviewed By: KL
Scale: 1" = 175'	Date: September 10, 2025

Exhibit 3-1



Photograph 1. OU 2 designation sign.



Photograph 2. View of OU 2 looking north from south gate of the site.



Photograph 3. View of east side of OU 2 looking north from southeast corner of site.



Photograph 4. View of typical OU 2 flush mount well completion.



Photograph 5. View of typical OU 2 storm drain; no signs of erosion or sedimentation.



Photograph 6. View of OU 2 looking southwest from northeast corner, near helipad.



Photograph 7. View of abandoned monitoring location in OU 2 during optimization activities.



Photograph 8. View of MW-96, well pad settling repaired in September 2024.

4. Annual Site Inspection Form Operable Unit 3

Defense Supply Center Richmond Annual Site Inspection Form

In accordance with the *Final LUC RD (AECOM 2015)* for Defense Supply Center Richmond (DSCR), [REDACTED] with Meadows completed an inspection of OU 3 on 02 June 2025.

Land use restrictions at OU 3 as presented in the LUC RD (AECOM, 2015):

The description of the Selected Remedy in the 1995 ROD includes:

- “Maintenance of existing fencing and continued use of existing security measures at the facility and NGA site;”
- “Implementation of existing deed restrictions and property transfer requirements in accordance with Section 120(h) of CERCLA, 42 U.S.C. §9620, and any regulations promulgated thereunder;”
- “Continued implementation of existing preconstruction assessment procedures to characterize military construction projects at the site, and policies which cover routine maintenance or utility excavations at the DGSC [now Defense Supply Center Richmond] facility;”
- “Maintenance of existing pavement within the National Guard Area;”
- “Performance of a follow-up chemical and biological monitoring program for No-Name Creek, until all OSA/NGA/Area 50 study area remedial actions are complete; and”
- “A five-year review, to ensure that the chosen remedy continues to provide adequate protection of human health and the environment.”

Implementation: Defense Supply Center Richmond has instituted the following measures to meet the LUCs in the ROD and the requirement for five-year reviews as long as constituents remain in place at concentrations that preclude unlimited use and unrestricted exposure. Defense Supply Center Richmond will notify EPA prior to changing the following measures if the change could affect the LUCs.

- Groundwater Use Restrictions: Potable groundwater use has been prohibited at OU 3. The installation has currently modified Maintenance Regulation 4150.1 to prohibit potable use of groundwater throughout the installation.
- Access Restrictions: The NGA will continue operation as a restricted area. Because Defense Supply Center Richmond is a secured Department of Defense facility, access is restricted. Separate fencing exists at the NGA (fencing follows the approximate OU boundary) and the area is locked at night. This dual security system provides a layering of controls and will continue to be maintained. Installation police conduct routine security checks of this area.
- Preconstruction Assessment:
 - Future industrial development, including excavation or site grading, is not precluded. In the event of construction activities, health and safety measures will be followed. The DM-FRE must be consulted prior to execution of these activities. DM-FRE will issue an environmental review document, which will outline the contaminant data in the area of the construction activity. In the event that impacted soils are removed in the future, they will be disposed of in a permitted facility and replaced with clean fill to prevent exposure. In addition, if the impacted soils are disturbed in the future, erosion and sediment controls will be required to prevent migration to the storm sewer. Due to the presence of VOCs in the groundwater underneath OU 3, vapor barriers will be required for any new building constructed over the OU 6 plume. In addition, prior to initiating intrusive activities over the OU 6 plume, soil gas/vapor monitoring may be

required. This will include monitoring for oxygen, carbon monoxide, carbon dioxide, combustible gas (methane), hydrogen sulfide, total volatile hydrocarbons, in addition to the VOCs.

- In case military construction projects are planned at OU 3, an environmental site assessment will be conducted. The environmental assessment will be completed prior to project design and submitted to DM-FRE for review. Monitoring may include soil, soil gas and groundwater sampling prior to construction. DM-FRE may also issue an environmental review document, if necessary. Soil and groundwater analyses, ambient air testing, and personnel monitoring may be required during construction.
 - For non-military construction projects (i.e., routine maintenance or utility operations requiring excavation or trenching) within the OU 3 footprint, an environmental review document will be issued by DM-FRE as specified in the installation's Maintenance Regulation 4150.1. Soil and groundwater analyses, ambient air testing, and personnel monitoring may be required during construction.
 - Depending on the type of construction activity, a health and safety plan may be required by the DM-FRE prior to work commencement. The plan may include air monitoring, personal protective equipment, dust suppression and runoff control during construction, as necessary.
- Monitoring and Maintenance: Soil, soil gas and groundwater analysis, ambient air testing, and personnel monitoring may be required during construction activities. This determination will be made based on the type and location of the construction activity proposed and the results of the preconstruction sampling. Maintenance of existing pavement within the NGA is required. Contamination monitoring (VOCs) for surface water in No Name Creek will continue until OU 6 remediation is complete. Groundwater monitoring will continue as part of OU 6 activities.
 - Property Transfer Restrictions: If the U.S. Army were to transfer the OU 3 area out of federal ownership, deed restrictions would apply to monitor future development within the site's physical boundaries. An environmental review would be required before construction. Residential development or school or childcare related facility development would be prohibited, if the transfer occurs before property conditions allow for unlimited use and unrestricted exposure.
 - Inspections and Five-Year Reviews: An annual site inspection will be conducted until OU 3 is deemed acceptable for unrestricted use. The annual site inspection will be documented and certified with the form provided as Figure 3 of the Land Use Control Remedial Design. A five-year review will be conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act until the termination provisions are met. Five-year reviews occurred in 1997, 2003, 2008, 2013, 2019, and 2023. The next five-year review is planned for 2028.

OU 3 has the following LUC elements and implementation measures:

Access restrictions.

Deed restrictions.

Property transfer restrictions.

Notice of land use restrictions, in the event of property transfer.

Zoning restrictions.

Preconstruction assessments.

Maintenance of existing pavement in the National Guard Area.

Monitoring for pre-intrusive, intrusive, pre-construction and construction activities.

Continue monitoring of No Name Creek until remediation of OU 6 complete.

Maintenance of signs identifying operable unit and designation as a no dig area.

Groundwater monitoring as part of OU 6 activities.

Groundwater well restrictions.

Engineering controls including vapor barriers for any new building constructed over the OU 6 plume.

Annual inspections and five year reviews.

Verification that land use restrictions are being accomplished and LUCs remain effective:

Verify that any boundary fence in the OU vicinity is intact.

Verify that no residential housing, development, or child daycare activities are occurring at the OU.

Verify that no groundwater wells have been installed at the OU (except for monitoring and injection wells that were installed as part of the remedy) and that no consumptive use of groundwater is occurring.

Verify that applicable LUCs are intact, meet specifications, and/or are in good working order.

Verify that vapor mitigation systems have been incorporated in existing or newly constructed buildings (if applicable).

Verify that the soil cover integrity is adequate to prevent exposure to contaminated soils.

Review of land use restrictions and LUCs in effect:

OU 3 is within the secured, fenced DSCR facility with limited access enforced by Base Security. OU 3 also is within the National Guard area, which is fully fenced in with a locked gate.

The 2025 inspection did not identify potable groundwater use, residential housing, development, or child daycare activities at OU 3. The boundary fence is intact, and the pavement cover appears intact. Signs identifying the operable unit and denoting the area as a "no dig" zone are intact. The sign locations are identified on Figure 4-1. Site photos are provided in Exhibit 4-1.

Current land use at OU 3 includes National Guard buildings, mechanic shop, military vehicle parking, and paved, open gravel and soil covered areas. The inspection observed that the military vehicles had spill pans located beneath the axles to collect any oil seepage from the vehicles. Site monitoring wells are intact and secured. The soil covering along the western edge of the OU showed no new signs of erosion. A storm drain central to the site has accumulating sediment around it but no visible sediment in the drain. The inspection noted minor surface cracking in the asphalt pavement cover outside of the area repaired in 2023. Some areas of surface weathering of concrete are apparent. The concrete and asphalt cover are sufficiently maintained to meet LUC requirements.

In 2020, DLA completed improvements to the entire storm sewer system at the installation that included inspection, relining, and repairs of more than 23 miles of storm drains and pipes (DLA 2020).

Description of any intrusive activities that occurred in the past year:

FY2025 includes activities from October 2024 to September 2025. The 2025 inspection did not identify intrusive activities at OU 3. Appendix B includes intrusive activities within the past five years at OU 3.

Description of any deficiency or violation of the land use restrictions:

No deficiencies observed.

Description of any proposed measures or corrective actions taken to remediate a deficiency or violation:

None.

Certification Statement:

I, the undersigned, document that the inspection was performed as indicated above, and that the above information is true and correct to the best of my knowledge and belief. I have reviewed the OU-specific appendix of the Environmental LUC RD (AECOM 2015) to verify requirements and restrictions.

Name and Title: [REDACTED] (Meadows Project Manager)

Signature [REDACTED]

6/2/2025



Legend

- Sign Locations
- ~ Stream
- ▭ Operable Unit 3 Boundary
- ▭ DSCR Boundary
- ← 8 Photo ID and Direction

Notes:
Orthoimagery Source: VGIN (2021)

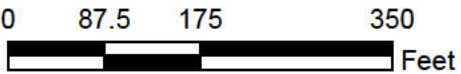
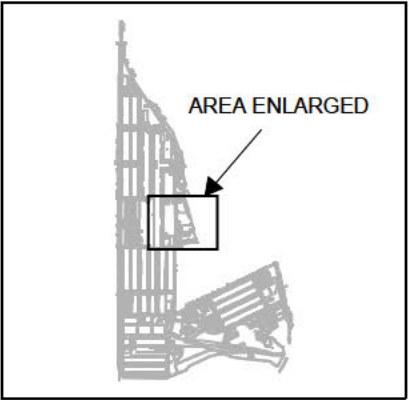




Figure 4-1
Operable Unit 3

2025 Annual LUC Inspection Report
Defense Supply Center Richmond
Richmond, VA

Prepared By: GC	Reviewed By: KL
Scale: 1" = 175'	Date: September 09, 2025

Exhibit 4-1



Photograph 1. OU designation sign on the western side of OU 3.



Photograph 2. Deteriorating asphalt west of Bldg. 153.



Photograph 3. Storm drain west of Bldg. 151; repaired as part of larger sewer repair work done around DSCR in FY24.



Photograph 4. Typical flush mount monitoring well at OU 3.



Photograph 5. View of OU 3 looking north from the west side of Bldg. 140.



Photograph 6. View of central portion of OU 3 looking northeast, previously repaired asphalt surface shown.



Photograph 7. Southeast corner of previously repaired northern asphalt area.



Photograph 8. View of the northern portion of OU 3 looking south.



Photograph 9. View of OU 3 northern end looking south.



Photograph 10. View of OU 3 drainage basin with riprap to eliminate erosion.



Photograph 11. Eastern edge of OU 3, minor erosion present.



Photograph 12. View of OU 3 looking south from north of Bldg. 151.



Photograph 13. View of OU looking north from south of Bldg. 151.



Photograph 14. Abandoned well pads in asphalt during the network optimization activity in FY23.



Photograph 15. Typical flush mount monitoring well completion in grass, installed 2021.



Photograph 16. Northeast corner of southern repaired asphalt surface.



Photograph 17. Looking south along wooden fence line, showing deteriorating concrete.



Photograph 18. View of rip rap run off area collecting sand and gravel.



Photograph 19. Southward view of western side of Bldg. 153 showing cracked asphalt.



Photograph 20. View of southern asphalt repair area from southeast corner of Bldg. 150.



Photograph 21. Sediment accumulation around storm drain in central area of the OU.



Photograph 22. Vines growing on perimeter fence along Alcott Road.



Photograph 23. Grass cover growing over minor erosion along wooded eastern fence line, looking north.



Photograph 24. Northwest corner of repaired northern asphalt area.



Photograph 25. Repaired well pad in northern asphalt repair area in FY24.



Photograph 26. Cleared vegetation adjacent to No Name Creek for access during well abandonments.



Photograph 27. Repaired fence section and repaired pass through of No Name Creek to the wooded area.



Photograph 28. Abandoned monitoring location in concrete during the network optimization activity.



Photograph 29. "OU / No Dig Zone" sign at north end of site, replaced in 2024.

5. Annual Site Inspection Form Operable Unit 6

Defense Supply Center Richmond Annual Site Inspection Form

In accordance with the *Final LUC RD (AECOM 2015)* for Defense Supply Center Richmond (DSCR), [REDACTED] with Meadows completed an inspection of OU 6 on 02 June 2025.

Land use restrictions as presented in the LUC RD (AECOM, 2015):

The description of the Selected Remedy in the 2013 ROD is:

- “Institutional controls (ICs). ICs will be implemented and maintained within the OU 6 IC boundary shown on Figure 2-2 [of the ROD; Figure D-1 of the 2015 LUC RD] to protect current and future on- and off-installation receptors. ICs will prohibit the potable use of groundwater, restrict land use to industrial purposes (on installation only) and control activities to reduce exposure of future construction workers to contaminated groundwater at OU 6. The ICs that restrict the land use will prohibit residential use, including housing, elementary and secondary schools, childcare facilities and playgrounds. ICs will be implemented through mechanisms such as the installation's environmental review process (on-installation only), county and local ordinances, warning signs, deed restrictions, UECA covenants, building permit processes, preconstruction assessments, and annual certification to EPA that the ICs are in place ICs will be required until the concentrations of hazardous substances in OU 6 groundwater have been reduced to levels that allow for unlimited use and unrestricted exposure. Engineering controls (i.e., vapor barriers) will be required for future buildings constructed within the footprint of the OU 6 plumes to mitigate potential vapor intrusion issues. ICs will also include annual occupancy and use inspections in current buildings over the footprint of the Upper WBU plume. DLA is responsible for implementing and maintaining the ICs to protect current and future on- and off-installation receptors (individuals who may be exposed to COCs). DLA will implement, maintain, monitor, report on and enforce ICs at federally-owned property. For privately owned property within the OU 6 groundwater contamination plume, DLA will notify Chesterfield County and the off-installation property owner, whose property is currently underlain by the off installation portion of the OU 6 groundwater plumes (Upper and Lower WBUs), of the need for groundwater use restrictions to prevent exposure to the OU 6 groundwater plumes. DLA shall exercise best efforts to get the cooperation of the owner and county and local government to implement ICs. DLA will also monitor and report on the implementation, maintenance, and enforcement of ICs on the non-federally owned property, and coordinate with federal, state and local governments involved at this site and the owners of the property subject to the ICs. Although the DLA may transfer procedural responsibilities to another party by contract, property transfer agreement, or through other means, the DLA shall retain ultimate responsibility for remedy integrity. In the event of future property transfer of any portion of the installation for civilian use, land and groundwater use restrictions necessary to protect human health and the environment will be incorporated into the property deed.”

Implementation: Defense Supply Center Richmond has instituted the following measures to meet the LUCs in the ROD and the requirement for five-year reviews as long as constituents remain in place at concentrations that preclude unlimited use and unrestricted exposure. Defense Supply Center Richmond will notify EPA prior to changing the following measures if the change could affect the LUCs.

- Groundwater Use Restrictions: Potable groundwater use is prohibited within the OU 6 IC Boundary shown on Figure D-1. The installation has currently modified Maintenance Regulation 4150.1 to prohibit potable use of groundwater throughout the installation. For privately owned property within the OU 6 groundwater contamination plume, DLA will notify Chesterfield County and the off-installation property owner, whose property is currently underlain by the off-installation portion of the OU 6 groundwater plumes (Upper and Lower

WBUs), of the need for groundwater use restrictions to prevent exposure to the OU 6 groundwater plumes. DLA shall exercise best efforts to get the cooperation of the owner and county and local government to implement ICs.

– Preconstruction Assessment:

- Land use for residential use, including housing, elementary and secondary schools, childcare facilities, and playgrounds, is prohibited. Future industrial development, including excavation or site grading, is not precluded. Engineering controls (i.e., vapor barriers) will be required for future buildings constructed within the footprint of the OU 6 plumes to mitigate potential vapor intrusion issues. In the event of construction activities, health and safety measures will be followed. The DM-FRE must be consulted prior to execution of these activities. DM-FRE will issue an environmental review document, which will outline the contaminant data in the area of the construction activity. In the event that impacted soils (OU 1, 2, and 3) are removed in the future, they will be disposed of in a permitted facility and replaced with clean fill to prevent exposure. In addition, if the impacted soils are disturbed in the future, erosion and sediment controls will be required to prevent migration to the storm sewer.
- Due to the presence of VOCs in the groundwater, engineering controls (i.e., vapor barriers) will be required for future buildings constructed within the footprint of the OU 6 plumes to mitigate potential vapor intrusion issues. In addition, prior to initiating intrusive activities over the OU 6 plume, soil gas/vapor monitoring may be required. This may include monitoring for oxygen, carbon monoxide, carbon dioxide, combustible gas (methane), hydrogen sulfide, total volatile hydrocarbons, in addition to the VOCs.
- In case military construction projects are planned over the OU 6 plume, an environmental site assessment will be conducted. The environmental assessment will be completed prior to project design and submitted to DM-FRE for review. Monitoring may include soil, soil gas and groundwater sampling prior to construction. DM-FRE may also issue an environmental review document, if necessary. Soil and groundwater analyses, ambient air testing, and personnel monitoring may be required during construction. In addition, supervision by an OE expert (e.g., UXO technician) may be required during subsurface intrusion activities within the OU 2 footprint (see Appendix B).
- For non-military construction projects (i.e., routine maintenance or utility operations requiring excavation or trenching) within the OU 6 footprint, an environmental review document will be issued by DM-FRE as specified in the installation's Maintenance Regulation 4150.1. Soil and groundwater analyses, ambient air testing, and personnel monitoring may be required during construction. In addition, supervision by an OE expert (e.g., UXO technician) may be required during subsurface intrusion activities within the OU 2 footprint (see Appendix B).
- Depending on the type of construction activity, a health and safety plan may be required by the DM-FRE prior to work commencement. The plan may include air monitoring, personal protective equipment, dust suppression and runoff control during construction, as necessary.

- Monitoring: Soil and groundwater analysis, ambient air testing, and personnel monitoring may be required during construction activities. This determination will be made based on the type and location of the construction activity proposed and the results of the preconstruction sampling. Groundwater monitoring will continue as part of remedial action activities at OU 6. COCs and geochemical conditions in the Upper and Lower WBUs shall be monitored in accordance with EPA guidance to document that MNA is reducing chemical mass and concentrations over time. In addition, annual long-term monitoring of groundwater in the Upper WBU to monitor for potential leaching of contaminants from OUs 1, 2, and 3 soils into the OU 6 Upper WBU groundwater will continue for a minimum of 5 years. Contamination monitoring (volatile organic compounds) for surface water in No

Name Creek will continue until OU 6 remediation is complete. Periodic indoor air and subsurface vapor monitoring will be performed for the current buildings in the footprint of the plume to confirm that conditions have not changed such that there is a risk to occupants of the buildings. The indoor air and subsurface vapor monitoring will be performed every three and five years for Building 151, and every five years for the other buildings over the OU 6 Upper WBU plume. The results and follow-on recommendations will be presented in the subsequent five-year review reports. Annual occupancy and use inspections will be done in current buildings over the footprint of the Upper WBU plume. DLA will also monitor and report on the implementation, maintenance, and enforcement of ICs on the non-federally owned property, and coordinate with federal, state and local governments involved at this site and the owners of the property subject to the ICs.

- Property Transfer Restrictions:
 - If the U.S. Army were to transfer the OU 6 area out of federal ownership, deed restrictions would apply to monitor future development within the site's physical boundaries. An environmental review would be required before construction. If the transfer occurs before property conditions allow for unlimited use and unrestricted exposure, potable groundwater use, residential development, or school, childcare related facility, or playground development would be prohibited; and engineering controls (i.e., vapor barriers) will be required for future buildings constructed within the footprint of the OU 6 plumes to mitigate potential vapor intrusion issues.
 - Although the DLA may transfer procedural responsibilities to another party by contract, property transfer agreement, or through other means, the DLA shall retain ultimate responsibility for remedy integrity. In the event of future property transfer of any portion of the installation for civilian use, land, and groundwater use restrictions necessary to protect human health and the environment will be incorporated into the property deed.
- Inspections and Five-Year Reviews: An annual site inspection will be conducted until OU 6 is deemed acceptable for unrestricted use. The annual site inspection will be documented and certified with the form provided as Figure 3 of the Land Use Control Remedial Design. A five-year review will be conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act until the termination provisions are met. Five-year reviews occurred in 1997, 2003, 2008, 2013, 2019, and 2023. The next five-year review is planned for 2028.

OU 6 has the following LUC elements and implementation measures:

Access restrictions.

Deed restrictions.

Property transfer restrictions.

Notice of land use restrictions, in the event of property transfer.

Zoning restrictions.

Preconstruction assessments.

Monitoring for pre-intrusive, intrusive, pre-construction and construction activities within the OU 6 plume area.

Continue monitoring of No Name Creek until remediation of OU 6 is complete.

Groundwater monitoring.

Perform indoor air and subsurface vapor sampling every three and five years for Building 151 and every five years for other buildings over the OU 6 plume.

Groundwater well restrictions.

Engineering controls including vapor barriers for future buildings constructed over the OU 6 plume.

Annual inspection and five year reviews.

Verification that land use restrictions are being accomplished and LUCs remain effective:

Verify that any boundary fence in the OU vicinity is intact.

Verify that no residential housing, development, or child daycare activities are occurring at the OU.

Verify that no groundwater wells have been installed at the OU (except for monitoring and injection wells that were installed as part of the remedy) and that no consumptive use of groundwater is occurring.

Verify that applicable LUCs are intact, meet specifications, and/or are in good working order.

Verify that vapor mitigation systems have been incorporated in existing or newly constructed buildings (if applicable).

Verify that a map of the plume where drinking water wells should not be installed or used off the installation property has been forwarded to the Chesterfield County Health Department (OUs 6, 7, 8, and PX Gas Station only).

Review of land use restrictions and LUCs in effect:

OU 6 is the designation for the groundwater underlying OUs 1, 2 and 3, and is located within the secured, fenced DSCR facility with limited access enforced by Base Security.

The 2025 inspection did not identify potable groundwater use, residential housing, development, or child daycare activities at OU 6. Building 151 vapor mitigation systems and monitoring points are inspected, maintained, and monitored quarterly to confirm operational effectiveness. A site map is provided as Figure 5-1. The five-year review sampling of indoor air, ambient air, and sub surface vapor performed at Buildings 54, 150, and 151 in the OU 6 monitored area in January 2022 confirmed continued protectiveness of the remedy.

A comprehensive well inventory and inspection occurs at OU 6 as part of annual groundwater monitoring performed in May. Current land use information and photos are included in the OU 1, OU 2, and OU 3 sections of this report.

In 2020, DLA completed improvements to the entire storm sewer system at the installation that included inspection, relining, and repairs of more than 23 miles of storm drains and pipes (DLA 2020).

Description of any intrusive activities that occurred in the past year:

FY2025 includes activities from October 2024 to September 2025. Underground cable repairs occurred during 2024. No intrusive activities occurred within the environmental easement used for OU 6 monitoring. Appendix B includes intrusive activities within the past five years at OU 6.

Description of any deficiency or violation of the land use restrictions:

Deficiencies specific to OU 1, OU 2, and OU 3 related to the surface area overlying groundwater within the installation area are included in Sections 2 and 4 respectively.

Description of any proposed measures or corrective actions taken to remediate a deficiency or violation:

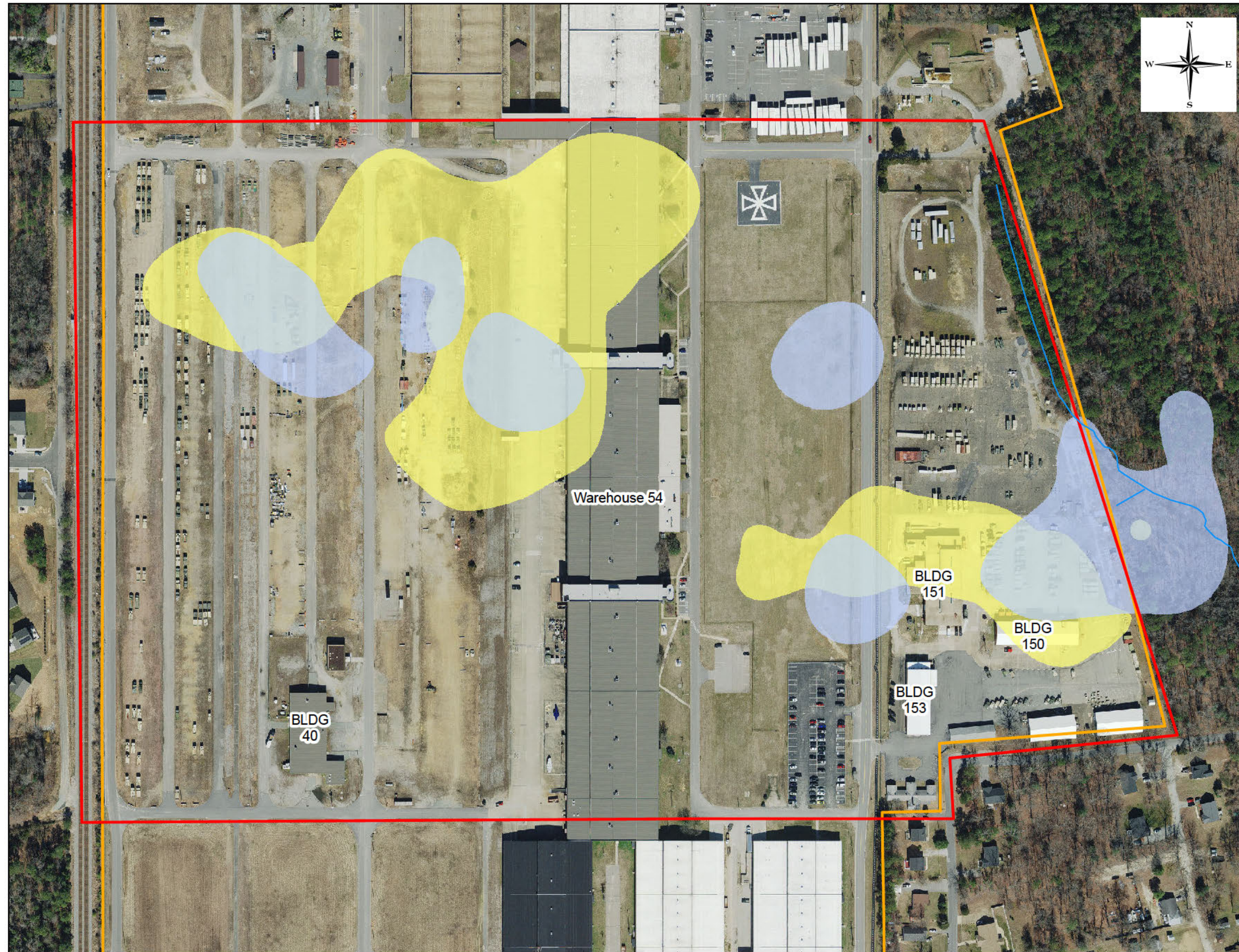
Sections 2 identifies corrective measures specific to OU 1 related to the surface area overlying groundwater within this area. No deficiencies or proposed measures identified for OU 2 or OU 3.

Certification Statement:

I, the undersigned, document that the inspection was performed as indicated above, and that the above information is true and correct to the best of my knowledge and belief. I have reviewed the OU-specific appendix of the Environmental LUC RD (AECOM 2015) to verify requirements and restrictions.

Name and Title: [REDACTED] (Meadows Project Manager)

Signature: [REDACTED] e: 6/2/2025

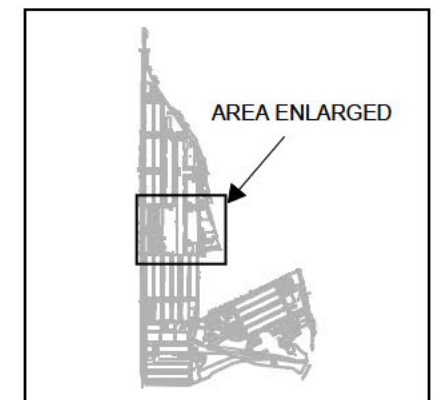


Legend

-  Streams
-  Operable Unit 6 Boundary
-  Installation Boundary
-  Surficial Aquifer Plume Extent
-  Confined Aquifer Plume Extent

Notes:

1. Orthoimagery Source: VGIN (2021)
2. MW96 has been identified as having deficiencies that will require maintenance.



0 112.5 225 450
Feet



Figure 5-1
Operable Unit 6

2025 Annual LUC Inspection Report
Defense Supply Center Richmond
Richmond, VA

Prepared By:
GC

Reviewed By:
KL

Scale:
1" = 225'

Date:
September 10, 2025

6. Annual Site Inspection Form Operable Unit 7

Defense Supply Center Richmond Annual Site Inspection Form

In accordance with the *Final LUC RD (AECOM 2015)* for Defense Supply Center Richmond (DSCR), [REDACTED] with Meadows completed an inspection of OU 7 on 02 June 2025.

Land use restrictions as presented in the LUC RD (AECOM, 2015):

The description of the Selected Remedy in the 2013 ROD includes:

- “ICs. ICs will be implemented and maintained to protect current and future on- and off installation receptors. ICs will prohibit the potable use of groundwater, restrict land use to industrial purposes (on-installation only) and control activities to reduce exposure of future construction workers to contaminated groundwater at OU 7. ICs will be implemented through enforceable mechanisms such as land use restrictions (on installation only), access restrictions, county and local ordinances, warning signs, deed restrictions, preconstruction assessments, and annual certification to U.S. EPA that the ICs are in place. ICs will be required until the concentrations of hazardous substances in OU 7 groundwater have been reduced to levels that allow for unlimited use and unrestricted exposure. Engineering controls (i.e., vapor barriers) will be required for future buildings constructed within the footprint of the OU 7 plumes to mitigate potential vapor intrusion issues. DLA will implement, maintain, monitor, report on and enforce ICs at federally-owned property. For privately owned property within the OU 7 groundwater contamination plume, DLA will notify Chesterfield County and the off installation property owner, whose property is currently underlain by the off-installation portion of the OU 7 Lower WBU plume, of the need for groundwater use restrictions to prevent exposure to the OU 7 groundwater plumes. DLA will also monitor and report on the implementation, maintenance, and enforcement of ICs on the non-federally owned property, and coordinate with federal, state and local governments involved at this site and the owners of the property subject to the ICs. Although the DLA may transfer procedural responsibilities to another party by contract, property transfer agreement, or through other means, the DLA shall retain ultimate responsibility for remedy integrity. In the event of future property transfer of any portion of the installation for civilian use, land and groundwater use restrictions necessary to protect human health and the environment will be incorporated into the property deed.”
- “Engineering controls (i.e., vapor barriers) will be required for future buildings constructed within the footprint of the OU 7 plumes to mitigate potential vapor intrusion issues.”

Implementation: Defense Supply Center Richmond has instituted the following measures to meet the LUCs in the ROD and the requirement for five-year reviews as long as constituents remain in place at concentrations that preclude unlimited use and unrestricted exposure. Defense Supply Center Richmond will notify EPA prior to changing the following measures if the change could affect the LUCs.

- Groundwater Use Restrictions: Potable groundwater use is prohibited within the OU 7 IC Boundary shown on Figure E-1. The installation has currently modified Maintenance Regulation 4150.1 to prohibit potable use of groundwater throughout the installation. DLA will notify Chesterfield County and the off-installation property owner, whose property is currently underlain by the off-installation portion of the OU 7 Lower WBU plume, of the need for groundwater use restrictions to prevent exposure to the OU 7 groundwater plumes.
- Preconstruction Assessment:
 - Land use on-installation is restricted to industrial use only. Future industrial development, including excavation or site grading, is not precluded. In the event of construction activities, applicable health and safety measures will be followed. The DM-FRE must be consulted prior to excavation. DM-FRE will issue an environmental

review document, which will outline the contaminant data in the area of the construction activity. In the event that impacted soils are removed in the future (OU 13), they will be disposed of in a permitted facility and replaced with clean fill to prevent exposure. In addition, if the impacted soils are disturbed in the future, erosion and sediment controls will be required to prevent migration to the storm sewer.

- Due to the presence of VOCs in OU 7 groundwater, vapor barriers will be required for any new building constructed over the OU 7 plume. In addition, prior to initiating intrusive activities over the OU 7 plume, soil gas/vapor monitoring may be required. This will include monitoring for oxygen, carbon monoxide, carbon dioxide, combustible gas (methane), hydrogen sulfide, total volatile hydrocarbons, in addition to the VOCs. Since part of the overlying OU 13 (low-lying wooded area) is the only remaining natural habitat for ecological receptors and has classified as wetlands, additional ecological evaluations may be required, and wetlands regulations may have to be considered if construction is planned in this low-lying wooded area.
- For military construction projects within the overlying OU 13 footprint, an environmental site assessment will be conducted. The environmental assessment will be completed prior to project design and submitted to DSFREE for review. Monitoring will include soil (soil gas and groundwater, if applicable) sampling prior to construction. DM-FRE may also issue an environmental review document, if necessary. Soil analyses, ambient air testing, and personnel monitoring may be required during construction.
- For non-military construction projects (i.e., routine maintenance or utility operations requiring excavation or trenching) within the OU 13 footprint, an environmental review document will be issued by DM-FRE as specified in installation's Maintenance Regulation 4150.1. Depending on the type of construction activity, a health and safety plan may be required by the DM-FRE prior to work commencement. The plan may include air monitoring, personal protective equipment, dust suppression and runoff control during construction, as necessary.
- Monitoring: Soil, soil gas, and groundwater analysis, ambient air testing, and personnel monitoring may be required during construction activities. This determination will be made based on the type and location of the construction activity proposed and the results of the preconstruction sampling. Monitored Natural Attenuation of the Lower and Sapolite WBUs groundwater COCs, which consist of chlorinated VOCs and geochemical conditions in the Lower and Sapolite WBUs, will be monitored to document that constituent mass and concentrations are decreasing over time. In addition, routine groundwater monitoring will continue as part of OU 7 activities. Contamination monitoring (volatile organic compounds) for surface water in Kingsland Creek will continue until OU 7 remediation is complete. DLA will also monitor and report on the implementation, maintenance, and enforcement of ICs on the non-federally owned property, and coordinate with federal, state, and local governments involved at this site and the owners of the property subject to the ICs.
- Property Transfer Restrictions: If the U.S. Army were to transfer any portion of the OU 7 area out of federal ownership for civilian use, land, and groundwater use restrictions necessary to protect human health and the environment will be incorporated into the property deed. An environmental review would be required before construction. Residential development or school or childcare-related facility development would be prohibited, if the transfer occurs before property conditions allow for unlimited use and unrestricted exposure. ICs will be required until the concentrations of hazardous substances in OU 7 groundwater have been reduced to levels that allow for unlimited use and unrestricted exposure. Deed restrictions would apply to monitor future development within the site's physical boundaries. An environmental review would be required before construction and engineering controls (i.e., vapor barriers) will be required for future buildings constructed within the footprint of the OU 7 plumes to mitigate potential vapor intrusion issues if the transfer occurs before property conditions allow for unlimited use and unrestricted exposure and potable groundwater use.

- Inspections and Five-Year Reviews: An annual site inspection will be conducted until OU 7 is deemed acceptable for unrestricted use. The annual site inspection will be documented and certified with the form provided as Figure 3 of the Land Use Control Remedial Design. A five-year review will be conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act until the termination provisions are met. Five-year reviews occurred in 2013, 2019, and 2023. The next five-year review is planned for 2028.

OU 7 has the following LUC elements and implementation measures:

Access restrictions.

Deed restrictions.

Property transfer restrictions.

Notice of land use restrictions, in the event of property transfer.

Zoning restrictions.

Preconstruction assessments.

Monitoring for pre-intrusive, intrusive, pre-construction and construction activities within the OU 7 plume area.

Continue monitoring of Kingsland Creek until remediation of OU 7 is complete.

Groundwater monitoring.

Groundwater well restrictions.

Engineering controls including vapor barriers for future buildings constructed over the OU 7 plume.

Annual inspections and five year reviews.

Verification that land use restrictions are being accomplished and LUCs remain effective:

Verify that any boundary fence in the OU vicinity is intact.

Verify that no residential housing, development, or child daycare activities are occurring at the OU.

Verify that no groundwater wells have been installed at the OU (except for monitoring and injection wells that were installed as part of the remedy) and that no consumptive use of groundwater is occurring.

Verify that applicable LUCs are intact, meet specifications, and/or are in good working order.

Verify that vapor mitigation systems have been incorporated in existing or newly constructed buildings (if applicable).

Verify that a map of the plume where drinking water wells should not be installed or used off the installation property has been forwarded to the Chesterfield County Health Department (OU 6, 7, 8, and PX Gas Station only).

Review of land use restrictions and LUCs in effect:

OU 7 is within the secured, fenced DSCR facility with limited access enforced by Base Security. OU 7 is designated as the groundwater beneath and downgradient of the Former Fire Fighting and Training Area (OU 4). The human health risk assessment completed for OU 7 did not identify a risk for current or future industrial worker at Building 72 for inhalation of VOCs migrating from groundwater to indoor air (DSCR 2012). Based on the risk assessment results, the final remedy implemented at OU 7 did not include vapor mitigation measures for Building 72.

The 2025 inspection for OU 13 did not identify potable groundwater use, residential housing, development, or child daycare activities for the land surface above groundwater associated with OU 7. Annual monitoring of sub slab vapor is performed in Building 72 in December of each calendar year to verify that engineering measures are not required for vapor mitigation. This monitoring includes an

inspection of building area, sampling for VOCs by EPA Method TO-15 at vapor monitoring point OU7-VMP-116, and field measurements for VOCs and methane at this monitoring point.

Current land use at includes open fields that are maintained as necessary to retain access to environmental monitoring wells, wetlands areas, vacant contractor staging areas, and remnant rock stockpiles. Numerous “no dumping” signs are located within the area.

Site storm drains show no signs of erosion or sedimentation. The 2025 and previous years inspections identified a depression in the central portion of the Pit 1 monitored area of the site at the location of a former biowall, groundcover remains intact in this area with no surface or subsurface soil exposure, thereby complying with LUCs for OU 13 that are in place to limit human health exposure to subsurface soil. The depression has approximate dimensions of 2 feet wide, depth of 2 feet, and length of 200 feet. Ground settlement has occurred from the mulch backfill that has a reduced volume and increased void spaces over time from consumption of the mulch from bioremediation processes. The ground settlement has caused the concrete pads of two monitoring wells (P1BWA58 and P1BWA66) to collapse into the depression. Well locations are not within the depression. A site map is provided as Figure 6-1 and shows the location of these two wells.

A comprehensive well inventory and inspection occurs at OU 7 as part of annual groundwater monitoring performed in March. Photos applicable to OU 7 are included under the section 11 (OU 13 Annual Site Inspection Form) of this report.

In 2020, DLA completed improvements to the entire storm sewer system at the installation that included inspection, relining, and repairs of more than 23 miles of storm drains and pipes (DLA 2020).

Description of any intrusive activities that occurred in the past year:

FY2025 includes activities from October 2024 to September 2025. The 2025 inspection did not identify intrusive activities at OU 7. Appendix B includes intrusive activities within the past five years at OU 7.

Description of any deficiency or violation of the land use restrictions:

Deficiencies at OU 13 include the damaged monitoring wells P1BWA58 and P1BWA66 not currently used for groundwater monitoring at OU 7.

Description of any proposed measures or corrective actions taken to remediate a deficiency or violation:

Abandon damaged monitoring wells P1BWA58 and P1BWA66 no longer used or needed for groundwater monitoring at OU 7. The current contract includes a well abandonment task to address these wells. Re-grading or filling of the depression area is not recommended at this time because of potential ground instability with use of heavy equipment in the area. Continued inspections performed during groundwater monitoring events annually will verify ground cover conditions in the area. Planned well abandonments have a scheduled completion date in FY2026.

Certification Statement:

I, the undersigned, document that the inspection was performed as indicated above, and that the above information is true and correct to the best of my knowledge and belief. I have reviewed the OU-specific appendix of the Environmental LUC RD (AECOM 2015) to verify requirements and restrictions.

Name and Title: [REDACTED] (Meadows Project Manager)

Signature

[REDACTED]

: 6/2/2025



Legend

- Monitoring Well with Deficiency
- Streams
- Operable Unit 7 Boundary
- Installation Boundary
- Surficial Aquifer Plume Extent
- Confined Aquifer Plume Extent

Notes:

1. Orthoimagery Source: VGIN (2021)
2. P1BWA58 and P1BWA66 have been identified as having deficiencies that will require maintenance.

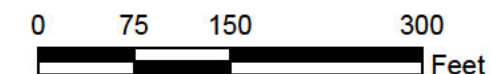
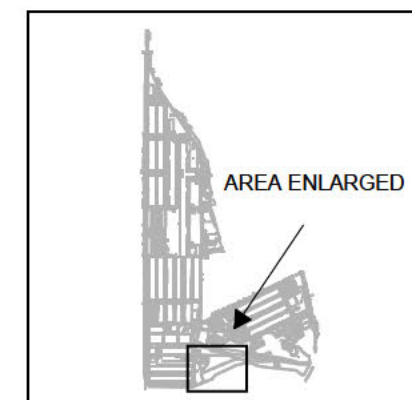


Figure 6-1
Operable Unit 7

2025 Annual LUC Inspection Report
Defense Supply Center Richmond
Richmond, VA

Prepared By:
GC

Reviewed By:
KL

Scale:
1" = 150'

Date:
September 09, 2025

7. Annual Site Inspection Form Operable Unit 8

Defense Supply Center Richmond Annual Site Inspection Form

In accordance with the *Final LUC RD (AECOM 2015)* for Defense Supply Center Richmond (DSCR), [REDACTED] with Meadows completed an inspection of OU 8 on 02 June 2025.

Land use restrictions as presented in the LUC RD (AECOM, 2015):

The description of the Selected Remedy in the 2007 ROD include:

- “Institutional controls on the installation including current and future restriction of potable groundwater use and residential land use. (The industrial land use scenario is also the basis for remedy selection at other OUs at the installation.)”
- “Deed restrictions to prohibit future potable groundwater use, residential development, and land use as a school or childcare-related facility, if the property changes ownership before property conditions allow for unlimited use and unrestricted exposure.”

Land use controls, as described in the 2011 ESD, include:

- “Potable groundwater use has been prohibited installation-wide. Land use has been designated solely for industrial purposes until conditions allow for unlimited use and unrestricted exposure to groundwater. Land Use Controls (LUCs) are currently in place and will also be attached to the Defense Supply Center Richmond property deed to restrict groundwater use and prohibit residential development and land use for schools or childcare facilities, should the property change ownership in the future before completion of the remedy. An assessment by the installation's environmental group is required before construction activities can be undertaken at OU 8 to ensure that conditions will not present an unacceptable risk to construction workers.”
- “Prior to excavation, monitoring data will be reviewed to determine potential vapor hazards and any associated health and safety requirements.”
- “The specific OU 8 institutional controls are outlined in an appendix of the installation's Environmental Land Use Control Implementation Plan (LUCIP) [herein the Land Use Control Remedial Design]. Annual inspections are conducted to determine whether the institutional controls remain effective and that land and groundwater use restrictions are being achieved. The annual inspections describe deficiencies or violations and proposed measures or corrective actions taken or required. In the unlikely event of a deficiency or violation, the installation takes appropriate corrective action. DLA is responsible for implementing, maintaining, reporting on, and enforcing institutional controls.”
- “Although DLA may transfer procedural responsibilities to another party by contract, property transfer agreement, or other means, the Department of Defense shall retain ultimate responsibility for remedy integrity.”

Implementation

- COCs at OU 8 primarily include volatile organic compounds. Exposure to COCs would be anticipated if excavation was undertaken or drinking water wells were installed.
- Defense Supply Center Richmond has instituted the following measures to meet the LUCs in the 2007 ROD and the 2011 ESD, and the requirement for five-year reviews as long as constituents remain in place at concentrations that preclude unlimited use and unrestricted exposure. Defense Supply Center Richmond will notify EPA prior to changing the following measures if the change could affect the LUCs.
 - Groundwater Use Restrictions: Potable groundwater use has been prohibited at OU 8. The installation has currently modified Maintenance Regulation 4150.1 to prohibit potable use of groundwater throughout the installation.

- Preconstruction Assessment:
 - Future industrial development, including excavation or site grading, is not precluded. In the event of construction activities, health and safety measures will be followed. The DM-FRE must be consulted prior to execution of these activities. DM-FRE will issue an environmental review document, which will outline the contaminant data in the area of the construction activity. In the event that impacted soils (OU 5 area) are removed in the future, they will be disposed of in a permitted facility and replaced with clean fill to prevent exposure. In addition, if the impacted soils are disturbed in the future, erosion and sediment controls will be required to prevent migration to the storm sewer. Due to the presence of VOCs in the groundwater, vapor barriers may be required for existing buildings or any new building constructed over the OU 8 plume. In addition, prior to initiating intrusive activities over the OU 8 plume, soil gas/vapor monitoring may be required. This will include monitoring for oxygen, carbon monoxide, carbon dioxide, combustible gas (methane), hydrogen sulfide, total volatile hydrocarbons, in addition to the VOCs.
 - In case military construction projects are planned over the OU 8 plume, an environmental site assessment will be conducted. The environmental assessment will be completed prior to project design and submitted to DM-FRE for review. Monitoring may include soil, soil gas and groundwater sampling prior to construction. DM-FRE may also issue an environmental review document, if necessary. Soil and groundwater analyses, ambient air testing, and personnel monitoring may be required during construction.
 - For non-military construction projects (i.e., routine maintenance or utility operations requiring excavation or trenching) within the OU 8 footprint, an environmental review document will be issued by DM-FRE as specified in the installation's Maintenance Regulation 4150.1. Soil and groundwater analyses, ambient air testing, and personnel monitoring may be required during construction.
 - Depending on the type of construction activity, a health and safety plan may be required by the DM-FRE prior to work commencement. The plan may include air monitoring, personal protective equipment, dust suppression and runoff control during construction, as necessary.
- Monitoring: Soil and groundwater analysis, ambient air testing, and personnel monitoring may be required during construction activities. This determination will be made based on the type and location of the construction activity proposed and the results of the preconstruction sampling. Groundwater monitoring will continue as part of remedial action activities at OU 8. Vapor phase monitoring may be required as part of remedial action activities at OU 8 to assess vapor intrusion.
- Property Transfer Restrictions: If the U.S. Army were to transfer the OU 8 area out of federal ownership, deed restrictions would apply to monitor future development within the site's physical boundaries. An environmental review would be required before construction. Potable groundwater use, residential development or school or childcare related facility development would be prohibited, if the transfer occurs before property conditions allow for unlimited use and unrestricted exposure.
- Inspections and Five-Year Reviews: An annual site inspection will be conducted until OU 8 is deemed acceptable for unrestricted use. The annual site inspection will be documented and certified with the form provided as Figure 3 of the Land Use Control Remedial Design. A five-year review will be conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act until the termination provisions are met. Five-year reviews occurred in 1997, 2003, 2008, 2013, 2019, and 2023. The next five-year review is planned for 2028.

OU 8 has the following LUC elements and implementation measures:

Access restrictions.

Deed restrictions.

Property transfer restrictions.

Notice of land use restrictions, in the event of property transfer.

Zoning restrictions.

Preconstruction assessments.

Monitoring for pre-intrusive, intrusive, pre-construction and construction activities within the OU 8 plume area.

Vapor phase monitoring as applicable.

Groundwater monitoring.

Groundwater well restrictions.

Engineering controls.

Annual inspections and five year reviews.

Verification that land use restrictions are being accomplished and LUCs remain effective:

Verify that any boundary fence in the OU vicinity is intact.

Verify that no residential housing, development, or child daycare activities are occurring at the OU.

Verify that no groundwater wells have been installed at the OU (except for monitoring and injection wells that were installed as part of the remedy) and that no consumptive use of groundwater is occurring.

Verify that applicable LUCs are intact, meet specifications, and/or are in good working order.

Verify that vapor mitigation systems have been incorporated in existing or newly constructed buildings (if applicable).

Verify that a map of the plume where drinking water wells should not be installed or used off the installation property has been forwarded to the Chesterfield County Health Department (OU 6, 7, 8, and PX Gas Station only).

Review of land use restrictions and LUCs in effect:

OU 8 is within the secured, fenced DSCR facility with limited access enforced by Base Security.

The 2025 inspection did not identify potable groundwater use, residential housing, development, or child daycare activities at OU 8. The boundary fence is intact at the facility. Signs identifying the operable unit and denoting the area as a “no dig” zone are intact but are fading. Comprehensive well inventories and inspections occur semi-annually at OU 8 in April and October as part of semi-annual groundwater monitoring. Building 65 vapor mitigation systems are monitored and maintained quarterly. The sign locations are identified on Figure 7-1. Site photos are provided in Exhibit 7-1.

Current land use at OU 8 includes warehouses, a softball field, parking areas, a jogging trail, and the Dervishian Army Reserve Center (this includes the Headquarters Building, office and classroom space, and service buildings). Site monitoring wells are intact and secured and site storm drains show no signs of erosion or sedimentation.

In 2020, DLA completed improvements to the entire storm sewer system at the installation that included inspection, relining, and repairs of more than 23 miles of storm drains and pipes (DLA 2020).

Description of any intrusive activities that occurred in the past year:

FY2025 includes activities from October 2024 to September 2025. Building 65 sprinkler system installation completed in June 2025. Surface construction and paving activities completed at OU 8 from January 2025 through April 2025. For the April 2024 semi-annual monitoring event, the project sampling team could not locate monitoring well OU8-MW-119 located in the pavement disturbance area north of

Building 65 during FY24 construction. Follow-up field activities could not locate well OU8-MW-119. Appendix B includes intrusive activities within the past five years at OU 8.

Description of any deficiency or violation of the land use restrictions:

For missing well OU8-MW-119, the project team modified the semi-annual monitoring program to incorporate a nearby replacement well. There are sufficient existing well locations in the area north of Building 65 to meet remedial monitoring and assessment objectives without using location of OU8-MW-119. One "No Dig Zone" sign has faded.

Description of any proposed measures or corrective actions taken to remediate a deficiency or violation:

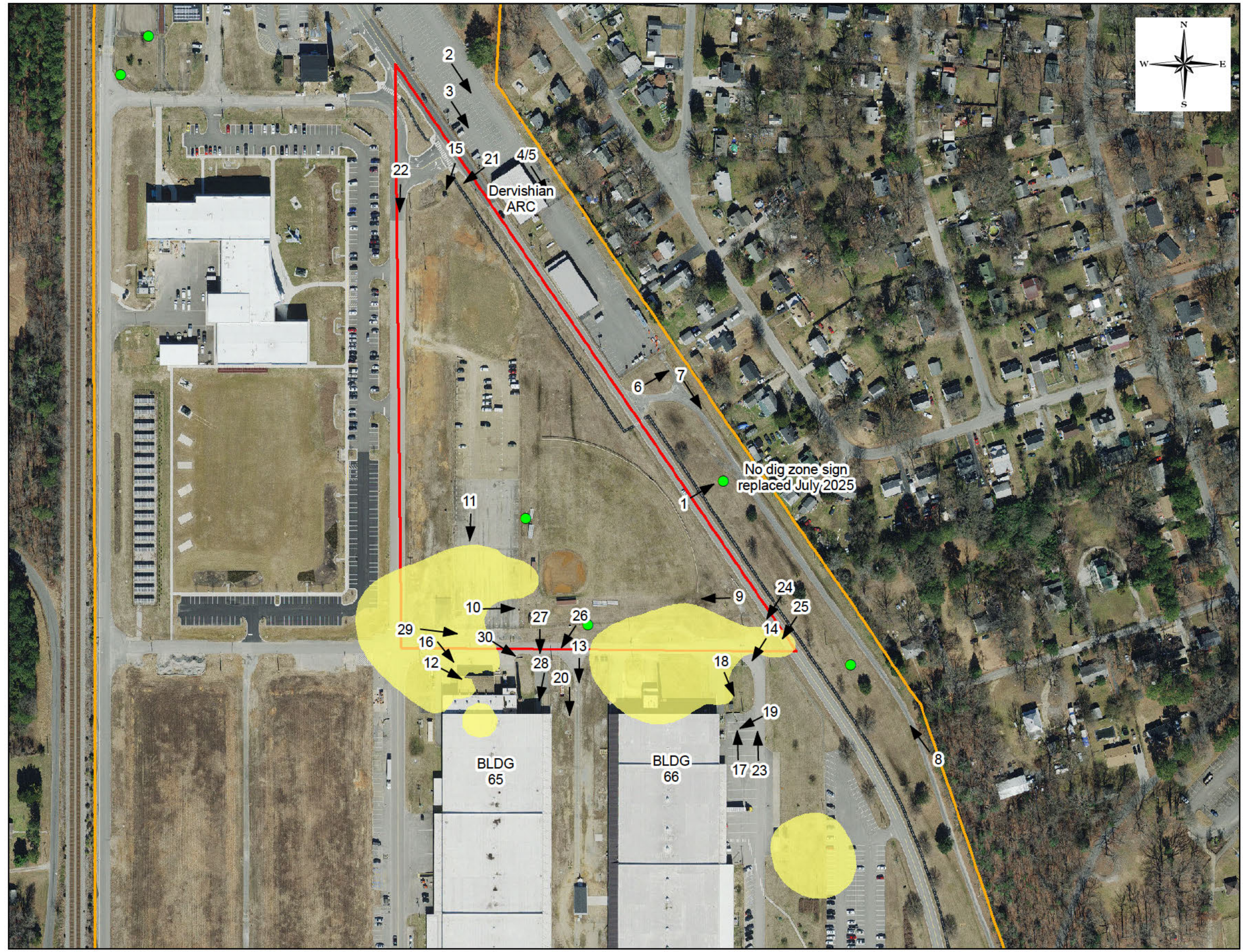
If well OU8-MW-119 is located, a well condition assessment will determine if the well requires abandonment or if repairs will allow for use of the well, as applicable. In July 2025 Meadows replaced one faded "No Dig Zone" sign in the eastern OU 8 area.

Certification Statement:

I, the undersigned, document that the inspection was performed as indicated above, and that the above information is true and correct to the best of my knowledge and belief. I have reviewed the OU-specific appendix of the Environmental LUC RD (AECOM 2015) to verify requirements and restrictions.

Name and Title: [REDACTED] (Meadows Project Manager)

Signature: [REDACTED] : 6/2/2025



Legend

- Sign Locations
- Surficial Aquifer Plume Extent
- Operable Unit 8 Boundary
- DSCR Boundary
- ← 8 Photo ID and Direction

Notes:
Orthoimagery Source: VGIN (2021)

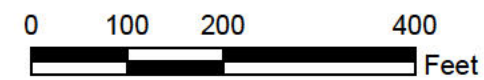
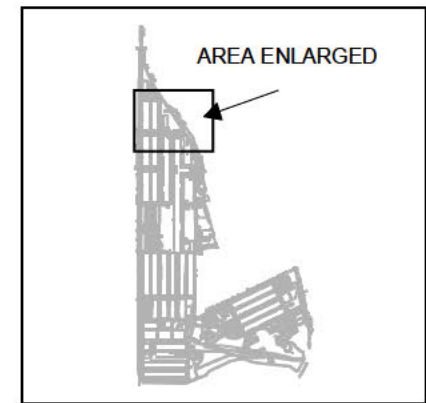


Figure 7-1
Operable Unit 8

2025 Annual LUC Inspection Report
Defense Supply Center Richmond
Richmond, VA

Prepared By: GC	Reviewed By: KL
Scale: 1" = 200'	Date: September 09, 2025

Exhibit 7-1



Photograph 1. OU 8 designation sign.



Photograph 2. View of the east side of Dervishian ARC looking south.



Photograph 3. View of the west side of Dervishian ARC looking south.



Photograph 4. View of the southern portion of Dervishian ARC looking south.



Photograph 5. View of typical flush mount well completion in asphalt.



Photograph 6. Typical flush mount monitoring well in grass.



Photograph 7. View of southeast portion of OU 8 looking southeast.



Photograph 8. View looking north along access road at the eastern fence line.



Photograph 9. Looking west across the southern end of ball field from G Road.



Photograph 10. Looking east towards ball field at southern end of parking lot in OU with deteriorating asphalt.



Photograph 11. Looking south at Bldg. 65 in parking lot with deteriorating asphalt.



Photograph 122. Interior view of covered storage area attached to Bldg. 65, looking towards the SSDS shed.



Photograph 13. Deteriorating pavement on access road between Bldgs. 65 and 66.



Photograph 14. View of northeast corner of Bldg. 66 where southern pump test was located.



Photograph 15. View of retention pond and exposed area from removed northern pump test shed.



Photograph 16. View of exterior of covered storage area, showing cracking asphalt at storm sewer repair area, completed FY24.



Photograph 17. View of storm drain where southern pump test discharged, cracking in asphalt visible.



Photograph 18. View of grass regrowth at pump test removal.



Photograph 19. Asphalt patch at 2022 injection location in the Bldg. 66 area.



Photograph 20. Depression near storm sewer and water line between Bldgs. 65 and 66.



Photograph 21. Flush mount well completion, concrete cracked from equipment passing over.



Photograph 22. C Road, looking South at repaved section in FY24, approximately 800 ft to intersection with N. 4th St.



Photograph 23. Paved section of N. 4th St with concrete curbs installed at northeast corner of Bldg. 66.



Photograph 24. Looking east at new intersection constructed at G Road and N. 4th St.



Photograph 25. MWANP-26, replaced concrete pad due to Construction of Intersection of G Road and N 4th St in FY24.



Photograph 26. Restored staging area of construction activity at northeast corner of Bldg. 65.



Photograph 27. Completed loading dock construction at northeast corner of Bldg. 65.



Photograph 28. Closeup view of new loading dock at northeast corner Bldg. 65.



Photograph 29. Repaved area north of Bldg. 65, MW-119 destroyed during construction.



Photograph 30. OU8-MW-53 disturbed during construction activities, concrete pad reset in correct location over casing FY24.

8. Annual Site Inspection Form Operable Unit 10

Defense Supply Center Richmond Annual Site Inspection Form

In accordance with the *Final LUC RD (AECOM 2015)* for Defense Supply Center Richmond (DSCR [REDACTED]) with Meadows completed an inspection of OU 10 on 02 June 2025.

Land use restrictions at OU 10 as presented in the LUC RD (AECOM, 2015):

The description of the Selected Remedy in the 2007 ROD is:

- “Institutional controls on the installation including current and future restriction of groundwater use as drinking water and industrial land use only.”
- “Deed restrictions to prohibit future potable use of groundwater, residential development, and land use as school or childcare-related facility, if the property changes ownership before property conditions allow for unlimited use and unrestricted exposure.”

Specifics:

- “Potable groundwater use has been prohibited installation-wide. Land use will be solely for industrial purposes until conditions allow for unlimited use and unrestricted exposure. LUCs will be attached to the property deed to restrict groundwater use and prohibit residential development and land use for schools or childcare facilities, should the property change ownership in the future before completion of the remedy.”
- “An annual inspection will be conducted to determine whether the institutional controls remain effective and that land and groundwater use restrictions are being achieved. The annual inspections will describe deficiencies or violations and proposed measures or corrective actions taken or required. In the unlikely event of a deficiency or violation, [Defense Supply Center Richmond] DSCR will take appropriate corrective action.”

In addition to institutional controls, the following requirements are included in the 2007 ROD:

- “A vegetative cover will be installed over the gravel at CU [sic] 10 as an ecological enhancement. The vegetative cover will minimize fugitive dust, surface soil erosion and runoff, thereby limiting potential future soil migration to the storm sewer.”
- “The vegetative/gravel cover will be maintained to limit potential future transport of impacted soils through the storm sewer to Falling Creek Tributary.”
- “In the event that impacted soils are removed in the future, they will be disposed of in a permitted facility and replaced with clean fill to prevent exposure.”
- “In the event that impacted soils are disturbed in the future, erosion and sediment controls will be required to prevent migration to the storm sewer. Inspections will be conducted annually.”
- “A preconstruction assessment by the [Defense Supply Center Richmond] DSCR environmental group will be required in the event that excavation activities are planned.”
- “Notification to USEPA and VDEQ of changes in land use at OU 10 that could affect implementation or the effectiveness of the institutional controls required by this ROD.”

Implementation: Defense Supply Center Richmond has instituted the following measures to meet the LUCs in the 2007 ROD and the requirement for five-year reviews as long as constituents remain in place at concentrations that preclude unlimited use and unrestricted exposure. Defense Supply Center Richmond will notify EPA prior to changing the following measures if the change could affect the LUCs.

- Groundwater Use Restrictions: Potable groundwater use has been prohibited at OU 10. The installation has currently modified Maintenance Regulation 4150.1 to prohibit potable use of groundwater throughout the installation.

- Access Restrictions and Signage: OU 10 will continue operation as a restricted industrial area. Because Defense Supply Center Richmond is a secured Department of Defense facility, access is already restricted. OU 10 is located within the tenant organization confines of the DDRV, which has a separate fence. Additional badging/clearance are required to enter the DDRV area. This additional security provides a layering of controls and will continue to be maintained. Installation police conduct routine security checks of this area. Access restrictions will be maintained as long as DDRV occupies this area. Signs identifying the OU are posted on the OU 10 fence.
- Preconstruction Assessment:
 - Future industrial development, including excavation or site grading, is not precluded. In the event of construction activities, health and safety measures will be followed. The DM-FRE must be consulted prior to excavation. DM-FRE will issue an environmental review document, which will outline the contaminant data in the area of the construction activity.
 - For military construction projects at OU 10, an environmental site assessment will be conducted. The environmental assessment will be completed prior to project design and submitted to DM-FRE for review. Monitoring will include soil sampling prior to construction. DM-FRE may also issue an environmental review document, if necessary. Soil analyses, ambient air testing, and personnel monitoring may be required during construction.
 - For non-military construction projects (i.e., routine maintenance or utility operations requiring excavation or trenching) within the OU 10 footprint, an environmental review document will be issued by DM-FRE as specified in the installation's Maintenance Regulation 4150.1.
 - Depending on the type of construction activity, a health and safety plan may be required by the DM-FRE prior to work commencement. The plan may include air monitoring, personal protective equipment, dust suppression and runoff control during construction, as necessary. In the event that impacted soils are removed in the future, they will be disposed of in a permitted facility and replaced with clean fill to prevent exposure. In addition, if the impacted soils are disturbed in the future, erosion and sediment controls will be required to prevent migration to the storm sewer.
- Maintenance and Monitoring: Soil analysis, ambient air testing, and personnel monitoring may be undertaken during construction activities, depending upon the type and location of the construction activity and the results of the preconstruction sampling. A vegetative cover has been installed at the site as part of the final remedy. The cover will be inspected on an annual basis. Requirements for additional top soil or seeding will be determined during these annual inspections. Maintenance activities (if required) will be performed after the annual inspection site visits.
- Property Transfer Restrictions: If the U.S. Army were to transfer OU 10 out of federal ownership, deed restrictions would apply to monitor future development within the site's physical boundaries. An environmental review would be required before construction. Residential development or school or childcare related facility development would be prohibited, if the transfer occurs before property conditions allow for unlimited use and unrestricted exposure.
- Inspections and Five-Year Reviews: An annual site inspection will be conducted until OU 10 is deemed acceptable for unrestricted use. The annual site inspection will be documented and certified with the form provided as Figure 3 of the Land Use Control Remedial Design. A five-year review will be conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act until the termination provisions are met. Five-year reviews occurred in 1997, 2003, 2008, 2013, 2019, and 2023. The next five-year review is planned for 2028.

OU 10 has the following LUC elements and implementation measures:

- Access restrictions.
- Deed restrictions.
- Property transfer restrictions.
- Notice of land use restrictions, in the event of property transfer.
- Zoning restrictions.
- Preconstruction assessments.
- Monitoring for pre-construction and construction activities.
- Maintenance of signs identifying operable unit and designation as a no dig area.
- Annual inspection of vegetative cover installed for the site remedy and perform maintenance as required.
- Groundwater well restrictions.
- Engineering controls.
- Annual inspections and five year reviews.

Verification that land use restrictions are being accomplished and LUCs remain effective:

- Verify that any boundary fence in the OU vicinity is intact.
- Verify that no residential housing, development, or child daycare activities are occurring at the OU.
- Verify that no groundwater wells have been installed at the OU (except for monitoring and injection wells that were installed as part of the remedy) and that no consumptive use of groundwater is occurring.
- Verify that applicable LUCs are intact, meet specifications, and/or are in good working order.
- Verify that vapor mitigation systems have been incorporated in existing or newly constructed buildings (if applicable).
- Verify that the soil cover integrity is adequate to prevent exposure to contaminated soils.

Review of land use restrictions and LUCs in effect:

OU 10 is within the secured, fenced DSCR facility with limited access enforced by Base Security.

The 2025 inspection did not identify potable groundwater use, residential housing, development, or child daycare activities at OU 10. The boundary fence is intact at the facility and the vegetative cover appears intact. Signs identifying the operable unit and denoting the area as a “no dig” zone are intact. The sign locations are identified on Figure 8-1. Site photos are provided in Exhibit 8-1.

Current land use at OU 10 is a grass and soil covered field. Site monitoring wells are intact and secured and site storm drains show no signs of erosion or sedimentation.

In 2020, DLA completed improvements to the entire storm sewer system at the installation that included inspection, relining, and repairs of more than 23 miles of storm drains and pipes (DLA 2020).

Description of any intrusive activities that occurred in the past year:

FY2025 includes activities from October 2024 to September 2025. Truck gate renovation began in January 2025. Appendix B includes intrusive activities within the past five years at OU 10.

Description of any deficiency or violation of the land use restrictions:

No deficiencies observed.

Description of any proposed measures or corrective actions taken to remediate a deficiency or violation:

None proposed.

Certification Statement:

I, the undersigned, document that the inspection was performed as indicated above, and that the above information is true and correct to the best of my knowledge and belief. I have reviewed the OU-specific appendix of the Environmental LUC RD (AECOM 2015) to verify requirements and restrictions.

Name and Title: [REDACTED] (Meadows Project Manager)

Signature [REDACTED] : 6/2/2025



Legend

- Sign Locations
- Operable Unit 10 Boundary
- DSCR Boundary
- ← 8 Photo ID and Direction

Notes:
Orthoimagery Source: VGIN (2021)

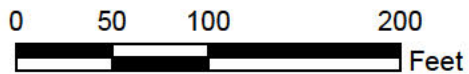
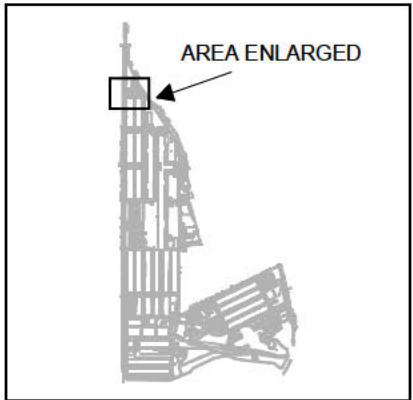


Figure 8-1
Operable Unit 10

2025 Annual LUC Inspection Report
Defense Supply Center Richmond
Richmond, VA

Prepared By: GC	Reviewed By: KL
Scale: 1" = 100'	Date: September 09, 2025

Exhibit 8-1



Photograph 1. OU 10 designation sign.



Photograph 2. View of OU 10 Looking southwest from northeast corner of the site.



Photograph 3. OU 10 looking northwest from southeast corner of the site.



Photograph 4. OU 10 looking north from southeast corner of the site.



Photograph 5. OU 10 looking south from north end of the site.

9. Annual Site Inspection Form Operable Unit 11

Defense Supply Center Richmond Annual Site Inspection Form

In accordance with the *Final LUC RD (AECOM 2015)* for Defense Supply Center Richmond (DSCR), [REDACTED] with Meadows completed an inspection of OU 11 on 02 June 2025.

Land use restrictions for OU 11 as presented in the LUC RD (AECOM, 2015):

The LUCs included in the Selected Remedy as specified in the 2007 ROD are:

- “Institutional controls on the installation including current and future restriction of groundwater use as drinking water and industrial land use only.”
- “Deed restrictions to prohibit future potable use of groundwater, residential development, and land use as school or childcare-related facility, if the property changes ownership before property conditions allow for unlimited use and unrestricted exposure.”

Specifics

- “Potable groundwater use has been prohibited installation-wide. Land use will be solely for industrial purposes until conditions allow for unlimited use and unrestricted exposure. LUCs will be attached to the property deed to restrict groundwater use and prohibit residential development and land use for schools or childcare facilities, should the property change ownership in the future before completion of the remedy.”
- “An annual inspection will be conducted to determine whether the institutional controls remain effective and that land and groundwater use restrictions are being achieved. The annual inspections will describe deficiencies or violations and proposed measures or corrective actions taken or required. In the unlikely event of a deficiency or violation, [Defense Supply Center Richmond] DSCR will take appropriate corrective action.”

In addition to institutional controls, the following requirements are included in the 2007 ROD:

- “A vegetative cover will be installed over the gravel at OU 11 as an ecological enhancement. The vegetative cover will minimize fugitive dust, surface soil erosion and runoff, thereby limiting potential future soil migration to the storm sewer.”
- “The asphalt/gravel/vegetative cover will be maintained to limit potential future transport of impacted soils through the storm sewer to Kingsland Creek.”
- “In the event that impacted soils are removed in the future, they will be disposed of in a permitted facility and replaced with clean fill to prevent exposure.”
- “In the event that impacted soils are disturbed in the future, erosion and sediment controls will be required to prevent migration to the storm sewer. Inspections will be conducted annually.”
- “A preconstruction assessment by the [Defense Supply Center Richmond] DSCR environmental group will be required in the event that excavation activities are planned.”
- “Notification to USEPA and VDEQ of changes in land use at OU 11 that could affect implementation or the effectiveness of the institutional controls required by this ROD.”

Implementation: Defense Supply Center Richmond has instituted the following measures to meet the LUCs in the 2007 ROD and the requirement for five-year reviews as long as constituents remain in place at concentrations that preclude unlimited use and unrestricted exposure. Defense Supply Center Richmond will notify EPA prior to changing the following measures if the change could affect the LUCs.

- Groundwater Use Restrictions: Potable groundwater use has been prohibited at OU 11. The installation has currently modified Maintenance Regulation 4150.1 to prohibit potable use of groundwater throughout the installation.

- Access Restrictions and Signage: OU 11 will continue operation as a restricted industrial area. Because Defense Supply Center Richmond is a secured Department of Defense facility, access is already restricted. OU 11 is located within the tenant organization confines of the DDRV, which has a separate fence. Additional badging/clearance are required to enter the DDRV area. This additional security provides a layering of controls and will continue to be maintained. Installation police conduct routine security checks of this area. Access restrictions will be maintained as long as DDRV occupies this area. Signs identifying the OU are posted at OU 11.
- Preconstruction Assessment:
 - Future industrial development, including excavation or site grading, is not precluded. In the event of construction activities, health and safety measures will be followed. The DM-FRE (Environment, Safety and Health Office operated under DLA Enterprise Support Richmond) must be consulted prior to excavation. DM-FRE will issue an environmental review document, which will outline the contaminant data in the area of the construction activity.
 - For military construction projects at OU 11, an environmental site assessment will be conducted. The environmental assessment will be completed prior to project design and submitted to DM-FRE for review. Monitoring will include soil sampling prior to construction. DM-FRE may also issue an environmental review document, if necessary. Soil analyses, ambient air testing, and personnel monitoring may be conducted during construction. For non-military construction projects (i.e., routine maintenance or utility operations requiring excavation or trenching) within the OU 11 footprint, an environmental review document will be issued by DM-FRE as specified in the installation's Maintenance Regulation 4150.1.
 - Depending on the type of construction activity, a health and safety plan may be required by the DM-FRE prior to work commencement. The plan may include air monitoring, personal protective equipment, dust suppression and runoff control during construction, as necessary. In the event that impacted soils are removed in the future, they will be disposed of in a permitted facility and replaced with clean fill to prevent exposure. In addition, if the impacted soils are disturbed in the future, erosion and sediment controls will be required to prevent migration to the storm sewer.
- Maintenance and Monitoring: Soil analysis, ambient air testing, and personnel monitoring may be undertaken during construction activities, depending upon the type and location of the construction activity and results of the preconstruction sampling. A vegetative cover is installed at the site as part of the final remedy. The cover will be inspected on an annual basis. Requirements for additional top soil, or seeding will be determined during these monthly inspections. Maintenance activities (if required) will be performed after the annual inspection site visits.
- Property Transfer Restrictions: If the U.S. Army were to transfer OU 11 out of federal ownership, deed restrictions would apply to monitor future development within the site's physical boundaries. An environmental review would be required before construction. Residential development or school or childcare related facility development would be prohibited, if the transfer occurs before property conditions allow for unlimited use and unrestricted exposure.
- Inspections and Five-Year Reviews: An annual site inspection will be conducted until OU 11 is deemed acceptable for unrestricted use. The annual site inspection will be documented and certified with the form provided as Figure 3 of the Land Use Control Remedial Design. A five-year review will be conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act until the termination provisions are met. Five-year reviews were conducted in 1997, 2003, 2008, 2013, 2019, and 2023 (in progress). The next five-year review is planned for 2028.

OU 11 has the following LUC elements and implementation measures:

- Access restrictions.
- Deed restrictions.
- Property transfer restrictions.
- Notice of land use restrictions, in the event of property transfer.
- Zoning restrictions.
- Preconstruction assessments.
- Monitoring for pre-construction and construction activities.
- Maintenance of signs identifying operable unit and designation as a no dig area.
- Annual inspection of vegetative cover installed for the site remedy and perform maintenance as required.
- Groundwater well restrictions.
- Engineering controls.
- Annual inspections and five year reviews.

Verification that land use restrictions are being accomplished and LUCs remain effective:

- Verify that any boundary fence in the OU vicinity is intact.
- Verify that no residential housing, development, or child daycare activities are occurring at the OU.
- Verify that no groundwater wells have been installed at the OU (except for monitoring and injection wells that were installed as part of the remedy) and that no consumptive use of groundwater is occurring.
- Verify that applicable LUCs are intact, meet specifications, and/or are in good working order.
- Verify that vapor mitigation systems have been incorporated in existing or newly constructed buildings (if applicable).
- Verify that the soil cover integrity is adequate to prevent exposure to contaminated soils.

Review of land use restrictions and LUCs in effect:

OU 11 is within the secured, fenced DSCR facility with limited access enforced by Base Security.

The 2025 inspection did not identify potable groundwater use, residential housing, development, or child daycare activities at OU 11. The boundary fence is intact at the facility and the vegetative cover appears intact. Signs identifying the operable unit and denoting the area as a “no dig” zone are intact. Three of five signs are fading and need replacement. The sign locations are identified on Figure 9-1. Site photos are provided in Exhibit 9-1.

Current land use at OU 11 includes vegetative and riprap covered slopes, grass and gravel covered field and an asphalt parking area used for pallet recycling, semi-trailer, and metal rack staging. Minor “divots” in the asphalt from the semi-trailer jack stands and minor cracks were noted throughout the asphalt. The asphalt and vegetative cover remain functional preventing potential runoff of soil into the installation stormwater system. Site monitoring wells are intact and secured and site storm drains show no signs of recent erosion or sedimentation.

In 2020, DLA completed improvements to the entire storm sewer system at the installation that included inspection, relining, and repairs of more than 23 miles of storm drains and pipes (DLA 2020).

Description of any intrusive activities that occurred in the past year:

FY2025 includes activities from October 2024 to September 2025. The 2025 inspection did not identify intrusive activities at OU 11. Appendix B includes intrusive activities within the past five years at OU 11.

Description of any deficiency or violation of the land use restrictions:

Two faded signs along the West boundary of the site and one on the East boundary identifying the operable unit as a "No Dig Zone" need replacement.

Description of any proposed measures or corrective actions taken to remediate a deficiency or violation:

Meadows replaced three faded "OU" and "No Dig Zone" signs in July 2025 at two locations along the western boundary and one location on the eastern boundary.

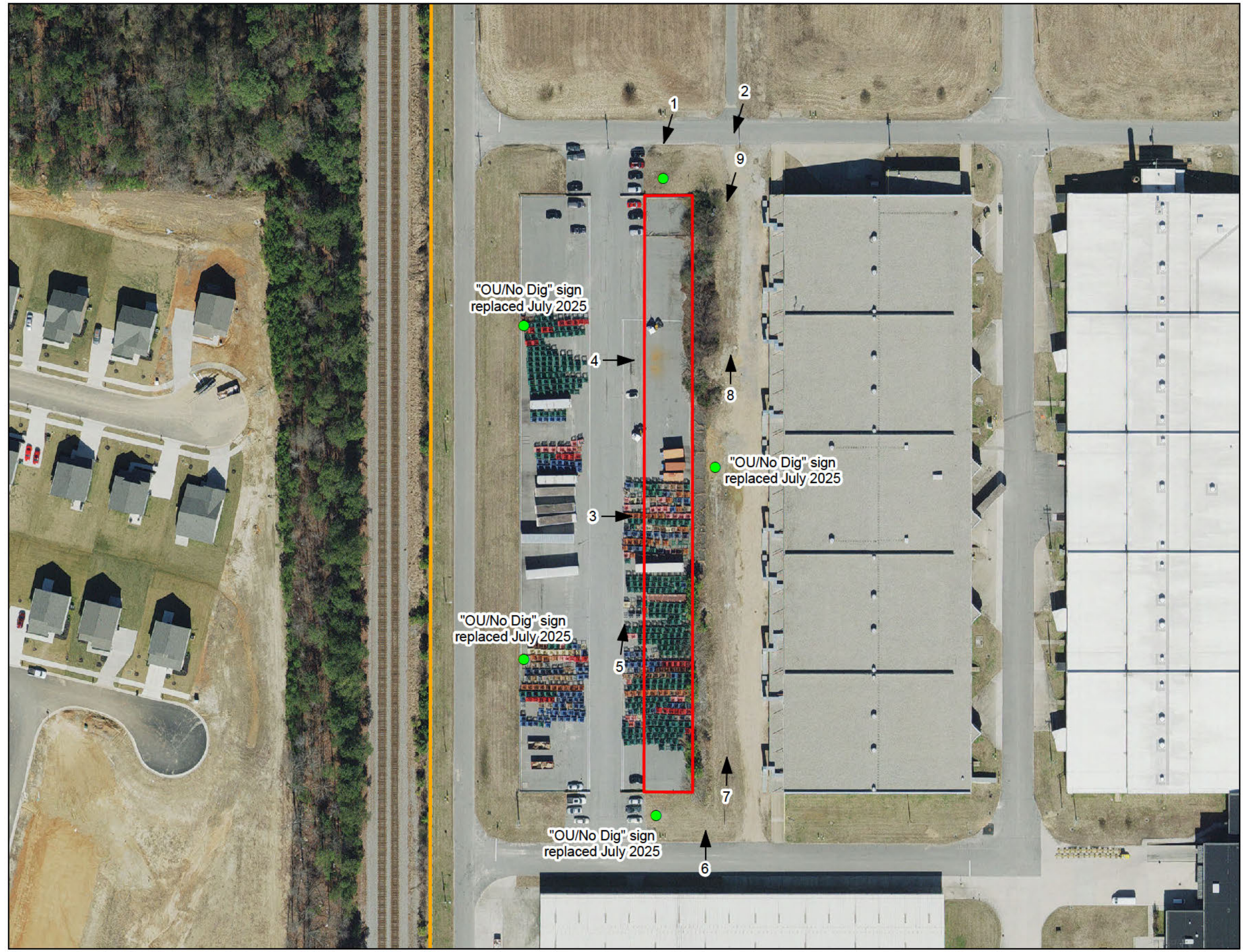
Certification Statement:

I, the undersigned, document that the inspection was performed as indicated above, and that the above information is true and correct to the best of my knowledge and belief. I have reviewed the OU-specific appendix of the Environmental LUC RD (AECOM 2015) to verify requirements and restrictions.

Name and Title: [REDACTED] (Meadows Project Manager)

Signature: [REDACTED]

6/2/2025



Legend

- Sign Locations
- Operable Unit 11 Boundary
- DSCR Boundary
- ← 8 Photo ID and Direction

Notes:
Orthoimagery Source: VGIN (2021)

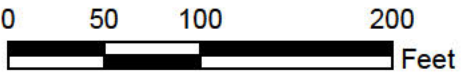
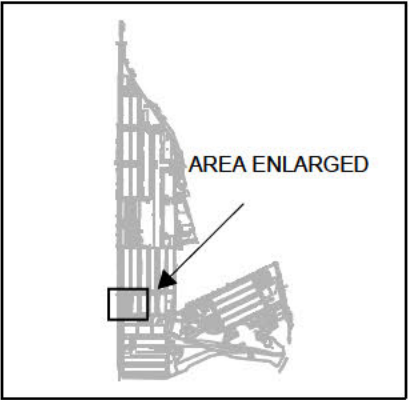




Figure 9-1
Operable Unit 11

2025 Annual LUC Inspection Report
Defense Supply Center Richmond
Richmond, VA

Prepared By: GC	Reviewed By: KL
Scale: 1" = 100	Date: September 10, 2025

Exhibit 9-1



Photograph 1. OU 11 designation sign.



Photograph 2. View of the northern end of OU 11 looking south.



Photograph 3. Metal racks at OU 11.



Photograph 4. Small divots in asphalt from semi-trailer jacks.



Photograph 5. Metals racks now cover area where trailers were previously parked.



Photograph 6. Southeast corner of OU 11 looking northwest.



Photograph 7. Storm drain east side of OU 11.



Photograph 8. OU 11 typical monitoring well.



Photograph 9. View of unpaved area from northeast corner of site.

10. Annual Site Inspection Form Operable Unit 12

Defense Supply Center Richmond Annual Site Inspection Form

In accordance with the *Final LUC RD (AECOM 2015)* for Defense Supply Center Richmond (DSCR), [REDACTED] with Meadows completed an inspection of OU 12 on 02 June 2025.

Land use restrictions for OU 12 as presented in the LUC RD (AECOM, 2015):

The description of the Selected Remedy in the 2005 ROD includes:

- “An asphalt cover with an approximate area of 13,800 square feet (ft²), which covers impacted soil at OU 12. The cover is a technically achievable containment strategy that will provide immediate point-of-exposure protection. Operation and maintenance of the cover will be conducted to maintain its integrity and to meet RAOs.”
- “Land use controls (LUCs) to restrict land and groundwater use at OU 12.”

Specifics of Land Use Controls according to the 2005 ROD:

- “The LUC objectives are: (1) reduce or eliminate the potential for human exposure to constituents in the soil; (2) maintain the integrity of any current or future remedial or monitoring system such as monitoring wells; (3) maintain the asphalt cover; and (4) prohibit the development and use of the property for residential housing, elementary and secondary schools, childcare facilities and playgrounds. The LUC objectives will be accomplished by restricting activities that could disturb or damage the asphalt cover or the groundwater monitoring wells. The selected remedy includes development, implementation, and enforcement (including annual verification inspections) of LUCs, including but not limited to land and groundwater use restrictions. LUCs will be maintained until the concentration of hazardous substances in the soil and groundwater are at such levels to allow for unrestricted use and exposure.”
- “[Defense Supply Center Richmond] DSCR will monitor LUCs, either directly or by delegation. An annual inspection will be conducted to determine whether the required LUCs remain effective and that land and groundwater use restrictions are being achieved. The annual inspections will describe deficiencies or violations of the LUCs and proposed measures or corrective actions taken to remedy such deficiencies or violations. The LUCIP [herein the Land Use Control Remedial Design] will include an annual inspection checklist and certification form that [Defense Supply Center Richmond] DSCR (or its representative) will complete. In the unlikely event that there is an LUC deficiency or violation, [Defense Supply Center Richmond] DSCR will take appropriate action to enforce LUCs and correct the deficiency or violation.”
- “Groundwater samples from three existing monitoring wells (two on-site and one upgradient) will be collected annually and analyzed for total and dissolved arsenic using USEPA Method SW 6010. One baseline groundwater sampling event will be conducted to characterize current conditions. Annual groundwater sampling and analysis for arsenic will be implemented for 5 years following construction of the asphalt cover to assure that arsenic concentrations remain below the MCL of 0.010 mg/L in groundwater.”

Implementation: Defense Supply Center Richmond has instituted the following measures to meet the LUCs in the 2005 ROD and the requirement for five-year reviews as long as constituents remain in place at concentrations that preclude unlimited use and unrestricted exposure. Defense Supply Center Richmond will notify EPA prior to changing the following measures if the change could affect the LUCs.

- Groundwater Restrictions: Groundwater beneath OU 12 shall not be used for potable, process, or irrigation purposes. The installation has currently modified Maintenance Regulation 4150.1 to prohibit potable use of groundwater throughout the installation.

- Access Restrictions: The area of former Building 112 is currently enclosed by a chain-link fence along the northern, western, and southern OU boundaries. Because Defense Supply Center Richmond is a secured Department of Defense facility, access to the overall installation is restricted. This dual security system provides a layering of controls and will continue to be maintained. Installation police conduct routine security checks of this area.
- Intrusive Activity Restrictions and Signage:
 - Future development, including excavation and site grading of OU 12 surface soils are precluded. Construction or other intrusive activities that could disturb the asphalt cover and monitoring wells are also precluded. Signs identifying the OU and prohibiting intrusive activities have been posted along the eastern OU boundary. The use of the asphalt and backfill area is limited to activities that will not damage the cover or clean backfill.
 - The one exception to precluding intrusive activities would be if maintenance of underlying utilities was required. In this case, a health and safety plan would be required by the DM-FRE (Environment, Safety and Health Office operated under DLA Enterprise Support Richmond) prior to work commencement. The plan would include air monitoring, personal protective equipment, dust suppression and runoff control during intrusive utility work, as necessary.
- Maintenance and Monitoring: Maintenance of the asphalt cover is required. The integrity of the asphalt cover will be inspected annually, and its integrity maintained for as long as constituents remain in OU 12 soil at concentrations that preclude unrestricted use. The metric for cover integrity will be distress of the asphalt slab, documented as low, medium, or high. Documented distress types for the asphalt cover will include alligator cracking, bleeding, block cracking, bumps and sags, depression edge cracking, potholes, swell, and weathering and raveling. High distress will warrant repair of the asphalt cover.
- Property Transfer Restrictions: If the U.S. Army were to transfer OU 12 out of federal ownership, deed restrictions would apply in accordance with the CERCLA, Section 120(h). Deed restrictions would preclude intrusive activities and groundwater use. An environmental review would be required before construction. Residential development or school or childcare related facility development would be prohibited, if the transfer occurs before property conditions allow for unlimited use and unrestricted exposure.
- Inspections and Five-Year Review: An annual site inspection will be conducted until OU 12 is deemed acceptable for unrestricted use. The annual site inspection will be documented and certified with the form provided as Figure 3 of the Land Use Control Remedial Design. A five-year review will be conducted in accordance with CERCLA until the termination provisions are met. Five-year reviews occurred in 1997, 2003, 2008, 2013, 2019, and 2023. The next five-year review is planned for 2028.

OU 12 has the following LUC elements and implementation measures:

Access restrictions.

Deed restrictions.

Property transfer restrictions.

Notice of land use restrictions, in the event of property transfer.

Zoning restrictions.

Intrusive activity restrictions.

Assessment and monitoring for permitted maintenance of underground utilities pre-construction and construction activities.

Maintenance of signs identifying operable unit and designation as a no dig area.

Annual inspection of asphalt cover and perform maintenance as required.

Groundwater well restrictions.

Engineering controls.

Annual inspection and five year reviews.

Verification that land use restrictions are being accomplished and LUCs remain effective:

Verify that any boundary fence in the OU vicinity is intact.

Verify that no residential housing, development, or child daycare activities are occurring at the OU.

Verify that no groundwater wells have been installed at the OU (except for monitoring and injection wells that were installed as part of the remedy) and that no consumptive use of groundwater is occurring.

Verify that applicable LUCs are intact, meet specifications, and/or are in good working order.

Verify that vapor mitigation systems have been incorporated in existing or newly constructed buildings (if applicable).

Verify that the asphalt cover integrity is adequate to prevent exposure to contaminated soils.

Review of land use restrictions and LUCs in effect:

OU 12 is within the secured, fenced DSCR facility with limited access enforced by Base Security.

The 2025 inspection did not identify potable groundwater use, residential housing, development, or child daycare activities at OU 12. The boundary fence is intact at the facility and the asphalt cover appears intact. Signs identifying the operable unit and denoting the area as a “no dig” zone were intact. The sign locations are identified on Figure 10-1. Site photos are provided in Exhibit 10-1.

Current land use at OU 12 includes an asphalt cap. A chain fence prevents direct access to the cap from the adjacent roadway area. Originally evenly spaced bushes around the asphalt cap inhibited unwanted parking on the asphalt; several of these bushes have died or no longer exist around the asphalt area. Minor cracking is apparent in the asphalt. The riprap at the south end of the cap is intact and appeared to function as designed. The asphalt cap prevents sufficient precipitation infiltration to preclude leaching of soil contaminants to groundwater and runoff of underlying soil materials to nearby storm water sewers or surface water. Site monitoring wells are intact and secured and site storm drains show no signs of erosion or sedimentation.

In 2020, DLA completed improvements to the entire storm sewer system at the installation that included inspection, relining, and repairs of more than 23 miles of storm drains and pipes (DLA 2020).

Description of any intrusive activities that occurred in the past year:

FY2025 includes activities from October 2024 to September 2025. The 2025 inspection did not identify intrusive activities at OU 12. Appendix B includes intrusive activities within the past five years at OU 12.

Description of any deficiency or violation of the land use restrictions:

Minor cracking is apparent in the asphalt at OU 12 and several bushes between the asphalt cap and G Road installed as part of the remedy have died or no longer exist in the area.

Description of any proposed measures or corrective actions taken to remediate a deficiency or violation:

For long-term protectiveness of the remedy, the installation will complete the following actions to ensure remedy protectiveness: 1) address cracks in the asphalt within the next few years to maintain the integrity of the remedy and 2) replace dead or missing bushes to inhibit unwanted parking on the asphalt surface. The five-year review finalized in August 2024 has identified a milestone completion date of December 31, 2027. DLA has incorporated this action in the remedy cost to complete maintenance activities for OU 12 no later than the milestone completion date.

Certification Statement:

I, the undersigned, document that the inspection was performed as indicated above, and that the above information is true and correct to the best of my knowledge and belief. I have reviewed the OU-specific appendix of the Environmental LUC RD (AECOM 2015) to verify requirements and restrictions.

Name and Title: [REDACTED] (Meadows Project Manager)

Signature [REDACTED] Date: 6/2/2025



Legend

- Sign Location
- Operable Unit 12 Boundary
- ← 8 Photo ID and Direction

Notes:
Orthoimagery Source: VGIN (2021)

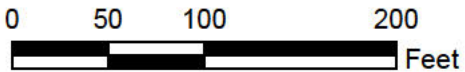
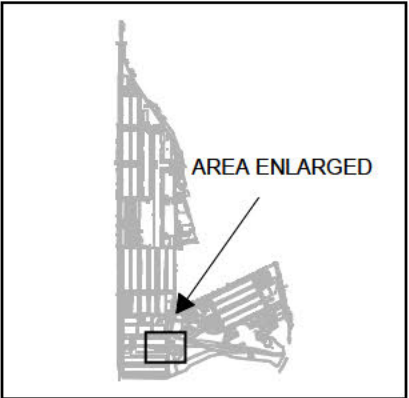




Figure 10-1
Operable Unit 12

2025 Annual LUC Inspection Report
Defense Supply Center Richmond
Richmond, VA

Prepared By: GC	Reviewed By: KL
Scale: 1" = 100'	Date: September 10, 2025

Exhibit 10-1



Photograph 1. OU 12 designation sign.



Photograph 2. View of the east side of OU 12 looking south.



Photograph 3. View of OU 12 cap looking south. No erosion or sedimentation are visible at storm drain.



Photograph 4. West side of OU 12 cap looking south.



Photograph 5. OU 12 cap looking north from south end.



Photograph 6. Surface runoff area protected by riprap.



Photograph 7. OU 12 typical flush mount monitoring well.



Photograph 8. OU 12 looking north.

11. Annual Site Inspection Form Operable Unit 13

Defense Supply Center Richmond Annual Site Inspection Form

In accordance with the *Final LUC RD (AECOM 2015)* for Defense Supply Center Richmond (DSCR), [REDACTED] with Meadows completed an inspection of OU 13 on 02 June 2025.

Land use restrictions for OU 13 as presented in the LUC RD (AECOM, 2015):

The description of the Selected Remedy in the 2013 ROD includes:

- “Institutional controls (ICs) to restrict land use to industrial use only and to prevent exposure to the subsurface soils exceeding the human health risk-based remedial action goals (RAGs). These ICs include access restrictions, warning signs, land use restrictions, and annual certification.”

Specifics of Institutional Controls according to the 2013 ROD includes:

- “Institutional Controls will be in place to limit human exposure to COCs in subsurface soil by restricting land use and access. Institutional controls for OU 13 will be maintained until concentrations of COCs in the soil are at levels that allow for unlimited use and unrestricted exposure. DLA is responsible for implementing, maintaining reporting on and enforcing land use controls. Institutional controls for OU 13 will consist of the following:
 - “Access Restrictions. These restrictions consist of maintenance of existing security fencing at Defense Supply Center Richmond. Because the installation is a secure federal facility, site access is already restricted to the general public. Additional security measures would not be required if land use does not change.”
 - “Warning Signs. Signs will be posted warning of the presence of contaminated subsurface soil and prohibiting intrusive activities at OU 13 without review and approval of the DLA Installation Support at Richmond's Environmental Branch.”
 - “Land Use Restrictions. The current and future use of this area will remain industrial, and residential use or use as a childcare facility will be prohibited until the COC levels are determined to allow unlimited use and unrestricted exposure. The land use restriction will be controlled by designating OU 13 in the Defense Supply Center Richmond Master Plan as industrial use only. In the event of land transfer, a deed notice regarding the COCs present at the site and deed restriction of land use to industrial use only would be necessary for the remedy to remain protective of human health.”
 - “Preconstruction Assessments. Before any intrusive activities or construction activities are initiated, a preconstruction assessment consisting of a review of the historical sampling data and soil sampling (to determine whether the soil COC concentrations continue to exceed RAGs) will be conducted. If soil COC concentrations exceed RAGs, excavated material will be disposed off-site in accordance with applicable waste regulations.”
 - “Annual Inspections and Certification. The site will be inspected on site annually, and the institutional controls will be reviewed, and DLA Installation Support at Richmond's Environmental Branch would provide written certification that the institutional controls are in place and effective annually.”

Implementation: Defense Supply Center Richmond has instituted the following measures to meet the LUCs in the 2013 ROD and the requirement for five-year reviews as long as constituents remain in place at concentrations that preclude unlimited use and unrestricted exposure. Defense Supply Center will notify EPA prior to changing the following measures if change could affect the LUCs.

- Groundwater Use Restrictions: Potable groundwater use has been prohibited at OU 13. The installation has currently modified Maintenance Regulation 4150.1 to prohibit potable use of groundwater throughout the installation.

- Access Restrictions: The PAH Area will continue operation as a restricted area. Because Defense Supply Center Richmond is a secured Department of Defense facility, access is already restricted. Installation police conduct routine security checks of this area. Signage designating this area as an OU has been placed at the site.
- Preconstruction Assessment:
 - Future industrial development, including excavation or site grading, is not precluded. In the event of construction activities, applicable health and safety measures will be followed. The DM-FRE must be consulted prior to excavation. DM-FRE will issue an environmental review document, which will outline the contaminant data in the area of the construction activity. In the event that impacted soils are removed in the future, they will be disposed of in a permitted facility and replaced with clean fill to prevent exposure. In addition, if the impacted soils are disturbed in the future, erosion and sediment controls will be required to prevent migration to the storm sewer. Due to the presence of VOCs in the groundwater underneath OU 13, vapor barriers will be required for any new building constructed over the OU 7 plume. In addition, prior to initiating intrusive activities over the OU 7 plume, soil gas/vapor monitoring may be required. This will include monitoring for oxygen, carbon monoxide, carbon dioxide, combustible gas (methane), hydrogen sulfide, total volatile hydrocarbons, in addition to the VOCs. Since part of OU 13 (low-lying wooded area) is the only remaining natural habitat for ecological receptors and has been classified as wetlands, additional ecological evaluations may be required, and wetlands regulations may have to be considered if construction is planned in this low-lying wooded area.
 - For military construction projects within the OU 13 footprint, an environmental site assessment will be conducted. The environmental assessment will be completed prior to project design and submitted to DM-FRE for review. Monitoring will include soil (soil gas and groundwater, if applicable) sampling prior to construction. DM-FRE may also issue an environmental review document, if necessary. Soil analyses, ambient air testing, and personnel monitoring may be required during construction.
 - For non-military construction projects (i.e., routine maintenance or utility operations requiring excavation or trenching) within the OU 13 footprint, an environmental review document will be issued by DM-FRE as specified in installation's Maintenance Regulation 4150.1.
 - Depending on the type of construction activity, a health and safety plan may be required by the DM-FRE prior to work commencement. The plan may include air monitoring, personal protective equipment, dust suppression and runoff control during construction, as necessary.
- Maintenance and Monitoring: Soil, soil gas and groundwater analysis, ambient air testing, and personnel monitoring may be required during construction activities. This determination will be made based on the type and location of the construction activity proposed and the results of the preconstruction sampling. Low-permeability soils will be placed over the excavation area at the site as part of the final remedy. This area will be inspected on an annual basis after completion of the remedial action. Requirements for additional soil will be determined during these annual inspections. Maintenance activities (if required) will be performed after the annual inspection site visits. Routine groundwater monitoring will continue as part of OU 7 activities.
- Property Transfer Restrictions: If the U.S. Army were to transfer the OU 13 area out of federal ownership, deed restrictions would apply to monitor future development within the site's physical boundaries. An environmental review would be required before construction. Residential development or school or childcare related facility development would be prohibited, if the transfer occurs before property conditions allow for unlimited use and unrestricted exposure.

- Inspections and Five-Year Reviews: An annual site inspection will be conducted until OU 13 is deemed acceptable for unrestricted use. The annual site inspection will be documented and certified with the form provided as Figure 3 of the Land Use Control Remedial Design. A five-year review will be conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act until the termination provisions are met. Five-year reviews occurred in 1997, 2003, 2008, 2013, 2019, and 2023. The next five-year review is planned for 2028.

OU 13 has the following LUC elements and implementation measures:

- Access restrictions.
- Deed restrictions.
- Property transfer restrictions.
- Notice of land use restrictions, in the event of property transfer.
- Zoning restrictions.
- Preconstruction assessments.
- Monitoring for pre-construction and construction activities.
- Annual inspection of cover over former excavation area and maintenance of cover as required.
- Maintenance of signs identifying operable unit and designation as a no dig area.
- Groundwater well restrictions.
- Engineering controls including vapor barriers for future buildings constructed over the OU 7 plume.
- Annual inspections and five year reviews.

Verification that land use restrictions are being accomplished and LUCs remain effective:

- Verify that any boundary fence in the OU vicinity is intact.
- Verify that no residential housing, development, or child daycare activities are occurring at the OU.
- Verify that no groundwater wells have been installed at the OU (except for monitoring and injection wells that were installed as part of the remedy) and that no consumptive use of groundwater is occurring.
- Verify that applicable LUCs are intact, meet specifications, and/or are in good working order.
- Verify that vapor mitigation systems have been incorporated in existing or newly constructed buildings (if applicable).
- Verify that the soil cover integrity is adequate to prevent exposure to contaminated soils.

Review of land use restrictions and LUCs in effect:

OU 13 is within the secured, fenced DSCR facility with limited access enforced by Base Security.

The 2025 inspection did not identify potable groundwater use, residential housing, development, or child daycare activities at OU 13. The boundary fence is intact at the facility.

Current land use at OU 13 includes open fields that are maintained as necessary to retain access to environmental monitoring wells, wetlands areas, vacant contractor staging areas, and remnant rock stockpiles. Numerous “no dig” and “no dumping” signs are located within the area. Signs identifying the operable unit and denoting the area as a “no dig” zone are intact. The sign locations are identified on Figure 11-1. Site photos are provided in Exhibit 11-1.

Site storm drains show no signs of erosion or sedimentation. The 2025, 2024 and 2023 inspections identified a depression in the central portion of the Pit 1 monitored area of the site at the location of a former biowall. Groundcover remains intact in this area with no surface or subsurface soil exposure, thereby complying with LUCs for OU 13 that are in place to limit human health exposure to subsurface

soil. The depression has approximate dimensions of 2 feet wide, depth of 2 feet, and length of 200 feet. Ground settlement has occurred from the mulch backfill that has a reduced volume and increased void spaces over time from consumption of the mulch from bioremediation processes. The ground settlement has caused the concrete pads of two monitoring wells (P1BWA58 and P1BWA66) to collapse into the depression. Well locations are not within the depression.

In 2020, DLA completed improvements to the entire storm sewer system at the installation that included inspection, relining, and repairs of more than 23 miles of storm drains and pipes (DLA 2020).

Description of any intrusive activities that occurred in the past year:

FY2025 includes activities from October 2024 to September 2025. The 2025 inspection did not identify intrusive activities at OU 13. Appendix B includes intrusive activities within the past five years at OU 13.

Description of any deficiency or violation of the land use restrictions:

Deficiencies at OU 13 include the damaged monitoring wells P1BWA58 and P1BWA66 (not currently used for groundwater monitoring at OU 7).

Description of any proposed measures or corrective actions taken to remediate a deficiency or violation:

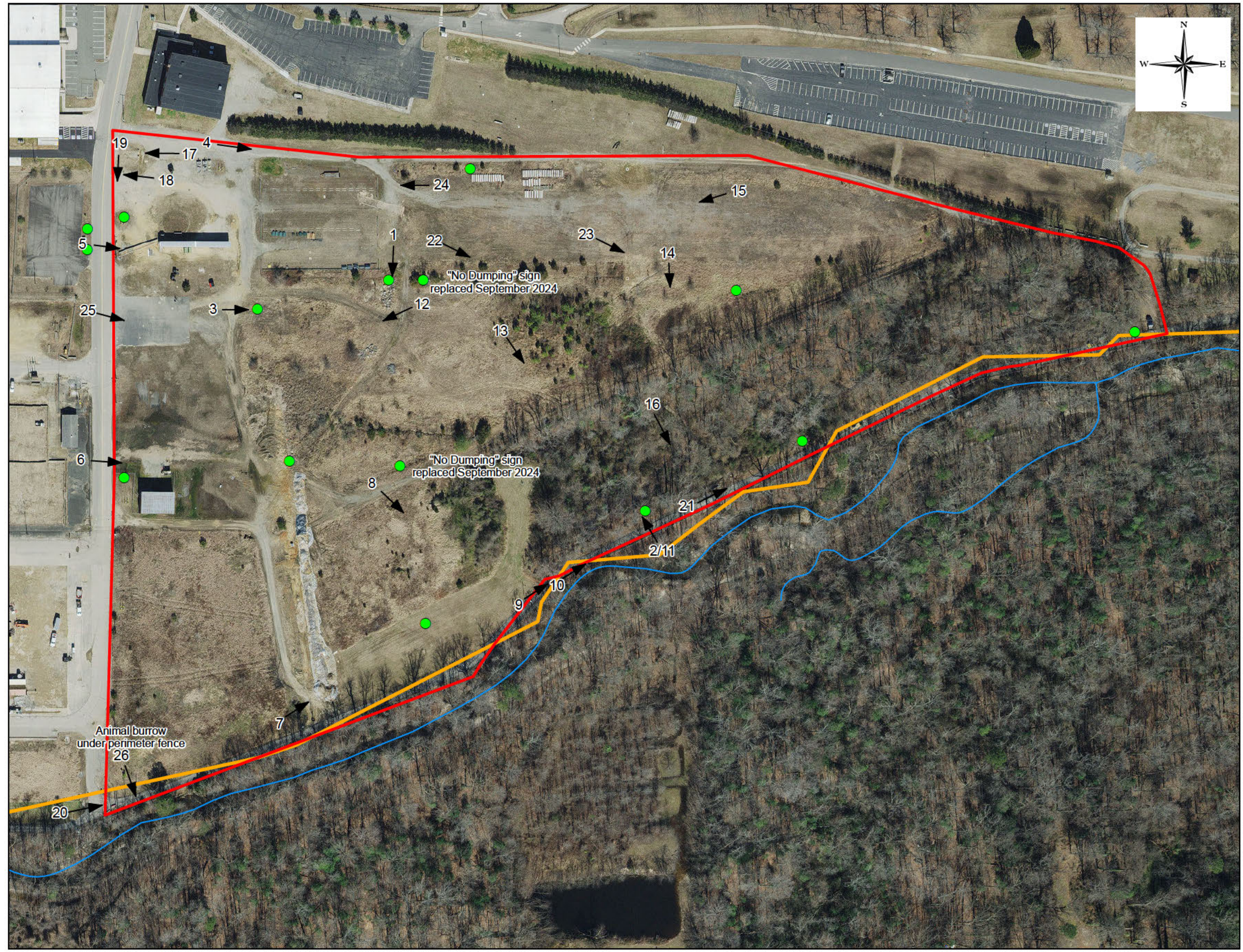
Abandon damaged monitoring wells P1BWA58 and P1BWA66 no longer used or needed for groundwater monitoring at OU 7. The current contract includes a well abandonment task to address these wells. Re-grading or filling of the depression area is not recommended at this time because of potential ground instability with use of heavy equipment in the area. Continued inspections performed during groundwater monitoring events annually will verify ground cover conditions in the area. Planned well abandonments have a scheduled completion date in FY2026.

Certification Statement:

I, the undersigned, document that the inspection was performed as indicated above, and that the above information is true and correct to the best of my knowledge and belief. I have reviewed the OU-specific appendix of the Environmental LUC RD (AECOM 2015) to verify requirements and restrictions.

Name and Title: [REDACTED] (Meadows Project Manager)

Signature: [REDACTED] Date: 6/2/2025



Legend

- Sign Location
- ~ Streams
- ▭ Operable Unit 13 Boundary
- ▭ DSCR Boundary
- ← 8 Photo ID and Direction

Notes:
 Orthoimagery Source: VGIN (2021)

0 75 150 300 Feet

Figure 11-1
 Operable Unit 13

2025 Annual LUC Inspection Report
 Defense Supply Center Richmond
 Richmond, VA

Prepared By: GC	Reviewed By: KL
Scale: 1" = 150'	Date: September 09, 2025

Exhibit 11-1



Photograph 1. OU 13 designation sign.



Photograph 2. Sign denoting wetlands area.



Photograph 3. "No Dumping" sign.



Photograph 4. View of northwest end of OU 13 looking east.



Photograph 5. View of Pit 3 looking east; View of indoor live-firing range.



Photograph 6. View of former contractor parking area.



Photograph 7. View of southwest corner of OU 13 looking east.



Photograph 8. View of overgrown area with soil stockpile.



Photograph 9. View of Perimeter Road along southern boundary of OU 13.



Photograph 10. Typical flush mount well completion in asphalt, Perimeter Road.



Photograph 11. Typical above ground well completion in wooded area.



Photograph 12. Rock pile in overgrown area at Pit 2.



Photograph 13. Typical flush mount monitoring well with T-bar for locating.



Photograph 14. Overgrown OU 13 storm drain.



Photograph 15. View of OU 13 from northeast corner looking west.



Photograph 16. Drainage creek in low lying area.



Photograph 17. Damaged rail stop.



Photograph 18. Crush and run access path off G Road.



Photograph 19. Crush and run access path off G Road.



Photograph 20. Looking east along Perimeter Road, new streetlamp installed FY24.



Photograph 21. Looking east, Perimeter Road, new street lamps installed FY24.



Photograph 22. Overgrown area with disturbed parking barriers, Pit 2.



Photograph 23. Overgrown area with disturbed parking barriers, concrete debris, Pit 1.



Photograph 24. Old shed at north end of Pit 2.



Photograph 25. View of former contractor parking lot.



Photograph 2622. Animal burrows under fence at Kingsland Creek near intersection of G Road and Perimeter Road.

12. Annual Site Inspection Form Former PX Gas Station

Defense Supply Center Richmond Annual Site Inspection Form

In accordance with the *Final LUC RD (AECOM 2015)* for Defense Supply Center Richmond (DSCR), [REDACTED] with Meadows completed an inspection of the former PX Gas Station on 02 June 2025.

Land use controls for the PX Gas Station as presented in the LUC RD (AECOM, 2015):

Groundwater Use Restrictions: Potable groundwater use has been prohibited at PX Gas Station.

The installation has currently modified Maintenance Regulation 4150.1 to prohibit potable use of groundwater throughout the installation.

Access Restrictions. PX Gas Station will continue operation as a restricted non-residential area.

Because Defense Supply Center Richmond is a secured Department of Defense facility, access is already restricted. Installation police conduct routine security checks of this area.

Preconstruction Assessment.

- Future industrial development, including excavation or site grading, is not precluded. In the event of construction activities, health and safety measures will be followed. The DM-FRE (Environment, Safety and Health Office operated under DLA Enterprise Support Richmond) must be consulted prior to excavation. DM-FRE will issue an environmental review document, which will outline the contaminant data in the area of the construction activity.
- For military construction projects within the PX Gas Station site footprint, an environmental site assessment will be conducted. The environmental assessment will be completed prior to project design and submitted to DM-FRE for review. Monitoring may include soil, (soil gas and groundwater, if applicable) sampling prior to construction. DM-FRE may also issue an environmental review document, if necessary. Soil analyses, ambient air testing, and personnel monitoring may be conducted during construction or during storm system repair. Due to the presence of VOCs in the groundwater underneath the site, vapor barriers will be required for any new building constructed over the PX Gas Station plume. In addition, prior to initiating intrusive activities over the PX Gas Station plume, soil gas/vapor monitoring may be required. This will include monitoring for oxygen, carbon monoxide, carbon dioxide, combustible gas (methane), hydrogen sulfide, total volatile hydrocarbons, in addition to the VOCs.
- For non-military construction projects (i.e., routine maintenance or utility operations requiring excavation or trenching) within the site footprint, an environmental review document will be issued by DM-FRE as specified in the installation's Maintenance Regulation 4150.1.
- Depending on the type of construction activity, a health and safety plan may be required by the DM-FRE prior to work commencement. The plan may include air monitoring, personal protective equipment, dust suppression and runoff control during construction, as necessary.

Monitoring. Soil and groundwater analysis, ambient air testing, and personnel monitoring may be required during construction activities. This determination will be made based on the type and location of the construction activity proposed and the results of the preconstruction sampling. Groundwater monitoring may continue as part of remedial action activities at the site. Personal protective equipment is recommended for trench workers and workers entering the storm sewer system.

Property Transfer Restrictions. If the U.S. Army were to transfer the PX Gas Station area out of federal ownership, deed restrictions would apply to monitor future development within the site's physical boundaries. An environmental review would be required before construction. Potable groundwater use, residential development or school or childcare related facility development

would be prohibited, if the transfer occurs before property conditions allow for unlimited use and unrestricted exposure.

Inspections and Five-Year Reviews. An annual site inspection will be conducted until PX Gas Station site is deemed acceptable for unrestricted use. The annual site inspection will be documented and certified in the form provided as Figure 3 of the Land Use Control Remedial Design. A five-year review will not be required at this site.

The LUC RD (AECOM 2015) has a list of LUCs common to all or most OUs that have LUCs specified in the ROD and LUC RD including:

Access restrictions.

Deed restrictions.

Property transfer restrictions.

Notice of land use restrictions, in the event of property transfer.

Zoning restrictions.

Preconstruction assessments.

Monitoring for intrusive, pre-construction, and construction activities.

Groundwater well restrictions.

Engineering controls including vapor barriers for new buildings constructed over the PX Gas Station plume in groundwater.

Annual inspections and five year reviews.

Verification that land use restrictions are being accomplished and LUCs remain effective:

Verify that any boundary fence in the OU vicinity is intact.

Verify that no residential housing, development, or child daycare activities are occurring at the OU.

Verify that no groundwater wells have been installed at the OU (except for monitoring and injection wells that were installed as part of the remedy) and that no consumptive use of groundwater is occurring.

Verify that applicable LUCs are intact, meet specifications, and/or are in good working order.

Verify that vapor mitigation systems have been incorporated in existing or newly constructed buildings (if applicable).

Verify that the soil cover integrity is adequate to prevent exposure to contaminated soils.

Review of land use restrictions and LUCs in effect:

The PX Gas Station is within the secured, fenced DSCR facility with limited access enforced by Base Security.

The 2025 inspection did not identify potable groundwater use, residential housing, development, or child daycare activities at the PX Gas Station. The boundary fence is intact at the facility and the asphalt and concrete cover appears intact. Site details are presented as Figure 12-1. Site photos are provided in Exhibit 12-1.

Current land use at the Former PX Gas Station includes an active gas station and convenience store. In 2019, the installation completed construction of a parking lot on the eastern portion of the Former PX Gas Station. The installation removed the previous asphalt parking lot and vegetation on the southern and eastern portions of the Former PX Gas Station. Site storm drains show no signs of erosion or sedimentation.

In 2020, DLA completed improvements to the entire storm sewer system at the installation that included inspection, relining, and repairs of more than 23 miles of storm drains and pipes (DLA 2020).

Description of any intrusive activities that occurred in the past year:

FY2025 includes activities from October 2024 to September 2025. The 2025 inspection did not identify intrusive activities at the PX Gas Station. Appendix B includes intrusive activities within the past five years at PX Gas Station.

Description of any deficiency or violation of the land use restrictions:

No deficiencies observed.

Description of any proposed measures or corrective actions taken to remediate a deficiency or violation:

None proposed.

Certification Statement:

I, the undersigned, document that the inspection was performed as indicated above, and that the above information is true and correct to the best of my knowledge and belief. I have reviewed the OU-specific appendix of the Environmental LUC RD (AECOM 2015) to verify requirements and restrictions.

Name and Title: [REDACTED] (Meadows Project Manager)

Signature: [REDACTED] Date: 6/2/2025



Legend

- Operable Unit PX Gas Station Boundary
- Installation Boundary
- Photo ID and Direction

Notes:
Orthoimagery Source: VGIN (2021)

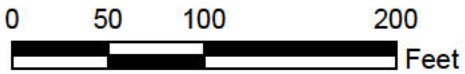
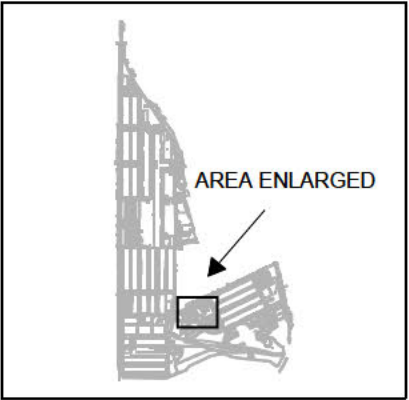


Figure 12-1
PX Gas Station

2025 Annual LUC Inspection Report
Defense Supply Center Richmond
Richmond, VA

Prepared By: GC	Reviewed By: KL
Scale: 1" = 100'	Date: September 09, 2025

Exhibit 12-1



Photograph 1. View of southwest side of PX Gas Station looking northwest.



Photograph 2. View of east side of PX Gas Station looking east-northeast, shows new parking lot.



Photograph 3. PX Gas Station storm drain; no new erosion or sedimentation visible.



Photograph 4. North end of PX Gas Station looking west-southwest.



Photograph 5. Eastern central portion of PX Gas Station looking south.



Photograph 6. Typical flush mount monitoring well.



Photograph 7. View of PX gas station and parking lot from north corner looking south.

13. References

- AECOM (AECOM Technical Services). 2015. Final Environmental Site-Wide Land Use Control Remedial for Defense Supply Center Richmond, November 2015.
- AECOM-Meadows (AECOM Technical Services, Inc. and Meadows CMPG, Inc.). 2021. Final 2021 Land Use Control Inspection Report for Defense Supply Center Richmond, October 2021.
- AECOM-Meadows (AECOM Technical Services, Inc. and Meadows CMPG, Inc.). 2023. Final 2022 Land Use Control Inspection Report for Defense Supply Center Richmond, February 2023.
- AECOM-Meadows (AECOM Technical Services, Inc. and Meadows CMPG, Inc.). 2024. Final 2023 Land Use Control Inspection Report for Defense Supply Center Richmond, March 2024.
- AECOM-Meadows (AECOM Technical Services, Inc. and Meadows CMPG, Inc.). 2024. Final 2024 Land Use Control Inspection Report for Defense Supply Center Richmond, November 2024.
- Arcadis U.S., Inc. 2019. Final 2018 Land Use Control Inspection Report for Defense Supply Center Richmond, July 2019.
- AECOM-Meadows, 2024. Final Sixth Five-Year Review Report for Defense Supply Center Richmond, August 2024.
- DSCR (Defense Supply Center Richmond). 2012. *Final Record of Decision – Operable Unit 7, Fire Training Area Groundwater, Defense Supply Center Richmond*. May 2012, Revision 5.
- DLA (Defense Logistics Agency). 2020. News Release from Environmental Management Division, DLA Installation Management. System. February 10, 2020.

APPENDICES

APPENDIX A

Field Documentation

Location _____ Date _____

Project / Client _____

Location DSCR, RICHMOND, VA Date 6/2/2025 47Project / Client DLA, USACE 2025 LUL INSPECTIONS

~~0600~~ IN TRANSIT TO RICHMOND
~~0830~~ PICK UP SAMPLING EQ FROM
 PINE

~~0900~~ ON SITE AT DSCR
 ↳ ANNUAL SAMPLING ON HOLD
 FOR SUMMA CONTAINER SHIPMENT

~~1120~~ START LUL INSPECTIONS AT
 003

00 / NO DIG SIGN ID EAST
 BOUNDARY OF SITE IS FADING
 BUT STILL LEGIBLE, REPLACE
 SOON (REPLACED "NO DIG ZONE")

↳ NO SIGNS OF INTRUSIVE
 ACTIVITY IN THE LAST YEAR
 SOME MINOR EROSION AT THE
 FENCE EAST OF B. 150, TWO
 SPOTS BUT STOPS AT GRASS.

~~1230~~

002

NO OBSERVED DEFICIENCIES
 ALL SIGNS INTACT AND READABLE
 SINKING WELL PAD REPAIRED IN 2024

Location DSCR, RICHMOND VA Date 6/2/25
 Project / Client DLA, USACE 2025 LUC INSPECTIONS

1300 OUI NO OBSERVED
 DEFICIENCIES, 2 "NO DZG ZONE"
 SIGNS REPLACED, NEED TO ORDER
 2 NEW OUI SIGNS TO REPLACE
 FADING ONES

1445 OUB NO OBSERVED
 DEFICIENCIES, INTRUSIVE ACTIVITIES
 WITH THE CONSTRUCTION OF THE NEW
 LOADING/RECEIVING BAY AT B65
 ARE COMPLETE.

1530 OUI3 NO OBSERVED DEFICIENCIES
 SMALL AREA WITH DUMPED SOIL
 IN NORTH OF PET 1

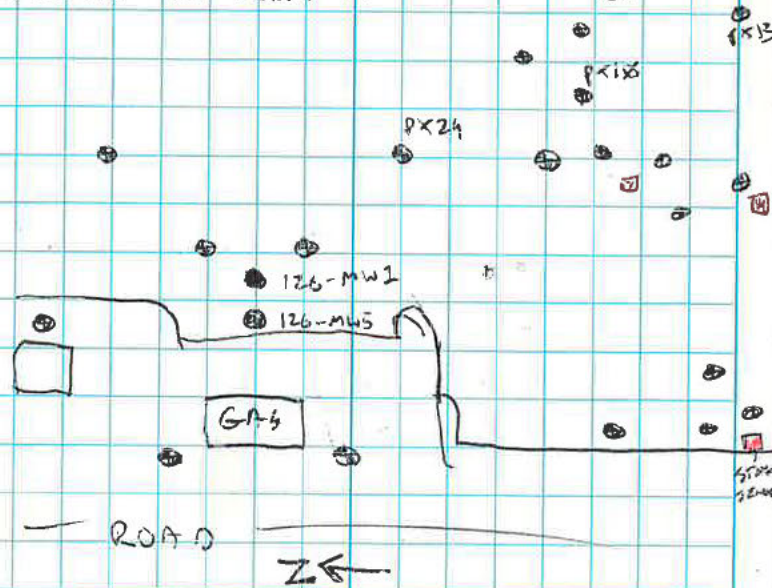
1720 OUI2 NO OBSERVED DEFICIENCIES
 MINOR CRACKING IN ASPHALT CAP
 NO CHANGES FROM PREVIOUS YEAR

1730 OUI1 NO OBSERVED DEFICIENCIES
 PLAN TO REPLACE 2 OUI1 SIGNS
 AND NO DZG ZONE SIGNS ON
 WEST SIDE OF SITE AND 1 ON
 EAST SIDE

Location DSCR, RICHMOND VA Date 6/2/25
 Project / Client DLA, USACE 2025 LUC INSPECTIONS

1800 OUI NO DEFICIENCIES OBSERVED
 1820 @ PX GAS
 NO DEFICIENCIES OBSERVED
 WELLS -> PX-31, 32, 33, 36, 38
 PLUS 1 WELL W/ OF 36
 NOPX 37, PX 31

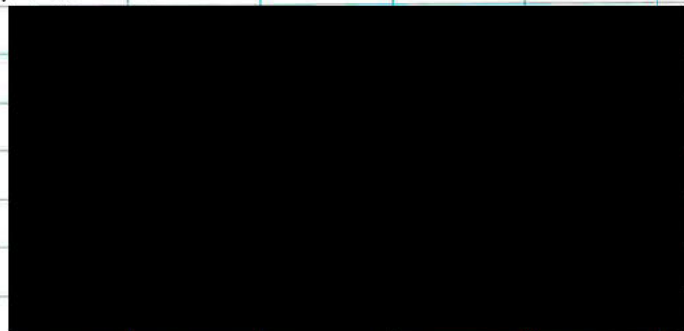
3 WELLS NEAR GAS STATION, NO ID
 4 TO EAST MAYBE PX 7, 8, 9, NO 20
 PX-24 W/ ID
 1 LARGE WELL ACROSS ST



Location DSCR, RICHMOND VA Date 6/2/25
 Project / Client DLA, USACE 2025 LUL INSPECTIONS

IT APPEARS THAT ALL WELLS IN
 THE PARKING LOT NORTH OF THE
 GAS STATION ARE THERE

WELLS IN THE CONSTRUCTION ZONE
 OF THE NEW OFFICES ARE EITHER
 DESTROYED OR BURIED, CAN NOT
 LOCATE ANY,
 1943 DONE



Location DSCR, RICHMOND VA Date 6/3/25
 Project / Client DLA, USACE 2025 B65 ANNUAL
53° MOSTLY SUNNY, 2W, 83%, 30.15" Hg

0615 ON SITE
 FINISH BOLTING NO DIG SIGN
 IN OU 1
 PREP FOR B65

~~0600~~ START VAPOR MONITORING
 → FINISH E & F BAY @ 1030S
 SUMMA CANISTERS ARRIVED
 GO TO MAIL ROOM AND RECEIVE
 DELIVERY FROM LISA
 RETURN TO B65 AND SET
 UP INDOOR AND OUTDOOR
 SAMPLES

	START
008-BLDG65-IA-1-20250603	1110
-IA-2-20250603	1111
-IA-3-	1112
-IA-4-	1113
-AA-1-	1115
-AA-2-	1120

FINISH OUTDOOR VAPOR MONITORING
 COLLECT SUBSLAB SAMPLES

008-VMP-86	1340
-VMP-87	1341
-VMP-141	1342
-VMP-142	1343

Appendix B

Intrusive Activities Summary

Table B.1 FY2020 Intrusive Activities (October 2019 – September 2020)

Intrusive Activities	Operable Units Affected	LUCs Implemented
DLA completed improvements to the entire storm sewer system at the installation that included inspection, relining, and repairs of more than 23 miles of storm drains and pipes.	OU 1, OU 2, OU 3, OU 6, OU 7, OU 8, OU 10, OU 11, OU 12, OU 13, PX Gas Station	Yes
Repair to well PX-1D.	PX Gas Station	Yes

Notes: OU = Operable Unit, LUC = Land Use Control, FY = fiscal year.

Table B.2 FY2021 Intrusive Activities (October 2020 – September 2021)

Intrusive Activities	Operable Units Affected	LUCs Implemented
Underground telephone-line repair work in the south-west area of OU1.	OU 1	Yes
Sewer line repair work.	OU 1, OU 2, OU 3, OU 8, OU 13	Yes
Monitoring well installation and direct push injections related to OU 6 remedy.	OU 1, OU 2, OU 3, OU 4	Yes
Direct push injections related to OU 7 remedy	OU 7, OU 13	Yes

Notes: OU = Operable Unit, LUC = Land Use Control, FY = fiscal year.

Table B.3 FY2022 Intrusive Activities (October 2021 – September 2022)

Intrusive Activities	Operable Units Affected	LUCs Implemented
Installation of monitoring wells and direct push injections related to the OU 6 groundwater remedy.	OU 1, OU 2, OU 3, OU 6	Yes
Completion of utility work for new streetlamps.	OU 1, OU 6	Yes
Direct push injections in the groundwater area beneath OU 13 related to the OU 7 groundwater remedy.	OU 7, OU 13	Yes
Direct push injections at the northeast corner of Building 66 and north of Building 65 related to OU 8 groundwater remedy.	OU 8	Yes
Removal of the northern and southern pump test sheds along with subsurface equipment. Conversion of four pumping wells to flush mount monitoring wells.	OU 8	Yes

Notes: OU = Operable Unit, LUC = Land Use Control

Table B.4 FY2023 Intrusive Activities (October 2022 – September 2023)

Intrusive Activities	Operable Units Affected	LUCs Implemented
Installation of monitoring wells related to the OU 6 monitoring network optimization.	OU 1, OU 3, OU 6	Yes
Abandonment of monitoring wells related to the OU 6 monitoring network optimization.	OU 1, OU 2, OU 3, OU 6	Yes
Utility work in the northeast section of OU 1.	OU 1, OU 6	Yes
Asphalt repairs completed in April 2023 mitigated degradation of asphaltic surfaces in two areas totaling 1 acre.	OU 3, OU 6	Yes

Notes: OU = Operable Unit, LUC = Land Use Control

Table B.5 FY2024 Intrusive Activities (October 2023 – September 2024)

Intrusive Activities	Operable Units Affected	LUCs Implemented
Storm drain repairs, underground cable repair work, lamp post installation.	OU 1, OU 2, OU 3, OU 6	Yes
Monitoring well abandonments related to the OU 6 monitoring network optimization.	OU 1, OU 2, OU 3, OU 6	Yes
Ramp removal and construction at the northeast corner of Building 65 and disturbances related to pavement work north of Building 65 and at the intersection at G Road and North 4th Street.	OU 8	Yes
New streetlamp installation along Perimeter Road.	OU 7, OU 13	Yes

Notes: OU = Operable Unit, LUC = Land Use Control

Table B.6 FY2025 Intrusive Activities (October 2024 – September 2025)

Intrusive Activities	Operable Units Affected	LUCs Implemented
Underground cable repair work.	OU 1, OU 6	Yes
Sprinkler system installation at Building 65 in June 2025.	OU 8	Yes
Truck gate renovation in January 2025.	OU 10	Yes

Notes: OU = Operable Unit, LUC = Land Use Control