

# FINAL PROPOSED PLAN FOR SITE SD-001, AREAS 1, 2, AND 3 GUNTER ANNEX, MONTGOMERY, ALABAMA

May 2018

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## THE U.S. AIR FORCE ANNOUNCES PROPOSED PLAN FOR NO FURTHER ACTION

This Proposed Plan identifies the United States Air Force's (USAF) plan for No Further Action (NFA) at Site SD-001 Areas 1, 2, and 3, Gunter Annex. This Proposed Plan summarizes the rationale that supports NFA at the site.

The USAF is issuing this Proposed Plan as part of its public participation responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This Proposed Plan is issued on behalf of the USAF, with regulatory support from the Alabama Department of Environmental Management (ADEM).

The work conducted to date at SD-001 Areas 1, 2, and 3 has been performed under the Environmental Restoration Program (ERP). The focus of the ERP is to achieve No Further Action with Unlimited Use/Unrestricted Exposure (UU/UE) in accordance with USAF Policy.

This Proposed Plan highlights key information that can be found in greater detail in the Interim Removal Action Report (Bhate Environmental Associates, Inc. [Bhate], 2017, Proposed Administrative Record Number [AR#] 1216), and other documents contained in the AR for the Gunter Annex SD-001 site.

The USAF encourages the public to review site-related documents to gain a better understanding of the location and the investigations that were conducted.

The public is also encouraged to review and comment on this Proposed Plan. The last page of this document can be used for submitting comments.

## MARK YOUR CALENDAR!

### PUBLIC COMMENT PERIOD:

**18 June 2018 through 18 July 2018**

The USAF will accept written comments on the Proposed Plan for No Further Action during the public comment period. Please submit comments via e-mail to [eric.sharman.2@us.af.mil](mailto:eric.sharman.2@us.af.mil) or USPS at 55 LeMay Plaza South, Suite 201, Maxwell AFB, AL 36112-6335.

### PUBLIC MEETING:

A public meeting will be held if requested during the public comment period.

### ADMINISTRATIVE RECORD:

For more information on these sites, contact the Maxwell AFB Public Affairs Office at (334) 953-2014 or (334) 953-1517. The Administrative Record can be viewed at the Juliette Hampton Morgan Memorial Library, 245 High Street, Montgomery, AL 36104, (334) 240-4999 or at <http://afcec.publicadmin-record.us.af.mil/> online.

## SITE NAME, LOCATION, AND DESCRIPTION

The areas (1, 2, and 3) are associated with the Gunter Annex surface drainage system designated as site SD-001.

SD-001 is located at Gunter Annex, Montgomery, Alabama. The Annex currently occupies approximately 390 acres and is bounded to the north

# PROPOSED PLAN FOR NO FURTHER ACTION AT SD-001 AREAS 1, 2, AND 3

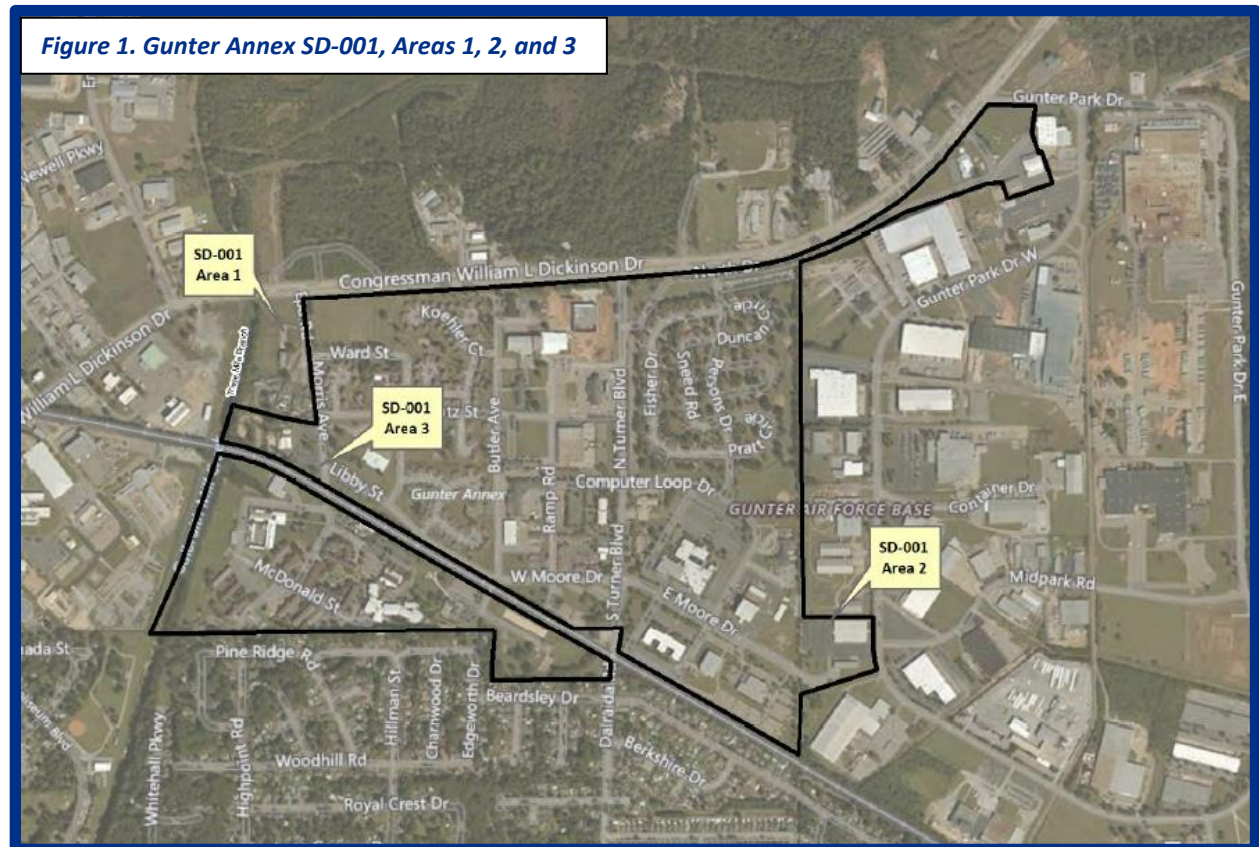
by United States (U.S.) Highway 231, to the east by Gunter Industrial Park, to the south by residential and commercial property, and to the west by a 2,000-foot (ft) stretch of Three Mile Branch Creek. Figure 1 shows the locations of SD-001 Areas 1, 2, and 3 within and adjacent to Gunter Annex.

## SITE HISTORY

Based on the *Final Surface Drainage Remedial Investigation at Maxwell AFB and Gunter Annex, Alabama* prepared by Radian International (Radian) in November 1999 (AR# 1093), data collected from surface drainage areas suggested stormwater runoff may be contributing contaminants to the sediment and surface water in Three Mile Branch Creek. The Remedial Investigation (RI) stated the most likely source of contamination was surface water runoff from Gunter Annex. Sampling was conducted in five general areas for Volatile Organic Compounds (VOCs), Semi-volatile Organic Compounds (SVOCs), herbicides, pesticides, Total Recoverable Petroleum Hydrocarbons (TRPH), and metals. Results varied, but SVOCs and pesticides exceeded their U.S. Environmental Protection Agency (USEPA) Preliminary Remediation Goals (PRGs).

The *Final Human Health and Ecological Risk Assessment for SD-001, Gunter Annex, AL* was prepared by Bechtel-S Corporation (Bechtel-S) in June 2004 (AR# 632), which presented data from surface water and sediment sampling at SD-001 and assessed the risk of contaminants of potential concern (COPCs) with respect to human health and the environment. The results indicated areas of non-hazardous sediment accumulation with potential ecological risk to aquatic receptors in Three Mile Branch Creek from chlorinated pesticides and metals. The source was noted as road surface runoff, residue from historic pesticide applications for buildings, and lawn maintenance activities.

Interim removal actions at Gunter Annex SD-001 were announced in articles published by the Montgomery Advertiser and Maxwell Dispatch on August 31 and September 3, 2005 (AR# 681). These articles stated that a small volume of localized non-hazardous contaminated sediments would be removed from Areas 1, 2, and 3 as part of the remediation process.



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## PREVIOUS INVESTIGATIONS AND STUDIES

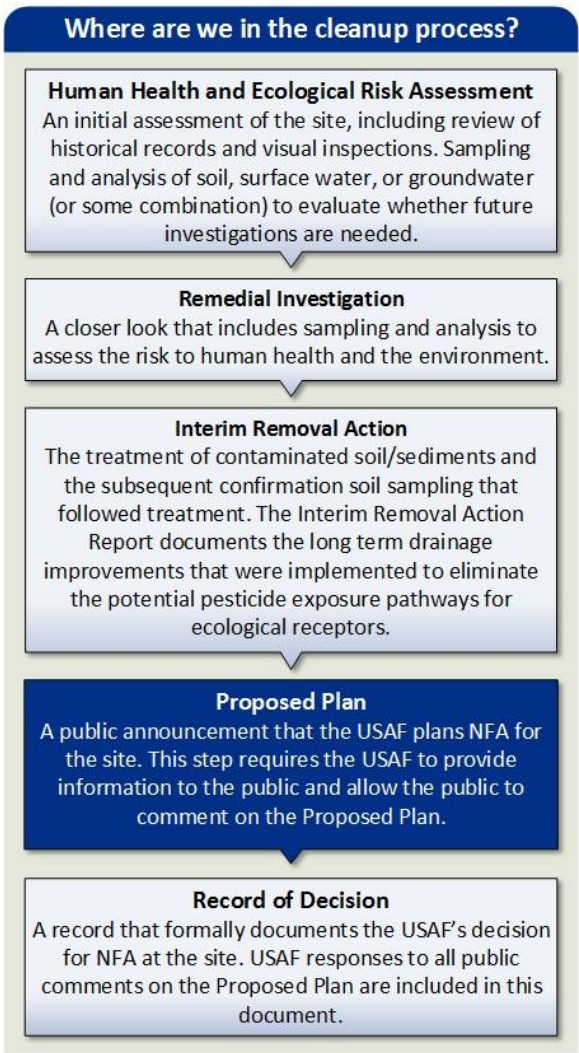
Previous investigations and studies at the SD-001 site include:

- Remedial Investigation (1999, AR# 1093)
- Human Health and Ecological Risk Assessment (2004, AR# 632)
- Interim Removal Action at Areas 1, 2, and 3 (2005, AR# 675)
- Remedial Action of Area 1 (2009, AR# 810)
- Interim Removal Actions at Areas 1, 2, and 3 (2017, Proposed AR# 1216)

## SUMMARY OF SITE RISKS

The Human Health and Ecological Risk Assessment identified the potential ecological risk to aquatic receptors in Three Mile Branch Creek from three areas of sediment accumulation (Areas 1, 2, and 3). The Risk Assessment identified a potential ecological risk from chlorinated pesticides and metals. It should be noted that metals detected were below background levels.

A Tier 1 Site Environmental Risk Assessment (SERA) was based on conservative screenings of the maximum detected concentrations from surface water and sediment samples against risk-based screening values. The analysis of inorganics, SVOCs, and pesticides indicated exceedance of screening benchmarks by surface water concentrations of 15 COPCs and by sediment concentrations of 38 COPCs. When the maximum detected COPC concentrations in surface water and sediment were used, the potential impact of average surface water and sediment concentrations does not indicate a clear risk of harm to the environment. Due to the simple fate and transport analysis using mean concentration and the watershed flow-weighting factor, surface water in the Gunter Annex SD-001 would likely combine with other watershed runoff in Three Mile Branch Creek to produce concentrations in surface water below ecological concern. Regarding the sediments in SD-001, the mass of sediments contained in sumps and in drainage swales would be minor compared to that contained in the channel of the Creek. It should also be noted that the concrete-lined sumps and overland drainage swales are only infrequently wetted by stormwater and some intermittent flow, therefore, they do not provide a permanent aquatic habitat. It was recommended that these sediments would most easily and effectively be dealt with by a one-time removal and disposal of accumulated sediments in sumps and swales.



## REMEDIAL ACTIONS

Sediment contaminated with pesticides was identified at Area 1 in October 2006. To eliminate potential pesticide exposure pathways, in-situ treatment along with the installation of a new storm drainage system began in October 2010. Following the removal of all vegetation located within the stream/drainage area of Area 1, sediment was treated starting from the southeast end (upstream) of the drainage area towards the northwest (downstream) to various depths depending on the location. Immediately after the placement of piping into the drainage system, soil blending was performed by applying dry sodium persulfate and lime placed on top of the sediment both north and south of the piping to the appropriate extents calculated. These treatment chemicals and the sediment/soils were then blended with an excavator and a mixing attachment. Upon completion of the

treatment and construction activities, the area was backfilled to the natural grade of the surrounding area (Bhate, 2011, AR# 939). In May 2011, confirmatory sampling was conducted in the area where the sediment/soil was treated in-place. The results of the confirmation sampling indicated a reduction of pesticides, however, all of the samples did not meet the site-specific cleanup levels (which were 13 times the ecological sediment screening values) as presented in the Interim Removal Action Work Plan (Bechtel-S, July 2004, AR# 675). Since the confirmation samples did not meet the site-specific goals, ADEM requested USAF provide a report to outline future measures. The USAF and ADEM held discussions and determined that the cleanup levels should be revised from risk-based levels (for sediment) to residential soil cleanup levels (USEPA Residential Regional Screening Levels [RSLs]) since sediment was no longer an issue as the exposure pathway was removed during the construction of the drainage system. The USAF retreated the area by conducting another round of in-situ soil blending (February 2014) followed by a confirmation soil sampling event (April 2014). Results of the 2014 confirmation samples indicated that the treatment activities achieved the target cleanup levels (residential soil RSLs) and USAF requested NFA. Due to the manner in which excavated soils were stored on site, ADEM requested additional sampling to verify that no contaminated soils were moved or spread around the site during retreatment activities. The verification surface soil and subsurface soil sampling was completed in May 2016. The results of the sampling were below the target cleanup levels (residential soil RSLs) and ADEM concurred with the USAF's request for NFA.

Sediment and soil from an area of approximately 100 square feet (ft<sup>2</sup>) was excavated in September 2005 at Area 2 due to pesticide-contaminated sediment. The concentrations of soil samples outside the drainage area had as high or higher concentrations than the original sediment sample from the risk assessment, indicating that the source of contamination was likely not associated with the surface drainage (Bechtel, 2005, AR# 675).

Pesticide-contaminated sediment was present in the storm drain sump at the northwest corner of Morris Avenue and the railroad tracks in Area 3. Approximately 2 to 3 cubic feet (ft<sup>3</sup>) of sediment was cleaned from the concrete sump with hand tools and approximately 2 cubic yards (yd<sup>3</sup>) of soil was excavated from the outlet of the storm drain beneath Morris Avenue. The excavated area was backfilled with clean topsoil, graded, seeded, mulched, and watered. This area was graded to a level below the surrounding soil so that it will continue to act as a trap for sediments carried by stormwater runoff from adjacent paved areas (Bechtel, 2005, AR# 675).

#### **SCOPE AND ROLE OF RESPONSE ACTION**

Because the risk has been eliminated and interim removal actions have removed the source of contamination and risk to potential receptors, no additional remediation is required. The site poses no unacceptable risk to the environment.

#### **CONCLUSIONS AND RECOMMENDATIONS**

Based on mitigation activities conducted at the sites, NFA is recommended. Installation of a culvert at Area 1 has removed any exposure pathway and in-situ soil blending activities reduced contaminant levels to below the respective USEPA Residential RSL for COPCs. Removal of contaminated sediments and mitigation activities conducted at Areas 2 and 3 removed any possible exposure pathway at the site. Due to the mitigation activities conducted at all three site areas, there is no unacceptable human or ecological risk of exposure, and therefore NFA is required.

#### **COMMUNITY PARTICIPATION**

The USAF is soliciting input from the community on the Proposed Plan for SD-001 Areas 1, 2, and 3 at Gunter Annex. The comment period extends from 6/18/2018 to 7/18/2018. A public meeting will be conducted if requested during the comment period. Please submit comments via e-mail to [eric.sharman.2@us.af.mil](mailto:eric.sharman.2@us.af.mil) or USPS at 55 LeMay Plaza South, Suite 201, Maxwell AFB, AL 36112-6335.

REFERENCES

Alabama Department of Environmental Management (ADEM). May 28, 2010. *ADEM Review and Notice of Concurrence: Draft Revised Work Plan for Remedial Action of Gunter SD-0001 Area 1 Gunter Annex, dated March 2010*. AR# 848.

ADEM. February 3, 2014 (Note: The year on the ADEM letter is incorrectly shown to be 2013). *ADEM Review Comments: Final Work Plan Addendum #1 to the Final Revised Work Plan for Remedial Action of Gunter SD-001 Area 1, dated December 2013*. AR# 1092.

ADEM (Stephen A. Cobb). May 26, 2015. *ADEM Review and Comments: Construction Completion Report for Remediation of SD-001 Areas 2 and 3, dated February 2007*. AR# 1165.

Bechtel-S Corporation (Bechtel-S). June 2004. *Final Human Health and Ecological Risk Assessment for SD-001, Gunter Annex, AL*. AR# 632.

Bechtel-S. August 2005. *Work Plan and Site Safety and Health Plan Addendum for Interim Removal Action, SD-001 Sediment, Gunter Annex, Alabama*. AR# 675.

Bechtel-S. February 2007. *Technical Memorandum for Gunter SD-001 Area 1 Remediation Plans*. AR# 733B or 733-2.

Bhate Environmental Associates, Inc. (Bhate). August 2005. *Notice of Interim Remedial Action at Gunter Annex SD-001*. AR# 681.

Bhate. February 2009. *Remedial Action of Gunter SD-001 Area 1 Work Plan Gunter Annex Montgomery, Alabama*. AR# 810.

Bhate. March 2010. *Final Revised Remedial Action of Gunter SD-001 Area 1 Work Plan Gunter Annex Montgomery, Alabama*. AR# 852.

Bhate. December 2011. *Remedial Action Completion Report Gunter SD-001 Area 1 Gunter Annex Montgomery, Alabama*. AR# 939.

Bhate. December 13, 2013. *Final Work Plan Addendum #1 to the FINAL Revised Work Plan for Remedial Action of Gunter SD-001 Area 1 Gunter Annex, Montgomery, Alabama*. AR# 1085.

Bhate. July 2014. *Technical Memorandum Remedial Action of SD-001 Area 1 Gunter Annex, Alabama*. (AR# 1167)

Bhate. February 2015. *Final Basewide Uniform Federal Policy - Quality Assurance Project Plan Maxwell Air Force Base and Gunter Annex Montgomery, Alabama*. AR# 1152.

Bhate. August 2017. *Interim Removal Action Report for Gunter Site SD-001 Areas 1, 2, and 3, Gunter Annex, Montgomery, Alabama*. Proposed AR# 1216.

Radian International. November 1999. *Final Surface Drainage Remedial Investigation at Maxwell AFB and Gunter Annex, Alabama*. AR# 1093.

## GLOSSARY OF TERMS

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** – This Federal law was passed in 1980 and amended in 1986, and is commonly referred to as the Superfund Law. It provides for liability, compensation, cleanup, and emergency response in connection with the cleanup of inactive hazardous waste disposal sites that endanger public health and safety or the environment.

**Proposed Plan** – Document used to facilitate public involvement in the remedy selection process. The document presents the lead agency's preliminary recommendation concerning how best to address contamination at the site, presents alternatives that were evaluated, and explains the reasons the lead agency recommends the Preferred Alternative.

**Record of Decision (ROD)** – The Record of Decision, signed by the USAF and USEPA [in this case ADEM], sets forth the selected cleanup action or remedy for a site, the basis for selecting that remedy, public comments on alternative remedies, responses to comments, and the cost of the remedy.

**Remedial Investigation** – An in-depth study of a contaminated site to determine the nature and extent of contamination. This includes sampling of air, soil, water, or waste (or any combination). Usually, a remedial investigation is combined with a feasibility study.

**Feasibility study (FS)** - This document provides a detailed analysis of remedial alternatives for a site. Analysis presented in the document supports risk management decision processes to select the most appropriate remedy.

**Interim removal/Remedial action** – Action taken to remove the release or threat of release of hazardous substances or contaminants from the environment.

**Risk Assessment** – Used to characterize the nature and magnitude of health risk to humans and ecological receptors from chemical contaminants and other stressors that may be present in the environment.

**PROPOSED PLAN FOR NO FURTHER ACTION AT SD-001 AREAS 1, 2, AND 3**

**USE THIS SPACE TO WRITE YOUR COMMENTS**

Your input on the Proposed Plan for the site is important to the USAF. Comments provided by the public are valuable in helping the USAF select a final remedy for the site.

You may use the space below to write your comments. Please submit comments via e-mail to [eric.sharman.2@us.af.mil](mailto:eric.sharman.2@us.af.mil) or USPS at 55 LeMay Plaza South, Suite 201, Maxwell AFB, AL 36112-6335. The comments must be postmarked/dated by 7/18/2018 and sent to the address provided. If you have any questions about the comment period, please contact Maxwell AFB Public Affairs Office at (334) 953-2014 or -1517.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

Phone \_\_\_\_\_

E-mail \_\_\_\_\_

Comments:
