

FINAL
No Action Proposed Plan
Building 30013 Sump Pit Area (LF512)
Wright-Patterson Air Force Base, Ohio

Contract No. W912QR20F0273

Prepared for:



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LIST OF ATTACHMENTS

Attachment 1	Public Comment Form
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LIST OF ACRONYMS AND ABBREVIATIONS

§	Section
AFCEC	Air Force Civil Engineer Center
AR	administrative record
ARARs	Applicable or Relevant and Appropriate Requirements
bgs	below ground surface
BMP	basewide monitoring program
BTEX	benzene, toluene, ethylbenzene, and xylenes
BUSTR	Ohio Bureau of Underground Storage Tank Regulations
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	chemical of concern
COPC	chemical of potential concern
CTL	CTL Environmental, LLC
DAF	Department of the Air Force
DERP	Defense Environmental Restoration Program
ERA	ecological risk assessment
FFS	focused feasibility study
FS	Feasibility Study
ft	feet
FYR	five-year review
GWOU	Groundwater Operable Unit
HHRA	human health risk assessment
HI	hazard index
IRP	Installation Restoration Program
LF	landfill
LF512	Landfill 512, Building 30013 Sump Pit Area
MCL	Maximum Contaminant Level
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
OEPA	Ohio Environmental Protection Agency
OU	operable unit
PAH	polycyclic aromatic hydrocarbons
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PP	proposed plan
RAO	remedial action objective
RI	remedial investigation

ROD	record of decision
RSL	regional screening levels
SAIC	Science Applications International Corp.
SSL	soil screening levels
SVOC	semi-volatile organic compound
TPH	total petroleum hydrocarbons
USEPA	United States Environmental Protection Agency
UST	underground storage tank
UU/UE	unlimited use/unrestricted exposure
Versar	Versar, Inc.
VOC	volatile organic compound
WPAFB	Wright-Patterson Air Force Base

1.0 INTRODUCTION

The United States Department of the Air Force (DAF) announces this No Action Proposed Plan (PP) for Wright-Patterson Air Force Base (WPAFB). This PP identifies the Preferred Alternative for addressing site contaminants of potential concern (COPCs) at the Building 30013 Sump Pit Area (LF512) and the rationale for the proposed remedy.

The Preferred Alternative is No Action. Soil at the site does not present an unacceptable risk to human health or the environment under current or future scenarios and meets the criteria for unlimited use/unrestricted exposure (UU/UE). No other alternatives were considered.

Groundwater beneath the site does not meet the criteria for UU/UE due to the concentrations of tetrachloroethene (PCE) above Maximum Contaminant Levels (MCLs). Groundwater impacts have been determined to be part of a large diffuse groundwater plume attributed to upgradient sources and is subject to long-term monitoring in accordance with the record of decision (ROD) for the Groundwater Operable Unit (GWOU) (WPAFB, 1999).

WPAFB is located in southwestern Ohio, between the cities of Dayton and Fairborn, and occupies portions of Greene and Montgomery Counties. WPAFB is subdivided into Areas A and B. The installation was formed as a consolidation of two bases: Patterson Field (Area A) and Wright Field (Area B). Area A is separated from Area B by State Route 444 and the ConRail Corporation railroad tracks. Areas A and B encompass approximately 5,700 and 2,400 acres, respectively.

LF512, part of Operable Unit (OU) 10, is located north of Building 30013 in Area A along Van Patton Drive east of Pearson Road (**Figure 1**) and was the site of a former oil sump pit used to store used oils from engine maintenance operations conducted in Building 30013.

The DAF is the lead agency for investigating, reporting, making remedial decisions, and taking remedial actions at WPAFB. The supporting agencies for this project include the United States Environmental Protection Agency (USEPA) Region V Office and the Ohio Environmental Protection Agency (OEPA).

The DAF is required under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section (§) 117(a) and National Oil and Hazardous Substances Pollution Contingency Plan (NCP) §300.430(f)(2) to issue this PP and seek public comment and participation. This PP summarizes

Public Comment Period:**October 1 through October 30, 2025**

Public participation for the PP will be sought during a public comment period and public meeting. A notification announcing the start of the public comment period and the date and time for the public meeting will be published in the Dayton Daily News at least 10 days prior to the meeting.

Public Meeting:**October 6, 2025**

A public meeting will be held in person at the Twin Base Golf Club at 6:00 p.m. to explain these proposed actions and to answer questions and accept written comments. Written comments or inquiries can be mailed to:

88 ABW / Public Affairs,
5135 Pearson Road, Building 10, Room 252
WPAFB, OH 45433
or emailed to: 88abw.pa@us.af.mil

The administrative record (AR) for WPAFB website contains electronic copies of the PP and supporting documentation on which decisions have been based, and is available at the following location:

Website: <https://ar.cce.af.mil/>
From top menu **Select Active Duty**
From Installation List **Select Wright-Patterson AFB, OH**
Press **Search** to load all WPAFB available documents

information specific to LF512 that can be found in greater detail in the Remedial Investigation (RI) Report (Versar, Inc. [Versar], 2020), Focused Feasibility Study (FFS) (CTL Environmental, LLC [CTL]), 2024), and other historical documents contained in the administrative record (AR) file for WPAFB. The AR contains documents on which decisions have been based. The public is encouraged to review these documents to gain a better understanding of LF512 and the investigations that have been conducted at this site. The RI, FSS, and other supporting documents can be found at <https://ar.cce.af.mil/>.

Public participation for the PP will be sought during a public comment period and public meeting. A notification announcing the start of the public comment period and the date and time for the public meeting will be published in the Dayton Daily News at least 10 days prior to the meeting.

The DAF may modify the Preferred Alternative or select another response action presented in this plan based on new information or public comments. The public is, therefore, encouraged to review and comment on the alternative presented for LF512 in this PP. After public comments regarding this PP are received, evaluated, and resolved, a Record of Decision (ROD) will be published to document the No Action remedial alternative (USEPA, 1999).

2.0 PROJECT SITE BACKGROUND

LF512 was the site of a former oil sump pit used to store used oils from engine maintenance operations conducted in Building 30013. A more detailed view of the site is provided in **Figure 2**. The usage of the sump was discontinued in 1985, and the sump was abandoned in place by filling with sand. In 1990, visual evidence of hydrocarbon contamination was observed at the surface emanating through the asphalt from the former sump pit just north of Building 30013, across the pavement, and in three existing monitoring wells at the former sump pit site (WPAFB, 1990a). As part of initial release and response in 1990 and 1991, the sump was uncovered, and 116 gallons of contaminated sands and oily liquids were removed, and four monitoring wells were installed. Analytical results indicated toluene, ethylbenzene, xylenes, TPHs, and lead were present in site soils (WPAFB, 1990b). Free product was observed in MW-4 in 1990 and free product recovery continued at MW-4 until January 1991 when it was discontinued due to diminishing recovery rates. Free product characterization showed the product consisted of lubricating oils and diesel fuel. In 1991, WPAFB proceeded with the performance of a non-CERCLA based Feasibility Study (FS) to address soil contaminated with benzene, toluene, ethylbenzene, and xylenes (BTEX) and total petroleum hydrocarbons (TPH) completed at the direction of the Ohio Bureau of Underground Storage Tank Regulations (BUSTR). The FS investigation included installation of additional soil borings and monitoring wells. The investigation also included a gridded soil gas survey to delineate BTEX and provide an estimated area of BTEX and TPH in soil and groundwater at the site. The findings of the FS investigation concluded that an isolated perched aquifer was present in the immediate vicinity of the sump pit. The recommendations of the FS were to address the soil and groundwater contamination, including dewatering the perched aquifer, addressing soil vapor contamination, removing lead-impacted soil, and treating groundwater (Aptim, 2020).

A BUSTR corrective action plan was developed in 1991 to remove the contaminated perched water table and to use vapor extraction with bioventing to address BTEX and TPH contamination in soil (Science Applications International Corp.[SAIC], 1991). Removal action activities were performed from June 1992 through March 1994 (Kelchner, 1994) and began with dewatering the perched water table, followed by the excavation and removal of the sump. Following sump removal, implementation of the bioventing groundwater treatment remedy began and operated from December 1992 through November 1993. In 1994, further excavation was completed to include an area approximately 45 feet (ft) by 35 ft around the former sump pit area. During the 1994 removal action, buried debris consisting of stained soils, concrete block and rubble, pipes, wood, conduit, wires, paint cans, and three underground storage tanks were uncovered in the excavation area. Affected soil and debris was removed to a depth of approximately 12 to 15 ft below ground surface (bgs) and replaced with clean fill (Versar, 2020). According to historical documentation, samples from the sidewalls and bottom of the excavation were analyzed for BTEX, TPH, polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs).

Although the LF512 sump pit area was not identified as an Installation Restoration Program (IRP) site, it was carried forward into the OU10 RI conducted in 1994 (CH2M Hill, 1995) for further groundwater investigation. The OU10 RI determined LF512 did not appear to be a source of VOCs, specifically PCE affecting groundwater and exposure to contaminated soil appeared to be limited.

As the corrective action was conducted under BUSTR, an open case remained that required a BUSTR Tier 1 Investigation. The Tier 1 Investigation was conducted in 2013 and included investigation of soil and groundwater. Soil samples and additional monitoring wells were installed at the site. Results of the investigation found trace concentrations of TPH in the soil and PCE was present in the lowest soil sample horizon associated with the water table. Groundwater monitoring results noted concentrations of PCE exceeding the MCL consistent with the OU10 RI (Versar, 2014).

In March 2014, the OEPA conducted a review of the site and existing data and determined that based on the landfill material observed in the excavation, the site should be regulated under CERCLA and not BUSTR (Versar, 2020).

In accordance with requirements of the Defense Environmental Restoration Program (DERP) and CERCLA process, an RI was conducted which included a baseline human health risk assessment (HHRA) and ecological risk assessment (Versar, 2020). A Focused Feasibility Study (FFS) was completed in 2020 (Aptim, 2020) and was revised in 2024 (CTL, 2024) to include an update of the HHRA to evaluate the hypothetical future resident scenario and assess an unlimited use/unrestricted scenario.

Public participation activities associated with the site have been limited to presentations at the annual meeting of the Restoration Advisory Board. The RAB provides an opportunity for public comment on proposed activities.

3.0 PROJECT SITE CHARACTERISTICS

LF512 is approximately 0.59 acres in size and is located northeast of Building 30013 in an industrial portion of WPAFB. The majority of the site is covered with asphalt and/or concrete and serves as a parking area for the occupants of Building 30013. A small portion of the site is grass-covered (Versar, 2020). No roads are present on the site. Van Patton Drive borders the site to the north (**Figure 2**).

The former sump, constructed in 1961, was originally a concrete steam valve box (SAIC, 1991) for maintenance operations conducted in Building 30013. In 1973, the steam valves and piping were removed from the concrete steam valve box and the box was subsequently converted into a sump pit. There are no known drawings of the former sump pit; however, its reported dimensions were 2 ft 7 inches by 2 ft 7 inches wide by 2 ft 6 inches deep, with an approximate volume of 140 to 150 gallons. The sump pit was used to collect oils, lubricants, and fuel from maintenance operations within Building 30013. The used oils, lubricants, and fuels were manually placed into the sump. The usage of the sump was discontinued in 1985, and the sump was abandoned in place by filling with sand (Versar, 2020).

There is no fencing or other access controls specific to the location of the site; however, access to WPAFB requires admittance through a secure gate and there is a secure perimeter fence around the installation. As noted above, the majority of the site is covered with asphalt and/or concrete, and only a small portion of the site is grass-covered (Versar, 2020).

3.1 Primary Contaminant Sources

The primary contaminant source at LF512 was an uncontrolled release from the sump pit into soils and groundwater. Based on the historical release from the former sump pit at LF512, subsequent investigations and remedial actions of the former sump pit, and broader range investigations for Area A (i.e., the OU10 RI), the target analytes for soil and groundwater at LF512 consist of VOCs, SVOCs, and TPH. In addition, while no evidence existed to indicate the presence of pesticides, herbicides, metals or polychlorinated biphenyls (PCBs), these compounds could not be categorically ruled out. Therefore, these compounds were evaluated in the RI at specific locations associated with the former sump pit to determine if they were present at the site.

The former excavation areas were also sampled as part of the RI since drums and other debris were noted in these locations in 1994. All target analytes were sampled for during the 2017 RI.

3.2 Soil

In the RI, analytical data for soil was compared to May 2019 USEPA Regional Screening Levels (RSLs) for industrial soil. Soil samples were also screened against USEPA risk-based soil screening levels (SSLs) and MCL-based SSLs to evaluate the potential for leaching from soil to groundwater.

The COPCs in surface and subsurface soil included several PAHs and metals. None of the surface soil sample results exceeded the RSLs for composite worker soil. PAHs found in the surface soil markedly decreased in concentration with depth and were not detected in soil at the groundwater interface. The PAH, benzo(a)pyrene, most commonly exceeded the SSL but was not detected in groundwater. For metals, arsenic and manganese most commonly exceed the SSLs. Arsenic concentrations in soil were attributed to background and arsenic was not identified as a COPC in groundwater. Manganese concentrations in soil

were present above the SSL across the site and manganese was identified as a COPC in groundwater; however, manganese was found to be elevated in groundwater upgradient of the site and LF512 was determined not to be the source. VOCs were infrequently detected in LF512 soils. PCE was detected in soils primarily in the deepest sample interval consistent with the groundwater interface. The location of the PCE detections correlates to the PCE originating from the groundwater. Even at depths of 25 to 30 ft bgs, the groundwater exerts a vapor pressure and evaporates into the vadose zone, carrying with it any VOCs, such as PCE. Concentrations of PCE just above the groundwater interface were within a range of 1.1 to 11.8 micrograms per kilogram ($\mu\text{g/kg}$). While these values are in the range of the SSLs, the source of the PCE at these depths has been determined to be a result of the underlying impacted groundwater (Versar, 2020).

3.3 Groundwater

A total of nine groundwater monitoring wells are located at LF512, including three monitoring wells installed during the RI. Groundwater samples were collected during two separate rounds in August 2017 and November 2017. Groundwater occurs at approximately 25 ft bgs and flows to the west-southwest. The LF512 monitoring well network provides representative groundwater data for the site and includes wells upgradient (MW-12, MW-13, and MW-17), cross-gradient (MW-14, MW-16, and MW-18), and downgradient (MW-7 and MW-19) of the former excavation area, and one well within the former excavation (MW-15) (**Figure 4**). Groundwater samples submitted to the laboratory were analyzed for VOCs, SVOCs, PAHs, TPH, and total and dissolved metals.

Analytical data from RI activities were compared to USEPA RSLs for Tap Water and MCLs. The only compounds detected in site groundwater exceeding the tap water RSLs were chloroform (non-detect to 1.9 micrograms per liter ($\mu\text{g/L}$) compared to a tap water RSL of 0.2 $\mu\text{g/L}$, and below the MCL of 80 $\mu\text{g/L}$), naphthalene (non-detect to 1.2 $\mu\text{g/L}$ compared to a tap water RSL of 0.17 $\mu\text{g/L}$, no MCL for this constituent), and arsenic (non-detect to 0.74 $\mu\text{g/L}$ compared to a tap water RSL of 0.052 $\mu\text{g/L}$ and below the MCL of 10 $\mu\text{g/L}$). None of these constituents exceeded their respective MCLs. PCE was detected in every site well at concentrations between 0.81 and 10.1 $\mu\text{g/L}$ and exceeded the MCL of 5 $\mu\text{g/L}$ in eight of the nine monitoring wells (Versar, 2020). The PCE results from the 2017 RI are provided on **Figure 3**.

Concentrations of PCE and manganese in groundwater were determined to be part of a large diffuse PCE groundwater plume within Operable Unit 10 (OU10) attributed to upgradient sources (**Figures 3, 4 and 5**). OU10 covers a large portion of the eastern half of Area A at the WPAFB and includes the area of LF512. Groundwater at OU10 is subject to a long-term groundwater monitoring program, which includes semiannual and annual VOC monitoring in accordance with the Record of Decision (ROD) for the Groundwater Operable Unit (GWOU) (WPAFB, 1999) through a GWOU Basewide Monitoring Program (BMP) (CTL, 2024).

4.0 SCOPE AND ROLE OF RESPONSE ACTION

The HHRA and HHRA update, discussed in Section 5.0, found that exposure to soil at LF512 does not present an unacceptable risk to human health or the environment under current or future scenarios. Based on this, and detailed evaluations of the remedial alternative present in the FFS and summarized in Sections 7, 8, and 9 of this PP, the Preferred Alternative for LF512 is No Action. It is anticipated that this Preferred Alternative will constitute the final response action for LF512.

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5.0 SUMMARY OF RISKS

This section summarizes the findings of the HHRA and Ecological Risk Assessment (ERA) as evaluated and documented by the RI (Versar, 2020) and the FFS (CTL, 2024). The HHRA and ERA identified no unacceptable risks to human or ecological receptors at LF512.

5.1 Human Health Risks

A HHRA was conducted as part of the RI and FFS to evaluate potential risks to human health associated with exposures to COPCs detected in soil at LF512.

COPCs identified at LF512 include:

- Surface Soil (0 to 2.5 ft bgs): Benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, aluminum, iron, manganese, and thallium.
- Aggregate Soil (surface and subsurface soil) (0 to 15 ft bgs): Benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, aluminum, arsenic, cadmium, iron, manganese, thallium, and vanadium. (Note: Aggregate refers to the combination of surface and subsurface soil.)
- Groundwater: Chloroform, PCE, dibenzofuran, naphthalene, arsenic, manganese, mercury, and thallium.

LF512 is currently a parking lot with a small plot of grass, and it is not zoned for residential use. The current and reasonably anticipated future land use activities at LF512 is, and is expected to remain, industrial in nature. Commercial/industrial receptors include commercial/industrial workers and construction workers. In order to evaluate a UU/UE scenario, residential risk was also evaluated.

Potential exposure pathways for the receptors at LF512 include:

1. Direct contact with soil (surface and subsurface),
2. Inhalation of fugitive dust and volatilized chemicals from soil in outdoor air, and
3. Inhalation of volatile chemicals in groundwater migrating to indoor air via vapor intrusion and volatile chemicals from groundwater migrating to outdoor air within a trench.

The baseline HHRA for current use scenarios (i.e., commercial/industrial scenarios) showed the cumulative cancer risk for the indoor site worker to be 2×10^{-7} and the cumulative cancer risk for the outdoor site worker to

A Superfund human health risk assessment estimates what risks are posed to people using the site. It provides the basis for taking action and identifies if contaminants and exposure pathways need to be addressed by remedial action.

The baseline risk assessment undertakes a four-step process:

Step 1: Analyze Contamination

Step 2: Estimate Exposure

Step 3: Assess Potential Health Dangers

Step 4: Characterize Site Risk

An exposure pathway describes a mechanism by which a population or individual may be exposed to chemicals present at a site.

The risks are probabilities that are expressed in scientific notation (e.g., 1×10^{-6}). An excess lifetime cancer risk of 1×10^{-6} indicates that an individual exposed at the reasonable maximum estimates has a 1 in 1,000,000 chance of developing cancer as a result of site-related exposure. This is referred to as an "excess lifetime cancer risk" because it would be in addition to the risks of cancer individuals face from other causes such as smoking or exposure to too much sun.

The potential for noncancer effects is evaluated by comparing an exposure level over a specified time period (e.g., life-time) with a ratio of exposure to toxicity called a hazard quotient. The total noncancer risk is referred to as the hazard index. A hazard index of greater than 1 indicates that site-related exposures may present a risk to human health.

be 4×10^{-7} . These values are below the lower end of the cancer risk management range (1×10^{-6}). The hazard index (HI) for current use scenarios showed the HI for the indoor site worker to be 0.08 and the outdoor site worker to be 0.1. These values are below the benchmark of 1, indicating non-cancer adverse health effects are unlikely. For the potential future construction worker, the cumulative cancer risk is 2×10^{-7} , and the HI is 0.3, which are below the lower end of the cancer risk management range at 1×10^{-6} and below the non-cancer HI threshold of 1.

The HHRA for the hypothetical future resident showed a cumulative cancer risk to be 4×10^{-6} , which is within the cancer risk management range of 10^{-6} to 10^{-4} . The HI for a hypothetical future resident was estimated to be 2. Although this exceeds the HI threshold of 1, the target organ-specific hazards were calculated and none of the target organ-specific HI values were greater than 1. Therefore, adverse health effects for a future hypothetical resident are unlikely.

Based on the HHRA, exposure to soil at Site LF512 does not present an unacceptable risk under a UU/UE scenario. It is DAF's current judgment that the Preferred Alternative identified in this Proposed Plan is protective of public health and welfare and the environment from actual or threatened releases of pollutants or contaminants from this site.

5.2 Ecological Risks

LF512 lies in an industrial area. The site is predominantly covered by pavement and concrete and there are no important ecological resources on site. Based on the lack of ecological resources on site, no further ecological evaluation was warranted.

6.0 REMEDIAL ACTION OBJECTIVES

Remedial Action Objectives (RAOs) are site-specific cleanup targets established based on the nature and extent of contamination, potential for human or environmental exposure, and applicable or relevant and appropriate requirements (ARARs). No RAOs are required for LF512 under the No Action remedial alternative for soils.

The following RAOs identified for the groundwater in the GWOU ROD (WPAFB, 1999) are applicable to groundwater for OU10 as part of the GWOU:

- Return usable groundwater to its beneficial use within a reasonable timeframe.
- Prevent off-site migration and ingestion of inorganic chemicals of concern (COCs) in groundwater that exceed remediation goals.
- Prevent off-site migration and ingestion of organic (COCs) in groundwater that exceed remediation goals.
- Monitor groundwater areas that exhibit sporadic (spatial or temporal) exceedance of remediation goals.

Because impacted groundwater at LF512 is located within the OU10 plume, and the RI results indicate the site is not contributing contaminants to groundwater, the groundwater RAOs apply to the GWOU and are not specifically applicable to LF512. Based on the groundwater result presented in the RI and the GWOU BMP, groundwater at the site exceeds the drinking water MCL of 5 µg/L for PCE, which is the only COC identified in groundwater beneath LF512. Any remedial actions required for groundwater beneath LF512 will be addressed under GWOU and its associated ROD.

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7.0 SUMMARY OF REMEDIAL ALTERNATIVES

One remedial alternative was evaluated by the FFS, No Action. No RAOs are required for the No Action alternative for soils. Based upon the HHRA performed in the RI and the HHRA update presented in the FFS exposure to soil at LF512 does not present an unacceptable risk to human health or the environment under current or future scenarios. Therefore, no action is required for soil at LF512. Under this alternative, LUCs are not required, and no remedial action would be performed at LF512, and the site would remain physically unchanged. In addition, no five-year reviews (FYRs) are required as soils at LF512 are suitable for UU/UE. Although PCE is present at concentrations above the MCL in groundwater beneath LF512, the contamination is attributable to upgradient sources. Since the groundwater beneath LF512 is part of the GWOU, it is subject to LUCs in accordance with the GWOU ROD.

The alternative is described below and was evaluated in the FFS based on the nine NCP criteria discussed in Section 8 of this PP.

7.1 Alternative # 1 - No Action

This alternative assumes no action would be taken. This alternative meets the threshold criteria based on the HHRA's which indicate that there are no unacceptable risk levels for current, future, and hypothetical residential use of the site. The existing GWOU ROD addresses groundwater at WPAFB where concentrations exceed MCLs. WPAFB does not anticipate abandoning monitoring wells at LF512 as several are sampled as part of the long-term monitoring program and are considered part of the GWOU.

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8.0 EVALUATION OF ALTERNATIVES

Section 300.430(e) of the NCP lists nine criteria against which each remedial alternative must be assessed. The acceptability or performance of each alternative against the criteria is evaluated individually so that relative strengths and weaknesses may be identified. The nine criteria used to evaluate the five remedial alternatives proposed for LF512 are segregated into three groups (threshold, balancing, and modifying) as summarized in **Table 1**.

Table 1 – Remedial Alternative Evaluation Criteria

Threshold Criteria	
1.	<i>Overall Protection of Human Health and the Environment</i> determines whether an alternative eliminates, reduces, or controls threats to public health and the environment.
2.	<i>Compliance with ARARs</i> evaluates whether the alternative meets federal and state environmental statutes, regulations, and other requirements that are either applicable or relevant and appropriate to the particular circumstances at the site.
Balancing Criteria	
3.	<i>Long-Term Effectiveness and Permanence</i> considers the ability of an alternative to maintain protection of human health and the environment over time.
4.	<i>Reduction of Toxicity, Mobility, or Volume through Treatment</i> evaluates an alternative's use of treatment to reduce the harmful effects of principal contaminants, their ability to move in the environment, and the amount of contamination present.
5.	<i>Short-Term Effectiveness</i> considers the amount of time until the remedy effectively protects human health and the environment at the site, the length of time needed to implement an alternative, and the risks the alternative poses to human receptors and the environment during implementation.
6.	<i>Implementability</i> considers the technical and administrative feasibility of implementing the alternative, including factors such as the relative availability of goods and services.
7.	<i>Cost</i> includes estimated capital and annual operations and maintenance costs. Cost estimates are expected to be accurate within a range of +50% to -30%.
Modifying Criteria	
8.	<i>State Acceptance</i> considers whether the state agrees with the remedial/investigative work completed at the site to date and the recommendations of the RI/FFS Reports, as documented in this PP.
9.	<i>Community Acceptance</i> considers whether the local community agrees with the DAF Preferred Alternative for the site. Comments received on the PP are an important indicator of community acceptance.

Threshold criteria are requirements that each alternative must meet in order to be selected. Balancing criteria are used to weigh major trade-offs among alternatives. Modifying criteria may be considered to the extent that information is available during the FFS, but can only be fully considered after public comments on the PP are received and addressed. In the final balancing of trade-offs among alternatives, upon which the final remedy selection is based, modifying criteria are of equal importance to the balancing criteria. A detailed analysis of the remedial alternative in relation to these nine criteria was completed in the FFS (CTL, 2024) and is summarized for LF512 in this section.

8.1 Overall Protection to Human Health and the Environment

LF512 lies in an industrial area. The site is predominantly covered by pavement and concrete and there are no important ecological resources on site. Based upon the results of the HHRA and HHRA update, exposure

to soil at LF512 does not present an unacceptable risk to human health or the environment under current or future scenarios. The existing GW0U ROD addresses groundwater at WPAFB where concentrations exceed MCLs.

8.2 Compliance with Applicable or Relevant and Appropriate Requirements

There are no chemical-specific, location-specific, or action-specific ARARs identified for this remedial alternative.

8.3 Long-Term Effectiveness

No Action is long-term effective and permanent as no unacceptable risk to human health, or the environment are present under current, future, or hypothetical scenarios, and the site meets the criteria for UU/UE.

8.4 Reduction of Toxicity, Mobility, or Volume

This alternative does not employ any treatment that would reduce the toxicity, mobility, or volume of the COPCs. However, the site does not present an unacceptable risk to human health or the environment under current or future scenarios and meets the criteria for unlimited UU/UE.

8.5 Short-Term Effectiveness

Implementation of this alternative does not pose any additional risks to the community, the workers, or the environment, because there are no remedial activities associated with it.

8.6 Implementability

There are no implementability concerns posed by this option because the threshold criteria have been met.

8.7 Cost

The total present worth cost, and capital cost of the No Action Remedial Alternative are estimated to be \$0.00.

8.8 State Acceptance

The OEPA provided concurrence with the findings of the FFS (CTL, 2024) in a letter dated December 26, 2024. However, final State acceptance cannot be assessed until comments on the PP are received. Modifying criteria (State and Community Acceptance) are considered in the remedy selection process.

8.9 Community Acceptance

Community acceptance cannot be assessed until comments on the PP are received. Modifying criteria (State and Community Acceptance) are considered in the remedy selection process.

9.0 PREFERRED ALTERNATIVE

The Preferred Alternative recommended by this PP for addressing site contamination is No Action.

Soil at the site does not present an unacceptable risk to human health or the environment under current or future scenarios and meets the criteria for unlimited use/unrestricted exposure. Therefore, no action is required at LF512 to address soil at the site. Groundwater beneath WPAFB, including beneath LF512, is addressed under the GWOU ROD.

The DAF expects the Preferred Alternative to satisfy the following statutory requirements of CERCLA §121(b): (1) be protective of human health and the environment; (2) comply with ARARs; and (3) be cost-effective. DAF in coordination with the USEPA and OEPA, is recommending no action as the preferred alternative for soil at LF512. The USEPA and OEPA concur with DAF's recommendation for no action as the preferred alternative as presented in the FFS (CTL, 2024) as presented in the concurrence letters from the USEPA dated December 3, 2024, and the OEPA dated December 26, 2024.

The Preferred Alternative may change in response to public comment.

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10.0 COMMUNITY PARTICIPATION

In accordance with the NCP, an AR File has been established for WPAFB. The contents of this file include a variety of written materials, correspondence, data reports, assessments, plans, newspaper articles, notices, and fact sheets. The AR website contains electronic copies of the PP and supporting documentation on which decisions have been based, and is available at the following location:

Website: <https://ar.cce.af.mil/>
From top menu **Select Active Duty**
From Installation List **Select Wright-Patterson AFB, OH**
Press **Search** to load all WPAFB available documents

Public comments will be carefully considered before the alternative is selected and approved. Public participation for the PP will be sought during a public comment period and public meeting. A notification announcing the start of the public comment period and the date and time for the public meeting will be published in the Dayton Daily News at least 10 days prior to the meeting. Representatives from WPAFB will be present at the public meeting to explain the PP, answer basic questions, accept public comments to be addressed and documented in the subsequent DD for LF512 which will document the final selected remedy for the site. A transcript of the public meeting and a copy of the transcript will be placed in the AR file. The DAF will review and consider the public's input as part of the process before finalizing the Decision. Comments received on this Proposed Plan during the public meeting and comment period will be summarized, and responses will be provided in the Responsiveness Summary section of the DD. The DD will memorialize the Decision and will be included in the AR file.

The DAF is seeking comments on the actions recommended in this Proposed Plan, which will be considered prior to a final decision. Comments will be accepted during a 30-day public comment period running from October 1 through October 30, 2025. Written comments must be postmarked no later than the last day of the public comment period.

Written comments (Attachment 1) or inquiries can be mailed to:

88 ABW/Public Affairs,
5135 Pearson Road, Building 10, Room 252
WPAFB, OH 45433

or emailed to 88abw.pa@us.af.mil.

In addition, a public meeting will be held in person at the Twin Base Golf Club on October 6, 2025, at 6:00 pm to explain these proposed actions and to answer questions and accept written comments.

Comments or questions concerning this PP, or the Preferred Alternative recommended for LF512, can also be sent to addressed to Mr. Joseph Ferentz, as follows:

Joseph Ferentz, Remedial Project Manager
Air Force Civil Engineer Center (AFCEC)
Bldg. 20028
2145 Monahan Way
Wright-Patterson AFB, OH 45433

Mr. Ferentz can also be reached by telephone at (937) 257-8591 or by email at joseph.ferentz.1@us.af.mil

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11.0 REFERENCES

- Aptim, 2020. *Focused Feasibility Study, LF512 Building 30013 Sump Pit Area, Wright-Patterson Air Force Base, Ohio*. October.
- CH2M Hill, 1995. *Remedial Investigation Report Operable Unit 10 Landfill No. 13 Central Heating Plant 3 and Associated Battery Burial Site, TCE/PCE Groundwater Plume, and Related Potential Source Areas, Volumes 1, 2, and 3*. December 1995.
- CTL, 2024. *Focused Feasibility Study – Revised, LF512 Building 30013 Sump Pit Area, Wright-Patterson Air Force Base, Ohio*. December.
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- United States Environmental Protection Agency (USEPA), 1999. *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*. July.
- Versar, 2014. *Draft BUSTR Tier 1 Investigation Form 2012, LF512 Facility ID #29003894, Wright-Patterson AFB*. February 2014.
- Versar, 2020. *Final Remedial Investigation Report, LF512 Building 30013 Sump Pump Area, Wright-Patterson Air Force Base; Dayton, OH*. May.
- Wright-Patterson Air Force Base (WPAFB), 1990a. *Suspected Release Report*. September 1990.
- WPAFB, 1990b. *Underground Storage Tank (UST) Release. Initial Corrective Action*. September 1990.
- WPAFB, 1999. *Final Record of Decision, Groundwater Operable Unit, Basewide Groundwater Monitoring Program, Wright-Patterson Air Force Base, Ohio*.

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12.0 GLOSSARY

Administrative Record (AR): The documents that form the basis for the selection of a response action compiled and maintained by the lead agency.

Chemical of Concern (COC): A hazardous substance, pollutant, or contaminant that presents an unacceptable risk to human health or the environment at a site.

Chemical of Potential Concern (COPC): Chemicals detected in environmental media that may cause an unacceptable risk to human health or the environment at a site.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): The federal law that guides cleanup of sites that contain hazardous substances, pollutants, or contaminants that present an unacceptable risk to human health or the environment.

Environmental Response Program (DERP): A program authorized by the Congress in 1986 that promotes and coordinates efforts for the evaluation and cleanup of contamination at Department of Defense installations and Formerly Used Defense Sites.

Feasibility Study (FS): An extensive study document that evaluates all possible remedies for remediating CERCLA sites. The FS utilizes data generated during previous investigations and compiled by the RI to serve as the basis for selecting the most appropriate Preferred Alternative for a CERCLA site.

Five-Year Reviews (FYR): Under CERCLA, periodic reviews are required to evaluate whether a remedy selected for a contaminated site, where hazardous substances remain at levels that potentially pose an unacceptable risk, remains protective of human health and the environment. Such reviews must be conducted every 5 years or may be conducted more frequently, if necessary, regardless of the alternative selected.

Groundwater: Water in a saturated zone or stratum beneath the surface of land or water.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP): The

federal regulations that set procedures for implementing cleanup actions under CERCLA.

Preferred Alternative: The alternative that, when compared to other potential alternatives, was determined to best meet the CERCLA evaluation criteria and is proposed for implementation at a site.

Proposed Plan (PP): A public document that solicits public input on a recommended remedial alternative to be used at a CERCLA site. The recommended remedial action could be modified or changed based on public comments and community concerns.

Public Comment Period: A reasonable period of time, of at least 30 days, for the public to review and comment on various documents and actions.

Remedial Investigation (RI): An investigation that determined the nature and extent and composition of contamination at a CERCLA site. It is used to assess the types of remedial options that are developed in the feasibility study.

Record of Decision (ROD): A public document that explains the remedial alternative to be used.

Semi-volatile Organic Compounds (SVOCs): A group of organic compounds that tend to have a higher molecular weight and higher boiling point temperature. The health effects of these chemicals depend on their chemical nature and on the degree of exposure.

Volatile Organic Compounds (VOCs): A group of organic chemicals that readily produce vapors at ambient temperatures. Some of these chemicals may have short- and long-term adverse health effects.

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FIGURES

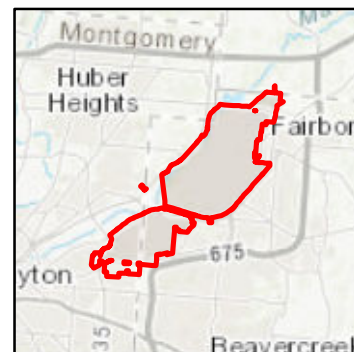
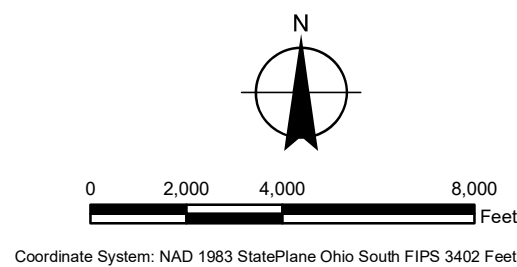
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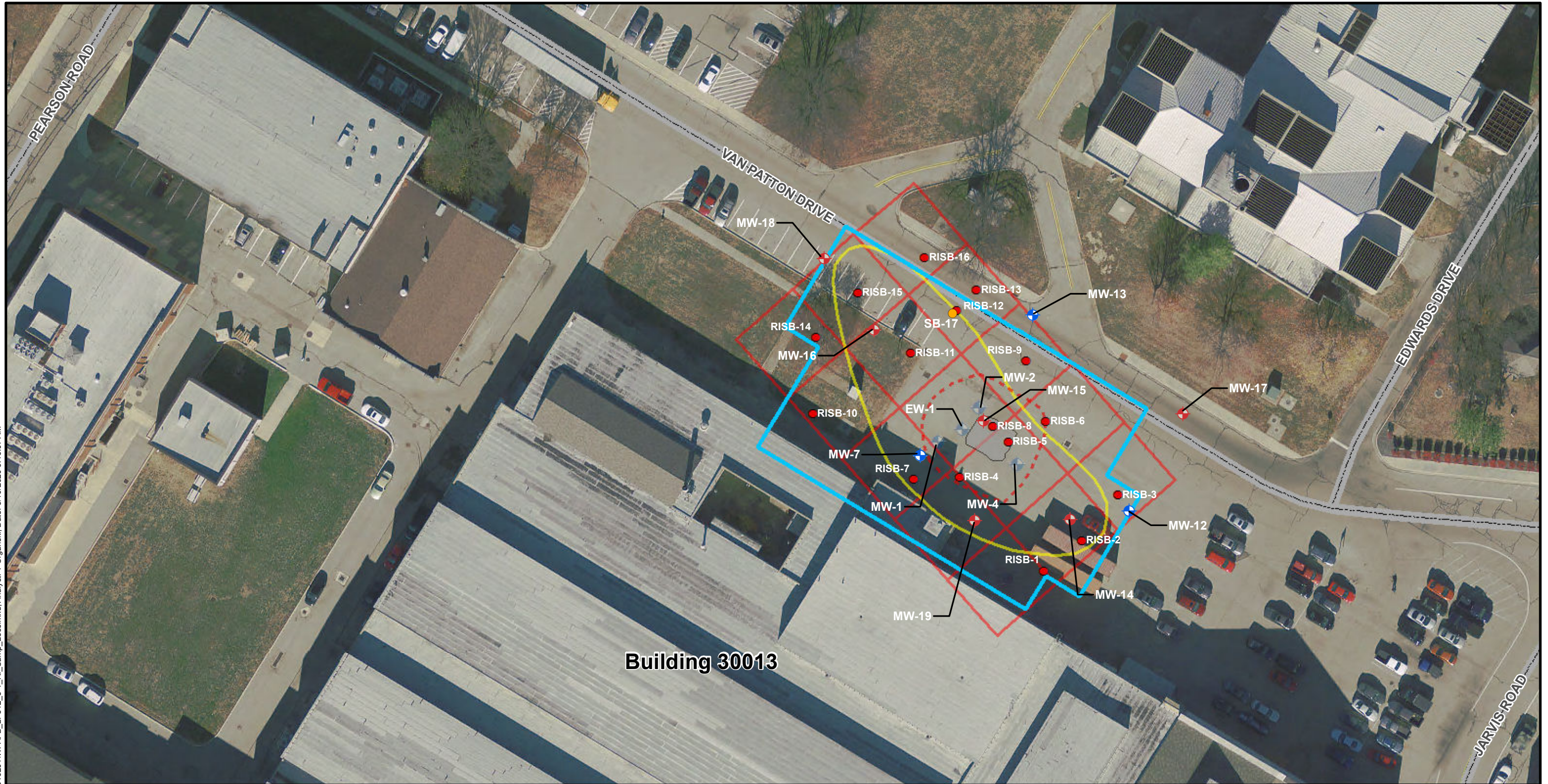
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar, Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Legend**
- LF512 Site Boundary
 - Operable Unit 2
 - Operable Unit 10
 - Installation Boundary



WRIGHT-PATTERSON AIR FORCE BASE, OHIO	
Focused Feasibility Study Site LF512, Building 30013	
FIGURE NUMBER 1	SITE LOCATION MAP
 CTL Environmental, LLC 34705 W 12 Mile Rd, Farmington Hills, Michigan 48331	

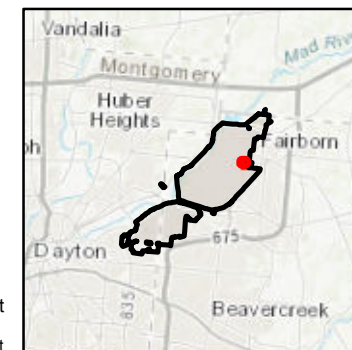
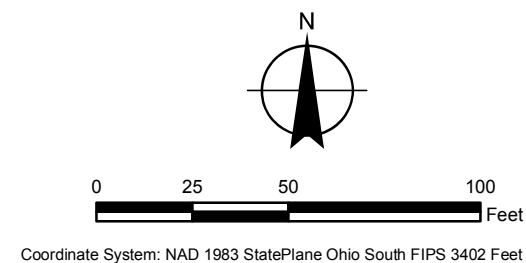
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Building 30013

Legend

- Monitoring Well (Installed 2013-2017)
- Monitoring Well (Installed 1990-1991)
- BUSTR Soil Boring (2013)
- Abandoned Monitoring Well (Installed 1990-1991)
- Soil Boring (Installed August 2017)
- LF512_Boundary
- Sump Pit Excavation Area (1994)
- Initial Response Excavation (1990)
- Estimated TPH Contamination Plume, 1991
- Sample Grid 2017
- Road
- Installation Boundary



WRIGHT-PATTERSON
AIR FORCE BASE,
OHIO

Focused Feasibility Study
Site LF512, Building 30013

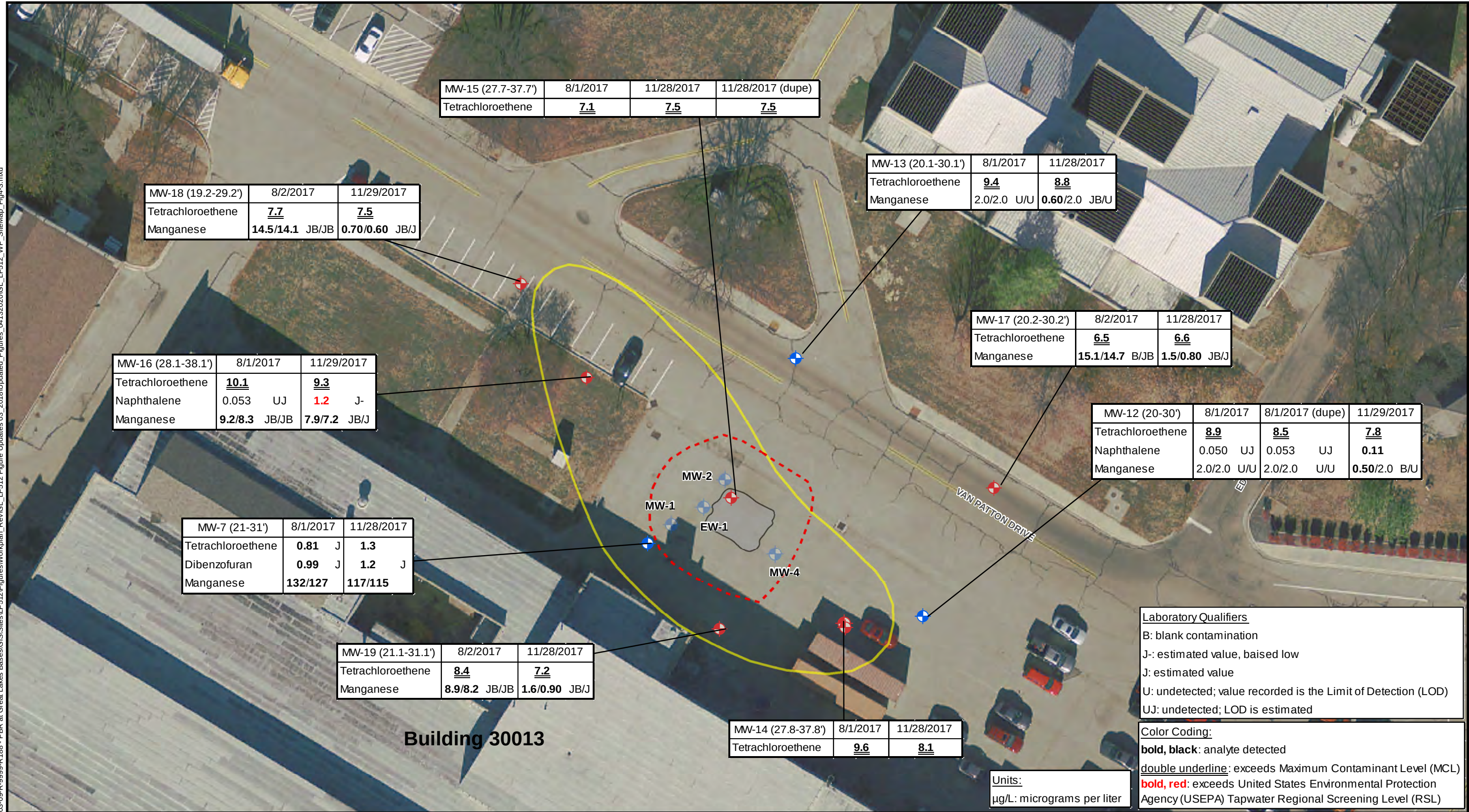
FIGURE
NUMBER
2

REMEDIAL INVESTIGATION SAMPLE LOCATIONS



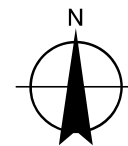
CTL Environmental, LLC
34705 W 12 Mile Rd, Farmington
Hills, Michigan 48331

K:\111900 AFCEE WERC 09 Contract\FA9903-09-P-9999-R188 - PBR at Great Lakes Bases\GIS\Sites\LF512\Figures\Workplan_Rev\GL_LF512 Figure Updates 03_2018\Updated_Figures_04132020\GL_LF512_WP_SiteMap_Fig4-3.mxd



Legend

- Monitoring Well (Installed 2013-2017)
- Monitoring Well (Installed 1990-1991)
- Abandoned Monitoring Well (1990-1991)
- Sump Pit Excavation Area (1994)
- Estimated TPH Contamination Plume, 1991
- Initial Response Excavation (1990)



Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
Aerial; USGS Ortho Imagery 2009 - 1 Meter

WRIGHT-PATTERSON AIR FORCE BASE, OHIO

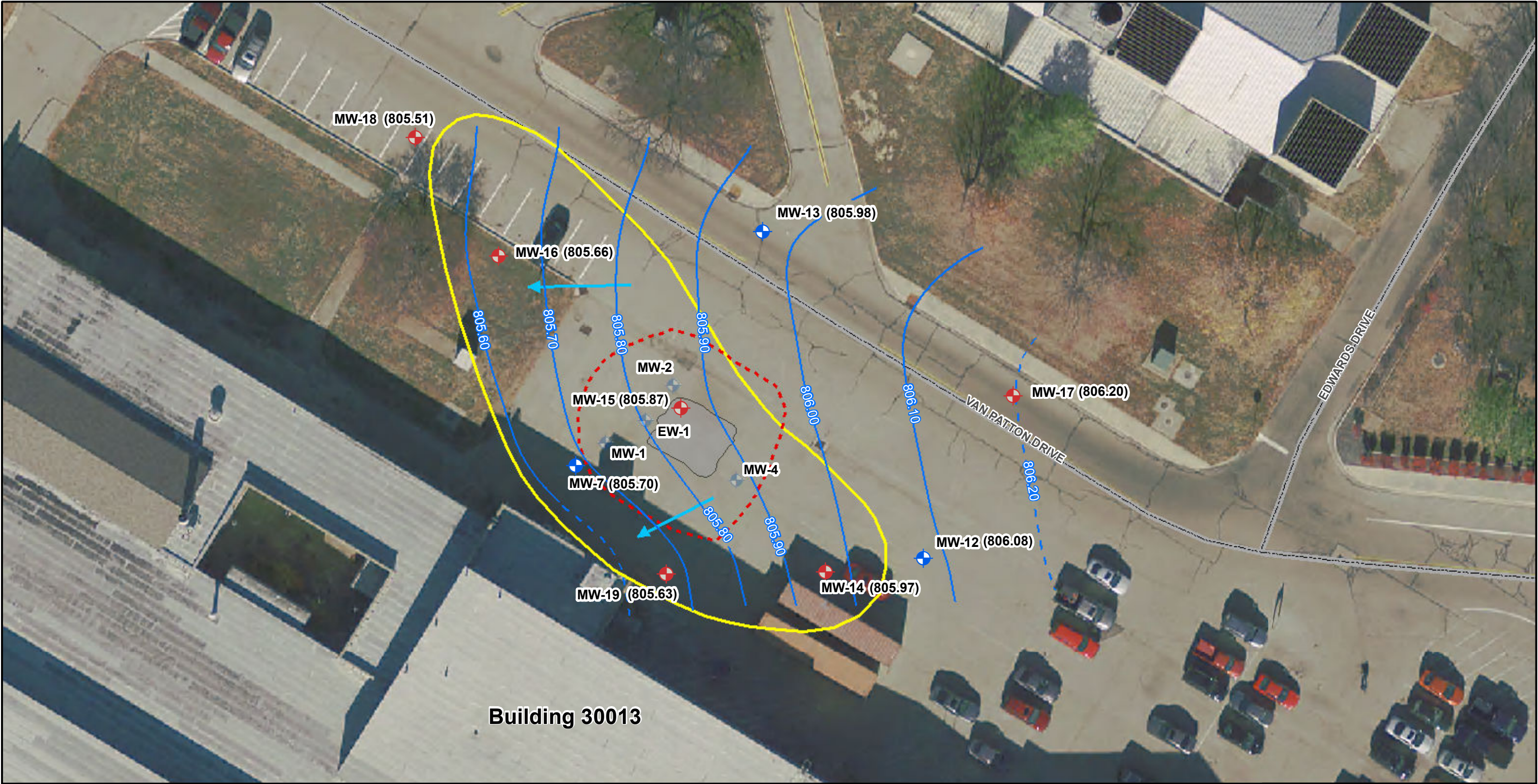
FIGURE
NUMBER
3

Detected Chemicals of Potential Concern in Groundwater LF512 Building 30013 Sump Area



CTL Environmental, LLC
34705 W 12 Mile Rd, Farmington
Hills, Michigan 48331

G:\WPAPFB\GIS_Documents\Project_Maps\600454\01010201\WPAPFB_LF512_2-2_Pot_Map_Aug2017.mxd; Analyst: T. Organski; Date: 6/10/2020 9:47:48 AM

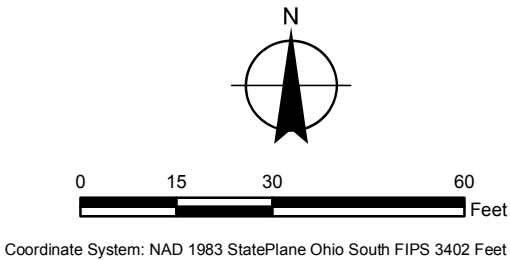


Legend

- Monitoring Well (Installed 2013-2017)
- Monitoring Well (Installed 1990-1991)
- Abandoned Monitoring Well (1990-1991)
- Potentiometric Surface Contour
- Inferred Potentiometric Surface Contour

- Approximate Groundwater Flow Direction
- Sump Pit Excavation Area (1994)
- Estimated TPH Contamination Plume, 1991
- Initial Response Excavation (1990)

Notes:
1. Groundwater elevation data collected 1 August 2017
2. (805.03) Groundwater Elevation in feet, NAVD 88



WRIGHT-PATTERSON AIR FORCE BASE, OHIO	
Focused Feasibility Study Site LF512, Building 30013	
FIGURE NUMBER 4	POTENTIOMETRIC SURFACE MAP, AUGUST 2017
	CTL Environmental, LLC 34705 W 12 Mile Rd, Farmington Hills, Michigan 48331

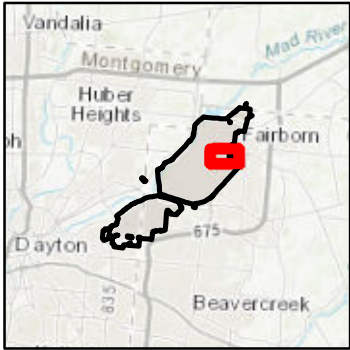
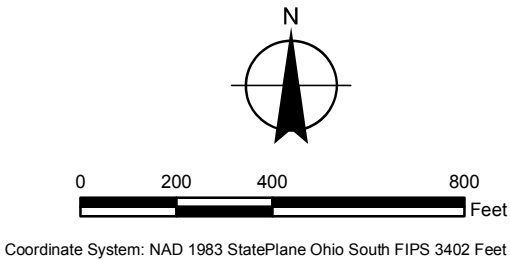
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Legend

- LF512 Site Boundary
- Operable Unit 2
- Operable Unit 10
- Sump Pit Excavation Area (1994)
- Groundwater Flow Direction
- PCE Isopleth (ppb) (dashed where inferred)
- Road
- Buildings with Numbers
- Installation Boundary
- Map Area

Note:
The PCE plume and Groundwater Flow Direction shown on this figure are from work associated with, and reported in, the Annual Report for OU10. It's inclusion here does not imply that monitoring of the OU10 plume is part of the work associated with LF512.



WRIGHT-PATTERSON AIR FORCE BASE, OHIO	
Focused Feasibility Study Site LF512, Building 30013	
FIGURE NUMBER 5	OPERABLE UNIT 10 TETRACHLOROETHENE PLUME
 CTL Environmental, LLC 34705 W 12 Mile Rd, Farmington Hills, Michigan 48331	

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ATTACHMENT 1
PUBLIC COMMENT FORM

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Attachment 1 – Public Comment Form

PLEASE USE THIS PAGE TO WRITE YOUR COMMENTS

Your input on the No Action Proposed Plan (PP) for Site LF512 at Wright Patterson Air Force Base is important to the United States Department of the Air Force (DAF). Comments provided by the public are valuable in helping the DAF select a remedy for this site. You may use the space below to write your comments.

Comments must be postmarked by October 30, 2025. Those with electronic communications capabilities may submit their comments to the DAF via the internet at the following email address: joseph.ferentz.1@us.af.mil.

Written comments can be mailed to:

88 ABW / Public Affairs,
5135 Pearson Road, Building 10, Room 252
WPAFB, OH 45433

If you have any questions about the comment period, please contact Mr. Joseph Ferentz at (937) 257-8591.

Name: _____

Address: _____ City: _____

State / ZIP: _____

Comments: _____

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