

Final

THIRD FIVE-YEAR REVIEW FOR OLMSTED AIR FORCE BASE

FOR

Olmsted Air Force Base (Sunset Annex)

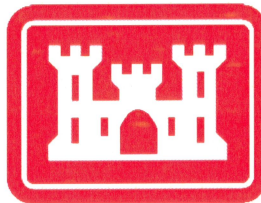
LONDONDERRY TOWNSHIP (Middletown),

DAUPHIN COUNTY, PENNSYLVANIA

FUDS Property Number: C03PA1016

Prepared by:

**U.S. Army Corps of Engineers
Baltimore District
Environmental & Munitions Design Center**



Approved by:

A handwritten signature in black ink, appearing to read "Estee R.", written over a horizontal line.

**Estee S. Pinchasin
COL, EN
Commanding**

23 FEB 2024

Date

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LIST OF ABBREVIATIONS & ACRONYMS

| | |
|--------|---|
| ARAR | Applicable or Relevant and Appropriate Requirement |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CFR | Code of Federal Regulations |
| EPA | United States Environmental Protection Agency |
| FYR | Five-Year Review |
| ICs | Institutional Controls |
| NCP | National Oil and Hazardous Substances Pollution Contingency Plan |
| NPL | National Priorities List |
| O&M | Operation and Maintenance |
| PRP | Potentially Responsible Party |
| RGs | Remedial Goals |
| ROD | Record of Decision |
| RPM | Remedial Project Manager |
| SHS | Statewide Health Standards |
| TBC | To Be Considered |
| USACE | US Army Corps of Engineers |
| DPW | Department of Public Works |
| FUDS | Formerly Used Defense Site(s) |
| MD | Maryland |
| MDT | Harrisburg International Airport |
| NAB | North Atlantic Baltimore District |
| PA | Pennsylvania |
| TCE | Trichloroethylene |
| USAF | U.S. Air Force |
| DCE | Dichloroethylene |
| EDC | Dichloroethene |

1. INTRODUCTION

The purpose of a Five-Year Review (FYR) is to evaluate the implementation and performance of a remedy in order to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in five-year review reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

Pursuant to Executive Order (EO) 12580 (Jan. 23, 1987), the Department of Defense (DoD) is the lead agency for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response actions at facilities under the custody or control of the DoD. The DoD has further delegated such lead agency authority down to the Army for the Formerly Used Defense Site (FUDS) program, and the United States Army Corps of Engineers (USACE) carries out the day-to-day execution of the FUDS program. The USACE is preparing this five-year review pursuant to CERCLA Section 121, consistent with the National Contingency Plan (NCP) (40 CFR Section 300.430(f)(4)(ii)), and considering EPA, DoD, and FUDS Policy. This is the third FYR for the Olmsted AFB (Sunset Annex). The triggering action for this statutory review is the completion of the previous FYR on April 4, 2019. The FYR has been prepared due to the fact that hazardous substances, pollutants, or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Site consists of one project, and that project will be addressed in this FYR. Project 01, (Landfill Cap and Fence LTM), addresses the surface soil, exposed metal wastes, and groundwater remedy.

The Olmsted Air Force Base (Sunset Annex) Five-Year Review was led by Project Manager Kendrick Nelson & USACE Participants included FUDS Program Manager Edward Hughes and Assistant Baltimore District Attorney Ms. Sabrina Fedel.

1.1 Site Background

The Olmsted Air Force Base (Sunset Annex) is situated on Sunset Hill in Londonderry Township, Pennsylvania, located approximately 1.5 miles southeast of the Harrisburg International Airport, and just east of Pennsylvania Route 441 and the Susquehanna River. See figures in Appendix B for property location and approximate landfill location. The Olmsted Air Force Base (Sunset Annex) incorporates the closed Hillside Dump and the Driving Range Landfill areas that are part of the Sunset Golf Course located at 783 South Geyers Church Road, Middletown, Pennsylvania. The non-contiguous Sunset Hill was acquired by the United States Air Force (USAF) in 1956 as part of a program to upgrade the former Olmsted Air Force Base (AFB) to accommodate jet aircraft. To create a proper glide angle for jets, the top of Sunset Hill was removed. Following the removal of the hilltop and prior to construction of the golf course, the USAF used approximately 15 acres of the property as a landfill to dispose of metals, wood, paper, and liquid waste, including spent solvents generated at the AFB. The landfill was used from 1956 to 1964. Olmsted AFB was retired in 1966, and in 1968, the Sunset Golf Course, including the Landfill Site and the Hillside Dump, were sold to Londonderry Township, a municipal subdivision of the Commonwealth of Pennsylvania. Anticipated future land use for this site and the surrounding areas include recreation and golfing.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION

Site Name: Olmsted AFB (Sunset Annex)

FUDS ID: C03PA1016

Region: 3

State: PA

City/County: Londonderry Township/Dauphin County

SITE STATUS

NPL Status: Non-NPL

Multiple OUs?

No

Has the site achieved construction completion?

Yes

REVIEW STATUS

Lead agency: US Army Corps of Engineers

Author name Kendrick Nelson

Author affiliation: Baltimore District, USACE

Review period: 8/1/2023 - 4/4/2024

Date of site inspection: 9/25/2023

Type of review: Statutory

Review number: 3

Triggering action date: 4/21/2019

Due date (*five years after triggering action date*): 4/21/2024

2. RESPONSE ACTION SUMMARY

As a result of the discovery of a drum labeled "TCE" (i.e., trichloroethene) in 1983, Pennsylvania Department of Environmental Restoration (PADER) sampled water from seeps and nearby residential wells to the west of the site. PADER was subsequently renamed as the Pennsylvania Department of Environmental Protection (PADEP). As a result of the discovery of the seeps and residential wells being impacted by various solvents, the public water supply from the nearby Royalton Borough was extended to private properties downgradient of the landfill. The 1993 ROD summarized the results of the human health risk assessment, as shown in Table 1.

Exceedances of EPA's risk management criteria were identified for exposure to surface soil and for use of groundwater as a drinking water source. Risk from exposure to surface water was deemed to be acceptable, at levels below EPA's risk management criteria. The flat Sunset Annex Golf Course Driving Range Landfill was capped, and the steep Hillside Dump Area was fenced in 1994. The solvent-impacted groundwater has naturally attenuated, and in 2007, the PADEP approved that remediation was complete, and all monitoring wells were removed.

2.1 Basis for Taking Action

TABLE 1

**Summary of Estimated Risks and Effects
Sunset Landfill Site
1992 Record of Decision
Londonderry Township, PA**

| Media and Exposure Scenario | Carcinogenic Risk-Upper Bound Excess Lifetime Cancer Risk | Chemicals Contributing Most to Cancer Risk | Noncarcinogenic Effect-Hazard Index (HI) | Chemical Contributing Most to HI |
|------------------------------------|--|--|---|---|
| SURFACE SOIL/FLY ASH | | | | |
| Dermal adsorption and ingestion | 2×10^{-4} | Carcinogenic Polynuclear Aromatic Hydrocarbons (PAH) | 2 | Arsenic, lead |
| Dermal adsorption | 4×10^{-7} | Arsenic | 0.8 | -- |
| GROUNDWATER | | | | |
| Landfill – Drinking Water Scenario | 3×10^{-3} | Vinyl Chloride, Trichloroethene | 2 | 1,2 Dichloroethene (EDC) |

2.2 Response Actions

- The ROD for the Olmsted Air Force Base (Sunset Annex) was signed on 13 January 1993. The selected remedy addressed the principal threats identified at the site, which included exposure to contaminated groundwater, and exposure to contaminated surface soils and exposed metal wastes. The ROD, prepared in 1992, did not contain Remedial Action Objectives nor Remedial Goals.
- The major components of the source control remedy selected in the ROD include the following:
 1. Installation of a pervious cap over the Driving Range Landfill
 2. Inventory and removal of exposed metal wastes on the Hillside Dump Area
 3. Installation of fencing around the Hillside Dump Area, to deter human entry
- The major components of the groundwater remedy selected in the ROD included the following:
 1. Installation of a groundwater extraction system, using a line of extraction wells located downgradient of the Hillside Dump Area. Extracted groundwater was to be treated on site by air stripping, with discharge of treated water to the Susquehanna River.
 2. Performance of a pre-design round of groundwater sampling
 3. Long-term groundwater quality monitoring program
 4. Continuing enforcement of existing administrative controls on groundwater use.

2.3 Status of Implementation

The 2011 components of the 1993 ROD were successfully completed between 1992 and 1994. Installation of the groundwater extraction system portion of the remedy from the 1993 ROD was delayed because of access issues with adjacent landowners (particularly the CSX Railroad). Given the interoperability of the new Pennsylvania regulatory program (ACT 2 promulgated in 1995) with CERCLA, and the knowledge that the primary contaminants of concern (COCs) were response naturally attenuating, a fate and transport study was proposed in 1997 in lieu of proceeding with installation of extraction wells for the extraction and treatment system (USAF, 2007). An investigation of the effects of natural attenuation on the site groundwater was conducted in 1998 through 2001. This investigation determined that natural attenuation of chlorinated solvents was occurring, and attainment of the Statewide Health Standards (SHS) was likely achievable without implementation of the groundwater extraction remedy. Additional groundwater characterization, and fate and transport modeling, was completed between 1998 and 2004. The final groundwater samples obtained in 2004 exhibited concentrations below the SHS for contaminants attributable to the Olmsted AFB (Sunset Annex). In 2007, the USAF determined, with the PADEP concurrence, that groundwater at the Olmsted Air Force Base (Sunset Annex) attained the Residential Statewide Health Standard for organic and inorganic contaminants (USAF, 2007), therefore all monitoring wells were removed and no future monitoring was required. PADEP concurred on January 14, 2005, that removal of the existing monitoring wells could proceed as part of site closure (USAF 2007).

The Post-Remediation Care Plan identified in the Final Report Under Combined Statewide Health/Site-Specific Standards, Sunset Landfill Site, U.S. Air Force, February 2007, requires institutional controls for the Olmsted AFB (Sunset Annex). These post-remedy requirements include:

- Annual inspections and reporting (USACE)
- Fence maintenance at the Hillside Dump Area (USACE)
- Preservation and maintenance of the landfill cap (Londonderry Township)
- Maintaining the landfill cap as a golf driving range (or some other recreational use) as well as preventing land use changes to the adjacent Hillside Dump Area. (Londonderry Township)

2.4 Systems Operations/Operation & Maintenance

The Post-Remediation Care Plan identified in the Final Report Under Combined Statewide Health/Site-Specific Standards, Sunset Landfill Site, U.S. Air Force, February 2007, also outlines the ongoing operation and maintenance (O&M) requirements for the Olmsted AFB (Sunset Annex). Responsibilities for the ongoing O&M are outlined in the Post-Remediation Care Agreement signed in January 2007. Under this agreement, the U.S. Army Corps of Engineers (USACE), Baltimore District, is responsible for annual inspections, reporting, and fence maintenance at the Hillside Dump Area. Londonderry Township is responsible for preserving and maintaining the landfill cap, and will ensure that the landfill cap will continue to be used as a golf driving range (or some other recreational use). Londonderry Township is also responsible for removing any trees that threaten or impair the integrity of the Hillside Dump Area fence.

In accordance with the Post-Remediation Care Agreement as part of the ongoing CERCLA response, USACE performed Annual Inspections at the Sunset Landfill Site. Routine maintenance issues identified during the annual inspections included:

- Depressions/ponding in the landfill cap
- Burrowing animals into landfill cap
- Areas of erosion
- Fallen trees damaging or threatening to damage the fence
- Overgrown trees/brush near the fence

Londonderry Township was responsible for and performed routine maintenance of the landfill cap to address the issues identified above. In 2019, the USACE repaired damaged portions of the fence. O&M performed by the responsible parties has successfully maintained the exposure controls required in the final remedy in compliance with CERCLA.

3. PROGRESS SINCE THE LAST REVIEW

This section includes the protectiveness determinations and statements from the last five-year review as well as the recommendations from the last five-year review and the current status of those recommendations.

Table 1: Protectiveness Determinations/Statements from the 2019 FYR

| Project 01 | Protectiveness Determination | Protectiveness Statement |
|-------------------|-------------------------------------|---|
| 1 | Protective | The remedy at the Olmsted Air Force Base (Sunset Annex) Landfill is protective of human health and the environment. |

There were no issues and recommendations in the last FYR.

4. FIVE-YEAR REVIEW PROCESS

4.1 Community Notification, Involvement & Site Interviews

A public notice was made available on the Baltimore District environmental Public Notice site, on 10/6/2023, stating that there is a five-year review and inviting the public to submit any comments to the USACE. A copy of the public notice is available below at Appendix C.

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy that has been implemented to date. The results of these interviews are summarized below:

The lead regulator from PADEP was interviewed. PADEP is satisfied that all environmental requirements have been met, and annual inspections are being completed in accordance with the Post Remediation Care Agreement. Interviews with the Sunset Golf Course Superintendent and the Londonderry Township Manager were also conducted, and each expressed overall satisfaction with the results of the remediation to date. Interview records including questions and responses are included in Appendix D of this report. The results of the review and the report will be made available at the Site information repository located on the USACE Baltimore District environment Public Notice site, <https://www.nab.usace.army.mil/Missions/Environmental/Formerly-Used-Defense-Sites/>

4.2 Data Review

No data was collected during the period assessed in this FYR.

4.3 Site Inspection

The inspection of the Site was conducted on 9/25/2023. In attendance were two USACE team members, Mr. Edward Hughes and Mr. Kendrick Nelson. The purpose of the inspection was to assess the protectiveness of the remedy. Site inspection included inspections of the landfill cap, hillside dump area, and landfill perimeter fence. The landfill cap continues to be utilized as the driving range for Sunset Golf Course, and it was found to be in generally good condition, with one area of synthetic cap liner material exposure. This area is recommended for repair by the Township in the near future. There were no signs of any exposed landfill materials. There are two landfill vents that are damaged, however, no action is currently needed. The vents may need to be

repaired in the future to restore them to their original condition. The landfill perimeter fence was found to be in good condition, except for several areas impacted by damage from fallen trees, which were recently removed by the Township. No observations were made that suggest a protection issue.

5. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Question A Summary:

Yes.

The source control remedy of landfill capping, fencing, maintenance and fence repairs is effective in preventing the exposure to contaminated surface soils and exposed metallic landfilled materials, and is functioning as intended in the ROD. The groundwater component of the remedy was not implemented because the lead agency and regulatory agency determined that the groundwater remedy was not necessary, because contaminant concentrations naturally dropped below levels posing an unacceptable risk. In addition, the residents are now on a public water supply. Therefore, there is no unacceptable risk associated with groundwater contamination.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial goals (RGs) used at the time of the remedy selection still valid?

Question B Summary:

No.

Soil: Exposure pathways that could result in unacceptable risk are being controlled. The landfill cap and fencing are being maintained and annual inspections are ongoing. Changes in toxicity data for soil were not analyzed, since the remedy addressed the surface soil risk using exposure control.

No chemical-specific RGs were identified for groundwater in the 1993 ROD. Unacceptable risk was identified in the 1993 ROD for TCE, vinyl chloride, and 1,2-dichloroethylene (DCE), assuming that groundwater was used as a drinking water source. Subsequently, the contamination levels in groundwater naturally attenuated, and were deemed to achieve Statewide Health Standards by PADEP, with no further remedial action necessary.

Vapor Intrusion Exposure Pathway: Using the last available worst-case values for groundwater contamination in the residential area and the current United States Environmental Protection Agency Vapor Intrusion Screening Level (VISL) model, the vapor exposure risks for the residents at the Sunset Annex site were estimated to be acceptable.

Disposal in the landfill reportedly ceased in 1964. There is strong evidence of biodegradation of the main contaminant TCE to daughter products during the monitoring period which ended in

2004. Even though monitoring wells no longer exist which could demonstrate this point, it is very likely that groundwater contaminant concentrations declined from 2004 to the present through the natural processes of degradation, dilution, and evaporation. Consequently, if reevaluated using current environmental data, it is virtually certain that any VI exposure risks continue to remain within acceptable levels.

QUESTION C: Has any other information come to light that could call call into question the protectiveness of the remedy?

No other information was identified that would impact the protectiveness of the remedy now or in the future.

6. ISSUES/RECOMMENDATIONS

| Issues/Recommendations |
|---|
| OU(s) without Issues/Recommendations Identified in the Five-Year Review: |
| Project 01 Olmsted AFB (Sunset Annex) - none |

OTHER FINDINGS

The following are recommendations that were identified during the FYR, but do not affect current and/or future protectiveness:

- A ROD amendment is a carry-over from the previous FYR and is being prepared to document the fundamental change resulting from the PADEP approval of the 2007 report documenting groundwater achieving Statewide Health Standards and in accordance with CERCLA requirements. This approval resulted in the decision to eliminate the groundwater extraction and treatment system. We expect the have the ROD amendment process completed by the end of FY2025.
- The 2023 FYR Site Inspection found that the majority of the perimeter fence appeared to be structurally sound, however several sections had been damaged by trees that fell during high wind events earlier in the year. The USACE is currently contracting the repair of the fence damage including the fence posts footers exposed to erosion that may impact site accessibility. The erosion issue is addressed in our scope of work and all perimeter fence related repairs should be completed in spring of 2024. One area of exposure of the

geotextile was noted on the landfill cap/driving range area which is recommended for repair by the Township (see Photo S1 on page 38).

7. PROTECTIVENESS STATEMENT

| Protectiveness Statement(s) | | |
|---|--|---|
| <i>Operable Unit:</i> Project 1 | <i>Protectiveness Determination:</i> Protective | <i>Planned Addendum Completion Date:</i> N/A |
| <i>Protectiveness Statement:</i> The remedy at the Olmsted Air Force Base (Sunset Annex) is protective of human health and the environment. | | |

Elements that protect human health and the environment include a landfill cap and a perimeter fence. The landfill cap provides a barrier between the landfill material and the recreational area above. Also, the perimeter fencing keeps out unauthorized personnel and animals that may damage the landfill cap potentially degrading its protectiveness and purpose.

8. NEXT REVIEW

The next five-year review report for the Olmsted Air Force Base (Sunset Annex) is required five years from the completion date of this review.

REFERENCE LIST

USACE, USAF, 1992 Memorandum outlining responsibility sharing for Olmsted Air Force Base in Middleton, PA, 7 May 1992

ABB Environmental Service, Inc., 1992. Record of Decision for the Landfill Area at Sunset Golf Course, Londonderry Township, PA, January.

USAF, 2007. Final Report Under Combined Statewide Health/Site-Specific Standards, Sunset Landfill Site, Londonderry Township, PA, February.

PADEP, 2007. Letter to Londonderry Township Board of Supervisors and Mr. Ron Joyner, USAF Regional Office, Re: Approval of Final Report Sunset Landfill Site, Londonderry Township, Dauphin County, PA, March.

USACE, Baltimore District, 2017. Vapor Intrusion Screening Report for Sunset Landfill FUDS, Londonderry Township, PA, July.

USACE, BALTIMORE DISTRICT, 2019. Second Five-Year Review of the Sunset Landfill Site Post-Remediation Care Plan, Londonderry Township, PA, March 2019.

USACE, BALTIMORE DISTRICT, 2023. ANNUAL REVIEW of the Sunset Landfill Site Post-Remediation Care Plan, Londonderry Township, PA, July 2023.

APPENDICES

APPENDIX A- Chronology of Site Event

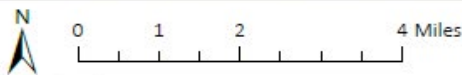
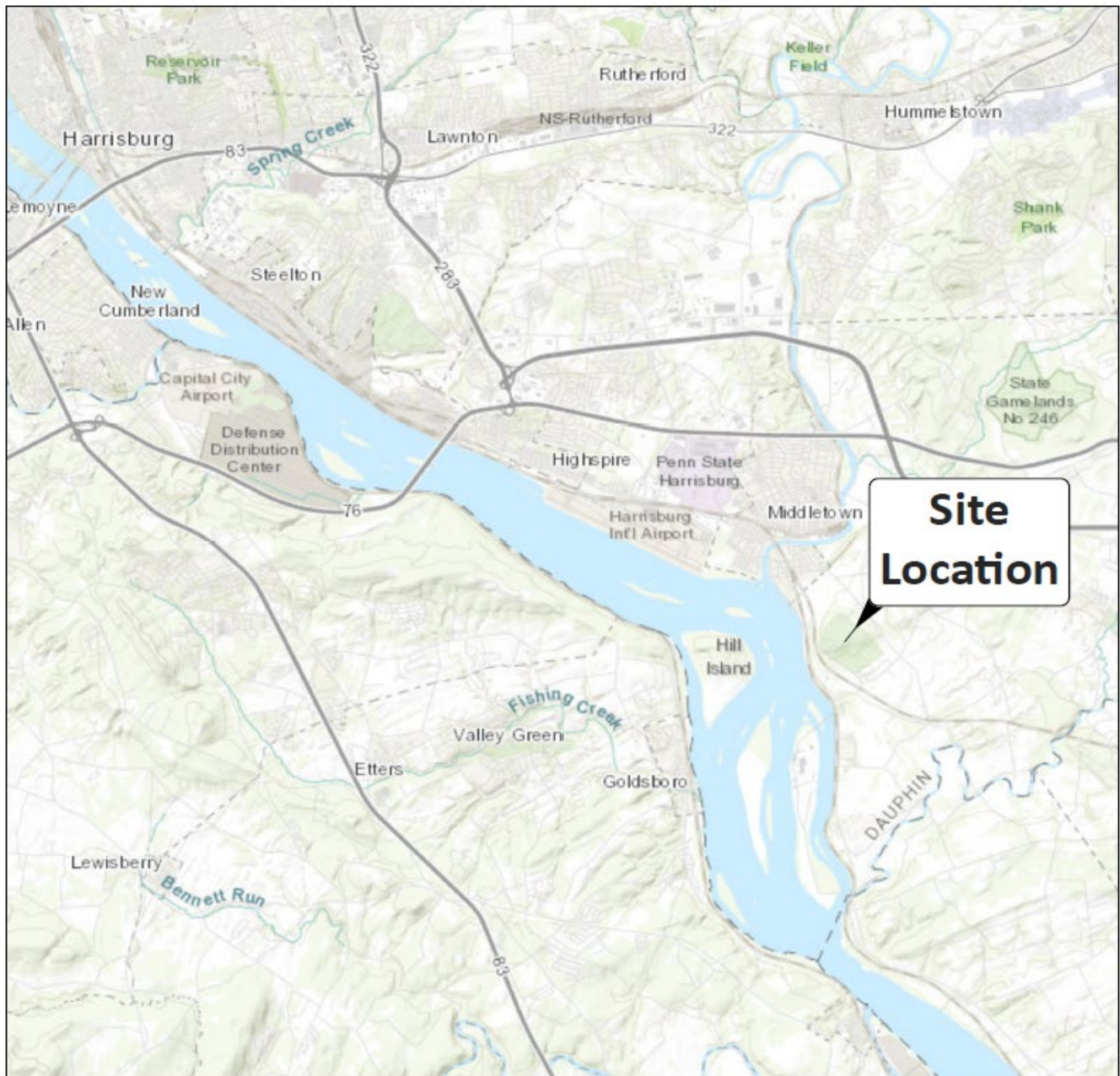
| Event | Date |
|--|---|
| U.S. Air Force (USAF) used approximately 15 acres of the property as a landfill for a wide variety of wastes generated at Olmsted Air Force Base | 1956-1964 ABB Environmental Service, Inc., 1992 |
| Londonderry Township purchased land. | 1968 ABB Environmental Service, Inc., 1992 |
| Pennsylvania Department of Environmental Resources (PADER) inspected the site and found a drum labeled "TCE" (ie. trichloroethene). PADER sampled water from water seeps at the edge of the landfill and at 5 private wells. Various chlorinated solvents were detected in the water samples. | 1983 PADEP, 2007. |
| USAF and U.S. Environmental Protection Agency extended the public water supply from Royalton Borough to the affected homes downgradient of the landfill. | 1983 (estimated) ABB Environmental Service, Inc., 1992. |
| USAF completes Remedial Investigation/Feasibility Study | 1991 ABB Environmental Service, Inc., 1992. |
| USAF and USACE agree on cleanup approach for the Olmsted Air Force Base (Sunset Annex). USAF assumes responsibility for completion of the Remedial Action, and USACE will be responsible for the operation and maintenance of the remedy. | 1992 USACE, USAF, 1992. |
| USAF completes ROD | 13 January 1993 ABB Environmental Service, Inc., 1992. |
| USAF implements source control remedies. Groundwater remedy was delayed due to access issues. | 1992-1994 |
| Pennsylvania enacts the Land Recycling and Environmental Remediation Standards Act (35 P.S. §§ 6026.101 -6026.909) (Act 2). | 1995 PADEP, 2007. |

| Event | Date |
|--|---|
| USAF initiates fate and transport study to demonstrate attainment of groundwater standards. | 1997 |
| USAF conducts additional groundwater studies to demonstrate that natural attenuation was occurring and that groundwater standards could be met. | 1997-2004 USACE, BALTIMORE DISTRICT, 2019. |
| PADEP and USEPA signs an MOA for Act 2 to be eligible to satisfy CERCLA, RCRA, and TSCA. | 2004 PADEP, 2007. |
| Groundwater sampling during 2003 and 2004 indicates that concentrations of VOCs onsite and offsite were less than the residential statewide health standard. PADEP concurred that groundwater monitoring could be discontinued, all wells were removed. | 2005 PADEP, 2007. |
| USAF issues the Final Report Under Combined Statewide Health/Site-Specific Standards. PADEP provided approval of the Final Report, indicating that PADEP Act 2 standards and all other CERCLA requirements were met at the Sunset Landfill Site. | 2007 USAF, 2007. |
| USACE and Londonderry Township sign Post Remediation Care Agreement which outlines O&M responsibilities for the two parties. | 2007 USACE, BALTIMORE DISTRICT, 2019. |
| USACE conducts first annual inspection | 2007 |
| USACE performs perimeter fence repair | 2011 USACE, BALTIMORE DISTRICT, 2019. |
| USACE completes first Five-Year Review | 2014 |
| USACE completes Vapor Intrusion Screening Report | 2017 USACE, Baltimore District, 2017. |
| USACE performs perimeter fence repair | 2019 USACE, BALTIMORE DISTRICT, 2019. |

APPENDIX B - Site Maps

Figure 1

SUNSET ANNEX - SITE LOCATION SUNSET LANDFILL LONDONDERRY TWP, PA



Spatial Reference
Name: WGS 1984 Web Mercator Auxiliary Sphere
Scale: 1:123,000
GIS by: KJP, 25 MAY 23



US Army Corps of Engineers
Baltimore District
Environmental & Munitions Design Center

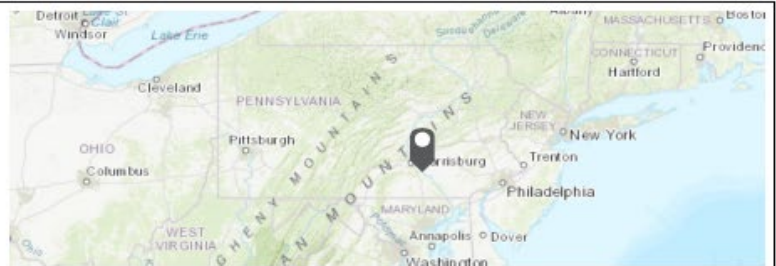


Figure 1

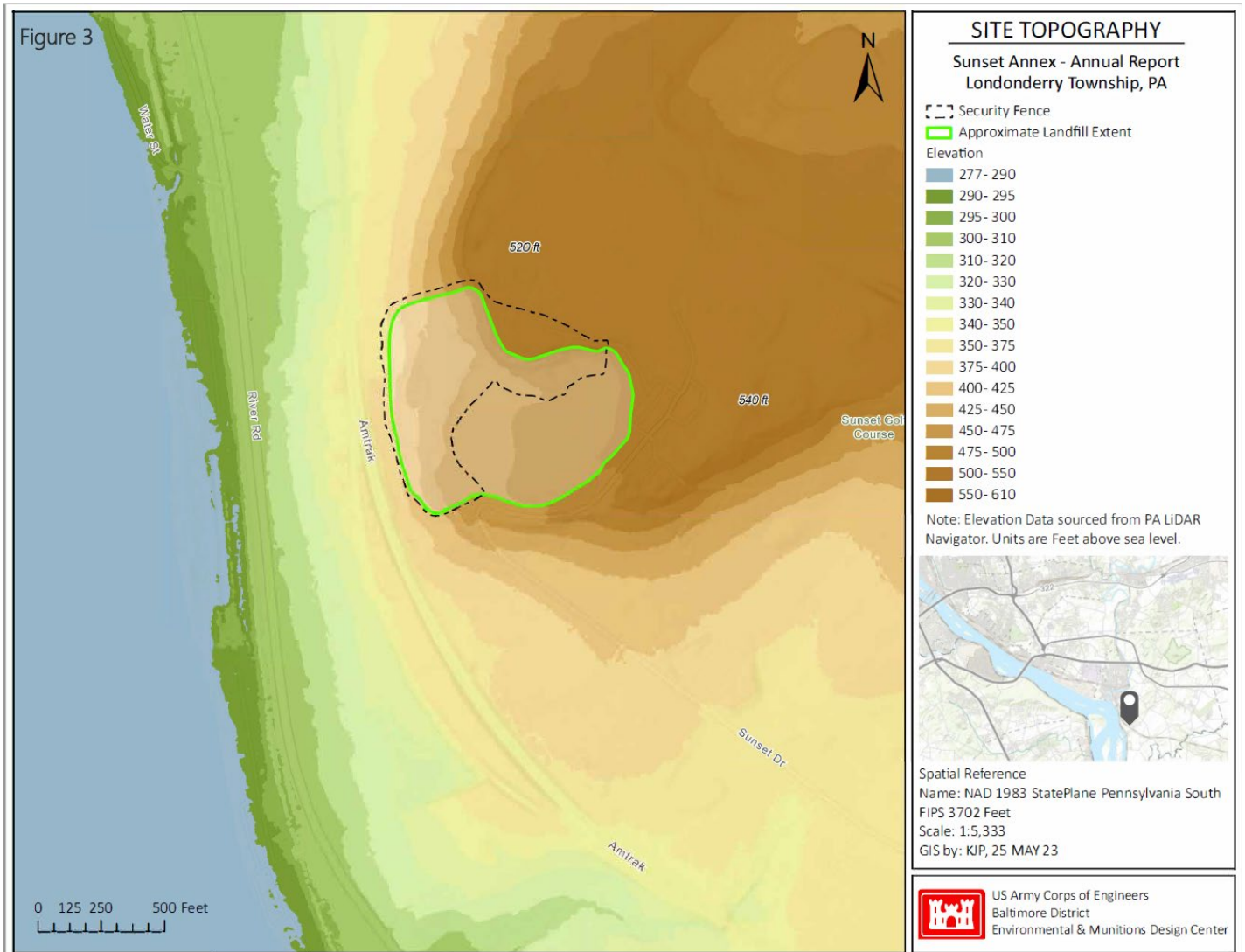


Figure 2

Figure 2

SUNSET ANNEX REMEDY ARRANGEMENT SUNSET LANDFILL LONDONDERRY TWP, PA

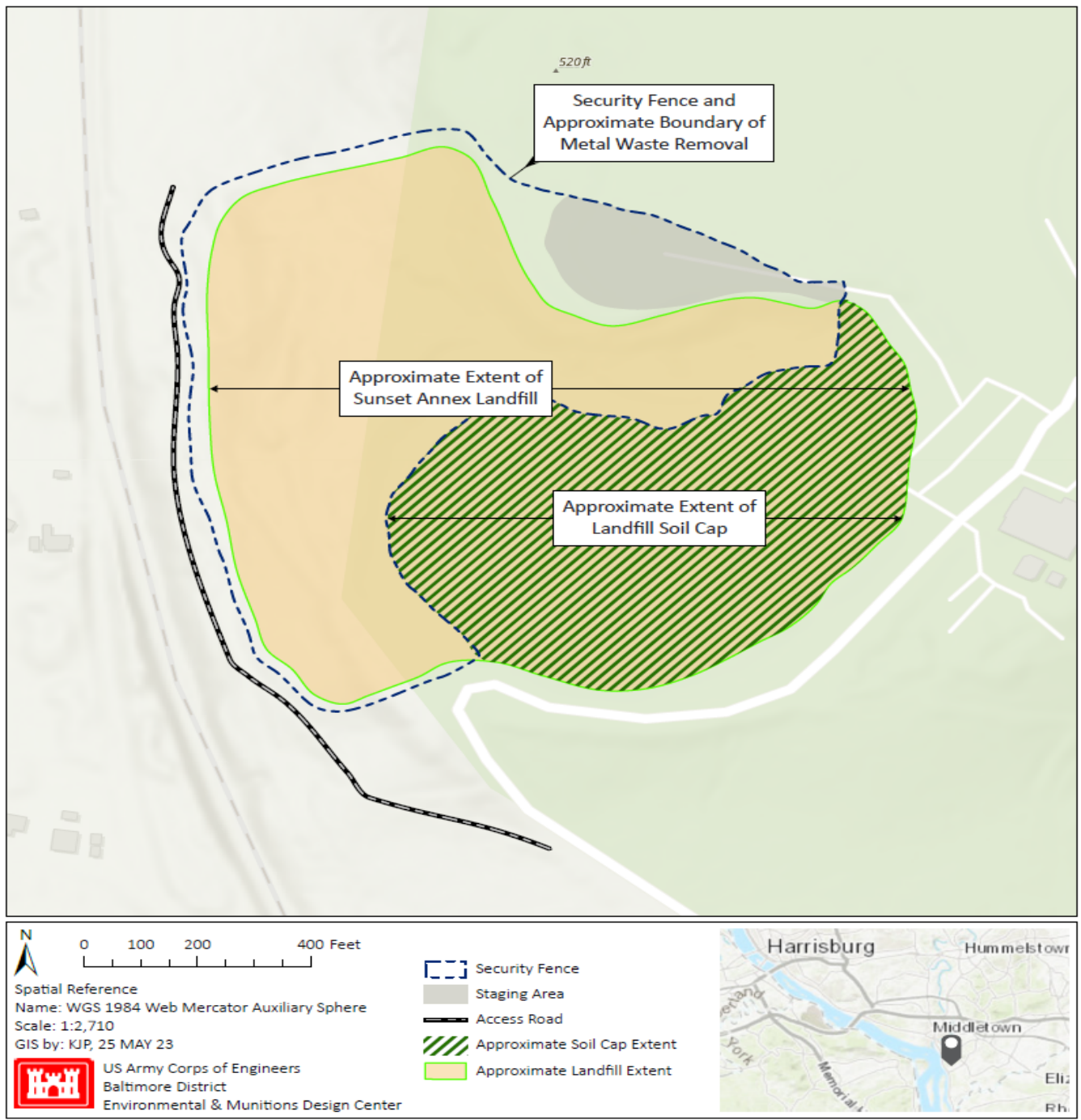


Figure 3

APPENDIX C – Public Notice



**US Army Corps
of Engineers®**

**SUNSET ANNEX LANDFILL,
FORMERLY USED DEFENSE SITE
COMPLETION OF FIVE-YEAR REVIEW NOTICE**

The U.S. Army Corps of Engineers, Baltimore District, has begun the third five-year review of the United States Air Force (USAF) Formerly Used Defense Site, also known as Sunset Annex. The process will evaluate the remedies that were implemented by the Record of Decision to clean up the site, and the subsequent Explanation of Significant Difference to the decision.

The Olmsted Air Force Base (Sunset Annex) is situated on Sunset Hill in Londonderry Township, Pennsylvania, located approximately 1.5 miles southeast of the Harrisburg International Airport, and just east of Pennsylvania Route 441 and the Susquehanna River. The non-contiguous Sunset Hill was acquired by the USAF in 1956 as part of a program to upgrade the former Olmsted Air Force Base (AFB) to accommodate jet aircraft. To create a proper glide angle for jets, the top of Sunset Hill was removed. Following the removal of the hilltop and prior to construction of the golf course, the USAF used approximately 15 acres of the property as a landfill to dispose of metals, wood, paper, and liquids wastes, including spent solvents generated at the AFB. The landfill was used from 1956 to 1964. Olmsted AFB was retired in 1966, and in 1968, the Sunset Golf Course, including the Landfill Site and the Hillside Dump, were sold to Londonderry Township, a municipal subdivision of the Commonwealth of Pennsylvania. In the 1983 as a result of the discovery of a drum labeled "TCE" (i.e., trichloroethene) and water samples identifying seeps of various solvents into ground water the landfill was capped. In 2007 it was determined that groundwater at the Olmsted Air Force Base (Sunset Annex) attained the Residential Statewide Health Standard for organic and inorganic contaminants. The environmental monitoring confirmed that the site is safe for recreational use. The U.S. Army Corps of Engineers (USACE) and Londonderry Township both monitor the remedies and maintain the grounds of the site.

Once the third five-year review process is completed, anticipated date sometime in March 2024, the Review will be available on the Baltimore District environment Public Notice site

<https://www.nab.usace.army.mil/Missions/Environmental/Formerly-Used-Defense-Sites/>

Contact Information: USACE welcomes your comments and questions. The point of contact for further information is Kendrick Nelson, Project Manager, U.S. Army Corps of Engineers, Baltimore District at (443) 666-0633 or Kendrick.J.Nelson@usace.army.mil.

APPENDIX D – Interview Reports

| | | | |
|--|---|---|-------------------------|
| Site Name: FUDS Sunset Landfill Site Londonderry Township, PA | | FUDS Property #: C03PA101601 | |
| Subject: Sunset Annex Landfill Status | | Time: 1100 | Date: 10/10/2023 |
| Type: Telephone Interview | | | |
| Contact Made By: | | | |
| Name: Kendrick Nelson | Title: Project Manager | Organization: USACE Baltimore District | |
| Individual Contacted: | | | |
| Name: Stephen Letavic | Title: TWSP Manager | Organization: Londonderry TWSP | |
| Telephone #: (717) 944-1803 | Address: 783 S. Geyers Church Road Middleton, PA 17057 | | |
| Summary of Conversation | | | |
| <ol style="list-style-type: none"> <u>Question:</u> What is your overall impression of the project? <u>Answer:</u> Great, all things are functioning properly. <u>Question:</u> Is the remedy functioning as expected? <u>Answer:</u> Yes, there are no issues to report. <u>Question:</u> Have there been any routine communications or activities conducted by your office regarding the site? <u>Answer:</u> No <u>Question:</u> Have there been any complaints, violations or other incidents related to this site requiring response from your office? <u>Answer:</u> No <u>Question:</u> Are you aware of any private water wells in use between Sunset Golf Course and the Susquehanna River? <u>Answer:</u> The wells that were once being tested along 441 and the 7 wells on the property that aren't being tested anymore <u>Question:</u> Are you satisfied with the work done, and/or the status of the site? <u>Answer:</u> Yes, the cap is performing well minor erosion will be repaired. <u>Question:</u> Do you have any comments, suggestions or recommendations regarding the site? <u>Answer:</u> No <u>Question:</u> Are you aware of any administrative groundwater restrictions in place other than the Post-Remediation Agreement between USACE and Londonderry Township? <u>Answer:</u> No | | | |

| | | | |
|---|--|---|------------------------|
| Site Name: FUDS Sunset Landfill Site Londonderry Township, PA | | FUDS Property #: C03PA101601 | |
| Subject: Sunset Annex Landfill Status | | Time: 1000 | Date: 10/3/2023 |
| Type: Telephone Interview | | | |
| Contact Made By: | | | |
| Name: Kendrick Nelson | Title: Project Manager | Organization: USACE Baltimore District | |
| Individual Contacted: | | | |
| Name: Pamela Trowbridge | Title: Regulator | Organization: PADEP | |
| Telephone #: (717) 705-4839 ptrowbridg@state.pa.us | Address: 909 Elmerton Ave. Harrisburg, PA 17110 | | |
| Summary of Conversation | | | |
| <p>1. <u>Question:</u> What is your overall impression of the project? <u>Answer:</u> Good holding up well except for trees</p> <p>2. <u>Question:</u> Is the remedy functioning as expected? <u>Answer:</u> Yes no issues to report</p> <p>3. <u>Question:</u> Have there been any routine communications or activities conducted by your office regarding the site? <u>Answer:</u> No</p> <p>4. <u>Question:</u> Have there been any complaints, violations or other incidents related to this site requiring response from your office? <u>Answer:</u> No</p> <p>5. <u>Question:</u> Are you aware of any private water wells in use between Sunset Golf Course and the Susquehanna River? <u>Answer:</u> Yes</p> <p>6. <u>Question:</u> Are you satisfied with the work done, and/or the status of the site? <u>Answer:</u> Yes</p> <p>7. <u>Question:</u> Do you have any comments, suggestions, or recommendations regarding the site? <u>Answer:</u> No</p> <p>8. <u>Question:</u> Are you aware of any administrative groundwater restrictions in place other than the Post-Remediation Agreement between USACE and Londonderry Township? <u>Answer:</u> No</p> | | | |

| | | | |
|---|--|---|------------------------|
| Site Name: FUDS Sunset Landfill Site Londonderry Township, PA | | FUDS Property #: C03PA101601 | |
| Subject: Sunset Annex Landfill Status | | Time: 0900 | Date: 10/5/2023 |
| Type: Telephone Interview | | | |
| Contact Made By: | | | |
| Name: Kendrick Nelson | Title: Project Manager | Organization: USACE Baltimore District | |
| Individual Contacted: | | | |
| Name: Sam Risteff | Title: Sunset Golf Course Manager | Organization: Sunset Golf Course | |
| Telephone #: (717) 944-5415 | Address: 2601 Sunset Dr, Middletown, PA 17057 | | |
| Summary of Conversation | | | |
| <p>1. <u>Question:</u> What is your overall impression of the project? <u>Answer:</u> Overall everything is functioning properly I am very satisfied.</p> <p>2. <u>Question:</u> Is the remedy functioning as expected? <u>Answer:</u> Yes, everything is functioning properly there are no complaints or concerns.</p> <p>3. <u>Question:</u> Have there been any routine communications or activities conducted by your office regarding the site? <u>Answer:</u> Yes</p> <p>4. <u>Question:</u> Have there been any complaints, violations or other incidents related to this site requiring response from your office? <u>Answer:</u> No</p> <p>5. <u>Question:</u> Are you aware of any private water wells in use between Sunset Golf Course and the Susquehanna River? <u>Answer:</u> Wells along route 441 were being tested for a while but they have stopped testing. There are 7 wells on the property but they are not being tested anymore.</p> <p>6. <u>Question:</u> Are you satisfied with the work done, and/or the status of the site? <u>Answer:</u> Yes, the cap is holding very well with minor erosion that can be repaired easily.</p> <p>7. <u>Question:</u> Do you have any comments, suggestions or recommendations regarding the site? <u>Answer:</u> No, everything is going well. There is some small cap erosion that is being handled and the walking trail looks good.</p> <p>8. <u>Question:</u> Are you aware of any administrative groundwater restrictions in place other than the Post-Remediation Agreement between USACE and Londonderry Township? <u>Answer:</u> No</p> | | | |

APPENDIX E – Third Five Year Review Site Inspection Report

Third Five Year Review Site Inspection Report
for the Sunset Annex Landfill

Londonderry Township
Dauphin County, PA

FUDS Property Number: C03PA1016

Site Inspection Date - 25 September 2023

Prepared by:

U.S. Army Corps of Engineers
Baltimore District
Engineering Division
Environmental & Munitions Design Center

2 Hopkins Plaza
Baltimore, MD 21201



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INTRODUCTION

The U.S. Army Corps of Engineers (USACE) Baltimore District (NAB) conducted its inspection visit for the third five year review of the property formerly occupied by the U.S. Air Force (USAF) on 25 September 2023. In attendance from USACE was Formerly Used Defense Sites (FUDS) Program Manager Mr. Ed Hughes PE, PMP and Project Manager Mr. Kendrick J Nelson. In attendance from Londonderry Township was Mr. Sam Risteff, Manager of Sunset Park. This inspection was conducted in accordance with a Post-Remediation Care Agreement between USACE NAB, USAF, and the Londonderry Township. USACE NAB agreed to accept responsibility for ongoing achievement of performance standards to maintain engineering controls, including conducting post-remediation inspections. Londonderry Township agreed to preserve and maintain the landfill cap at the Sunset Golf Course until 2036.

SITE LOCATION

The Sunset Landfill site is situated on the Sunset Hill of Sunset Park in Londonderry Township, PA, located approximately 1.5 miles southeast of Harrisburg International Airport (MDT), and due east of PA Route 441 and the Susquehanna River. The Sunset Landfill site is comprised of the Sunset Golf Course located at 783 South Geyers Church Road, Middletown, PA. Within the property boundary, the Sunset Landfill site includes the Sunset Golf Course Driving Range Landfill and the closed Hillside Dump Area.

HISTORY OF THE SITE

Sunset Hill was acquired by the USAF in 1956 as part of a program to upgrade the former Olmstead Air Force Base to accommodate jet aircraft. To achieve the proper glide angle for jet aircraft, approximately 30 to 40 feet of rock were removed from the top of Sunset Hill. The USAF used approximately 15 acres of the property as a landfill for a variety of wastes generated at the base from 1956 to 1964. Historical reports indicate that wastes, both hazardous and nonhazardous, were brought to the site and placed into the landfill cells. Wastes were not segregated by type.

In 1968, the USAF sold Sunset Hill to Londonderry Township for use as a recreation area. A golf course was built on the top of the hill. This portion of the site became known as Sunset Golf Course. The Pennsylvania Department of Environmental Protection (PADEP) discovered a USAF drum labeled “TCE”¹ in the Hillside Dump Area in 1983. This discovery prompted investigations which ultimately resulted in remediation efforts by the USAF. PADEP concurrently investigated private wells downgradient of the Hillside Dump Area, which led to the extension of the public water supply to affected homes from the Royalton Borough.

¹ Trichloroethylene (TCE) is primarily used as a solvent for degreasing metal parts in the manufacturing process of various products, among other potential historical uses. TCE is associated with negative human health effects above certain exposure thresholds.

A Feasibility Study was completed to select a remedy for the Sunset Landfill site after the on-site investigations in the mid-to-late 1980s. The selected remedy was documented in a Record of Decision (ROD) and included the following components for source control:

- Installation of a pervious cap over the Driving Range Landfill to prevent exposure to waste and contaminated soil, and reduce infiltration into the landfill;
- Grading and vegetation of the landfill cap such that the driving range could be used by Londonderry Township;
- Inventory and removal of exposed metal wastes in the Hillside Dump Area; and
- Installation of fencing around the Hillside Dump Area, to prevent access to the area.

The 1993 ROD also specified a groundwater remedy consisting of a groundwater extraction system downgradient of the Hillside Dump Area. Groundwater was to be treated via air stripping and discharged into the Susquehanna River. Source control components of the 1993 ROD, including the removal of drums and metal wastes from the Hillside Dump Area, capping of the landfill, and the installation of fencing, were performed between 1992 and 1994. Certified closure documentation was prepared, indicating compliance with the design documents and the ROD.

The Driving Range Landfill cap and institutional controls (e.g., perimeter fencing) prevent access to the disposal area and maintain compliance with the Pennsylvania Land Recycling and Environmental Standards Act (Act 2) Site-Specific Standard by eliminating potential exposure pathways. Capping of the landfill eliminates the direct contact exposure pathway under the Site-Specific Standard. Soils in the area surrounding the landfill demonstrate attainment of the Non-Residential Statewide Health Standards for organic and inorganic contaminants. The groundwater at the site is undergoing natural attenuation of the chlorinated solvents (e.g., TCE) released from the landfill. Groundwater at the site demonstrates attainment of the Residential Statewide Health Standard for organic and inorganic contaminants.

Since this project attained a Site-Specific Standard, a deed notice is required in accordance with Section 304 (M). In order to maintain the relief of liability provided by Act 2, post-remediation care is required to maintain the landfill cap and fencing.

The last five-year review performed in March 2019 determined that the remedy at the site remained protective of human health and the environment. The 2019 5-Year Review found that the majority of the landfill perimeter fence was sound, though some areas needed repair due to tree damage from felled trees due to high winds. USACE contracted for and completed the fence repairs later in 2019.

POST-REMEDATION CARE

Since this project attained a Site-Specific Standard, post-remediation care is required by the Pennsylvania Land Recycling and Environmental Standards Act (Act 2) to maintain the landfill cap and fencing. Therefore, a Post-Remediation Care Agreement was written between the USACE NAB, the USAF, and Londonderry Township and is in effect until 2036. A signed copy of the Post-Remediation Care Agreement is found in Appendix C. On 6 FEB 2007, PADEP

approved the “Final Report Under Combined Statewide Health/Site-Specific Standards, Sunset Landfill Site”. A copy of PADEP’s approval letter is found in Appendix D.

INSPECTION DETAILS

An inspection of the landfill cap and fence is to be performed each year and for each recurring five year review to ensure that direct human contact with wastes is prevented, which ensures the direct exposure pathway continues to be eliminated. The 25 September 2023 inspection included investigating the Driving Range Landfill cover and the perimeter fence surrounding the Hillside Dump Area as described below. A blank inspection checklist is presented in Appendix E.

The landfill cover on the golf course driving range was inspected to ensure that direct contact with exposed wastes in the landfill area is prevented. The inspectors checked for the presence of:

- Depressions or holes greater than 6-inches in depth developing on the cap area;
- Vegetation stressed and in a condition atypical of the season;
- Areas larger than 100 square feet without vegetation; and
- Visible landfill debris surfacing on the cap area.

The fence surrounding the Hillside Dump Area was inspected to ensure that access to the Area is prevented and site security is intact. The inspection included an inspection of the fence fabric, barbed wire, padlocks, gates, and fence posts. The inspectors checked for the presence of the following items that could affect the integrity of the fence and enhance the potential for trespasser entry:

- Three-strand barbed wire torn/missing;
- Holes greater than once square foot in the fence fabric;
- Leaning or bent fence posts;
- Damage to fence or gates resulting from fallen trees;
- Damaged or malfunctioning gates; and
- Missing or malfunctioning padlocks.

If the items noted above are observed during the annual inspection, an appropriate corrective action will be performed by the responsible parties. All repairs and corrective actions will be documented through photographs (Appendix A) and notations on the inspection checklist (Appendix B).

INSPECTION RESULTS

USACE NAB, represented by Mr. Ed Hughes and Mr. Kendrick Nelson, conducted the annual Sunset Annex FUDS inspection on 25 September 2023. The Sunset Landfill cover appeared to mostly be in good condition, except for a patch of exposed cap material surrounded by stressed grasses and soil erosion (S1). Two vents on the landfill were damaged (Photos S2-S3). While still functional, the vents may need to be repaired in the future to restore them to their original

condition. As mentioned previously, the fence around the Hillside Dump Area is prone to damage caused by felled trees, and underwent repairs in the Fall of 2019 by Cromedy Construction, Inc. As of this inspection, the perimeter fence was generally intact; however, some portions are damaged and may no longer be functioning as intended or may be prone to further damage. Erosion has worn away the soil around several post concrete foundations and the fence fabric (Photo S4). Felled trees have damaged the perimeter fence fabric and barbed wire in several locations (Photos S8, S10). As previously reported, the responsibility of removing trees is assumed by the Londonderry Township Department of Public Works (DPW). As of the most recent site inspection on 25 September 2023, Londonderry Township DPW has recently completed the necessary tree removal actions. The fence, under the responsibility of USACE, is in need of repair in the locations where felled trees have damaged it. All inspected gates are intact, and all padlocks are functional. One area of the landfill cap warrants minor repair and the perimeter fencing needs to be cleared of overgrown vegetation (Photo S1-S11).

CORRECTIVE ACTIONS

Results from the Annual Inspection indicate that the corrective actions taken to maintain the integrity of the landfill remain effective, but repairs are required on the Hillside Dump Area perimeter fence and Driving Range Landfill cap and soil cover. USACE will coordinate the repairs of the landfill area perimeter fence. It is the responsibility of the Londonderry Township DPW to repair the Driving Range soil cap, per the Post-Remediation Care Agreement (Appendix C).

The vegetation along the perimeter has been regularly maintained and trimmed as part of the Post Maintenance Division operations, however, the northern portion of the fence is not accessible due to excessive vegetation growth and the significantly sloped topography (Photos S6, S7, S11). The Londonderry Township DPW, in coordination with the Harrisburg International Airport, significantly cut back trees throughout the fenced area and along the western path adjacent to the landfill perimeter fence. There is no corrective action needed with regard to large vegetation however, vines with leaves have woven through the links of the fencing and need to be trimmed (Photos S6, S7, S11) .

25 September 2023 Site Inspection

Photo Log

Pictures S1-S11



Photo S1: The soil of the landfill cap has eroded in various places, exposing the liner in this location. This patch measures approximately 4.5 by 7.5 feet.



Photo S2: Landfill vent has been damaged from being struck by golf balls on the driving range. The perpendicular portion of the vent is still sufficiently shielded from precipitation and foreign debris.



Photo S3: Another picture of the opening of the landfill vent.



Photo S4: The perimeter fence is intact, but erosion has exposed the foundation of the fence post.



Photo S6: Perimeter fence barbedwire intact but needs to be repaired. Also, vegetation needs to be trimmed along the perimeter fence.



Photo S7: Vegetation along perimeter fence needs to be trimmed.



Photo S8: Perimeter fence needs to be repaired after felled trees have been removed.



Photo S9: Perimeter fence barbedwire needs to be repaired.



Photo S10: Perimeter fencing needs to be repaired from fallen trees.



Photo S11: Perimeter fencing near the landfill cap needs vegetation trimmed.

Inspection Checklist, 25 September 2023

| Inspection Checklist Post-Remediation Care Plan Sunset Landfill FUDS, Londonderry Township, PA | | | | | | |
|---|---|--|----|--|---------------------|---------------|
| Date: 25 September 2023 | Weather: Cloudy, 60s, great air quality with winds out of the NE | Inspectors: Kendrick Nelson, Project Manager | | | | |
| Item | Conditions | Yes | No | Action to be taken | Person Notified | Date Repaired |
| Landfill Cover | | | | | | |
| Grade | Any depressions or holes > 6 in deep? | X | | Yes, landfill cap is exposed on Driving Range. | Report Notification | |
| Vegetation | Any signs of stressed vegetation? | X | | Patches of grass appear stressed on Driving Range over landfill cap where erosion is occurring. USACE will coordinate with Londonderry Township, the responsible party for landfill cap repairs. | Report Notification | |
| | Any areas > 100 ft ² without vegetation? | | X | - | - | - |
| Debris | Any landfill debris visible? | | X | - | - | - |
| Landfill Fence | | | | | | |
| Barbed Wire | Are the 3 strands of barbed wire intact? | | X | Areas of the fencing barbed wire are damaged, indicated in report and photo log. USACE is planning fence repair action after Londonderry Township cleared felled trees. | Report Notification | |
| Fence Posts | Any fence posts leaning or bent? | X | | Several bent fence posts near felled trees. USACE is contracting the fence repair action. | Report Notification | |
| Fence Fabric | Any holes > 1 ft ² in fence fabric? | | X | - | - | - |
| Tree Damage | Any fallen trees over fence? | | X | NOTE: Londonderry Township has cleared felled trees indicated in | | |

| | | | | | | |
|----------------------|---|--|---|--|---|---|
| | | | | previous reports and identified in the September site visit. | | |
| Gates | Are any gates broken? | | X | NOTE: No gates are broken, though some appear to be deteriorating and may need repairs in the near future. | - | - |
| Padlocks | Are any gates not padlocked? | | X | NOTE: All padlocks are intact and functional. | - | - |
| Other Remarks | Londonderry Township has completed all necessary tree removal actions and must now execute the necessary landfill cap repairs. USACE is responsible for coordinating the fence repairs noted in this inspection checklist and annual reports. | | | | | |

Post-Remediation Care Agreement

POST-REMEDIATION CARE AGREEMENT

Post-Remediation Care Responsibilities Sunset Landfill Site, Londonderry Township, Pennsylvania Formerly Used Defense Site (FUDS) Project C03PA101601

This Post-Remediation Care Agreement states the understanding among the affected parties as to the roles and responsibilities for the post-remediation care of the landfill cap and the fence enclosing the Hillside Dump Area at the Sunset Landfill Site located in Londonderry Township, Pennsylvania. Maintenance of the landfill cap and the Hillside Dump Area fence are specific components of the remedy intended to prevent exposure to wastes or fly ash associated with the former landfill activities. Additionally, the post-remediation care of these components is required to maintain the site-specific standard for landfilled areas at the Hillside Dump Area and the Driving Range Landfill under the Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2).

The United States Army Corps of Engineers, Baltimore District, assumes responsibility for ongoing achievement of performance standards to maintain engineering controls, including conducting post-remediation inspections, Hillside Dump Area fence maintenance, and overall reporting activities until 2036, in accordance with the Post-Remediation Care Plan included in the *Final Report Under Combined Statewide Health/Site Specific Standards*.

Londonderry Township agrees to preserve and maintain the landfill cap at the Sunset Golf Course until 2036 in accordance with the Post-Remediation Care Plan included in the *Final Report Under Combined Statewide Health/Site Specific Standards*. The Township will ensure for the duration of the post-remediation care period that the landfill cap will continue to serve as a driving range or some other form of recreational use and will not permit land use changes to the adjacent Hillside Dump Area. In addition, Londonderry Township will make any necessary repairs to the driving range such as correcting areas of erosion and loss of vegetation that could diminish the effectiveness of the landfill cap, and will remove trees which unreasonably threaten or impair the integrity of the Hillside Dump Area fence.

The undersigned representatives certify that they are fully authorized to enter into the terms and conditions of this Post-Remediation Care Agreement and to bind the agencies they represent to this document.

POST-REMEDATION CARE AGREEMENT

Post-Remediation Care Responsibilities
Sunset Landfill Site, Londonderry Township, Pennsylvania
Formerly Used Defense Site (FUDS) Project C03PA101601

Agreed this 19TH day JANUARY, 2006

For the United States Air Force

By: [Signature]

Printed Name: THOMAS D. SIMS

Title: DIRECTOR USAF REGIONAL ENVIRONMENTAL OFFICE

For the United States Army Corps of Engineers,
Baltimore District

By: [Signature]

Peter W. Mueller
Colonel, Corps of Engineers
Commanding

For Londonderry Township

By: [Signature] 11/15/07

Printed Name: STEPHEN M. LEBLANC

Title: TOWNSHIP MANAGER

PADEP Approval of Post-Remediation Care Plan



Pennsylvania Department of Environmental Protection

909 Elmerton Avenue
Harrisburg, PA 17110-8200
March 2, 2007

717-705-4705 FAX
717-705-4830

Southcentral Regional Office

Londonderry Township Board of Supervisors
Londonderry Township, PA
783 Geyers Church Road
Middletown, PA 17057

Mr. Ron Joyner
Air Force Regional Environmental Office 60
Forsyth Street, SW
Suite 8M80
Atlanta, GA 30303

Re: Approval of Final Report
Sunset Landfill Site (Olmsted AFB, Sunset Annex)
eFACTS PF # PF 622400
783 South Geyers Church Road
Middletown Township, PA 17057
Londonderry Township, Dauphin County

Ladies and Gentlemen:

The Department hereby approves the February 6, 2007, document titled "Final Report Under Combined Statewide Health/Site-Specific Standards, Sunset Landfill Site," for the property located at the Sunset Golf Course, 783 South Geyer Church Road. The report was prepared by MWH Americas, Inc. and submitted to the Department in accordance with the Land Recycling and Environmental Remediation Standards Act (Act 2) and constitutes a "Final Report" as defined in Chapter 3 of Act 2.

A Final Report summary is enclosed that describes the area(s) of the property characterized, contaminants identified, remediation performed, and standards attained. A figure depicting the areal extent and the reference coordinates of the site(s) remediated is included. The Department approves this report for the substances identified and remediated to an Act 2 standard within the site(s) specified. This report was reviewed by or under the supervision of a Pennsylvania licensed professional geologist.

Chapter S, Section SO I of Act 2, provides the liability protection where attainment of Act 2 cleanup standard is demonstrated. Cleanup liability protection provided by this chapter applies to the current and future owner or any other person who participated in the remediation; a person who develops or occupies the site; successor or assign of any person to whom liability protection applies; and public utility to the extent the public utility performs activities on the identified site.

Londonderry Township Board of
Supervisors

- 2 -

March 2, 2007

Mr. Ron Joyner
Air Force Regional Environmental Office

In the 1950s and 1960s the United States Air Force used 15 acres of this property for a landfill. A wide variety of wastes were disposed at this landfill. In the 1980s the Air Force initiated site investigation work at the property. They decided on a remedial action of removal of some of the wastes and capping of the landfill. A public water line was also extended to downgradient property owners.

Capping of the landfill eliminates the direct contact exposure and is pathway elimination under the Site-Specific standard. Soil in the area surrounding the landfill demonstrate attainment of the Non-Residential Statewide Health standards for organic and inorganic contaminants. The groundwater at the site is undergoing natural attenuation of the chlorinated solvents released from the landfill. Groundwater at the site demonstrates attainment of the Residential State-wide Health standard for organic and inorganic contaminants.

Since this project attained a Site-Specific Standard, a deed notice is required in accordance with Section 304 (M). In order to maintain the relief of liability provided by Act 2, post remediation care is required to maintain the landfill cap and fencing.

Although remediation under Act 2 is now complete for this site, you are advised that any future earth disturbance or development may require either approvals or permits from the appropriate county soil conservation district. Therefore, you should contact the conservation district before engaging in any such activities.

Thank you for your cooperation in working with the Department in the remediation of this site. Your efforts are helping to return land to productive use and prevent the needless loss of greenspace across the Commonwealth.

If you have any questions, please call Pamela Trowbridge, P.G. at 717-783-9750.

Sincerely,



John F. Krueger, Manager
Environmental Cleanup Program

Enclosure

cc: Ms. Julie A. Widman ovak
Dauphin County Conservation District
K. Horvath, P.G., Special Projects Chief, DEP

PST

Blank Inspection Checklist

| Inspection Checklist Post-Remediation Care Plan Sunset Landfill FUDS, Londonderry Township, PA | | | | | | |
|---|---|------------|----|----------------------------|-----------------|---------------|
| Date: | Weather: | Inspector: | | | | |
| Item | Conditions | Yes | No | If yes, Action to be taken | Person Notified | Date Repaired |
| Landfill Cover | | | | | | |
| Grade | Any depressions or holes > 6 in deep? | | | | | |
| Vegetation | Any signs of stressed vegetation? | | | | | |
| | Any areas > 100 ft ² without vegetation? | | | | | |
| Debris | Any landfill debris visible? | | | | | |
| Landfill Fence | | | | | | |
| Barbed Wire | Are the 3 strands of barbed wire intact? | | | | | |
| Fence Posts | Any fence posts leaning or bent? | | | | | |
| Fence Fabric | Any holes > 1 ft ² in fence fabric? | | | | | |
| Tree Damage | Any fallen trees over fence? | | | | | |
| Gates | Are any gates broken? | | | | | |
| Padlocks | Are any gates not padlocked? | | | | | |
| Other Remarks | | | | | | |