WHITE SANDS MISSILE RANGE

Army Cleanup Program

Installation Action Plan Final

June 2024

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STATEMENT OF PURPOSE

The Installation Action Plan (IAP) provides evidence that the Army is firmly committed to expeditious identification and cleanup of environmental contamination, and that the installation has a credible, organized program to carry out that commitment. The IAP provides an outline of the total multi-year environmental cleanup program for each site with ongoing or future planned restoration activity and includes the (1) environmental restoration requirements, (2) the rationale for the selected technical approach, and (3) foundation to develop corresponding financial needs for each cleanup site.

INSTALLATION OVERVIEW

Installation Name: WHITE SANDS MISSILE RANGE

Installation City: WHITE SANDS MISSILE RANGE

Installation County: DONA ANA, LINCOLN, OTERO, SIERRA, SOCORRO

Installation State: NM

Regulatory Participation - Federal: US Environmental Protection Agency (USEPA), Region 6

Regulatory Participation - State: New Mexico Environment Department (NMED), Hazardous Waste Bureau

ACRONYMS

Acronym	Definition
AAA	Anti-Aircraft Artillery
ACA	Accelerated Corrective Action
AFFF	Aqueous Film Forming Foam
AST	Aboveground Storage Tank
AOPI	Areas of Potential Interest
AUA	Annual Unit Audit
bgs	below ground surface
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
Cr+6	Hexavalent Chromium
CAC	Corrective Action Completion
CC	Compliance-related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CME	Corrective Measures Evaluation
CMI	Corrective Measures Implementation
CMS	Corrective Measures Study
COC	Contaminants of Concern
CRL	Cleanup Restoration & Liabilities
CSM	Conceptual Site Model
DCE	Dichloroethene
DD	Decision Document
DERP	Defense Environmental Restoration Program
DRMO	Defense Reutilization and Marketing Office
DRO	Diesel Range Organics
ENV	Environmental
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
FFTA	Fire Fighting Training Area
FS	Feasibility Study
ft	feet
FY	Fiscal Year
FYR	Five-Year Review
gal	gallons
HCF	HELSTF Cleaning Facility
HELSTF	High Energy Laser Systems Test Facility
HMX	Cyclotetramethylene Tetranitramine
HRR	Historical Records Review
HTA	Hazardous Test Area
HSWA	Hazardous and Solid Wastes Amendment
HWB	Hazardous Waste Bureau

Acronym	Definition
HWSF	Hazardous Waste Storage Facility
IAP	Installation Action Plan
ID	Identification
IM	Interim Measures
in	inch
IR	Installation Restoration
IRA	Interim Remedial Action
IRP	Installation Restoration Program
IRFNA	Inhibited Red Fuming Nitric Acid
IRM	Interim Remedial Measures
ISEB	In Situ Enhanced Bioremediation
kg	kilogram
LC	Launch Complex
LNAPL	Light Non-Aqueous Phase Liquids
LTM	Long-Term Management
LSTC	Laser System Test Center
LUC	Land Use Control
MAR	Multi-Array Radar
MC	Munitions Constituents
MCA	Main Cantonment Area
MCL	Maximum Contaminant Level
MEC	Munitions and Explosives of Concern
MEK	Meth Ethyl Ketone
mg	milligram
MMH	Monomethyl Hydrazine
MNA	Monitored Natural Attenuation
MPL	Main Post Landfill
MR	Munitions Response
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
MTBE	Methyl Tert-Butyl Ether
NDMA	N-Nitrodimethylamine
NFA	No Further Action
NOD	Notice of Deficiency/Disapproval
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMEID	New Mexico Environmental Improvement Division
NPL	National Priorities List
NPS	National Park Service
O&M	Operations and Maintenance
OB/OD	Open Burn/Open Detonation
ORC	Oscura Range Center

Acronym	Definition
OSD	Office of the Secretary of Defense
OWS	Oil/Water Separator
PA	Preliminary Assessment
PCB	Polychlorinated Biphenyl
PCCP	Post-Closure Care Plan
PFAS	Per- and Polyfluoroalkyl Substances
pH	Potential of Hydrogen
POL	Petroleum Oil Lubricant
ppb	parts per billion
ppm	parts per million
PR	Periodic Review
PRS	Pressure Recovery System
PSH	Phase Separated Hydrocarbons
PST	Petroleum Storage Tank
PSTB	Petroleum Storage Tank Bureau
RA	Release Assessment
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RAB	Restoration Advisory Board
RATSCAT	Radar Target Scatter
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RDX	Cyclotrimethylenetrinitramine
RFA	Resource Conservation and Recovery Act Facility Assessment
RFI	Resource Conservation and Recovery Act Facility Investigation
RI	Remedial Investigation
RIP	Remedy-In-Place
RRSE	Relative Risk Site Evaluation
SC	Site Closeout
SI	Site Inspection
SLERA	Screening Level Ecological Risk Assessment
SRC	Stallion Range Center
SSL	Soil Screening Level
STP	Sewage Treatment Plant
SVE	Soil Vapor Extraction
SVOC	Semi-Volatile Organic Compound
SVS	Soil Vapor Survey
SWB	Solid Waste Bureau
TAPP	Technical Assistance for Public Participation
TCA	Trichloroethane
TCE	Trichloroethylene

Acronym	Definition
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total Petroleum Hydrocarbons
TTF	Temperature Test Facility
UDMH	Unsymmetrical Dimethyl Hydrazine
USACE	US Army Corps of Engineers
USAEHA	US Army Environmental Hygiene Agency
USEPA	US Environmental Protection Agency
UST	Underground Storage Tank
UXO	Unexploded Ordnance
VCA	Voluntary Corrective Action
VCM	Voluntary Corrective Measure
VOC	Volatile Organic Compound
WQCC	Water Quality Control Commission
WSMR	White Sands Missile Range
WSNM	White Sands National Monument
WWTP	Wastewater Treatment Plant

PHASE TRANSLATION TABLE

CERCLA Phase	RCRA Phase	RCRA UST Phase
Preliminary Assessment (PA)	RCRA Facility Assessment (RFA)	Initial Site Characterization (ISC)
Site Inspection (SI)	Confirmation Sampling (CS)	Investigation (INV)
Remedial Investigation/ Feasibility Study (RI/FS)	RCRA Facility Investigation/Corrective Measures Study (RFI/CMS)	Corrective Action Plan (CAP)
Remedial Design (RD)	Design (DES)	Design (DES)
Interim Remedial Action (IRA)	Interim Measure (IM)	Interim Remedial Action (IRA)
Remedial Action (Construction) (RA(C))	Corrective Measures Implementation (Construction) (CMI(C))	Implementation (Construction) (IMP(C))
Remedial Action (Operations) (RA(O))	Corrective Measures Implementation (Operations) (CMI(O))	Implementation (Operations) (IMP(O))
Long-Term Management (LTM)	Long-Term Management (LTM)	Long-Term Management (LTM)

PROGRAM SUMMARY

Number of Open Sites with Response Complete/Total Open IR Sites: 1/70

Number of Open Sites with Response Complete/Total Open MR Sites: 0/4

Number of Open Sites with Response Complete/Total Open CC Sites: 0/9

SITE-LEVEL INFORMATION

35955.1005_WSMR-05_FORMER OSCURA RANGE CENTER LANDFILL

Env Site ID: WSMR-05
Cleanup Site: FORMER OSCURA RANGE CENTER LANDFILL
Alias: SWMU 157-159
Regulatory Driver: RCRA-C
RIP Date: 11/15/2025
RC Date: 11/15/2025
RC Reason: Not assigned
SC Date: 11/16/2025
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Low
MRSPP: N/A

Phase	Start	End
RFA:	8/31/1997	9/30/1997
CS:	- -	- -
RFI/CMS:	10/31/1997	11/15/2025
DES:	- -	- -
IRA:	10/31/2005	9/15/2008
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1005 (WSMR-05) consisted of three separate landfill areas located near the Oscura Range Center (ORC) in the northeastern portion of the Range. Landfill A, solid waste management unit (SWMU157), is located south of the communications building within the ORC cantonment area. The current and reasonably anticipated future land use is industrial. Waste including insulated wire, wood scrap, metal, tires, paper, and office materials was deposited into an excavated trench measuring 16-feet (ft) x 6.5-ft x 5-ft. Adjacent former waste disposal sites included a scaffold used for draining petroleum oil lubricant (POL) from vehicles, scattered small piles of construction and demolition debris, and several smaller and shallower trenches used to bury insulated wire. In June 1998, all wastes described above were excavated and transported to the Lincoln/Otero Regional Landfill.

Landfill B (SWMU 158) is located 0.5-miles south of ORC. Refuse was dumped on the ground surface at this site until the early 1980s. Waste was similar in volume and type to Landfill A. In June 1998, all wastes were excavated and transported to the Lincoln/Otero Regional Landfill. The NMED approved the closure of SWMU 158 in a letter dated April 15, 2008, and is currently listed as clean closure complete.

Landfill C (SWMU 159) is situated approximately two miles north of ORC. A geophysical survey defined buried metal approximately 8-10-ft below grade in an area 200-ft by 30-ft. An investigation of Landfill C was conducted during 2002 to determine if buried material from the landfill has contaminated soil beneath the site. Soil contamination was not detected. White Sands Missile Range (WSMR) submitted a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Report to the NMED in FY04 that recommended removal of debris and clean close the site to eliminate the need for long-term monitoring. Excavation was completed in 2006 and an Accelerated Corrective Action Completion (ACA) Report was submitted to NMED. Due to the removal of source materials, there is not a potential for offsite migration. The NMED approved the ACA in a letter dated Oct. 24, 2007, stating that WSMR must submit a petition for corrective action complete status for both SWMUs 157 and 159.

A Corrective Action Completion (CAC) petition was submitted to NMED in March 2010 and a revised CAC Petition was submitted in January 2011. The NMED determined the petition to be Administratively Incomplete in October 2011, requiring the removal of SWMU 158 from the petition and submittal of

additional information for SWMUs 157 and 159. The revised CAC Petition was submitted to NMED on July 3, 2013. The NMED issued an Administratively Complete determination of the CAC petition on February 3, 2014. WSMR received a Disapproval on the CAC petition dated May 8, 2018. The NMED stated that the petition would move forward for SWMUs 157 and 159. However, additional information may be required for the sites pending NMED review of additional reference.

Cleanup/exit strategy- The objective is to complete the required CAC efforts and reporting. WSMR is pending a statement of basis from NMED for this site. WSMR is expecting to achieve site completion under the RFI/corrective measures study (CMS) phase. The site is achieving site closeout (SC), and there is no future cleanup required.

35955.1011_WSMR-14_FORMER RHODES CANYON LANDFILLS

Env Site ID: WSMR-14

Cleanup Site: FORMER RHODES CANYON LANDFILLS

Alias: SWMU 114-115

Regulatory Driver: RCRA-C

RIP Date: 9/30/2004

RC Date: 9/30/2004

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/30/2031

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/1991	10/31/2003
DES:	- -	- -
IRA:	- -	- -
CMI(C):	10/31/2003	9/30/2004
CMI(O):	- -	- -
LTM:	10/31/2004	9/30/2031

Site Narrative: 35955.1011 (WSMR-14) consists of two inactive landfills located approximately 0.25-miles northwest of Rhodes Canyon Range Center 65 miles north of the WSMR Main Post at the intersection of Range Road 6 and Range Road 7. The current and reasonably anticipated future land use is industrial. The media of concern is groundwater. The start-up date for the oldest landfill (SWMU 115) is unknown, but it was closed in 1976 prior to the implementation of RCRA. SWMU 114 was the most recently active area reportedly, receiving waste until approximately 1987. SWMU 114 was reported by the RCRA Facility Assessment (RFA) to have received office refuse and construction debris from the Rhodes Canyon Range Center. The RFA reported that SWMU 115 received sanitary waste from Rhodes Canyon and inert missile debris from up-range impact areas. The RFA concluded that there was a low to moderate potential for release to soil and groundwater from SWMU 115. The RFI concluded that no release is suspected to have occurred from SWMU 115 and recommended that the RFI be discontinued.

A Corrective Measures Implementation (CMI) Work Plan was submitted to NMED on Jan. 15, 2002. The CMI Work Plan proposed that a landfill soil cover and storm water control structures be constructed to minimize the potential for groundwater contamination. NMED approved the CMI Work Plan in October 2003. Annual sampling commenced in 2004, along with the soil cover construction completion. Due to the installation of an engineered soil cap, there is not a potential for offsite migration of potential contaminants. WSMR submitted a CMI Report dated September 2004, and NMED approved the report as a Closure Report for the site on Jan.18, 2006. The report satisfied the closure requirements, but WSMR was required to submit closure certification information and a survey plat, which was submitted on April 4, 2006. WSMR received final NMED Closure Verification on July 12, 2006, and Closure Report Approval on Jan. 18, 2006. 25 years of Post Closure Care activities began in January 2006. The US Army Corps of Engineers (USACE) conducted a periodic review of the site in 2019. The next scheduled periodic review (PR) is planned for 2024. WSMR continued annual groundwater monitoring and cap repair in accordance with Post Closure Care.

Cleanup/exit strategy- The objective at this site is to continue Post Closure Care efforts. Post Closure Care has been implemented to provide long-term maintenance and monitoring of the soil cover. Analytical data gathered during groundwater monitoring events is evaluated for deviations from the established background levels. Post Closure Care of the soil cover will continue until groundwater monitoring is deemed no longer necessary (not to exceed 25 years). Additionally, periodic reviews are required every five years. Upon receiving no further action (NFA) approval from NMED, Post Closure Care will cease, and the WSMR will prepare a Corrective Measures Completion Report.

35955.1019_WSMR-27_FORMER ACID NEUT UNIT @ HWSF

Env Site ID: WSMR-27

Cleanup Site: FORMER ACID NEUT UNIT @ HWSF

Alias: SWMU 89

Regulatory Driver: RCRA-C

RIP Date: 9/30/2026

RC Date: 9/30/2026

RC Reason: Not assigned

SC Date: 9/30/2026

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	5/31/1992	9/30/2026
DES:	- -	- -
IRA:	5/31/1992	7/15/2014
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1019 (WSMR-27) (SWMU 89) was formerly an open-topped concrete evaporation tank located adjacent to the Hazardous Waste Storage Facility (HWSF), which is located eight miles east of the Main Post area. The current and reasonably anticipated future land use is industrial. The media of concern is groundwater and soil. Facility personnel estimated the date of construction between 1973 and 1978.

Prior to 1981, the SWMU 89 tank was used to evaporate liquid chemical wastes generated at the installation's photographic laboratories. The unit was occasionally used as a storage pad for damaged transformers containing polychlorinated biphenyls (PCB). In 1981, PCB transformers were being stored in the tank when a batch of corrosive photographic waste was added to the unit. As a result, PCBs leaked from the transformers and mixed with the corrosive photographic waste. Soil sampling around the unit indicated PCB contamination. The sludge and soils were removed, drummed, and buried in the Hazardous Waste Landfill. The remediation and cleanup were performed in 1981 by WSMR with Environmental Protection Agency (USEPA) Region 6 and NMED oversight. The unit was converted to a loading dock in 1981 by installing a reinforced concrete cap/seal over the structure.

In February 2011, an ACA Work Plan was submitted to NMED. The NMED responded with a Notice of Disapproval for the Work Plan in August 2011. WSMR submitted a Revised ACA Work Plan to NMED in November 2011 and was approved by NMED in May 2012. Following approval of the Revised ACA Work Plan, interim removal actions commenced at the site. Site activities included removal of the loading dock and concrete tank. Soil excavation activities also took place at the site following removal of the structures. An ACA Investigation Report was submitted to NMED in December 2012. A NMED disapproval called for WSMR to address all comments in a Closure Plan in accordance with Table 8-1 of the RCRA Permit.

WSMR submitted a final Closure Plan dated May 2014, which was disapproved by NMED in a letter dated Feb. 18, 2015, requiring further explanation of site conditions and potential further investigation. WSMR

completed a revised closure plan, which was submitted to the NMED in FY17. The NMED issued a final Closure Plan dated July 2018, which required additional confirmation sampling and potential further soil excavation. Field work for the closure activities was completed in December 2018. Preliminary results indicated that contamination above soil screening levels was still present in the subsurface. Additional excavation was completed in 2020 with confirmation sample indicating the site was cleaned to residential screening levels. A Clean Closure Report was submitted to the NMED in May 2021. Eight quarters of groundwater monitoring began in 2021 and field work was completed in October 2022 to satisfy closure requirements for this site. The groundwater Frequent Monitoring Report was submitted to the NMED in July 2023. The Clean Closure Report and Frequent Monitoring Report were both approved by NMED in letters dated Nov. 2, 2023. Based on results of soil removal and groundwater monitoring, there is not a potential for off-site migration of potential contaminants.

Cleanup/exit strategy- WSMR has achieved clean closure of the site. No additional work is expected to be required.

35955.1020_WSMR-29_STP DRYING BEDS (MAIN POST)

Env Site ID: WSMR-29

Cleanup Site: STP DRYING BEDS (MAIN POST)

Alias: SWMU-79

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	5/31/1992	1/2/2027
DES:	- -	- -
IRA:	7/31/1995	8/31/1995
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1020 (WSMR-29) (SWMU 79) was a series of 11 parallel beds used for the drying of the sewage treatment plant (STP) sludge. The current and reasonably anticipated future land use is industrial. The media of concern is soil. The beds were separated by 2-ft high concrete walls and had sand bottoms. Each bed was estimated to be 15 to 20-ft wide and 50-ft long. Facility representatives estimated that three to four cubic yards of sludge cake was removed from each cell each year. The cake was disposed of at the Sanitary Landfill (SWMU 86).

The unit was originally constructed in 1958 and was reconstructed after a flood washed the unit out in 1978. The debris was removed and stored in the nearby Waste Pile (SWMU 80) (WSMR-29). A RCRA RFA was conducted in 1988 that suggested a high release potential to soil and groundwater based on the probability of heavy metal constituents leaching into the soils.

In 1992, a Phase I RFI was conducted at the site. At the time of the Phase I RFI, the site was active and soil beneath the unlined unit had not been sampled for evidence of a release. The RFI concluded that a Phase II RFI was needed to delineate the extent of contamination. At the conclusion of the Phase I RFI, USEPA Region 6 approved a Class III Permit Modification dated Dec. 31, 1995, for NFA at the site.

Following the Phase I RFI, an Interim Removal Action took place at the site in August 1996. Excavation of the sludge material from the sludge beds and sludge piles was removed to a depth of 2-ft below ground surface (bgs). There were no samples collected from the sludge bed floors following excavation. An additional RFI was conducted in 2017 and submitted to the NMED in May 2018. The RFI showed chromium above soil screening levels at one sample location at the former sludge beds. In a letter dated Aug. 6, 2018, the NMED issued a disapproval on the RFI report, requiring WSMR to conduct additional work at the SWMU due to the chromium detection. A revised RFI report was submitted to NMED in October 2018, which was subsequently approved in an NMED letter dated Nov. 27, 2018, requiring removal of the chromium contaminated soil.

A spot removal of soil at the site for chromium contamination and confirmation sampling was completed in June 2022. A Letter Report of the removal was submitted to the NMED in June 2023. The removal action Letter Report was approved by the NMED in a letter dated Oct. 18, 2023. There is not an expected potential for offsite migration of potential contaminants based on results of investigations and corrective actions.

Cleanup/exit strategy- Corrective action was taken at the site through minor amounts of soil removal and confirmation sampling early in June 2022. WSMR will complete the required Corrective Action Complete efforts and reporting for permit modification.

35955.1021_WSMR-30_STP SLUDGE WASTE PILE (MAIN POST)

Env Site ID: WSMR-30

Cleanup Site: STP SLUDGE WASTE PILE (MAIN POST)

Alias: SWMU-80

Regulatory Driver: RCRA-C

RIP Date: 11/15/2027

RC Date: 11/15/2027

RC Reason: Not assigned

SC Date: 11/16/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	5/31/1992	11/15/2027
DES:	- -	- -
IRA:	7/31/1995	8/31/1995
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1021 (WSMR-30) (SWMU 80) is located at the WSMR Main Post near the STP approximately 100-ft southeast of the former sludge beds (SWMU 79). The current and reasonably anticipated future land use is industrial. The media of concern is soil. There is not an expected potential for offsite migration of potential contaminants.

The dimensions of the sludge waste pile were approximately 300-ft long by 150-ft wide by 2 to 6-ft high. The sludge pile was on site from 1978 through 1995. A flash flood in 1978 damaged the Main Post STP sludge drying beds (SWMU 79). Debris from the flood damage cleanup, including reinforced concrete excavated soil and sludge, was stockpiled at the SWMU 80 site in 1978. The site was subsequently used for the stockpiling of dried sludge following construction of the new sludge drying beds at SWMU 79. Sludge and sediment samples were collected during Phase I RFI to determine if contamination was released into native soils from the sludge pile. Total cyanide was detected in one sludge sample during the Phase I RFI at 86-milligram (mg)/ kilogram (kg), exceeding both the NMED residential and industrial Soil Screening Levels (SSL) at 46.9-mg/kg and 681-mg/kg respectively. Arsenic was detected at concentrations below the then current NMED SSL of 3.9-mg/kg in sludge and sediment samples collected during the Phase I investigation.

The sludge waste pile was removed and excavated to a depth of 2-ft/bgs, following sludge sampling performed as part of the Dow Close Out for SWMU 80. Arsenic was detected at concentrations below regulatory criteria for Toxicity Characteristic Leaching Procedure (TCLP) analysis for sludge samples collected during SC activities.

Following the excavation and backfill performed by Dow in 1995, confirmation soil samples were collected as part of the Phase III RFI. Confirmation soil samples indicated that arsenic remained in soils at levels, exceeding current NMED residential SSLs and site-specific background values. Total cyanide was not detected above laboratory reporting limits for samples collected during the Phase III RFI. Contamination believed to be associated with the former sludge pile was not detected in native soils

except for arsenic. There is no known handling of arsenic wastes or products at this site, and following the sludge removal, there has been no activity at the site that would lead to any known arsenic contamination. The Phase III RFI was approved by NMED in a letter dated Nov. 7, 2008, with no specific comments (no conditions) on SWMU 80.

A background study was conducted and identified elevated background levels of arsenic above the NMED Residential SSL. NMED approved the background study in a letter dated Feb. 3, 2014.

A petition to perform Class III Permit Modification for this site was submitted to NMED dated June 2013. WSMR received a Notice of Deficiency (NOD) dated Feb. 5, 2015, requiring additional soil investigation at the site. WSMR submitted an investigation work plan to NMED in May 2020 and was approved by NMED in March 2021. Field work for the investigation was completed in October 2022. An investigation report was submitted to NMED in June 2023. NMED subsequently approved the investigation report in a letter dated Oct. 18, 2023.

Cleanup/exit strategy- WSMR's strategy is to address NMED's CAC petition disapproval through submission of a revised petition for a Class III Permit Modification to change the status of the site from requiring corrective action to CAC. Plans are in place to achieve completion of the investigation. Site corrective action is expected to be completed under the RFI phase following revision and approval of the CAC petition.

35955.1023_WSMR-32_MAIN POST FORMER FFTA WASTE PILE

Env Site ID: WSMR-32

Cleanup Site: MAIN POST FORMER FFTA WASTE PILE

Alias: SWMU-22

Regulatory Driver: RCRA-C

RIP Date: 11/15/2027

RC Date: 11/15/2027

RC Reason: Not assigned

SC Date: 11/16/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	9/30/1996	11/15/2027
DES:	- -	- -
IRA:	7/31/1996	12/31/2005
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1023 (WSMR-32) (SWMU22) is the Main Post Former Fire Fighting Training Area (FFTA) Waste Pile, which was located approximately 350-ft south of Martin Luther King Boulevard and immediately west of Headquarters Avenue at the WSMR Main Post. The current and reasonably anticipated future land use is industrial. The media of concern is soil. There is not an expected potential for offsite migration of potential contaminants.

The abandoned waste pile was located approximately 100-ft south of the former FFTA (SWMU 21). The abandoned pile was approximately 25-ft by 50-ft (depth was unknown) and consisted of reworked stained soil and dense low shrubs which surrounded the unit. The purpose of the SWMU 22 waste pile has not been identified based on previous studies, and therefore, its operational history is unknown. The visual appearance of the pile and its location with respect to the former FFTA (SWMU 21) suggested that wastes originated at SWMU 21 and were deposited at SWMU 22. The waste pile likely consisted of contaminated soils transported during regrading of SWMU 21.

SWMU 22 currently consists of an area of backfilled soil where previous native soil and stockpiled soil were removed by WSMR in 1996. Excavation and backfill confirmation samples taken during the Phase III RFI indicated that arsenic and lead remained in soil at levels above current NMED residential SSLs. Arsenic was detected at SWMU 22 above current NMED residential SSLs in all but one of the confirmation samples collected during the Phase III RFI. Arsenic exceedances were detected from the surface to 6-ft/bgs. Lead was detected at a maximum concentration of 510-mg/kg in one surface sample collected during the Phase III RFI.

WSMR performed a Voluntary Corrective Measure (VCM) in 2005 removing 3-cubic ft of soil surrounding the borehole from which the exceeding lead concentration (510-mg/kg) was collected. Total petroleum hydrocarbons (TPH) were also detected at concentrations, exceeding the NMED residential SSL for unknown oil in surface and near-surface samples collected during the Phase I and II RFIs. TPH was detected at concentrations of up to 203-mg/kg collected during Phase III RFI sampling, not exceeding the

NMED residential SSL for unknown oil (1000-mg/kg). No surface or subsurface TPH contamination was detected above NMED residential SSLs during the Phase III RFI. TPH detections may be related to pieces of degrading asphalt that were strewn across the site and are assumed to have been dumped on-site following the original excavation performed by Dow in 1996. Documentation of the dumping of asphalt and concrete is unknown. The Phase III RFI was approved by NMED in a letter dated Nov. 7, 2008, with no specific comments (no conditions) on SWMU 22.

A background study was conducted and identified elevated background levels of arsenic below the then current NMED Residential SSL of 3.9 mg/kg. NMED approved the background study in a letter dated Feb. 3, 2014.

A petition to perform Class III Permit Modification for this site was submitted to NMED dated June 2013. WSMR received an NOD dated Feb. 5, 2015, requiring additional discussion of background concentrations of arsenic and revision to the CAC petition.

WSMR submitted an investigation work plan to NMED in May 2020, which was approved by NMED in March 2021. Field work for the investigation was completed in October 2022. An investigation report was submitted to NMED in June 2023. NMED subsequently approved the investigation report in a letter dated Oct. 18, 2023.

Cleanup/exit strategy- WSMR's strategy is to address NMED's CAC petition disapproval through submission of a revised petition for a Class III Permit Modification to change the status of the site from requiring corrective action to CAC. Site corrective action is expected to be completed under the RFI phase following revision and approval of the CAC petition.

35955.1024_WSMR-33_USED BATTERY ACCUMULATION AREAS (MAIN POST)

Env Site ID: WSMR-33
Cleanup Site: USED BATTERY ACCUMULATION AREAS (MAIN POST)
Alias: SWMU 14
Regulatory Driver: RCRA-C
RIP Date: 1/2/2027
RC Date: 1/2/2027
RC Reason: Not assigned
SC Date: 1/3/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Low
MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	7/31/1994	1/2/2027
DES:	- -	- -
IRA:	1/31/1997	9/30/1997
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1024 (WSMR-33) consisted of two formerly used battery accumulation areas located immediately south and approximately 50-ft northeast of Building 1776 Battery Shop (SWMU 14). The current and reasonably anticipated future land use is industrial. The media of concern is soil. The units consisted of an asphalt-lined open-air facility used for accumulation and storage of batteries, which contained lead and sulfuric acid. There is not an expected potential for offsite migration of potential contaminants.

A concrete apron was present on the south side of Building 1776, which had some visible staining and etching possibly as a result of the battery acid. A sump located on the east side of Building 1776 collected solids prior to wastewater entering the sanitary sewer system. An asphalt lined drainage ditch runs in a north-south direction on the east side of Building 1776.

Approximately 40,000-pounds of used lead/sulfuric acid batteries were collected annually at this facility and stored prior to off-site recycling until 1990. Used battery storage operations were moved in 1990 to a separate facility constructed with a roof and berms to prevent and contain accidental releases. During the operation of SWMU 14, batteries were stored on wooden pallets to a height of 3 to 4-ft.

Soil sampling at the asphalt lined drainage ditch to the east of Building 1776 indicated the presence of lead and arsenic in the sediment at SWMU 14 above screening levels. A soil sample collected adjacent to the sump did not detect constituents above NMED residential SSLs suggesting no release at the sump. A concrete core sample and soil samples collected from beneath the concrete apron detected lead at concentrations below the NMED residential SSL.

WSMR performed a removal action in 1997 to address the high lead concentrations. The removal action involved removal of liquid and sludge from the sump excavation of sediments from the drainage ditch to east of Building 1776 and demolition of the concrete apron on the south side of Building 1776. The inlet to the sump was plugged with concrete to eliminate any discharge. Collection and analysis of post excavation confirmatory soil samples indicated that concentrations of lead were below NMED residential SSLs. Therefore, any source of lead contamination from SWMU 14 has been removed. Arsenic was also

detected in four of the sediment samples at concentrations above the NMED residential SSL but below the NMED industrial SSL. Confirmation soil samples were not analyzed for arsenic.

WSMR conducted a Screening Level Ecological Risk Assessment (SLERA) with a biological survey and baseline risk assessment in June 2005 for the Phase III RFI. The baseline risk assessment indicated that non-cancer and cancer risk to future on-site residents was acceptable for inhalation and ingestion of soil. The Phase III RFI was approved by NMED in a letter dated Nov. 7, 2008, with no specific comments (no conditions) on SWMU 14.

A background study was conducted and identified background levels of arsenic below the NMED Residential SSL. NMED approved the background study in a letter dated Feb. 3, 2014.

A petition to perform Class III Permit Modification for this site was submitted to NMED dated June 2013. WSMR received a NOD dated Feb. 5, 2015, requiring additional discussion of site history, potential additional sampling, and revision to the CAC petition. WSMR submitted an investigation work plan to NMED in May 2020, which was approved by NMED in July 2020. WSMR completed the investigation work and submitted the report to NMED in February 2022. NMED approved the investigation in a letter dated July 19, 2022. NMED does not require further investigation at this site.

Cleanup/exit strategy- WSMR expects to resubmit the CAC petition under the RFI/CMS phase based on approval of the site investigation from NMED. Site corrective action is expected to be completed under the RFI phase following revision of the CAC petition.

35955.1029_WSMR-39_FORMER MAIN POST LANDFILL 1A

Env Site ID: WSMR-39

Cleanup Site: FORMER MAIN POST LANDFILL 1A

Alias: SWMU-63

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	2/29/1996	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1029 (WSMR-39) is the suspected former landfill No. 1 supposedly located in the southeast area of the Main Post near building 1678. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. There is not an expected potential for offsite migration of potential contaminants. No historical information was available on the design construction and operating procedures used at this unit.

In 1988, an investigation of SWMU 63 under the WSMR RFA concluded that the potential for releases to soil and groundwater was unknown. A 1992 Phase I RFI also found no evidence of contamination. In 1994, four monitoring wells were installed and sampled around the suspected landfill as part of the Phase II RFI. Analyses indicated no constituents exceeding their respective action levels. A review of aerial photographs from 1956 and field inspections indicated that the site was most likely located approximately 330-ft south of Building 1678. To avoid confusion with the previously misidentified site, the new alleged landfill location was referred to as Landfill 1A. An additional RFI was conducted and consisted of an archeological study, geophysical survey, and soil borings. Boring activities were conducted in 1999 at sites identified as possible trench locations containing buried waste. Through visual classification of soil samples, no buried waste was detected. From this study, it was concluded that no landfill exists.

In an Aug. 2, 2004, letter, the NMED agreed with WSMR's assertion that Landfill 1A does not exist and recommended that the SWMU was eligible for NFA and that WSMR submit a petition for NFA determination. A CAC petition was submitted to NMED in March 2010 and a revised CAC Petition was submitted in January 2011. The NMED determined the petition to be Administratively Incomplete in October 2011. The revised CAC Petition was submitted to NMED on July 3, 2013. The NMED issued a NOD on May 8, 2018, requesting additional information.

Cleanup/exit strategy- The objective is to complete the required CAC efforts and reporting. WSMR may be required to complete additional investigation/CAC efforts however WSMR reiterates the site requires

NFA. WSMR is expecting to achieve site completion under the RFI/CMS phase following revision and approval of the CAC petition.

35955.1030_WSMR-40_FORMER MAIN POST LANDFILL 2A

Env Site ID: WSMR-40

Cleanup Site: FORMER MAIN POST LANDFILL 2A

Alias: SWMU-64

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	5/31/1994	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1030 (WSMR-40) is the suspected former Landfill No. 2 (SWMU 64) supposedly located in the southeast area of the Main Post near Building 1774. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. There is not an expected potential for offsite migration of potential contaminants.

The landfill supposedly operated from 1948-1965, but there is no historical information available on the design construction and operating procedures used at this unit. In 1988, SWMU 64 was investigated as part of the WSMR RFA, which concluded that the potential for releases to soil and groundwater was unknown. Phase I RFI found no evidence of a contamination source or release. Five monitoring wells were installed and sampled as part of the Phase II RFI. Analyses indicated no constituents exceeded their respective action levels. A review of aerial photographs and field inspections indicated that the site was possibly located approximately 660-ft to the south of Building 1774. The new alleged landfill location was referred to as Landfill No. 2A. An additional RFI was conducted. A smaller potential waste disposal area was found northeast of the main landfill area. An archeological study was extended to cover the newly identified area. A geophysical study and boring activities were conducted for SWMU 64 in which no evidence of refuse was discovered during the soil boring activities. From this study, it was determined that no landfill exists.

The NMED concurred that the Former Main Post Landfill 2A does not exist and required no further investigations in a July 2003 letter. However, the NMED did request additional investigation of monitoring well T-21 where chromium and lead were detected above Water Quality Control Commission (WQCC) standards. After further investigation at T-21, it was determined on Dec. 1, 2004, that neither lead nor chromium was detected in groundwater samples collected in August 2004. In the December 2004 letter, NMED determined that WSMR had completed the required investigations pertaining to Landfill 2A.

A CAC petition was submitted to NMED in March 2010 and a revised CAC Petition was submitted in January 2011. The NMED determined the petition to be Administratively Incomplete in October 2011,

requiring WSMR to provide additional information for SWMU 64. The revised CAC Petition was submitted to NMED on July 3, 2013. The NMED issued a Notice of Disapproval on May 8, 2018, requesting additional information.

Cleanup/exit strategy- The objective is to complete the required CAC efforts and reporting. WSMR may be required to complete additional investigation/CAC efforts however, WSMR reiterates that the site requires NFA. It is expected that no future action/liabilities will be required following the approval of the revised CAC petition. WSMR is expecting to achieve site completion under the RFI/ CMS phase.

35955.1031_WSMR-41_TTF METHYLENE CHLORIDE SPILL AREA

Env Site ID: WSMR-41

Cleanup Site: TTF METHYLENE CHLORIDE SPILL AREA

Alias: SWMU-108

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	5/31/1994	1/2/2027
DES:	- -	- -
IRA:	6/30/1988	5/15/1995
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1031 (WSMR-41) (SWMU 108) was a soil vapor extraction (SVE) system installed in 1995 to remediate methylene chloride and other constituents in soils associated with a release at the Temperature Test Facility (TTF) (SWMU 104). The current and reasonably anticipated future land use is industrial. The media of concern was soil and groundwater. There is not an expected potential for off-site migration of potential contaminants.

The constituents in the soil were the result of releases of approximately 8,000-gallons (gal) of coolant from a lined wastewater pond (SWMU 104; WSMR-34), approximately 5,000-gal from faulty valves associated with an underground tank located between SWMU 104 and the TTF building, and approximately 4,500-gal spilled during building construction.

SWMU 108, consisting of 19 SVE wells, was installed in 1998. Operation of the SVE system continued until October 2002, when the system shut down due to maintenance issues. At that time permanent system shutdown was recommended, as no constituents had been detected in soil vapor extracted from the system since October 2000. Dismantling of the SVE system was initiated in January 2003 and completed in August 2004. Vapor and groundwater wells associated with the system were plugged and abandoned in November and December 2007.

No unit-specific environmental investigation was conducted for SWMU 108, and all of the investigation and closure work conducted for SWMU 104 has already been reviewed and approved by NMED. Field activities for the TTF Clean Closure Demonstration were conducted during May and June 2005. These activities were conducted to accomplish clean closure for SWMU 104. Successful closure of SWMU 104 would/should then lead to successful closure of SWMU 108. NMED approved the clean closure certification for SWMU 104 in a letter dated July 11, 2007.

The clean closure of SWMU104 included the dismantling of SWMU 108 pursuant to an NMED approved Closure Plan. The closure activities at SWMU 104 were certified complete by WSMR and approved by the NMED and well abandonment (34 wells) was completed in late 2007.

A CAC petition, including SWMU 108, was submitted to NMED in March 2010, and a revised CAC Petition was submitted in January 2011. The NMED determined the petition to be Administratively Incomplete in October 2011. The letter required removing SWMU 108 from the petition, because a release assessment for the SWMU and submittal of additional information for SWMU 108 was required in Table 8-2 of the RCRA Permit. WSMR determined that the closure activities conducted met the requirements for a Release Assessment, which was required for SWMU 108 in Table 8-2 of the RCRA Permit. The revised CAC Petition was submitted to NMED on July 3, 2013. WSMR received Disapproval on the CAC petition dated May 8, 2018. The NMED (regulatory authority) stated that the petition would move forward for SWMU 108; however, additional information may be required for the sites pending NMED review of additional references.

Cleanup/exit strategy- The objective is to complete the required CAC efforts and reporting. WSMR is expecting to achieve site completion under the RFI/CMS phase.

35955.1033_WSMR-43_FORMER CHEM WASTE EVAP TANKS @ HELSTF

Env Site ID: WSMR-43
Cleanup Site: FORMER CHEM WASTE EVAP TANKS @ HELSTF
Alias: SWMU 31-32
Regulatory Driver: RCRA-C
RIP Date: 1/2/2027
RC Date: 1/2/2027
RC Reason: Not assigned
SC Date: 1/3/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Low
MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	5/31/1992	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: WSMR-43 (SWMUs 31 and32) consisted of two RCRA-regulated hazardous waste evaporation tanks located at the High Energy Laser Systems Test Facility (HELSTF). The current and reasonably anticipated future land use of this site is industrial. The media of concern is soil and groundwater. There is not an expected potential for offsite migration of potential contaminants.

The tanks were identical, located side-by-side above grade, and were constructed of reinforced concrete. In 1991, the tanks were determined to be leaking. Approximately 30,000-gal of waste were removed from the tanks in 1992 and disposed at a permitted facility. The tanks were determined to be non-hazardous and disposed of as construction debris.

The Phase III RFI work plan was submitted to the NMED in September 2005. WSMR submitted a revised Phase III RFI work plan in January 2007 and the NMED approved it in January 2007. The Phase III RFI report was submitted to NMED in February 2008 following field activities. In response to an NMED NOD, a revised Phase III RFI report was submitted to the NMED in September 2009. The NMED issued another NOD to the revised Phase III RFI report. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD on the second revision of the report in March 2012. WSMR addressed the comments concerning requirements for additional investigation found in the March 2012 NOD through submission of a Phase IV RFI work plan for NMED review (January 2017). NMED issued an NOD on the Phase IV work plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a letter dated March 15, 2021. To address data gaps, WSMR submitted the revised Phase IV RFI work plan to NMED in September 2023 and is awaiting review and approval.

Cleanup/exit strategy- WSMR's strategy is to complete the RFI for this site since it is still undergoing the RFI phase and has not achieved regulatory (NMED) concurrence with extent of potential contamination. Phase IV RFI will move forward. WSMR feels that speculation past the study phase is not reasonable until concurrence can be reached with the regulatory authority on current and potential future actions for the site.

35955.1039_WSMR-49_HELSTF HOLDING TANKS (Fluorspar)

Env Site ID: WSMR-49

Cleanup Site: HELSTF HOLDING TANKS (Fluorspar)

Alias: SWMU 33-34

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	3/31/1992	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: WSMR-49 (SWMUs 33 and34) consisted of two side-by-side tanks located at the HELSTF area. The current and reasonably anticipated future land use of this site is industrial. The media of concern is soil and groundwater. There is not an expected potential for offsite migration of potential contaminants.

The tanks received fluorspar from the Laser System Pressure Recovery System (PRS). The tanks acted as drying beds for the fluorspar sludge. The dried fluorspar was periodically removed for off-site disposal. The tanks are below grade level and are constructed of concrete. Approximately 900 pounds were produced per week. The tanks had no secondary containment. The use of these tanks was discontinued in 2009, and fluoride was found above residential SSL.

An RFA was conducted in 1988 that suggested a high release potential to soil. The Phase III RFI work plan for site investigation was submitted to the NMED in September 2005. WSMR submitted a revised Phase III RFI work plan in January 2007, and the NMED approved it in January 2007. The Phase III RFI report was submitted to NMED in February 2008 following field activities. In response to an NMED NOD, a revised Phase III RFI report was submitted to the NMED in September 2009. The NMED issued another NOD to the revised Phase III RFI report. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD on the second revision of the report in March 2012. WSMR addressed the comments concerning requirements for additional investigation found in the March 2012 NOD through submission of a Phase IV RFI work plan for NMED review (January 2017). NMED issued a NOD on the Phase IV work plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a letter dated Mar. 15, 2021. To address data gaps, WSMR submitted the revised Phase IV RFI work plan to NMED in September 2023 and is awaiting review and approval.

Cleanup/exit strategy- WSMR's strategy is to complete the RFI for this site since it is still undergoing the RFI phase and has not achieved regulatory (NMED) concurrence with extent of potential contamination.

Phase IV RFI will move forward. WSMR feels that speculation past the study phase is not reasonable until concurrence can be reached with the regulatory authority on current and potential future actions for the site.

35955.1040_WSMR-50_SWMUs 35-36 and AOC-V

Env Site ID: WSMR-50

Cleanup Site: SWMUs 35-36 and AOC-V

Alias: SWMU 35-36

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	9/30/1988
RFI/CMS:	1/31/1989	1/2/2027
DES:	- -	- -
IRA:	2/28/1989	5/31/1989
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: WSMR-50 (SWMUs 35 and 36 and AOC V) consisted of two ethylene glycol tanks (SWMUs 35 and 36) and a pressure recovery system (AOC-V) located at HELSTF. The current and reasonably anticipated future land use of the site is industrial. The media of concern is soil and groundwater. There is not an expected potential for offsite migration of potential contaminants.

These steel tanks were used as emergency storage containers for ethylene glycol in the event the compressor system at HELSTF failed. An emergency release occurred in 1988. The ethylene glycol was disposed through the Defense Reutilization and Marketing Office (DRMO). There were no other reported releases of ethylene glycol to the tanks.

An RFA was conducted in 1988 that suggested a low release potential to soil and groundwater. A Phase III RFI work plan for site investigation was submitted to the NMED in September 2005. WSMR submitted a revised Phase III RFI work plan in January 2007, and the NMED approved it in January 2007. The Phase III RFI report was submitted to NMED in February 2008 following field activities. In response to an NMED NOD, a revised Phase III RFI report was submitted to the NMED in September 2009. The NMED issued another NOD to the revised Phase III RFI report. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD on the second revision of the report in March 2012. WSMR addressed the comments concerning requirements for additional investigation found in the March 2012 NOD through submission of a Phase IV RFI work plan for NMED review (January 2017). NMED issued an NOD on the Phase IV work plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a letter dated Mar. 15, 2021.

A Release Assessment was conducted specifically at AOC V which was approved by the NMED in January 2019. Additional investigation at AOC V was required. To address data gaps, WSMR submitted the revised Phase IV RFI work plan to NMED in September 2023 and is awaiting review and approval.

Cleanup/exit strategy- WSMR's strategy is to complete the RFI for this site since it is still undergoing the RFI phase and has not achieved regulatory (NMED) concurrence with extent of potential contamination. Phase IV RFI will move forward. WSMR feels that speculation past the study phase is not reasonable until concurrence can be reached with the regulatory authority on current and potential future actions for the site.

35955.1042_WSMR-53_HELSTF TEST CELL 4 LAGOON

Env Site ID: WSMR-53

Cleanup Site: HELSTF TEST CELL 4 LAGOON

Alias: SWMU-145

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	6/30/1992	1/2/2027
DES:	- -	- -
IRA:	6/30/1996	7/31/1996
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: WSMR-53 consisted of the Test Cell 4 Lagoon located at HELSTF. The current and reasonably anticipated future land use of this site is industrial. The media of concern is soil and groundwater. There is not an expected potential for offsite migration of potential contaminants.

The unit had a single liner and no secondary containment. In 1989, a discharge of 30,000-gal of sodium fluoride and sodium hydroxide wastewater was released and the liner failed. In 1992, a Phase I RFI was conducted and included a composite sediment sample and installation of a groundwater monitoring well. In 1994, a Phase II RFI included the installation of three monitoring wells. Soil samples were collected during the installation of the wells and analyzed for volatile organic compounds (VOC), semi-volatile organic compound (SVOC), metals, and fluoride. VOCs and SVOCs were not detected. 1,1 dichloroethene (DCE), lead, selenium, and fluoride exceeded their MCL in groundwater.

The liner and 2-ft of soil beneath were removed following Phase II RFI. Confirmatory samples were collected and determined to be nonhazardous, and the lagoon was backfilled. A Class III permit modification was submitted to remove this site from the WSMR permit. The NMED disapproved the petition requesting additional investigation.

WSMR submitted a revised Phase III RFI work plan in January 2007, and the NMED approved it in January 2007. The Phase III RFI report was submitted to NMED in February 2008 following field activities. In response to an NMED NOD, a revised report was submitted to the NMED in September 2009. The NMED issued another NOD to the revised Phase III RFI report. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD on the second revision of the report in March 2012. WSMR addressed the comments concerning requirements for additional investigation found in the March 2012 NOD through submission of a Phase IV RFI work plan for NMED review (January 2017). NMED issued an NOD on the Phase IV work plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a letter dated Mar. 15, 2021. To address data gaps,

WSMR submitted the revised Phase IV RFI work plan to NMED in September 2023 and is awaiting review and approval.

Cleanup/exit strategy- WSMR's strategy is to complete the RFI for this site since it is still undergoing the RFI phase and has not achieved regulatory (NMED) concurrence with extent of potential contamination. Phase IV RFI will move forward. WSMR feels that speculation past the study phase is not reasonable until concurrence can be reached with the regulatory authority on current and potential future actions for the site.

35955.1043_WSMR-54_HELSTF CHROMATE SPILL SITE

Env Site ID: WSMR-54

Cleanup Site: HELSTF CHROMATE SPILL SITE

Alias: SWMU-143

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Medium

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	3/31/1991	1/2/2027
DES:	- -	- -
IRA:	8/31/1998	12/31/1998
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1043 (WSMR-54) (SWMU 143) consists of a hexavalent chromium spill located at the HELSTF Equipment Storage Area (SWMU 141). The current and reasonably anticipated future land use for this site is industrial. The media of concern is soil and groundwater.

The spill occurred in the early 1980s when unused hexavalent chromium-based corrosion inhibitor (Entec 300) was released from leaking storage drums. A site investigation was conducted by the US Army Environmental Hygiene Agency (USAEHA) in July 1990. The investigation determined that chromium spills had not occurred at other locations in the yard and determined that the release happened sometime between 1982 and 1983 during the handling of a 55-gal drum of Entec 300.

Concurrent with the investigation, approximately 17 drums of chromium contaminated soil were excavated to a depth of 8-ft and removed from the site. In 1992, Phase I RFI soil borings indicated slightly elevated total chromium concentrations. A groundwater sample showed hexavalent chromium, total chromium, and 1,1-dichloroethylene levels exceeding Federal and State Maximum Contaminant Levels (MCLs) and State groundwater protection standards. In 1994, the Phase II RFI indicated that VOCs, SVOCs, and seven metals were detected in soil samples and groundwater samples from this SWMU. Detections of some of the VOCs and SVOCs could not be attributed to this site; therefore, those detections were attributed to SWMU 154.

Periodic groundwater monitoring began in accordance with the Work Plan for the CMS in February 1995. In May 1996, the USEPA issued a NOD for the Phase II report recommending the CMS should be initiated to remove chromium from the shallow water zone, and interim measures should be taken to abate the release of newly discovered organics. In September 1996, WSMR decided to implement the demonstration of In Situ Gas Treatment Technology under a VCM phased approach. The report resulted in showing the successful reduction of 70% of the hexavalent chromium. NMED concurred with the success of the remedy and technology and considered the remedy complete for the chromium.

HELSTF Phase III RFI commenced in 2003 to address all HELSTF sites under one comprehensive study. Per NMED's NOD a revised Phase III RFI report was submitted to the NMED in September 2009. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD in March 2012. WSMR addressed the comments concerning requirements for additional investigation found in the March 2012 NOD through submission of a Phase IV RFI work plan for NMED review (January 2017). NMED issued an NOD on the Phase IV work plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a letter dated Mar. 15, 2021. To address data gaps, WSMR submitted the revised Phase IV RFI work plan to NMED in September 2023 and is awaiting review and approval.

Cleanup/exit strategy- WSMR's strategy is to complete the RFI for this site since it is still undergoing the RFI phase and has not achieved regulatory (NMED) concurrence with the extent of potential contamination. Phase IV RFI will move forward. WSMR feels that speculation past the study phase is not reasonable until concurrence can be reached with the regulatory authority on current and potential future actions for the site. WSMR will also continue periodic groundwater monitoring at the site. Since 1995, nine wells have undergone groundwater monitoring which has indicated the area remains impacted. Contaminants have migrated past the SWMU boundary. There is not an expected potential for off WSMR/HELSTF migration of contaminants. WSMR will complete an approved RFI and continue routine groundwater monitoring.

35955.1044_WSMR-55_HELSTF SYSTEMIC DIESEL SPILL

Env Site ID: WSMR-55

Cleanup Site: HELSTF SYSTEMIC DIESEL SPILL

Alias: SWMU-154

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Medium

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	6/30/1992	1/2/2027
DES:	- -	- -
IRA:	8/31/1994	9/30/2007
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1044 (WSMR-55) Solid waste management unit (SWMU 154) is located near the HELSTF Cleaning Facility (CCWS-05; SWMU 142). The current and reasonably anticipated future land use for the site is industrial. The media of concern is soil and groundwater.

A 30,000-gal diesel underground storage tank (UST) was installed at the staging area on the east side of Test Cell No. 2 between 1979 and 1980. The UST was removed in April 1988. A release of fuel from the supply line for the HELSTF Cleaning Facility (HCF) boilers was discovered in 1990 during an investigation of the HCF Sump. Estimates of product loss ranged from 100,000 to 175,000-gal. The USEPA required WSMR to implement Interim Remedial Measures (IRM) for the site. In October 1991, WSMR submitted an Interim Measures Work Plan to the USEPA and NMED that included pumping the free product fuel directly from monitoring wells. In 1991, the IRM Work Plan was approved by the NMED and USEPA.

Phase I RFI was conducted between April and June 1992, simultaneously with the ongoing IRM. The RFI report recommended that no activities be conducted under the RFI for SWMU 154 until the completion of the IRM. It was also recommended that continued groundwater sampling of monitor wells be conducted as part of the Phase II RFI for SWMU 143. The IRM report concluded that soil and groundwater contamination had been delineated. Additionally, a pneumatic skimming pump was installed in various monitor wells and reported more than 500-gal of diesel recovered from the system. The skimmers operated until 1995. In October 1992, NMED concurred with WSMR's request to coordinate activities related to the RCRA closure of SWMUs 31-32 with the RFI process at SWMU 142, 154, and the IRM.

A new work plan for the IRM was submitted in March 1993. The second phase of the IRM was conducted between April and June 1993. The IRM assessment delineated the light non-aqueous phase liquids (LNAPL) boundaries and provided enough data to develop a remedial system for LNAPL removal. A final IRM report was approved by the USEPA in July 1994. The proposed diesel recovery system was installed between November 1994 and January 1995. The system became fully operational on May 15, 1995. An

IRM report and Operations and Maintenance (O&M) manual were submitted to the USEPA and NMED in May 1995. The product recovery rates of the diesel recovery system began to decline in 1998. As a result of system optimizations and labor-intensive operations, product recovery increased temporarily in the early 2000s, but without effective results. The system was shut down in 2004.

HELSTF Phase III RFI commenced in 2003 to address all HELSTF sites under one comprehensive study. Per NMED's NOD, a revised Phase III RFI report was submitted to the NMED in September 2009. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD in March 2012. WSMR addressed the comments concerning requirements for additional investigation found in the March 2012 NOD through submission of a Phase IV RFI work plan for NMED review (January 2017). NMED issued an NOD on the Phase IV work plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a letter dated Mar. 15, 2021. To address data gaps, WSMR submitted the revised Phase IV RFI work plan to NMED in September 2023 and is awaiting review and approval.

Cleanup/exit strategy- WSMR’s strategy is to complete the RFI for this site since it is still undergoing the RFI phase and has not achieved regulatory (NMED) concurrence with the extent of potential contamination. Phase IV RFI will move forward. Since 1995, 11 wells have undergone groundwater monitoring which has indicated the area remains impacted. Contaminants have migrated past the SWMU boundary. There is not an expected potential for off WSMR/HELSTF migration of potential contaminants. WSMR will complete an approved RFI and continue routine groundwater monitoring.

35955.1047_WSMR-58_FORMER VANDAL BURIAL SITE

Env Site ID: WSMR-58

Cleanup Site: FORMER VANDAL BURIAL SITE

Alias: SWMU-153

Regulatory Driver: RCRA-C

RIP Date: 12/31/2026

RC Date: 12/31/2026

RC Reason: Not assigned

SC Date: 1/1/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	5/31/1992	12/31/2026
DES:	- -	- -
IRA:	7/31/1995	9/30/1996
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1047 (WSMR-58) (SWMU 153) is an area approximately 270 by 140-ft located in the Hazardous Test Area (HTA) of WSMR adjacent (25-ft south) to the Open Burn/Open Detonation (OB/OD) Area (SWMUs 55 56 and 56a). The current and reasonably anticipated future land use of the site is industrial. The media of concern was soil and groundwater. There is not an expected potential for offsite migration of potential contaminants.

During the mid-1950s, missile and rocket parts were buried in three distinct cells and covered with approximately 2 to 3-ft of soil. In 1992, a RFI was performed to determine whether a release had occurred. The RFI conclusion was no release from SWMU 153 was evident based on the data.

In 1996, a removal action was performed to excavate the metal and debris and associated soil. Approximately 10,900-cubic yards of soil were removed from the burial area. The metal and debris were disposed offsite. The soil was disposed of at the Main Post Landfill. Soil samples were collected from the base of the excavation, and the results confirmed that soil remaining in the area contained no RCRA metals above the 1992 NMED residential SSLs.

During 1995, two monitoring wells were installed to provide cross-gradient and downgradient groundwater data within the HTA site. In 2001, NMED requested additional soil sampling of the previously excavated area as part of the physical closure activities of the HTA OB/OD unit.

A RFI Work Plan was submitted in October 2011 and approved by the NMED on April 30, 2012. The RFI report was submitted in December 2012. The results of the investigation at SWMU 153 indicated that no potential perchlorate source is present in the investigated area. Therefore, SWMUs 55, 56, and 56a (the OB/OD at HTA site) are considered as the likely source for perchlorate concentration in groundwater from well HTA-14. The results of the RFI for the site indicated that no source of contamination is present in the soil from this site and that the site should be proposed for NFA. The NMED responded with disapproval to the RFI report on Feb. 27, 2014. WSMR submitted a revised RFI report in May 2014.

NMED approved (with modifications) the revised RFI in a letter dated Dec. 12, 2014. WSMR resubmitted additions to the RFI report to comply with the NMED required modifications in February 2015.

A CAC petition was submitted to the NMED in July 2019 and received an administratively incomplete determination from the NMED dated Feb. 17, 2020. WSMR responded to the NMED in May 2020.

Cleanup/exit strategy- Based on the NFA recommendation of the RFI, WSMR submitted a Class III Permit Modification Petition to the NMED to change the status of the site to CAC. WSMR is awaiting NMED review of the CAC petition. No further sitework is expected beyond completion of the CAC petition at this time. Corrective action is expected to be completed (under the RFI phase) following NMED approval of the CAC petition.

35955.1048_WSMR-59_FORMER SEWAGE TREATMENT PLANT (IMHOFF TANK)

Env Site ID: WSMR-59
Cleanup Site: FORMER SEWAGE TREATMENT PLANT (IMHOFF TANK)
Alias: SWMU-62
Regulatory Driver: RCRA-C
RIP Date: 1/2/2027
RC Date: 1/2/2027
RC Reason: Not assigned
SC Date: 1/3/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Low
MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	6/30/1992	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1048 (WSMR-59) (SWMU 62) was a wastewater treatment plant which was abandoned in 1958 when the current WSMR STP was constructed. The current and reasonably anticipated future land use of this site is industrial. The media of concern was soil. There is not an expected potential for offsite migration of potential contaminants.

The plant was reported to have consisted of an Imhoff Tank used to treat sewage from the post area and potential chemical waste discharges from testing activities. Effluent from the tank may have drained into a nearby ditch. As of 1988, no information was available on the management of sludge from the unit. A RFA was conducted in 1988 that suggested a high release potential to soil/groundwater.

In 1992, a Phase I RFI was performed to determine whether the Imhoff tank was still in place and whether a significant release had occurred. In March 1991, total magnetic field ground conductivity and in-phase component geophysical survey methods were used to tentatively locate the tank. All three methods exhibited highly anomalous values in the eastern portion of the survey area. This anomaly is roughly circular with a radius of approximately 50-ft. Due to the magnitude of anomalous readings on all three data sets, this area is suspected to be the location of the former Imhoff tank.

To answer potential data gaps at the site, an additional RFI was conducted. WSMR submitted an RFI Work Plan to the NMED in 2016 which was subsequently approved by the NMED. Field work was completed at the end of 2017. WSMR submitted the RFI report to the NMED in May 2018 which received disapproval in August 2018. WSMR submitted the revised RFI report in October 2018 which was approved with modifications by the NMED in a letter dated Nov. 27, 2018. WSMR responded to these comments in March 2019. The WSMR administrative record lists the letter as having been sent on Mar. 4, 2019.

Based on the comments in the approval with modifications letter, WSMR will conduct additional investigation to further characterize the site. A Data Gap Investigation Letter Work Plan was submitted to the NMED in November 2022. WSMR is awaiting review and approval from NMED.

Cleanup/exit strategy- Following completion of additional investigation, WSMR will petition for a Class III Permit Modification to change the status of the site from requiring corrective action to CAC. Site corrective action is expected to be completed under the RFI phase following submittal and approval of the CAC petition.

35955.1049_WSMR-60_WASH RAMP & DRAIN/SUMP EAST OF BUILDING 1778

Env Site ID: WSMR-60
Cleanup Site: WASH RAMP & DRAIN/SUMP EAST OF BUILDING 1778
Alias: SWMU 12
Regulatory Driver: RCRA-C
RIP Date: 1/2/2027
RC Date: 1/2/2027
RC Reason: Not assigned
SC Date: 1/3/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Low
MRSPP: N/A

Phase	Start	End
RFA:	5/15/1988	8/15/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	6/30/1992	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1049 (WSMR-60). The current and reasonably anticipated future land use of this site is industrial. The media of concern was soil. There is not an expected potential for offsite migration of potential contaminants.

The vehicle wash ramp and drains and the sump and Oil/Water Separator (OWS) (SWMU 12) were built in the 1950s. The site is located in the Maintenance Area of the Main Post, east of the maintenance shop, waste oil tank, wash ramp, and drains. It is situated immediately east of Building 1778 in the Main Post. The wash ramp and drain/sump were used to steam-clean vehicles operated at WSMR. The concrete pad was designed to collect wastewater from spray-washing vehicles. The wastewater formerly discharged through a subgrade pipe to the drainage ditch located east of the wash ramp. After the Main Post STP was built in 1958, the OWS outlet was plumbed to the sanitary sewer system for treatment and disposal of wastewater. The OWS worked by gravity separation, and the skimmed oil phase was drained into the waste oil storage tank. The wash ramp was dismantled in 1997 and transported off-site as scrap.

SWMU 12 was investigated during three phases of the RFI. The investigations indicated the presence of arsenic in site soil; arsenic was detected at concentrations above the NMED residential SSL of 3.9-mg/kg but below the industrial SSL of 17.7 mg/kg. All other constituents were below NMED residential SSLs. A SLERA was performed as part of the Phase III RFI which indicated that a full ecological risk assessment was not warranted. Based on the results of the investigation, WSMR requested a determination for CAC with Controls for SWMU 12. The screening conducted for human exposure to arsenic determined that a complete exposure pathway did not exist to future residents, site/industrial workers, or construction workers; hence, a baseline risk assessment was not warranted. NMED approved the Phase III RFI report with no site-specific comments (no conditions) in a letter dated Nov. 7, 2008. A background study was conducted and identified background levels of arsenic below the NMED Residential SSL of 3.9 mg/kg. NMED approved the background study in a letter dated Feb. 3, 2014. A petition to perform Class III Permit Modification for this site was submitted to NMED dated June 2013. WSMR received a Disapproval dated Feb. 5, 2015, requiring additional discussion of site history, contaminants of concern, ground water, potential additional sampling, and revision to the CAC petition.

WSMR submitted an investigation work plan (Phase IV) to the NMED in 2020. The work plan was approved by NMED in July 2020. WSMR completed the investigation work and submitted the report to NMED in February 2022. NMED approved the investigation in a letter dated July 19, 2022. NMED does not require further investigation at this site.

Cleanup/exit strategy- WSMR expects to resubmit the CAC petition under the RFI/CMS phase based on approval of the site investigation from NMED. Site corrective action is expected to be completed under the RFI phase following additional investigation and revision of the CAC petition.

35955.1053_WSMR-67_STALLION ASPHALT TANKS

Env Site ID: WSMR-67

Cleanup Site: STALLION ASPHALT TANKS

Alias: SWMU 121-123

Regulatory Driver: RCRA-C

RIP Date: 12/31/2026

RC Date: 12/31/2026

RC Reason: Not assigned

SC Date: 1/1/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	5/31/1993	12/31/2026
DES:	- -	- -
IRA:	7/31/1993	7/31/1993
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: WSMR-67 (SWMUs 121 through 123). The Stallion Asphalt Tanks (SWMUs 121-123) were located north of the Stallion Range Center, just west of the Stallion Gate security checkpoint and consisted of three inactive subgrade tanks. The current and reasonably anticipated future land use is industrial. The media of concern was soil. There is not an expected potential for off-site migration of potential contaminants.

Three sub-grade storage tanks were used in the 1960s during the paving of the Stallion Range Center roads. These SWMUs were included in Table 8-2 of the WSMR 2009 Hazardous Waste Permit. The storage tanks were labeled Tank 1 (SWMU 121), Tank 2 (SWMU 122), and Tank 3 (SWMU 123). Each storage tank had a capacity of approximately 15,000-gal and dimensions of 26-ft in length by 9-ft in diameter. The tanks were located on the side of a terraced hill, with soil extending approximately halfway up the sides of the tanks on their northern end, while the soil on the southern ends of the tanks only extended approximately 1/8 up the tank's sides. One of the tanks appeared to have severely collapsed. The visible portions of the other two tanks appeared to be in good condition. All three tanks appeared to be empty and abandoned based upon the visual survey in 1988. No piping or vent lines were observed to be connected to or associated with the tanks and a tar-like odor was apparent. The ground on the north side of the tanks appeared to be stained with a tar-like substance. Facility personnel were unable to provide a list of materials, which may have been managed within the tanks, the age of the tanks, or the dates of operation of the units.

A RFA was conducted in 1988 that suggested a moderate release potential. Phase I RFI was conducted in 1992 to determine whether a release of hazardous constituents occurred. In 1993, WSMR performed a voluntary corrective action (VCA) to remove two of the storage tanks and excavate 3-ft of soil in 1993. The third tank was removed later. Documentation of this removal has not been located.

A CAC petition was submitted to the NMED on July 26, 2012. On Oct. 26, 2012, NMED responded to the CAC petition with an Administratively Incomplete determination. The NMED determined that SWMUs

121-123 required a release assessment, and therefore, could not evaluate them for corrective action complete status and that further excavation at the site was not conducted following removal of the tanks. Following the Administratively incomplete determination, WSMR submitted a Revised CAC Petition as well as a Release Assessment report on Jan. 1, 2013.

The release assessment was prepared in response to the NMED Oct. 26, 2012, letter and addresses the requirements for SWMUs 121-123 listed in Appendix 8, Table 8-2 of the RCRA Permit. WSMR stated that although the sites are not newly identified, the document contains the elements found in the permit and that investigation and remediation work had already been completed at the site. On Aug. 28, 2013, WSMR received a Notice of Disapproval for the revised report and required WSMR to remove sites from the report. WSMR submitted the revised Release Assessment on Oct. 13, 2013. On Feb. 19, 2014, WSMR received an Approval with Modifications on the Revised Release Assessment report. NMED determined that SWMUs 121-123 are not eligible for corrective action complete until WSMR addresses the issues found within the Revised Release Assessment. NMED determined that once the investigation at the site is complete, WSMR may resubmit petitions for the site. WSMR removed SWMUs 121-123 from the Jan. 1, 2013, Revised CAC Petition.

WSMR submitted an ACA Work Plan to NMED in February 2020 and was subsequently approved in July 2020. Field work was completed during the summer of 2022. The ACA report was submitted to NMED in February 2023. The ACA report was approved by NMED in a letter dated Aug. 22, 2023.

Cleanup/exit strategy- WSMR will complete a CAC petition for this site. Site corrective action is expected to be completed under the RFI phase following completion and approval of the CAC petition.

35955.1056_WSMR-70_FORMER LANDFILL @ STALLION RANGE CENTER

Env Site ID: WSMR-70
Cleanup Site: FORMER LANDFILL @ STALLION RANGE CENTER
Alias: SWMU 119-120
Regulatory Driver: RCRA-C
RIP Date: 11/15/2027
RC Date: 11/15/2027
RC Reason: Not assigned
SC Date: 11/16/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Low
MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	12/31/1996	11/15/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1056 (WSMR-70). SWMUs 119-120 are in Socorro County New Mexico along the northwestern boundary of WSMR, approximately 100 miles north of the WSMR Main Post. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. There is not an expected potential for offsite migration of potential contaminants.

The former SRC Landfill (SWMUs 119 and 120) has an area of approximately 12-acres and is located approximately one mile south of the SRC Gate. The previous landfill area was divided into the former landfill (SWMU 120) and the then active landfill (SWMU 119). SWMU 119 has since been covered and is inactive. The original or former landfill SWMU 120, located north of the then active landfill, consists of five filled cells typically 150-ft long by 25-ft wide by 15-ft deep that encompasses approximately 5-acres. SWMU 119 consists of several trenches of the same dimensions as SWMU 120 (approximately 15-ft deep). SWMU 120 operated from 1970 – 1984. SWMU 119 operated from 1984 until about 2001 when the landfill expansion and 20 New Mexico Administrative Code (NMAC) 9.1 Section 108.B exemption was approved by NMED Solid Waste Bureau (SWB).

The currently active cell is assumed to have opened after the NMED SWB approval of March 2001. The currently active cell is south of and separate from SWMUs 119 and 120. Based on site records, the SWMU 120 and 119 landfills have received only nonhazardous paper, office, kitchen, and yard/grounds waste from the SRC excluding any liquids, solvents, cleaners, dyes, or lubricants.

In March 2001, WSMR received a small volume operation exemption for the SRC Landfill from the NMED SWB (20 NMAC 9.1 Section 108.B), which minimizes the annual requirements for the facility and also approved the landfill expansion. Groundwater monitoring and methane monitoring were not required on an annual basis if the operating conditions are met.

In 1996, the groundwater monitoring wells were sampled and one explosive compound, cyclotetramethylene tetranitramine (HMX), was detected. Based on a review of the October 1996 groundwater monitoring program results, a data gap was identified along the southern boundary of the landfill. To supplement groundwater data for the landfill, a fourth downgradient monitoring well was

installed along the southeastern boundary of the landfill and documented in the March 1998 groundwater monitoring report.

WSMR submitted a RFI Work plan to NMED in February 2011. In August 2011, NMED submitted a Notice of Disapproval on the Work Plan. WSMR responded with response to the comments and a revised Work Plan was submitted in November 2011. In May 2012, NMED approved with modifications the Revised Work Plan. On Jan. 25, 2013, WSMR submitted a RFI report that described field activities performed in December 2012. WSMR received an Approval with Modifications letter from NMED dated May 13, 2014. The letter required clarification of the report and four years of annual groundwater monitoring due to the detections of TPH and HMX. Based on the results of the RFI, the site was recommended for NFA.

WSMR submitted a groundwater sampling work plan to the NMED in December 2019 and is awaiting comment. By early 2021, four required annual groundwater monitoring events had been conducted in which the contaminants of concern were not detected. The groundwater monitoring events were approved by NMED. The final report was approved in October 2023.

Cleanup/exit strategy- The objective at this site is to complete a permit modification by submitting a CAC petition based on NMED approval of the RFI. Site corrective action is expected to be completed under the RFI phase following completion and approval of the CAC petition.

35955.1057_WSMR-71_FORMER NORTH OSCURA PEAK LANDFILL

Env Site ID: WSMR-71
Cleanup Site: FORMER NORTH OSCURA PEAK LANDFILL
Alias: SWMU 47-49
Regulatory Driver: RCRA-C
RIP Date: 12/15/2027
RC Date: 12/15/2027
RC Reason: Not assigned
SC Date: 12/16/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Low
MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	5/31/1991	12/15/2027
DES:	- -	- -
IRA:	11/30/2001	2/28/2013
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1057 (WSMR-71) consisted of three landfill cells located in the Oscura Mountains in the northern section of WSMR. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. There is not an expected potential for offsite migration of potential contaminants.

A small open trench (SWMU 47) was reportedly used to dispose septic waste, but wire and various waste materials were present. A second open trench (SWMU 48) was above the surrounding grade with little vegetation and disturbed soil. Material visible in the trench included glass and plastic bottles, wiring, wood, and miscellaneous waste. A mound of dirt approximately 10-ft high was situated at the north end of this trench. The third trench (SWMU 49) was covered with soil. Investigations including drilling and sampling of the trench were completed. Waste identified included wood, wire, plastic, and metal debris.

An investigation of the SWMUs was conducted in 1997. Soil borings were taken to characterize the nature and extent of the waste and was incorporated into the Corrective Measures Work Plan. Corrective measures were completed in early 2002. All buried debris was removed from the landfill. A VCM report was submitted to the NMED in 2004. In a letter dated June 18, 2006, the NMED concurred with the finding of the VCM Report and stated that based on the information in the report, it appeared that WSMR had completed corrective action at the landfill. NMED also stated in the letter that no further investigation pertaining to the landfills was required, and the SWMUs are eligible for a NFA determination.

In December 2009, RCRA Permit (NM2750211235) for WSMR SWMUs 48 and 49 were administratively combined into SWMU 48. A CAC petition was submitted to NMED in March 2010 and revised CAC Petition was submitted in January 2011. The NMED determined the petition to be Administratively Incomplete in October 2011 requiring removing SWMUs 47 & 48 from the petition, because release assessment for this SMWU is required based on Table 8-2 of the RCRA Permit. WSMR determined that because investigation and corrective action activities have been completed at these SWMUs and because the NMED concurred that the SWMUs are eligible for a NFA determination, the requirements for a

release assessment have been met. The revised CAC Petition was submitted to NMED on July 3, 2013. The NMED issued a Notice of Disapproval on May 8, 2018, requesting additional information.

Cleanup/exit strategy- The objective is to complete the required CAC efforts and reporting through responding to the NOD. WSMR is responding to the NOD through revising the CAC petition to complete SC. WSMR is expecting to achieve site completion under the RFI/CMS phase.

35955.1059_WSMR-73_WASTE UNDERGROUND INJECTION PIPE

Env Site ID: WSMR-73
Cleanup Site: WASTE UNDERGROUND INJECTION PIPE
Alias: SWMU 17
Regulatory Driver: RCRA-C
RIP Date: 12/31/2026
RC Date: 12/31/2026
RC Reason: Not assigned
SC Date: 1/1/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Low
MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	5/31/1992	12/31/2026
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1059 (WSMR-73) (SWMU 17). The waste underground injection pipe was reportedly located at the southwest corner of Building 1753, the Heavy Equipment Maintenance Shop, at the White Sands Main Post. The current and reasonably anticipated future land use is industrial. The media of concern is soil. There is not an expected potential for off-site migration of potential contaminants.

The dimensions composition and depth of the pipe were unknown at the time of the RFA. SWMU 17 was reportedly used to dispose of waste oils and degreasing solvents from the Heavy Equipment Maintenance Shop at Building 1753. According to site personnel, the pipe was reportedly installed vertically in the ground and wastes were poured into the open end. The dates of operation are unknown, but the pipe was not visible as of the time of the RFA conducted in 1988. The anecdotal evidence of the existence of SWMU 17 was acquired from former site personnel during the RFA.

SWMU 17 was investigated during three phases of the RFI. A horizontal underground pipe was excavated as part of the Phase II RFI. A soil sample collected at the end of the excavated pipe indicated arsenic concentration above the NMED residential SSL of 3.9-mg/kg but below the NMED industrial SSL of 17.7 mg/kg. All other constituent concentrations were below the NMED residential SSL. A SLERA conducted as part of the Phase III RFI determined there was no concern for biotic organisms or native habitats at this site and a full ecological risk assessment was not warranted. A baseline risk assessment was also conducted which indicated acceptable exposure risks to future onsite residents. The NMED approved the Phase III RFI in a letter dated Nov. 7, 2008.

A background study was conducted and identified background levels of arsenic below the NMED Residential SSL of 3.9 mg/kg. NMED approved the background study in a letter dated Feb. 3, 2014. A petition to perform Class III Permit Modification for this site was submitted to NMED dated June 2013. WSMR received a Notice of Disapproval dated Feb. 5, 2015, requiring proposal for additional investigation and revision to the CAC petition. NMED was concerned that the location of the former injection pipe has not been shown by WSMR and therefore fully investigated.

WSMR submitted an Investigation Work Plan to NMED in May 2020, which was approved by NMED in March 2021. Field work was completed in October 2022. An investigation report was submitted to NMED in June 2023 and approved by NMED in October 2023 requiring no further investigation.

Cleanup/exit strategy- WSMR's strategy is to submit a revised petition for a Class III Permit Modification to change the status of the site from requiring corrective action to CAC without controls. It is not likely that additional site work will be required following approval of the CAC petition. No significant evidence exists that would indicate wastes were disposed at this site. Site corrective action is expected to be completed under the RFI phase following submittal and approval of the CAC petition.

35955.1060_WSMR-74_FORMER WST OIL TANK/SUMP @ BLDG 1778

Env Site ID: WSMR-74
Cleanup Site: FORMER WST OIL TANK/SUMP @ BLDG 1778
Alias: SWMU 10
Regulatory Driver: RCRA-C
RIP Date: 12/31/2026
RC Date: 12/31/2026
RC Reason: Not assigned
SC Date: 1/1/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE:
MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	3/31/1990	3/31/1990
RFI/CMS:	5/31/1992	12/31/2026
DES:	- -	- -
IRA:	3/31/1990	3/31/1990
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: WSMR-74 (35955.1060) (SWMU 10) consists of the Vehicle Wash Pad and Drains and the Sump and Oil/Water Separator (SWMU 10) as listed in WSMR's RCRA Permit. The current and reasonably anticipated future land use is industrial. The media of concern is soil. There is not an expected potential for offsite migration of potential contaminants. The SWMU is located immediately west of Building 1778 in the Main Post area.

The dimensions of the concrete wash pad are 30-ft by 30-ft, and it is surrounded by a 2-ft wide drain. The drain is 2-ft deep, constructed of concrete and covered with metal grates. The drain empties to a concrete 500-gal sump and oil/water separator at the northwest corner of the Vehicle Wash Pad. The Vehicle Wash Pad and Oil/Water Separator were built in the mid-1950s. The concrete pad collects wastewater from the spray washing of vehicles. The wastewater formerly discharged through a subgrade pipe to the drainage ditch located east of the wash pad. After the Main Post STP was built, the oil/water separator outlet was plumbed to the sanitary sewer system for treatment and disposal of the wastewater. The oil phase would be periodically skimmed to the Waste Oil Storage Tank (SWMU 8).

A visual inspection performed during the RFA revealed no historical evidence of contaminant releases at the site. Sampling performed during the Phase I RFI included a Soil Vapor Survey (SVS), surface sediment sampling, and a shallow soil sample taken from the ditch to which the SWMUs originally discharged. No contaminants were identified at concentrations exceeding guidelines, although an elevated lead concentration was detected in one sediment sample. The source of this concentration may have been SWMUs 14 and 15, as those sites also discharged to the drainage ditch. The Phase II RFI completed sampling from soil borings placed by the wash pad and former effluent discharge pipe, but no contaminants were detected at levels above their current guidelines. It was concluded in the Phase III RFI, that SWMU 10 required NFA. NMED approved the Phase III RFI report with no site-specific comments (no conditions) in a letter dated Nov. 7, 2008.

Cleanup/exit strategy- WSMR's strategy is to submit a CAC petition to the NMED to close out the site since the Phase III RFI was approved by the NMED.

35955.1064_WSMR-78_SWMUs 147 and 23-26

Env Site ID: WSMR-78

Cleanup Site: SWMUs 147 and 23-26

Alias: SWMU-147

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Medium

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	8/31/1994	10/31/1994
RFI/CMS:	10/31/1994	1/2/2027
DES:	- -	- -
IRA:	8/31/1996	8/31/1996
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1064 (WSMR-78) consists of several SWMUs. SWMU 147 was a decontamination pad and underground holding tank located adjacent to the southeast corner of HELSTF Building 26131. The unit reportedly consisted of a 3-ft by 5-ft by 6.5-ft deep underground waste tank. The pad was used for cleaning large pieces of equipment. This site also includes accumulation areas; SWMU 23-Old Hazardous Waste Tank, SWMU 24-Old Hazardous Waste Tank, SWMU 25-Waste Accumulation Area, and SWMU 26-Vapor Recovery Unit. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. There is not an expected potential for offsite migration of potential contaminants.

The Phase II RFI determined that there was no decontamination pad and underground waste tank. The equipment was actually an aboveground tank, and the only remaining unit was a sump. Results of the RFI determined that no release of contaminants had occurred. In January 1996, confirmatory soil samples were collected and determined nonhazardous. The sump was subsequently filled with concrete for closure.

On Jan. 24, 2000, a petition was submitted for CAC. The NMED disapproved the petition in March 2002 and requested an additional investigation. WSMR submitted a revised Phase III RFI work plan in January 2007, which was approved in January 2007. The Phase III RFI report was submitted to NMED in February 2008 following field activities. In response to an NMED NOD, a revised report was submitted to the NMED in September 2009. The NMED issued another NOD to the revised Phase III RFI report. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD on the second revision of the report in March 2012. WSMR addressed the comments concerning requirements for additional investigation found in the March 2012 NOD through submission of a Phase IV RFI Work Plan for NMED review (January 2017). NMED issued a NOD on the Phase IV Work Plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a

letter dated Mar. 15, 2021. To address data gaps, WSMR submitted the revised Phase IV RFI work plan to NMED in September 2023 and is awaiting review and approval.

Cleanup/exit strategy- WSMR's strategy is to complete the RFI for this site since it is still undergoing the RFI phase and has not achieved regulatory (NMED) concurrence with extent of potential contamination. Phase IV RFI will move forward. WSMR feels that speculation past the study phase is not reasonable until concurrence can be reached with the regulatory authority on current and potential future actions for the site.

35955.1067_WSMR-81_MAIN POST SANITARY LANDFILL

Env Site ID: WSMR-81

Cleanup Site: MAIN POST SANITARY LANDFILL

Alias: SWMU-86

Regulatory Driver: RCRA-C

RIP Date: 12/31/2026

RC Date: 12/31/2026

RC Reason: Not assigned

SC Date: 9/30/2056

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	6/30/1993	12/31/2026
DES:	- -	- -
IRA:	- -	- -
CMI(C):	1/1/2027	1/1/2027
CMI(O):	- -	- -
LTM:	1/2/2027	9/30/2056

Site Narrative: 35955.1067 (WSMR-81) (SWMU 86) is located approximately two miles east of the Main Post area. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. There is not an expected potential for offsite migration of potential contaminants.

This landfill is just one distinct area of the Main Post Landfill (MPL). The unit covers an area of approximately 60-acres and is surrounded by an 8-ft chain link fence. The disposal cell was excavated to an approximate depth of 20-ft. Waste collected from the Main Post was transported to the landfill and placed in the cell and covered daily. The disposal cell received both domestic and construction waste. A Certificate of Registration was issued by NMED in April 1982.

A RFA was conducted in 1988 that suggested a low release potential. The RFA suggested a moderate potential for the generation of subsurface gas. Groundwater monitoring began in 1996 with the installation of four monitoring wells and five quarters of sampling to establish background concentrations. Following development of the background data set, periodic groundwater monitoring has been conducted since 2000.

In 1997, WSMR conducted a delineation study to provide additional hydrologic information regarding the possible source area and extent of cyanide contamination. To supplement the existing groundwater data, six additional monitoring wells were installed. This study eliminated the MPL as the source for cyanide contamination in the area.

WSMR continues to submit annual groundwater monitoring reports to the NMED Hazardous Waste Bureau (HWB). In December 2008, WSMR submitted a Closure and Post-Closure Care Plan (PCCP) for the Municipal and Asbestos Areas of the MPL to the NMED SWB. The NMED SWB responded in November 2009 with its approval of the MPL with conditions. The landfill cover was completed in March 2011 and is currently under post closure care activities under the SWB.

WSMR submitted a RFI Work Plan to NMED in March 2011. In November 2011, NMED submitted a NOD on the Work Plan. WSMR responded with a revised Work Plan in April 2012. In June 2012, NMED

approved the Revised Work Plan with modifications. On Mar. 28, 2013, WSMR submitted an RFI report which recommended the site for NFA and continued compliance with the requirements of the NMED, SWB approved PCCP that include submitting annual monitoring summary reports to the NMED SWB. On Feb. 25, 2014, NMED issued an NOD on the RFI. The revised report, dated April 2014, was submitted to the NMED and was subsequently approved (with modifications) in the letter dated Oct. 16, 2014.

WSMR submitted a petition for a Class III Permit Modification (CAC petition with controls) to NMED in July 2019 and is currently under review. The likely controls include groundwater monitoring of the site.

Cleanup/exit strategy- The objective at SWMU 86 is to complete the Class III Permit Modification to change the status of the site to CAC with controls. Implementation of likely controls will be required. Site corrective action is expected to be completed under the RFI phase following submittal and approval of the CAC petition. Once the CAC with controls petition is approved, this site will be RC and will require LTM as controls indefinitely for this site which will include groundwater monitoring and landfill cap maintenance.

35955.1068_WSMR-82_MAIN POST CONSTRUCTION LANDFILL

Env Site ID: WSMR-82

Cleanup Site: MAIN POST CONSTRUCTION LANDFILL

Alias: SWMU-87

Regulatory Driver: RCRA-C

RIP Date: 12/31/2026

RC Date: 12/31/2026

RC Reason: Not assigned

SC Date: 9/30/2056

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	2/29/1996	12/31/2026
DES:	- -	- -
IRA:	- -	- -
CMI(C):	1/1/2027	1/1/2027
CMI(O):	- -	- -
LTM:	1/2/2027	9/30/2056

Site Narrative: 35955.1068 (WSMR-82) (SWMU 87) is located approximately two miles east of the Main Post area. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. There is not an expected potential for off-site migration of potential contaminants.

This landfill is just one distinct area of the MPL. The unit is approximately 300-ft long and 20-30-ft high. WSMR filed an application for registration of the unit with the NMED in March 1982. A Certificate of Registration was issued by NMED in April 1982.

This unit received construction debris from various locations on Main Post. There is no record of release from the unit. A RFA was conducted in 1988 that suggested a low release potential. Groundwater monitoring began in 1996 with the installation of four monitoring wells and five quarters of sampling to establish background concentrations. Following development of the background data set, periodic groundwater monitoring has been conducted since 2000.

In December 2008, WSMR submitted a PCCP for the Municipal and Asbestos Areas of the Main Post Landfill to the NMED SWB. The NMED SWB responded in November 2009 with its approval of the MPL with conditions. The landfill cover was completed in March 2011 and is currently under post closure care activities.

WSMR submitted a RFI Work Plan to NMED in March 2011. In June 2012, NMED approved the Revised Work Plan with modifications. On Mar. 28, 2013, WSMR submitted a RFI report that described field activities performed in July, November, and December 2012. Based on the results of the RFI, SWMU 87 was recommended for NFA and continued compliance with the requirements of the NMED. SWB approved PCCP that included submitting annual monitoring summary reports to the NMED SWB. On Feb. 25, 2014, WSMR received disapproval from the NMED. The revised report dated April 2014 was submitted to the NMED and was subsequently approved (with modifications) in the letter dated Oct. 16, 2014. Groundwater monitoring is currently (and for the foreseeable future) being conducted as required under the PCCP regulated by the SWB.

WSMR submitted a petition for a Class III Permit Modification (CAC petition) to NMED in July 2019 and is currently under review.

Cleanup/exit strategy- The objective at SWMU 87 is to complete the Class III Permit Modification to change the status of the site to CAC with controls. Implementation of likely controls will be required. Site corrective action is expected to be completed under the RFI phase following submittal and approval of the CAC petition. Once the CAC with controls petition is approved, this site will be RC and will require LTM as controls indefinitely for this site which will include groundwater monitoring and landfill cap maintenance.

35955.1069_WSMR-83_FORMER MAR WASTE STABILIZATION POND

Env Site ID: WSMR-83
Cleanup Site: FORMER MAR WASTE STABILIZATION POND
Alias: SWMU-148
Regulatory Driver: RCRA-C
RIP Date: 1/2/2027
RC Date: 1/2/2027
RC Reason: Not assigned
SC Date: 1/3/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Low
MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1989	10/31/1994
RFI/CMS:	5/31/1992	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1069 (WSMR-83) was the Multi-Function Array Radar Waste Stabilization Pond (SWMU 148) that was used to treat sanitary waste in the 1960s. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. There is not an expected potential for offsite migration of potential contaminants.

The site was an unlined surface impoundment with dimensions of approximately 110-ft by 130-ft by 7-ft. SWMU 148 was backfilled and paved in the early 1980s and is located at the south end of the current HELSTF Equipment Storage Area (SWMU 141). No evidence of release was detected from this site during Phase I RFI or Phase II RFI. The Phase II RFI recommended a Class III permit modification. The USEPA Region VI approved a Class III permit modification dated Dec. 31, 1995, for NFA at SWMU 141. A Class III permit modification NFA petition was submitted on Jan. 24, 2000, to the NMED. The NMED disapproved the petition in March 2002 and requested additional investigation including an ecological risk assessment.

WSMR submitted a revised Phase III RFI Work Plan for site investigation in January 2007, and the NMED approved it in January 2007. The Phase III RFI report was submitted to NMED in February 2008 following field activities. In response to an NMED NOD, a revised report was submitted to the NMED in September 2009. The NMED issued another NOD to the revised Phase III RFI report. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD on the second revision of the report in March 2012. WSMR addressed the comments concerning requirements for additional investigation found in the March 2012 NOD through submission of a Phase IV RFI Work Plan for NMED review (January 2017). NMED issued an NOD on the Phase IV work plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a letter dated Mar. 15, 2021. To address data gaps, WSMR submitted the revised Phase IV RFI work plan to NMED in September 2023 and is awaiting review and approval.

Cleanup/exit strategy- WSMR's strategy is to complete the RFI for this site since it is still undergoing the RFI phase and has not achieved regulatory (NMED) concurrence with extent of potential contamination. Phase IV RFI will move forward. WSMR feels that speculation past the study phase is not reasonable until concurrence can be reached with the regulatory authority on current and potential future actions for the site.

35955.1071_CCWS-100_SWMU 101

Env Site ID: CCWS-100

Cleanup Site: SWMU 101

Alias: SWMU 101

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	5/15/1988	8/15/1988
CS:	- -	- -
RFI/CMS:	1/15/2014	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1071 (CCWS-100) (SWMU 101) was an unlined earthen surface impoundment (pit) located within a fenced compound south of Range Road 2, east of the Main Post of WSMR. The current and reasonably anticipated future land use is industrial. The media of concern is soil. There is not an expected potential for offsite migration of potential contaminants.

The pit was used to neutralize spent acids used in rocket fuels. The typical practice was to layer the pit with lime and then to fill the pit with diluted acid. The acid was neutralized as it percolated through the lime. The unit was in use from 1958 to 1984. The unit managed approximately 200-gal per year of red fuming nitric acid. The unit was being operated under interim status and because of the status, WSMR was seeking an operating permit. WSMR constructed a new site to perform the same operation and elected to close this site.

In October 1985, the USACE conducted a soil investigation showing no hazardous waste contamination at the site. New Mexico Environmental Improvement Division (NMEID)/NMED denied clean closure of the site requiring additional sampling. The USACE conducted additional sampling in August 1986 and further demonstrated that no contamination was found. A closure plan was submitted in accordance with NMEID requirements. The plan proposed closure of the facility by backfilling with clean fill and grading. On Apr. 1, 1988, WSMR submitted a letter to certify that as of Mar. 28, 1988, the pit was no longer in use. This certification letter gave NMEID grounds to deny the permit application for the unit and terminating the interim status of the surface impoundment.

The 1988 RFA concluded there was low potential for release. The RFA suggested NFA required at the site. This SWMU is included in Table 8-1 of WSMRs 2009 hazardous waste permit requiring a closure plan submittal.

WSMR submitted a Phase I Closure Plan in May 2017 to the NMED. The Phase I Closure Plan was approved by NMED in a letter dated November 2017. Field work was completed for the Closure Plan in February 2018 in which no contamination was determined above screening levels. The Phase I Closure

Report was submitted to the NMED in November 2018 and was disapproved by NMED in January 2019. The revised Phase I Closure report was submitted to NMED in March 2019 and approved by the NMED in a letter dated Apr. 11, 2019.

Cleanup/exit strategy- All required closure activities are completed. There are no expected actions required apart from the Phase I Closure Report. WSMR anticipates clean closing of the unit in accordance with the RCRA permit.

35955.1080_CCWS-77_Main Post POL Storage Site

Env Site ID: CCWS-77

Cleanup Site: Main Post POL Storage Site

Alias: SWMU 219

Regulatory Driver: RCRA-C

RIP Date: 9/30/2028

RC Date: 9/30/2028

RC Reason: Not assigned

SC Date: 9/30/2028

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	12/31/2005	12/31/2005
CS:	12/31/2005	12/31/2005
RFI/CMS:	9/30/2006	9/30/2028
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1080 (CCWS-77) (SWMU 219) is located at the former Main Post POL Storage facility, at Building 1719, POL Station. The site is at the corner of Aberdeen and Wesson. The station provided a storage and fueling point for Main Post official vehicles. This facility is no longer in use. All storage tanks, fuel dispensers, and fuel lines have been removed as part of the Petroleum Storage Tank (PST) Program. The media of concern is soil with a contaminant of concern gasoline. Future land use is expected to be industrial (site is located within the Maintenance Area of Main Post). There are no current land use controls at this site.

On Dec. 7, 2005, a release of approximately 1,370-gal of gasoline (constituents include gasoline range organics, benzene, toluene, ethylbenzene, and xylenes) occurred while transferring fuel between a 25,000-gal and 6,000-gal tank. The smaller capacity tank was overfilled. The fuel was captured by the concrete secondary containment; however, cracks in the containment allowed most of the fuel to escape and be released to the subsurface soil below. The release was reported by phone to the Petroleum Storage Tank Bureau (PSTB) and HWB in December 2005.

SWMU 219 is listed in Table 8-2 requiring corrective action in the 2009 RCRA Part-B permit. RFI activities were performed at the site in January and April 2010 and included soil sampling beneath and around the release site. It was determined from the investigation that the vertical extent of impacted soil was to 3-ft/bgs, with horizontal extent limited to the area beneath the southeast corner of the former secondary containment. Based on sampling results, soils at the site were determined to not pose a current or future risk to human health. The RFI recommended that no further investigations are required. The submittal of the RFI report had been delayed due to the NMED questions about the size and boundary of the SWMU. The RFI report was eventually submitted to the NMED in October 2010 for review and recommended no further investigation. WSMR has received two separate NODs with the latest dated Aug. 10, 2011. The NMED insists that the SWMU area should encompass the entire POL station site instead of just the site of the reported spill from the storage tank. Since the POL station was active, no further investigations or actions for SWMU 219 were conducted through the restoration program.

Cleanup/exit strategy- WSMR plans to address the comments from the two NODs in a Phase II RFI. Since a removal action has occurred as part of the PST Program, it is anticipated that further investigation results will indicate no significant contamination at the site. Following completion and approval of the Phase II RFI, WSMR anticipates submitting a CAC without controls petition. Site corrective action is expected to be completed under the RFI/CMS phase following submittal and approval of the CAC petition.

35955.1081_CCWS-05_HELSTF CLEANING FACILITY SUMP

Env Site ID: CCWS-05

Cleanup Site: HELSTF CLEANING FACILITY SUMP

Alias: SWMU 142

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1989	6/30/1989
CS:	2/28/1995	12/31/1995
RFI/CMS:	6/30/1992	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1081 (CCWS-05) (SWMU 142) is the cleaning facility sump located at the HCF Building 26131 at HELSTF. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. Contaminants of concern include solvents. There is not an expected potential for offsite migration of potential contaminants. The unit is specifically located in the pre-clean room of the cleaning facility and is currently inactive. The pre-clean room was used for general cleaning of parts and materials. Solvents that were used include meth ethyl ketone (MEK), acetone, Freon 113, trichloroethylene (TCE), and trichloroethane (TCA).

Rinsate solutions and used solvents accumulated in the sump via a floor trench. On May 26, 1989, WSMR notified the USEPA that a leak in the sump at the cleaning facility had been discovered. A partial soil removal was completed in 1989. In June 1992, the Phase I RFI fieldwork was conducted at the cleaning facility. The report concluded that a significant release had occurred and waste constituents in soil and groundwater were commingled with diesel fuel wastes associated with SWMU 154. In October 1992, the NMED concurred with WSMR's request to coordinate activities related to the RCRA closure of the cleaning facility with the RFI process at the diesel spill (WSMR-55; SWMU 154).

WSMR submitted a revised Phase III RFI Work Plan for site investigation in January 2007, which the NMED approved in January 2007. The Phase III RFI report was submitted to NMED in February 2008 following field activities. In response to an NMED NOD, a revised report was submitted to the NMED in September 2009. The NMED issued a second NOD to the revised Phase III RFI report. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD on the second revision of the report in March 2012. WSMR addressed the comments concerning requirements for additional investigation found in the March 2012 NOD through submission of a Phase IV RFI Work Plan for NMED review (January 2017). NMED issued an NOD on the Phase IV work plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a letter dated Mar. 15,

2021. To address data gaps, WSMR submitted the revised Phase IV RFI work plan to NMED in September 2023 and is awaiting review and approval.

Cleanup/exit strategy- WSMR's strategy is to complete the RFI for this site since it is still undergoing the RFI phase and has not achieved regulatory (NMED) concurrence with extent of potential contamination. Phase IV RFI will move forward. WSMR feels that speculation past the study phase is not reasonable until concurrence can be reached with the regulatory authority on current and potential future actions for the site.

35955.1082_CCWS-16_HELSTF TSA GASOLINE SPILL SITE

Env Site ID: CCWS-16

Cleanup Site: HELSTF TSA GASOLINE SPILL SITE

Alias: SWMU 197

Regulatory Driver: RCRA-C

RIP Date: 8/15/2016

RC Date: 10/1/2030

RC Reason: Not assigned

SC Date: 10/2/2030

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	1/31/2000	3/31/2000
CS:	- -	- -
RFI/CMS:	5/1/2000	6/30/2000
DES:	11/21/2006	1/15/2008
IRA:	10/31/2000	9/30/2004
CMI(C):	1/16/2008	8/15/2016
CMI(O):	8/16/2016	10/1/2030
LTM:	- -	- -

Site Narrative: 35955.1082 (CCWS-16) (SWMU 197) the HELSTF TSA Gasoline Spill Site consists of a 3,000-gal aboveground storage tank (AST) that released approximately 1,490-gal of unleaded gasoline into the soil. The current and reasonably anticipated future land use of the site is industrial. The media of concern is soil and groundwater. Contaminants of potential concern include those associated with gasoline (gasoline range organics, benzene, toluene, ethylbenzene, and xylenes). There is not an expected potential for off-site migration of potential contaminants.

The release was discovered on Mar. 16, 2000. The fueling station was shut down in March 2000. This SWMU is included in Table 4-1 of WSMR's 2009 Hazardous Waste Permit requiring corrective action.

SWMU 197 was investigated during May and June 2000 at which time NMED approved the installation of three monitoring wells. As an interim response, a SVE system was installed in October 2000 to remove fuel contamination from the subsurface and operated for four months as an interim response measure. According to estimates, the SVE was effective at removing up to 1,800-gal of fuel.

An August 2004 investigation determined that the SVE Interim Remedial Action (IRA) was effective in removing the contamination from the more porous upper sediments from 0 to 25-ft. It was concluded in the report that the human health and ecological exposure pathways, relevant to the remaining contamination, are all incomplete leading to the conclusion of no current or future human health or ecological risk.

On Nov. 21, 2006, the NMED requested WSMR restart the remediation process due to continued presence of fuel in the subsurface. The NMED required WSMR to submit a CMI Work Plan. The NMED approved the CMI Work Plan in January 2008. As discussed between WSMR and NMED, a CMI Work Plan was not implemented; however, it was agreed upon that supplemental data collection and a risk assessment be conducted.

In March 2011, a Status Report for the site was submitted to NMED to document the supplemental work and to demonstrate that the site is eligible for CAC with controls. NMED responded with a Notice of

Disapproval to the Status Report in April 2012. The NOD called for a revised report and a work plan for additional field work to investigate the contamination in the vadose zone or the potential for that contamination to migrate to regional groundwater and to address the remaining contamination in the vadose zone and to complete the remediation effort as proposed in the CMI Work Plan.

A Supplemental Engineering Design for SVE was completed in January 2016 to document the plan for Interim Measures (IM) to remove the remaining gasoline contamination in the perched groundwater and the vadose zone at the site. The plan was approved by NMED in a letter dated May 2, 2016. Installation of the SVE system was completed, and the system was activated in August 2016. WSMR completed seven quarters of SVE operation and sampling and submitted quarterly monitoring reports to the NMED to document remediation activities. Following completion of the seventh quarter of operation, the system was shut down due to declining results. An IM Report was submitted to NMED in March 2019 which suggested WSMR complete a Corrective Measures Evaluation (CME) Report to present a viable remediation method. NMED issued a Disapproval on the IM report dated Apr. 12, 2019. WSMR responded to the NOD which was eventually approved in a letter dated Oct. 2, 2019, which required WSMR to submit a CME.

WSMR submitted a CME Report to the NMED in January 2020 and was disapproved by NMED in February 2021. WSMR submitted to NMED a Data Gap Investigation Letter Work Plan to NMED in October 2022 and received an NMED NOD in May 2023. WSMR resubmitted the work plan in August 2023 which was subsequently approved by NMED in November 2023. Field work for this investigation is expected to be completed in early 2024. This work plan is intended to answer data gaps identified in the NOD on the CME report.

Cleanup/exit strategy- The objective is to continue CMI(O) which includes groundwater monitoring, additional investigation and potential further remediation activities, followed by completion of a CAC petition and site closure.

35955.1084_CCWS-09_LC-38 DIESEL FUEL SPILL SITE

Env Site ID: CCWS-09

Cleanup Site: LC-38 DIESEL FUEL SPILL SITE

Alias: SWMU 198

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	1/31/2002	12/31/2002
CS:	- -	- -
RFI/CMS:	1/31/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1084 (CCWS-09) (SWMU 198) is the Launch Complex (LC)-38 Diesel Fuel Spill Site which consisted of a 150,000-gal Above-Ground Storage Tank (AST) and surrounding contaminated area. The current and reasonably anticipated future land use of the site is industrial. The media of concern is soil and groundwater. Contaminants of concern include constituents associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

Corroded piping connected to the AST resulted in the loss of approximately 31,000 gal of diesel fuel to soil beneath the site. The tank and associated piping were removed in Fiscal Year (FY) 2005. A Preliminary Assessment (PA) was conducted in February 2001.

A SWMU Assessment was conducted in November 2003 to supplement the PA. Four groundwater monitor wells were installed at the site in November 2003. Depth to the water table is approximately 235-ft/bgs. Soil samples indicated the diesel contamination extended to approximately 75-ft/bgs. The contaminant plume is approximately 20-ft thick. The SWMU Assessment Report dated September 2004 recommended no further remedial action and to perform groundwater monitoring at the site for the presence of free product annually for ten years. However, in October 2006, the NMED indicated that sampling for 10 years would not be acceptable and stated that annual groundwater monitoring (groundwater sample collection and chemical analysis) of the four wells must continue until NMED determines otherwise.

Based upon further review of the SWMU Assessment results, long term groundwater monitoring data, and on a risk analysis, it was determined that achieving CAC status was the more appropriate objective for the site. A revised CAC Petition was submitted in January 2011 that included the LC-38 Diesel Spill. The NMED determined the petition to be Administratively Incomplete in October 2011, requiring the submittal of additional information for SWMU 198. The revised CAC Petition was submitted to NMED on July 3, 2013, and was determined administratively complete as stated in the NMED letter dated Feb. 3, 2014. The NMED issued a Notice of Disapproval on May 8, 2018, requesting additional field work.

WSMR submitted an RFI Work Plan dated December 2020 which was subsequently approved by NMED in May 2021.The Work Plan is intended to further characterize the nature and extent of contamination of Diesel Range Organics (DRO), chromium, and hexavalent chromium. Additionally, work will be completed to determine a potential separate source for chromium and hexavalent chromium, which are site contaminants not generally associated with diesel fuel. Field work began in the summer of 2022 and is expected to be completed in 2024.

Cleanup/exit strategy- The objective is to continue groundwater monitoring and conduct additional investigation/corrective action of the site as required by the NMED in the NOD to the CAC petition. WSMR is required to continue annual periodic groundwater monitoring at the site and submit an annual site wide groundwater monitoring report as stated by NMED in their October 2006 letter. WSMR is expecting to achieve site completion under the RFI/ CMS phase following completion of the investigation.

35955.1087_WSMR-87_MULTIFUNCTION ARRAY RADAR DUMP SITE

Env Site ID: WSMR-87
Cleanup Site: MULTIFUNCTION ARRAY RADAR DUMP SITE
Alias: SWMU 150
Regulatory Driver: RCRA-C
RIP Date: 1/2/2027
RC Date: 1/2/2027
RC Reason: Not assigned
SC Date: 1/3/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Low
MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2002	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1087 (WSMR-87) (SWMU 150) is a dump site located at the HELSTF, which consisted of an open trench measuring about 225-ft by 35-ft by 8-ft. The current and reasonably anticipated future land use is industrial. The media of concern is soil. Metals and PCBs are contaminants of potential concern. There is not an expected potential for off-site migration of potential contaminants. The unit is inactive and had been utilized in the 1960s.

The trench was partially filled with what was thought to be building debris and old paint materials. In January 1997, a closeout report was prepared for the NMED. Sample results indicated the levels of barium, lead, mercury, and silver all exceeded toxicity characteristic levels. The remedial strategy for the site was to remove the contents of the open trench to determine, through sampling, if the soil below the debris was contaminated and if so, excavate the contaminated soil. On Feb. 7, 1996, eight confirmatory samples were collected from below the excavation. All samples tested as nonhazardous. The materials from the trench were then transported to the WSMR landfill on April 9, 1996.

A petition for removal from the RCRA permit was submitted in 1996 but rejected in 2002 due to the lack of an RFI. WSMR submitted a revised Phase III RFI Work Plan for site investigation in January 2007, and the NMED approved it in January 2007. The Phase III RFI report was submitted to NMED in February 2008 following field activities. In response to an NMED NOD, a revised report was submitted to the NMED in September 2009. The NMED issued a second NOD to the revised Phase III RFI report. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD on the second revision of the report in March 2012. WSMR addressed the comments concerning requirements for additional investigation found in the March 2012 NOD through submission of a Phase IV RFI Work Plan for NMED review (January 2017). NMED issued an NOD on the Phase IV Work Plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a letter dated Mar. 15, 2021. To address data gaps, WSMR submitted the revised Phase IV RFI work plan to NMED in September 2023 and is awaiting review and approval.

Cleanup/exit strategy- WSMR's strategy is to complete the RFI for this site since it is still undergoing the RFI phase and has not achieved regulatory (NMED) concurrence with extent of potential contamination. Phase IV RFI will move forward. WSMR feels that speculation past the study phase is not reasonable until concurrence can be reached with the regulatory authority on current and potential future actions for the site.

35955.1088_WSMR-86_LANCE MISSILE IMPACT SITE

Env Site ID: WSMR-86

Cleanup Site: LANCE MISSILE IMPACT SITE

Alias: SWMU-168

Regulatory Driver: RCRA-C

RIP Date: 12/15/2025

RC Date: 12/15/2025

RC Reason: Not assigned

SC Date: 12/16/2025

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	3/31/2000	3/31/2000
CS:	- -	- -
RFI/CMS:	3/31/2002	12/15/2025
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1088 (WSMR-86) (SWMU 168) is located within the White Sands National Monument (WSNM) near Lake Lucero on property managed by the National Park Service (NPS). The media of concern is soil and groundwater. Potential contaminant source migrated off WSMR through the impact on NPS property. There is not an expected potential for off-site migration of potential contaminants from the NPS property. This SWMU is included in the 2009 hazardous waste permit for WSMR and included in Table 4-1 requiring corrective action.

On Dec. 14, 1999, a Lance Missile Launched from WSMR impacted within WSNM. The propellant used in the Lance Missile included Unsymmetrical Dimethyl Hydrazine (UDMH) and Inhibited Red Fuming Nitric Acid (IRFNA). The missile penetrated the ground surface and exposed the water table approximately 3-ft/bgs. The impact created a crater approximately 18-ft in diameter and 5-ft deep.

An initial assessment of the impact was conducted on Dec. 16, 1999, by explosive ordnance disposal (EOD) team members. Soil and water samples were collected. The analysis indicated a small amount of contamination from the impact. The initial site visit concluded that the missile must be below the surface of the water table possibly with the propellant tanks intact. On Jan. 26, 2000, six soil and three water samples were collected and four additional soil samples from the edge of the crater at the four compass points. Two background soil samples were collected, one water background sample and two water samples from the crater were also collected. IRFNA was detected in soil samples from the background and edge of the crater. It was also detected in background water samples and the crater samples.

A follow-on sampling event was completed on Feb. 28, 2000. No contaminants were detected in soil samples and only N-Nitrodimethylamine (NDMA) was detected in water. On Mar. 16, 2000, an assessment recovery team inspected the site. Based on calculations of the physics of the missile flight, it was concluded that the missile could not be intact, and it could be no deeper than 23-ft bgs. This

indicated that most of the missile debris was not deep and contamination release happened at the surface.

A RFI conducted in November 2002 concluded that because of the remoteness of the site potential adverse effects are lessened. It was also concluded that the site does not pose health risks to humans. In June 2003, the NMED agreed with WSMR that no hazardous waste or hazardous constituents have been released to the soil or groundwater as a result of the missile crash.

A CAC petition was submitted to NMED in March 2010 and revised CAC Petition was submitted in January 2011.The NMED determined the petition to be Administratively Incomplete in October 2011, requiring removing SWMU 168 from the petition because a release assessment was needed. WSMR determined that because investigation and corrective action activities have been completed at these SWMUs and because the NMED concurred that the SWMUs are eligible for a NFA determination, the requirements for a release assessment have been met. The revised CAC Petition was submitted to NMED on July 3, 2013. WSMR received a Disapproval on the CAC petition dated May 8, 2018. The NMED stated that the petition would move forward for SWMU 168.

Cleanup/exit strategy- WSMR is expecting to achieve site completion under the RFI/CMS phase following NMED listing the site as CAC without controls in WSMR's RCRA Permit.

35955.1089_CCWS-81_BLD 1621 DRAINS & CONTAINERS

Env Site ID: CCWS-81

Cleanup Site: BLD 1621 DRAINS & CONTAINERS

Alias: SWMUS 1-7

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1089 CCWS-81 (SWMUs 1-7) is located in the Visual Information Building 1621 built in 1958. The current and reasonably anticipated future land use is industrial. The media of concern is soil. Contaminants of potential concern include cyanide and silver. There is not an expected potential for off-WSMR migration of potential contaminants. Cyanide was likely transported through wastewater from this site to the WSMR Sewage Treatment Plant Percolation Ditches (SWMU 82).

The floor drain system (SWMU 1) was covered by an approximately 1x1-ft metal grate in a concrete floor. The size and material of the construction of the under-floor drains are unknown. The drain was connected to the STP system. The lines from the building to the system were vitrified clay and concrete. The drain system had received pre-hardener, neutralizer, developer, bleach, fixer, and stabilizer waste residues which contained low concentrations of chromium metallic cyanides and silver.

Photo chemical substitutions were made in 1985 eliminating the use of metallic cyanides. The drain system was replaced by bleach/fixer collection containers (SWMUs 2-6) located near the photo processor and drain system. The five bleach and fixer collection containers received liquid waste fixer and bleach from both black/white and color photo processing equipment. Approximately 30 gal/month of waste was generated. The waste was directed into the containers via clear small flexible tubes, which connected the photo processing equipment to the containers. Containers were stored in place until removed by the DRMO for off-site disposal.

The process then changed in 1988 where all bleach and fixer waste liquids were managed at the photo processing area for silver recovery. The containers were then emptied into a Silver Recovery Unit in the same building. The treated liquid was sent to the HWSF Evaporation Tank. The silver recovery unit tailing tank (SWMU 7) removed silver from the waste generated by electroplating out onto an internal drum. The silver was then removed from the drum into a plastic container (tailing tank). The recovered silver was shipped off-site and collected in the tailing tank.

A RFA was conducted in 1988 that suggested a low release potential. A Release Assessment was conducted in 2017 and submitted to the NMED. There were no detections of contaminants of potential concern from the release assessment. NMED received the report as an investigation. The NMED submitted an NOD dated February 2018 requiring additional investigation. WSMR resubmitted a revised Release Assessment report in July 2018. The NMED responded with a second disapproval in September 2018 requiring additional information. WSMR submitted the Revision 2 Release Assessment report in December 2018. The NMED responded with the third disapproval in February 2019. Revision 3 to the report was submitted to NMED in April 2019 and was subsequently approved by the NMED in a letter dated May 28, 2019. The approval of the Release Assessment called for further investigation of the site to supplement the Release Assessment.

WSMR submitted an RFI Work Plan for investigation of the site in September 2020. The Work Plan was approved by NMED in November 2020. Field work for the RFI was completed during the summer of 2022. The RFI report was submitted to NMED in September 2023. WSMR is awaiting review and approval of the RFI report.

Cleanup/exit strategy- WSMR will complete an investigation for the site to satisfy the requirements for corrective action or decide if contamination exists from this site. Following the RFI WSMR expects to submit a CAC petition to complete SC. WSMR is expecting to achieve site completion under the RFI/CMS phase.

35955.1091_CCWS-83_Waste Oil Storage Tank at SRC

Env Site ID: CCWS-83

Cleanup Site: Waste Oil Storage Tank at SRC

Alias: SWMU-124

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1091 (SWMU 124). The Waste Oil Storage Tank at Stallion Range Center (CCWS-83) (SWMU 124) was located north of Building 34250. The current and reasonably anticipated future land use is industrial. The media of concern is soil. Contaminants of potential concern include those constituents associated with waste oil (Diesel Range Organics, volatiles, semi-volatiles, and metals). There is not an expected potential for offsite migration of potential contaminants.

This unit was a portable 500-gal closed steel tank sitting on concrete pavement. The tank was used for storage of waste oil generated at SRC. The tank was transported to the WSMR Main Post for emptying as needed. The concrete pad around the tank was stained with oil at the time of the RFA in 1988. The SRC is currently using 55-gal drums for storage and disposal of oil.

An RFA was conducted in 1988 that suggested a low release potential to soil/groundwater surface water air and subsurface gas generation for CCWS-83. This SWMU was included in the 2009 hazardous waste permit for WSMR and was included in Table 8-2 requiring corrective action.

WSMR submitted a RCRA Facility Investigation Work Plan to NMED in October 2022 which was approved in August 2023. Field work was completed in early 2024.

Cleanup/exit strategy- WSMR will complete a Release Assessment/RFI for the site to satisfy the requirements for corrective action or decide if the potential exists for contamination from the SWMU. WSMR is expecting to achieve site completion under the RFI/CMS phase.

35955.1092_CCWS-84_SILVER RECOVERY SYSTEM TAILING TANK

Env Site ID: CCWS-84
Cleanup Site: SILVER RECOVERY SYSTEM TAILING TANK
Alias: SWMU-128
Regulatory Driver: RCRA-C
RIP Date: 1/2/2027
RC Date: 1/2/2027
RC Reason: Not assigned
SC Date: 1/3/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Not Evaluated
MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: CCWS-84 (SWMU 128) is located in the basement of Building 1512. The current and reasonably anticipated future land use of this site is industrial. The media of concern is soil. Contaminants of potential concern include cyanide and silver. There is not an expected potential for off-WSMR migration of potential contaminants. Cyanide was likely transported through wastewater from this site to the WSMR Sewage Treatment Plant Percolation Ditches (SWMU 82).

The tailings tank was the final tank in the commercialized silver recovery system. The fiberglass tank had a capacity of about 40-gal. Photographic fixer solution was re-circulated through the silver recovery system where excess silver was recovered from solution by an electrolytic process. Flow into and out of the unit was through manually controlled pumps. Overflow from the fixer bath accumulated in the interface tanks was then pumped into the recovery tank where the silver was recovered. Effluent from the recovery tank was pumped to the tailing tank for removal of residual silver. The concentration of silver was reduced to less than 5-ppm before discharging the effluent to the sewer system. The silver recovery system operated from the 1970s-1990s.

A RFA was conducted in 1988 that suggested a low release potential. A Release Assessment was conducted in 2017 and submitted to the NMED. There were no detections of contaminants of potential concern from the release assessment. NMED received the report as an investigation. The NMED submitted an NOD dated February 2018 requiring additional investigation. WSMR resubmitted a revised Release Assessment report in July 2018. The NMED responded with a second disapproval in September 2018 requiring additional information. WSMR submitted the Revision 2 Release Assessment report in December 2018. The NMED responded with the third disapproval in February 2019. Revision 3 to the report was submitted to NMED in April 2019 and was subsequently approved by the NMED in a letter dated May 28, 2019. The approval of the Release Assessment called for further investigation of the site to supplement the Release Assessment.

WSMR submitted an RFI work plan for investigation of the site in September 2020 which was approved by NMED in November 2020. Field work for the RFI was completed in the Summer of 2022. The RFI

report was submitted to NMED in September 2023. WSMR is awaiting review and approval of the RFI report.

Cleanup/exit strategy- WSMR will complete an investigation for the site to satisfy the requirements for corrective action or decide if contamination exists from this site. Following the RFI WSMR expects to submit a CAC petition to complete SC. WSMR is expecting to achieve site completion under the RFI/CMS phase.

35955.1093_CCWS-85_Cyanide Treatment Unit

Env Site ID: CCWS-85

Cleanup Site: Cyanide Treatment Unit

Alias: SWMU-129

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: CCWS-85 (SWMU 129) is located in Building 1512. The current and reasonably anticipated future land use is industrial. The media of concern is soil. Contaminants of potential concern include cyanide and silver. There is not an expected potential for off-WSMR migration of potential contaminants. Cyanide was likely transported through wastewater from this site to the WSMR Sewage Treatment Plant Percolation Ditches (SWMU 82).

Prior to 1985, this unit was used to oxidize spent photographic bleacher solutions which contained ferrous cyanide. In 1985, ferrous cyanide was replaced by sodium persulfate in the bleaching process. The unit used an ozone treatment process to oxidize ferrous cyanide to ferrous cyanate prior to discharging the effluent to the STP. Prior to installation of the cyanide treatment unit, wastes containing spent ferrous cyanide were stored in 1,000-gal plastic storage tanks. Periodically, the spent ferrous cyanide solution was transferred to the evaporation pit. Because ferrous cyanide was no longer used, the tank was relocated in 1985 to Building 1524 where it was used as a secondary spill containment tank for an acetic acid storage area. It operated from the 1970s to the 1990s.

An RFA was conducted in 1988 that suggested a low release potential. This SWMU was included in the 2009 hazardous waste permit for WSMR and included in Table 8-2 requiring corrective action. A Release Assessment was conducted in 2017 and submitted to the NMED. There were no detections of contaminants of potential concern from the release assessment. NMED received the report as an investigation. The NMED submitted a NOD dated February 2018 requiring additional investigation. WSMR resubmitted a revised Release Assessment report in July 2018. The NMED responded with a second disapproval in September 2018 requiring additional information. WSMR submitted the Revision 2 Release Assessment report in December 2018. The NMED responded with the third disapproval in February 2019. Revision 3 to the report was submitted to NMED in April 2019 and was subsequently approved by the NMED in a letter dated May 28, 2019. The approval of the Release Assessment called for further investigation of the site to supplement the Release Assessment.

WSMR submitted an RFI Work Plan for investigation of the site in September and was approved by the NMED in November 2020. Field work for the RFI was completed in the Summer of 2022. The RFI report was submitted to NMED in September 2023. WSMR is awaiting review and approval of the RFI report.

Cleanup/exit strategy- WSMR will complete an investigation for the site to satisfy the requirements for corrective action or decide if contamination exists from this site. Following the RFI WSMR expects to submit a CAC petition to complete SC. WSMR is expecting to achieve site completion under the RFI/CMS phase.

35955.1094_CCWS-86_SWMU 130-131,DEVELOPER/ACETIC TANK

Env Site ID: CCWS-86
Cleanup Site: SWMU 130-131,DEVELOPER/ACETIC TANK
Alias: SWMU 130/31
Regulatory Driver: RCRA-C
RIP Date: 1/2/2027
RC Date: 1/2/2027
RC Reason: Not assigned
SC Date: 1/3/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Not Evaluated
MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: CCWS-86 (SWMUs 130-131) was located on a diked concrete pad outside of Building 1524, where it was used as a back-up secondary containment tank for the acetic acid storage area. The current and reasonably anticipated future land use is industrial. The media of concern is soil. Contaminants of potential concern include cyanide. There is not an expected potential for off-site migration of potential contaminants.

The unit was a cylindrical plastic tank with a capacity of 1000-gal. The acetic acid was stored in drums on pallets inside the containment. A drain within the containment pad sloped to a drain line connected to the spill containment tank (SWMU 131). Facility personnel stated that the tank was used on an emergency basis only and may never have received waste. Prior to 1985, this tank was located outside building 1512 where it was used to store spent ferrous cyanide solution from photographic processing (SWMU 130). Periodically, the ferrous cyanide solution was removed from this tank and transferred to the evaporation tank. The tank is no longer in use.

A RFA was conducted in 1988 that suggested a low release potential. A Release Assessment was conducted in 2017 and submitted to the NMED. There were no detections of contaminants of potential concern from the release assessment. NMED received the report as an investigation. The NMED submitted an NOD dated February 2018 requiring additional investigation. WSMR resubmitted a revised Release Assessment report in July 2018. The NMED responded with a second disapproval in September 2018 requiring additional information. WSMR submitted the Revision 2 Release Assessment report in December 2018. The NMED responded with the third disapproval in February 2019. Revision 3 to the report was submitted to NMED in April 2019 and was subsequently approved by the NMED in a letter dated May 28, 2019. The approval of the Release Assessment called for further investigation of the site to supplement the Release Assessment.

WSMR submitted an RFI Work Plan for investigation of the site, and it was approved by the NMED in November 2020. Field work for the RFI was completed in the summer of 2022. The RFI report was submitted to NMED in September 2023. WSMR is awaiting review and approval of the RFI report.

Cleanup/exit strategy- WSMR will complete an investigation for the site to satisfy the requirements for corrective action or decide if contamination exists from this site. Following the RFI WSMR expects to submit a CAC petition to complete SC. WSMR is expecting to achieve site completion under the RFI/CMS phase.

35955.1096_CCWS-88_SWMUs 135-136, PAINT SHOP ACCUMULATION AREA

Env Site ID: CCWS-88

Cleanup Site: SWMUs 135-136, PAINT SHOP ACCUMULATION AREA

Alias: SWMU 135/36

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	4/15/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1096 (CCWS-88) (SWMU 135-136) was located at two separate locations around building 1742. The current and reasonably anticipated future land use is industrial. Contaminants of potential concern include those associated with paint wastes, solvents (PD-680), and metals. The media of concern is soil. There is not an expected potential for offsite migration of potential contaminants.

The Paint Shop Accumulation Area (SWMU 135) was located outside of building 1742. Drums of paint waste and waste solvent were stored on wooden pallets. The accumulation area was gravel covered and fenced. The dates of operation could not be confirmed. The site is currently not in use and is covered by asphalt.

The Paint Shop Spray booth (SWMU 136) was a Binks spray booth located inside building 1742. The unit was a water-cascade type spray booth used for airless and conventional spray painting. During spray painting operations a water-cascade curtain was activated to entrap overspray from paint operations. The effluent from the water-cascade flowed to a sump (WSMR-56). Wastewater from the spray booth contained particulates from paint overspray. Volatiles from paint solvents were vented through an exhaust duct to the atmosphere. The primary solvent utilized in the paint shop was PD-680 which contains no toxic or ignitable constituents. Building 1742 is no longer used as the paint shop.

A RFA was conducted in 1988 that suggested a moderate release potential at SWMU 135. During the visual inspection, the gravel around the waste drums at SWMU 135 was stained with minor paint spills and drips. The RFA suggested that there was low release potential at SWMU 136. The RFA suggested a moderate release potential to air based on the venting of exhaust fumes.

WSMR requested removal from the 1999 Annual Unit Audit (AUA) based on the inability for minor spills to migrate to the subsurface. NMED denied based on the RFA suggesting an RFI. NMED stated that there was no record of RFI or other corrective action that would warrant removal from the Hazardous and Solid Wastes Amendment (HSWA) module of the RCRA permit. NMED requested an RFI or corrective action documentation.

These SWMUs were included in the 2009 Hazardous Waste Permit for WSMR and were included in Table 8-2 requiring correction action. A Release Assessment (RA) was completed, and the report was submitted to the NMED in September 2017. All detected concentrations of metals, VOCs, and SVOCs were below their respective residential soil screening levels. Chromium was detected at a highest concentration of 25.5-ppm. The NMED disapproved the report in a letter dated Mar. 15, 2018, requiring additional information. WSMR submitted the revised RA report in June 2018 which was approved (requiring no further investigation) with modifications by the NMED in July 2018.

Cleanup/exit strategy- The objective is to complete the required CAC efforts and reporting. WSMR anticipates submitting a CAC petition to the NMED to close out the site. WSMR is expecting to achieve site completion under the RFI/CMS phase.

35955.1097_CCWS-89_Accumulation area at RATSCAT

Env Site ID: CCWS-89

Cleanup Site: Accumulation area at RATSCAT

Alias: SWMU-138

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1097 (CCWS-89) (SWMU 138) is located approximately 35 miles north of the Main Post area and 23 miles west of Alamogordo NM. The current and reasonably anticipated future land use is industrial. The media of concern is soil. Contaminants of potential concern include those constituents associated with waste oil (DROs, volatiles, semi-volatiles, and metals). There is not an expected potential for off-site migration of potential contaminants.

The accumulation area consisted of metal drums containing hydrocarbons including waste hydraulic fluid and waste oil. The area was in the open and was underlain by a curbed concrete pad. As of 1988, less than 350-gal of petroleum waste were generated per year. The release controls consisted of grounded metal drums, a curbed concrete pad, and warning signs.

A RFA was conducted in 1988 that suggested a low release potential. This SWMU was included in the 2009 Hazardous Waste Permit for WSMR Table 8-2 requiring Corrective Action/RA. This area was active at the former Radar Target Scatter (RATSCAT) facility; however, the facility has been relocated and the SWMU is no longer active.

WSMR submitted a RFI Work Plan to NMED in October 2022, which was approved by NMED in August 2023.

Cleanup/exit strategy- WSMR will complete an investigation for the site to satisfy the requirements for corrective action or decide if the potential exists for contamination from the SWMU. WSMR is expecting to achieve site completion under the RFI/CMS phase.

35955.1098_CCWS-90_LC-34 CONTAMINATED SOILS

Env Site ID: CCWS-90

Cleanup Site: LC-34 CONTAMINATED SOILS

Alias: SWMU 165

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	5/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1098 (CCWS-90) (SWMU 165) consisted of two USTs located near buildings 23104 and 23106. The current and reasonably anticipated future land use is industrial. The media of concern is soil. Contaminants of potential concern include those associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants. The tank at Building 23104 had a capacity of 500-gal, and the tank at Building 23106 had a capacity of 1,000-gal and both of single-wall construction.

The USTs provided heating oil storage (Diesel Fuel) for boilers located in Buildings 23104 and 23106 and were not regulated by NMED Underground Storage Tank Bureau Regulations. Though the tanks were not regulated by the NMED, closure activities were performed in accordance with the NMED UST Regulations. The two tanks were removed from WSMR on Feb. 18, 1998. Approximately 90 cubic yards of soil were removed from Building 23104 and 35 cubic yards from Building 23106. On March 30, 1998, a letter was sent to NMED Groundwater Bureau notifying them of the excavation and removal of the USTs. WSMR proposed to excavate the contaminated soil, take confirmation samples to ensure concentrations of contaminates were below regulatory limits, and then to backfill the excavation with clean soil from an approved borrow pit. Confirmation sampling showed that samples were below the laboratory detection limit confirming all contaminated soil had been removed. In May 1998, the sites were backfilled.

A Closure Report was developed in September 1998 recommending NFA was required at the site based on visual inspection of the sites and laboratory analysis of confirmatory samples collected from surrounding the tanks NFA was recommended for these sites. This report was not submitted to the NMED HWB.

An RFI Work Plan was submitted to and approved by the NMED in a letter dated Apr. 19, 2017. RFI field work began in May 2017 and was completed in FY18. DROs were detected at the highest concentration of 26-ppm. Oil Range Organics were detected at the highest concentration of 29-ppm. The RFI report was submitted to the NMED in December 2018. WSMR received a disapproval on the report requiring

additional information dated April 2019. A revised RFI report dated October 2019 was submitted to the NMED and subsequently approved in a letter dated Jan. 6, 2020. The revised RFI report recommended NFA for this site.

Cleanup/exit strategy- The objective at this site is to complete a CAC petition for the site and submit to the NMED for concurrence. WSMR expects to achieve site completion under the RFI phase.

35955.1099_CCWS-91_UST AT TIMING STATION, BLDG 20710

Env Site ID: CCWS-91

Cleanup Site: UST AT TIMING STATION, BLDG 20710

Alias: SWMU 216

Regulatory Driver: RCRA-C

RIP Date: 12/31/2026

RC Date: 12/31/2026

RC Reason: Not assigned

SC Date: 1/1/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	3/31/1995	7/31/1995
CS:	7/31/1995	9/30/1999
RFI/CMS:	3/31/2011	12/31/2026
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1099 (CCWS-91) (SWMU 216) is a former 600-gal UST at the LC-32 Building 20710 Timing Station. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. Contaminants of potential concern include those associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

The tank was discovered in 1995 and was removed in April 1995. Two holes were noted in the bottom of the tank and a minor amount of diesel fuel leaked from these holes as the tank was physically removed.

An investigation was completed in 1999, which concluded that a soil removal was needed; however, a soil removal action has not been completed. TPHs were detected at the highest concentration of 26,000-ppm. NMED PSTB stated that soil removal was not required, and NFA was required at the site. NMED PSTB reiterated the NFA status of the site and stated that an NFA request had not been received from WSMR.

The site has been transferred to the NMED HWB for oversight. This SWMU is included in the 2009 hazardous waste permit for WSMR and included in Table 4-1 requiring corrective action. An RFI Work Plan was submitted to the NMED in January 2017 for investigation of the site. The RFI Work Plan was approved by the NMED letter dated August 2017. Field work was completed in November 2017. WSMR submitted the RFI report to the NMED in 2018. A disapproval on the RFI report was received from NMED in February 2019 which required additional information for the site. A revised RFI report dated June 2018 was submitted to the NMED and subsequently approved with modifications in a letter dated July 30, 2019. The approval letter requires WSMR to complete further investigation at SWMU 216.

An ACA Work Plan was submitted to NMED in October 2021. NMED disapproved the Work Plan in a letter dated June 28, 2022, requiring WSMR submit an Investigation Work Plan. WSMR revised the ACA Work Plan and submitted it as a Revised Phase II RFI Work Plan in October 2022 and approved by NMED in December 2022.

Cleanup/exit strategy- The objective for this site is to complete corrective action through further investigation and removal of contaminated soil above residential screening levels. Following removal of contaminated soil and regulatory approval, WSMR will submit a RCRA permit modification (CAC petition) to complete SC. These actions are to be completed under the Revised Phase II RFI Work Plan.

35955.1100_CCWS-93_SINK AND DRAIN SYSTEM AT BLDG 1621

Env Site ID: CCWS-93
Cleanup Site: SINK AND DRAIN SYSTEM AT BLDG 1621
Alias: AOC-A
Regulatory Driver: RCRA-C
RIP Date: 1/2/2027
RC Date: 1/2/2027
RC Reason: Not assigned
SC Date: 1/3/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Not Evaluated
MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: CCWS-93 (AOC A) was a bank of three sinks located in the photo-processing area on the east side of Building 1621. The current and reasonably anticipated future land use is industrial. The media of concern is soil. Contaminants of potential concern include cyanide and silver. There is not an expected potential for off-WSMR migration of potential contaminants. Cyanide was likely transported through wastewater from this site to the WSMR Sewage Treatment Plant Percolation Ditches (SWMU 82).

The sinks were used for the approximately weekly scrubbing of the photo-processing racks contained in each of the photo-processing machines. The racks were in direct contact with photo chemicals such as fixers and bleaches which contained silver. Photo chemicals containing cyanides were used prior to 1985. The sinks were used from 1958 to the mid-1990s.

A RFA was conducted in 1988 which suggested NFA is warranted. This SWMU is included in the 2009 hazardous waste permit for WSMR and included in Table 8-2 requiring corrective action.

A Release Assessment was conducted in 2017 and submitted to the NMED. There were no detections of contaminants of potential concern from the release assessment. NMED received the report as an investigation. The NMED submitted a NOD dated February 2018 requiring additional investigation. WSMR resubmitted a revised Release Assessment report in July 2018. The NMED responded with a second disapproval in September 2018 requiring additional information. WSMR submitted the Revision 2 Release Assessment report in December 2018. The NMED responded with the third disapproval in February 2019. Revision 3 to the report was submitted to NMED in April 2019 and was subsequently approved by the NMED in a letter dated May 28, 2019. The approval of the Release Assessment called for further investigation of the site.

WSMR submitted a RFI Work Plan for investigation of the site and it was approved by NMED in November 2020. Field work for the RFI was completed during the Summer of 2022. The RFI report was submitted to NMED in September 2023. WSMR is awaiting review and approval of the RFI report.

Cleanup/exit strategy- WSMR will complete an investigation for the site to satisfy the requirements for corrective action or decide if contamination exists from this site. Following the RFI WSMR expects to submit a CAC petition to complete SC. WSMR is expecting to achieve site completion under the RFI/ CMS phase.

35955.1101_CCWS-92_LC 38 BLDG 23626

Env Site ID: CCWS-92

Cleanup Site: LC 38 BLDG 23626

Alias: SWMU-218

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1101 (CCWS-92) was a 1,764-gal UST at the LC 38 Building 23626 (SWMU 218). The current and reasonably anticipated future land use of the site is industrial. The media of concern is soil. Contaminants of potential concern include those associated with gasoline. There is not an expected potential for off-site migration of potential contaminants.

The tank was utilized to supply gasoline for vehicles via a multiple key dispenser located adjacent to the UST. The tank was steel and uncoated and was removed on Feb. 3, 1993. After the tank was removed, it was determined that contamination had impacted the soils beneath the tank. The Phase II RFI recommended that a minimum site assessment work plan be prepared as part of the Phase III RFI.

In April 1993, a contamination delineation report was completed. According to the report, the groundwater was not impacted. No phase separated hydrocarbons (PSH) were observed in the soil borings completed. Soil sample analytical data indicated that subsurface exhibited Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) values above NMED guidelines. This site is listed as SWMU 218 in Table 8-2 of the 2009 RCRA permit requiring corrective action. A RFI Work Plan was submitted to the NMED in January 2017 for investigation of the site. The RFI Work Plan was approved by the NMED in a letter dated August 2017. Field work was completed in November 2017. Gasoline Range Organics were detected at a highest concentration of 0.3 ppm which is well below residential soil screening levels. WSMR submitted the RFI report to NMED in November 2018. WSMR received a disapproval on the RFI report dated February 2019 requiring additional information. WSMR submitted the revised RFI dated June 2019 to the NMED which was subsequently approved in a letter dated July 30,2019. The RFI report recommended NFA for the site.

Cleanup/exit strategy- The objective at this site is to complete a CAC petition for the site and submit it to the NMED for concurrence. WSMR expects to achieve site completion under the RFI phase.

35955.1102_CCWS-94_BATTERY ACCUM. AREA AT N OSCURA

Env Site ID: CCWS-94

Cleanup Site: BATTERY ACCUM. AREA AT N OSCURA

Alias: AOC B

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1102 (CCWS-94) (AOC B) was an accumulation area where approximately 10 vehicle lead/acid batteries were accumulated next to a tracking station at the North Oscura Range. The current and reasonably anticipated future land use is industrial. The media of concern is soil. Contaminants of potential concern include those associated with lead/acid batteries including lead and soil potential of hydrogen (pH). There is not an expected potential for off-site migration of potential contaminants. As of 1988, the batteries had been there for one year. The batteries were placed in the open on soil exposed to the weather. No evidence of leakage or spills was observed as of 1988. A RFA was conducted in 1988 and suggested NFA was warranted.

A RA was conducted in 2017 and submitted to the NMED in September 2017. Except for arsenic, RCRA 8 metals were not present in soil at concentration above their respective NMED Residential SSLs and where not established EPA Regional SSLs. Arsenic was present in four soil samples (highest concentration at 11.4 ppm), each collected from a different boring at concentrations that slightly exceeded the NMED Residential SSL of 7.07 mg/kg. The range of detected arsenic concentrations was relatively small. Overall, average concentration of arsenic is below the SSL and given the alkaline soil, the presence of arsenic is not likely the result of a release. Instead, the presence of arsenic is likely representative of naturally occurring concentrations typical of the region. In addition, arsenic was not managed as a waste and arsenic-containing materials are not known to have been used at AOC B. As a result, WSMR asserted that the four isolated occurrences of arsenic are the result of naturally occurring variability in soil and not the result of a release. Based on the available information, it was concluded that AOC B meets the criteria for NFA. All available data indicate that a release of constituents of potential concern has not occurred at the site.

The NMED received the RA report as an investigation and charged WSMR accordingly. The NMED submitted a Disapproval on the RA dated April 17, 2018 requiring additional information. In June 2018, WSMR responded to NMED submitting a letter answering NMED's comments. In a letter dated June 29, 2018, NMED disapproved WSMR's response requiring further information and a revised RA report.

WSMR submitted a Revised RA Report to the NMED in September 2018 responding to NMED's comments. The NMED approved the Revised RA report with modifications in a letter dated Jan. 22, 2019. The NMED approval letter indicated that WSMR made a good faith effort to locate the former battery storage area. The modifications did not specifically require further corrective action at this site. The next step in the corrective action process is to submit a CAC petition for this site.

Cleanup/exit strategy- WSMR will petition for a Class III Permit Modification to change the status of the site from requiring corrective action to CAC. Site corrective action is expected to be completed under the RFI phase following submittal and approval of the CAC petition.

35955.1103_CCWS-95_DRUM STORAGE AT STP

Env Site ID: CCWS-95

Cleanup Site: DRUM STORAGE AT STP

Alias: AOC D

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1103 (CCWS-95) (AOC D) was a concrete pad used for the storage of lube oil and solvent. The current and reasonably anticipated future land use of the site is industrial. The media of concern is soil. Contaminants of potential concern include constituents associated with petroleum hydrocarbons, unspecified solvents, and metals (diesel, oil and gasoline range organics, volatiles, and semi-volatiles). There is not an expected potential for offsite migration of potential contaminants.

Drums were stored horizontally on a wooden frame and additional drums stored on a concrete pad. The pad had no secondary containment. A RFA was conducted in 1988 and suggested NFA is warranted. During the RFA, a drip collection tub was present and sat beneath the solvent drum to collect spills.

CCWS-95 was not included in the 1992 Phase I RFI, 1994 Phase II RFI, or the 2006 Phase III RFI. This SWMU is included in Table 8-2 of WSMR's 2009 Hazardous Waste Permit requiring corrective action.

A RA was conducted in 2017 and submitted to the NMED in September 2017. The NMED received the RA report as an investigation and charged WSMR accordingly. There were no significant detections (detections near the laboratory lower reporting limits) of volatiles or semi-volatiles. DROs were detected at the highest concentration of 72-ppm, well below the residential soil screening levels. The NMED submitted a Disapproval on the RA dated Apr. 17, 2018, requiring additional information. In June 2018, WSMR responded to NMED submitting a letter answering NMED's comments. In a letter dated June 29, 2018, NMED disapproved WSMR's response requiring further information and a revised RA report. WSMR submitted a Revised RA Report to the NMED in September 2018 responding to NMED's comments. It was recommended in the RA Report that the site was eligible for CAC without controls. The NMED approved the Revised RA Report with modifications in a letter dated Jan. 22, 2019.

Based on NMED comments on the RA Report, WSMR submitted an RFI Work Plan for AOC D in September 2018. The RFI Work Plan was approved by the NMED in January 2019. The RFI field work was completed in 2020 which found no evidence of contamination from the site, and the RFI report was

submitted to NMED in April 2021. NMED approved the report in June 2022 requiring no further investigation.

Cleanup/exit strategy- WSMR will petition for a Class III Permit Modification to change the status of the site from requiring corrective action to CAC. Site corrective action is expected to be completed under the RFI phase following submittal and approval of the CAC petition.

35955.1106_CCWS-98_ABANDONED UST

Env Site ID: CCWS-98

Cleanup Site: ABANDONED UST

Alias: AOC Z

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1106 (CCWS-98) (AOC Z) was an abandoned UST located at the southern end of the main post near the intersection of Headquarters and Raritan Ave (now Martin Luther King Drive). The current and reasonably anticipated future land use at this site is industrial. The media of concern is soil. Contaminants of potential concern include constituents associated with fuels. There is not an expected potential for offsite migration of potential contaminants.

The tank was situated just off a dirt road approximately 200-ft south of Raritan Ave. The unit was constructed of steel and a portion of the tank was exposed above grade. The dimensions were approximately 10 by 4-ft. A vent protruded about three-quarters out of the ground on one end of the tank. The dates of operation and the contents are unknown but potentially contained gasoline. A RFA was conducted in 1988 and suggested that further investigation was warranted to determine the contents of the tank.

A RA was conducted in 2017 and submitted to the NMED in September 2017. Based on the analytical results of this report, lead VOCs, SVOCs, and TPH were either present in soil at concentrations below their respective NMED Residential screening levels or not detected at the analytical laboratory's reporting limits. Lead was detected at a highest concentration of 20.5-ppm. TPH was not detected. No appreciable volatiles or semi-volatiles were detected. Based on the analytical results from soil samples collected, AOC Z meets the criteria for NFA because no samples exceeded the NMED Residential SSLs. The NMED received the RA report as an investigation and charged WSMR accordingly. The NMED submitted a Disapproval on the RA dated April 17, 2018, requiring additional information. In June 2018, WSMR responded to NMED submitting a letter answering NMED's comments. In a letter dated June 29, 2018, NMED disapproved WSMR's response requiring further information and a revised RA report. WSMR submitted a Revised RA Report to the NMED in September 2018 responding to NMED's comments. The NMED approved the Revised RA Report with modifications in a letter dated Jan. 22, 2019. The modifications did not specifically require further corrective action at this site. The next step in the corrective action process is to submit a corrective action complete petition for this site.

Cleanup/exit strategy- WSMR will petition for a Class III Permit Modification to change the status of the site from requiring corrective action to CAC. Site corrective action is expected to be completed under the RFI phase following submittal and approval of the CAC petition.

35955.1107_CCWS-99_WASTE OIL TANK AND SUMP, BLDG 1794

Env Site ID: CCWS-99
Cleanup Site: WASTE OIL TANK AND SUMP, BLDG 1794
Alias: SWMU 8
Regulatory Driver: RCRA-C
RIP Date: 1/2/2027
RC Date: 1/2/2027
RC Reason: Not assigned
SC Date: 1/3/2027
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: Not Evaluated
MRSPP: N/A

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	- -	- -
RFI/CMS:	3/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1107 (CCWS-99) (SWMU 8) is located at the Maintenance Area on the Main Post. The current and reasonably anticipated future land use of this site is industrial. The media of concern is soil. Contaminants of potential concern include constituents associated with waste oil (petroleum hydrocarbons). There is not an expected potential for offsite migration of potential contaminants.

The former waste oil tank and sump are located approximately 300-ft east of Building 1794. The sump is located within a paved and bermed area that was also used for product drum storage. The waste oil tank is an underground steel tank with a 5,000-gallon capacity. Waste oil entered the tank via the waste oil sump. The waste oil tank and sump started operation in the 1950s. The tank and the sumps received waste oil and other fluids routinely drained from vehicles.

A RFA was conducted in 1988 that suggested a moderate release potential to the soil and a minimal release potential to groundwater. The RFA suggested NFA is warranted.

A Phase I RFI was conducted in 1992 that included CCWS-99. The RFI concluded that more work needed to be done to the site to properly close out the site. Consequently, a Phase II RFI was conducted in 1994 that included CCWS-99. The Phase II report recommended that a CMS was needed to evaluate the removal and disposal of soil. The underground tank was removed and properly disposed as reported in a Dow 1997 Close Out Report. Confirmation sampling indicated no BTEX detected and lead at the highest concentration of 48-ppm.

The Phase III RFI was conducted beneath the former UST with the objective of confirming completeness of previous removal efforts. Activities to support this objective consisted of the collection of one soil sample from the bottom of each of the five soil borings located beneath the former tank location. No TPH, VOCs, or SVOCs were detected. The Phase III RFI concluded that there is no evidence of contamination remaining relating to a release from the former waste oil UST. The RFI suggested the site should be eligible for a NFA determination. The NMED approved the Phase III RFI in a letter dated Nov. 7, 2008.

Cleanup/exit strategy- The objective at CCWS-99 is to submit a Class III Permit Modification Petition to the NMED to change the status of the site to CAC. WSMR expects to complete SC under the RFI/CMS phase.

35955.1112_CCWS-102_SWMU 102

Env Site ID: CCWS-102

Cleanup Site: SWMU 102

Alias: SWMU 102

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	5/15/1988	8/15/1988
CS:	- -	- -
RFI/CMS:	1/15/2014	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1112 CCWS-102 (SWMU 102) is a rectangular steel box approximately 7-ft long, 3-ft wide, and 1-ft deep. The unit was used until 1984 to burn spent rocket fuels. The design capacity of the unit was about 200-gal per day. The Burn Pan was about 250-ft south of the former acid neutralization pit. The current and reasonably anticipated future land use of this site is industrial. The media of concern is soil. Contaminants of potential concern include explosives, metals, perchlorate, and organics. There is not an expected potential for offsite migration of potential contaminants.

The unit was being operated under interim status and because of the status WSMR was seeking an operating permit. WSMR constructed a new site to perform the same operation and elected to close the site in lieu of seeking an operating permit. A closure plan dated June 1987 was submitted in accordance with NMEID (now NMED) requirements. The plan proposed closure of the facility by excavating the burn pan and backfilling with clean fill based on the results of the soil investigation. The NMEID approved the closure plan on Dec. 2, 1987. A subsequent addendum to the approved closure plan was also approved on Mar. 30, 1989. The NMEID final disposition of the permit application was to deny the application and terminate the interim status of unit based on the closure plan activities.

The 1988 RFA concluded there was a high potential for release to soil or groundwater. WSMR conducted a RFI in 2017 and submitted the RFI report to the NMED in March 2018, which indicated no contamination at the site. The RFI was approved by the NMED in an Approval with Modifications letter dated July 25, 2018. WSMR responded to the NMED Approval with Modifications letter submitting additional information in a letter dated Oct. 1, 2018. In a letter dated Feb. 21, 2019, the NMED approved WSMR's response and stated that WSMR may submit a CAC for the site.

Cleanup/exit strategy- WSMR will petition for a Class III Permit Modification to change the status of the site from requiring corrective action to CAC. Site corrective action is expected to be completed under the RFI phase following submittal and approval of the CAC petition.

35955.1115_WSMR-88_PFAS

Env Site ID: WSMR-88

Cleanup Site: PFAS

Alias: #

Regulatory Driver: CERCLA

RIP Date: 10/1/2028

RC Date: 10/1/2028

RC Reason: Not assigned

SC Date: 10/2/2028

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	5/21/2018	5/13/2019
SI:	5/14/2019	7/15/2023
RI/FS:	7/16/2023	10/1/2028
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: Per direction from the Deputy Chief of Staff G-9, this site was created to account for all per- and polyfluoroalkyl substances (PFAS) costs at the installation. Currently a PA/SI is underway to identify all releases of PFAS to the environment. The PFAS sites on WSMR (35955.1115) consist of multiple Areas of Potential Interest (AOPI) located across WSMR. The AOPIs were identified based on the potential use storage or disposal of aqueous film forming foam (AFFF) and/or potential PFAS containing materials.

Sample collection for the PA/SI was conducted in July and November 2020 on WSMR at sites where PFAS containing materials were used, stored, or disposed as part of operational history on the Range. The draft PA/SI report was published March 2021. Additional sample locations were determined as necessary for WSMR based on the draft PA/SI report. Additional sampling was completed in May 2022.

AOPIs were identified during the PA and were associated with fire training areas, fire stations storage areas, maintenance shops, photo-processing facilities, landfills, and sanitary sewers. SI sampling was conducted at all AOPIs to evaluate the presence/absence of PFAS. PFAS were detected in soil and/or groundwater above project screening levels (laboratory limits of detection) at 19 AOPIs. Based on results of the final PA/SI, 11 sites have been included as requiring further investigation in the RI/FS phase.

Cleanup/exit strategy- The objective at this site is to complete an RI/FS for the WSMR PFAS sites determined to require further study during the WSMR PA/SI. It is unknown at this time if further corrective action costs will be required beyond the study phase since it is unknown how extensive the contamination is and how to approach potential clean-up actions.

35955.1153_CCWS-18_DENVER SPILL SITE

Env Site ID: CCWS-18

Cleanup Site: DENVER SPILL SITE

Alias: SWMU 166

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: This site was originally listed as a Compliance-related Cleanup (CC) site 35955.1121 (CCWS-18) (SWMU 166); however, the Denver Spill Site has been transferred to the Defense Environmental Restoration Program (DERP) as site 35955.1153. There were two spatially distinct contamination zones at the site. The current and reasonably anticipated future land use of this site is industrial. The media of concern is soil and groundwater. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

Diesel-contamination at the Denver site was the result of releases from a former AST and associated piping and equipment. Soil and groundwater investigations were performed in 1999 and 2001 which defined the horizontal and vertical nature, extent of contamination, and evaluated the hydrogeology. DROs were detected in soil at concentrations up to 44,400-ppm. In 2006, the contaminated soil was removed, and wells abandoned. A June 2006 final report was submitted to NMED. NMED responded in a Sept. 12, 2006, letter recognizing the fact that TPH contamination was left under Range Road 316. In July 2007, the remaining contamination was removed. In July 2008, the ACA Completion Report was submitted to the NMED. The ACA report asserted that contaminated material and contaminant sources had been removed and the site did not pose a risk to potential receptors. Based on the results of the report WSMR determined that the site should be eligible for NFA.

The NMED responded with a Disapproval in August 2009 requesting a revised report. In December 2009, WSMR submitted a Revised ACA Completion Report. In July 2010, NMED responded with a second NOD and required an additional revised report. WSMR submitted Revision 2 ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR sent a letter contesting the fourth NOD. WSMR also submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that NFA will be required for the site.

35955.1154_CCWS-20_MALPAIS SPILL SITE

Env Site ID: CCWS-20

Cleanup Site: MALPAIS SPILL SITE

Alias: SWMU 167

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: This site was originally listed as a CC site 35955.1123 (CCWS-20) (SWMU 167) but has been transferred to DERP as site 35955.1154. SWMU 167 consisted of a diesel AST located approximately 40-miles northwest of Alamogordo, New Mexico on the northeastern portion of the range along the southern edge of the Malpais lava flow. The current and reasonably anticipated future land use of this site is industrial. The media of concern was soil and groundwater. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for off-site migration of potential contaminants.

The AST and associated product line was used to provide fuel for a field generator. Operations ceased in 1989. During a 1999 WSMR Range-wide AST survey, a leaking diesel AST was identified at the Malpais site. The tank capacity was approximately 2,000-gal. The AST had not been in use for approximately 10 years when it was discovered in 1999. The tank contents were removed at that time with the tank and concrete pedestals removed on Feb. 3, 1999. DROs were detected up to 17,000-ppm.

In February and March 1999, a second investigation took place following the removal of the product lines. Due to the significant diesel concentrations detected at depth beneath the former tank during the previous investigation and beneath the north end of the former product lines, it was determined that additional investigation was warranted to delineate the vertical extent of contamination.

A third investigation took place in May 1999. During this investigation, depth to groundwater was determined to be 30-ft. Removal of the source area was recommended. The report recommended the removal of all soil with TPH concentrations exceeding 1,000-mg/kg. A follow-up investigation was conducted in February and April 2001. The extent of contamination had been determined to be from the surface to a depth of approximately 17.5-ft.

Investigation and corrective action activities conducted at the Malpais site prior to 2,000 were conducted under the authority of the New Mexico Groundwater Quality Bureau. When the NMED HWB added the Malpais Site to the corrective action module of the RCRA Part B permit in June 2000, the authority for

investigation and corrective action transferred to the HWB. Following the previously described site investigations the NMED HWB requested that a RFI be conducted at the Malpais site for evaluation of Methyl tert-butyl ether (MTBE) and lead.

A RFI Work Plan was prepared and submitted by WSMR and approved by NMED in November 2001. The RFI report concluded that the contamination was primarily concentrated beneath the former AST and generator.

WSMR initiated a VCA to address diesel contamination and to expedite closure of the Malpais site. NMED was notified of WSMR's intent and was provided with a VCM Work Plan in March 2004. NFA was proposed in the VCA report based on site conditions. In correspondence dated Jan. 24, 2006, the NMED approved the VCA Work Plan and final VCA Report. In the correspondence, the NMED stated that SWMU 167 was eligible for a NFA determination.

A CAC petition was submitted to NMED in March 2010 and a revised CAC Petition was submitted in January 2011. The NMED determined the petition to be Administratively Incomplete in October 2011. WSMR received a Disapproval on the CAC petition dated May 8, 2018. The NMED (regulatory authority) stated that the petition would move forward for SWMU 167, however, additional information may be required for the sites pending NMED review of additional references.

Cleanup/exit Strategy- WSMR is expecting to achieve site completion under the RFI/CMS phase through completion of a CAC petition for this site.

35955.1155_CCWS-27_HARDIN RANCH AST SITES

Env Site ID: CCWS-27

Cleanup Site: HARDIN RANCH AST SITES

Alias: SWMU 199

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: This site was originally listed as a CC site 35955.1125 (CCWS-27) (SWMU 199) but was transferred to the DERP as site 35955.1155. The current and reasonably anticipated future land use of this site is industrial. The media of concern was soil. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

This SWMU was a former AST which was used for fueling generators supporting testing operations on the range. An unknown amount (estimated to exceed 2,000-gal) of diesel fuel was released at this site over an extended period ending in 2003. An initial investigation was performed and reported to the NMED in accordance with RCRA Part B Operating Permit in February 2004. DROs were detected up to 71,000-ppm and naphthalene was detected up to 25,000-ppb.

A corrective measures work plan (dated November 2005) was submitted to NMED in January 2006. The presumptive remedy was excavation and removal of approximately 200-cubic yards of contaminated soil and submit a final report to NMED. The excavation fieldwork was completed in 2007.

The ACA report was submitted to the NMED in July 2008. The NMED issued a NOD in August 2009 and a revised ACA report was submitted in December 2009. A NOD was submitted to WSMR on the revised ACA report in July 2010. WSMR submitted Revision 2 ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that NFA will be required for the site.

35955.1156_CCWS-28_HARDIN Ranch 2 AST (SWMU 200)

Env Site ID: CCWS-28

Cleanup Site: HARDIN Ranch 2 AST (SWMU 200)

Alias: SWMU 200

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: This site was originally listed as 35955.1126 (CCWS-27) (SWMU 200) but was transferred to the DERP as site 35955.1156. The current and reasonably anticipated future land use of this site is industrial. The media of concern was soil. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

This SWMU was a former AST which was used for fueling generators supporting testing operations on the Range. An unknown amount (estimated to exceed 2,000-gal) of diesel fuel was released at this site over an extended period ending in FY03. An initial investigation was performed and reported to the NMED in accordance with RCRA Part B Operating Permit in February 2004. DROs were detected at concentrations up to 1,400-ppm.

A corrective measures work plan (dated November 2005) was submitted to NMED in January 2006. The presumptive remedy was excavation and removal of approximately 200-cubic yards of contaminated soil and submit a final report to NMED. The excavation fieldwork was completed in 2007.

The ACA report was submitted to the NMED in July 2008. The NMED issued a NOD in August 2009 and a revised ACA report was submitted in December 2009. A NOD was submitted to WSMR on the revised ACA report in July 2010. WSMR submitted Revision 2 ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that NFA will be required for the site.

35955.1157_CCWS-29_OSCURA COMMO AST SITE

Env Site ID: CCWS-29

Cleanup Site: OSCURA COMMO AST SITE

Alias: #

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: Originally identified as CC site 35955.1127 (CCWS-29), the Oscura Commo AST Site was transferred to the DERP as site 35955.1157. The current and reasonably anticipated future land use is industrial. The media of concern was soil. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

In 2003, a preliminary investigation took place in which it was estimated that approximately 110-cubic yards of diesel contaminated soil was at the site. DROs were detected at concentrations up to 1,400-ppm. A Corrective Measures Work Plan (dated November 2005) was submitted to the NMED in January 2006. The presumptive remedy was excavation which was completed in 2006. The site excavation was extended in the appropriate direction until no physical evidence remained of further diesel contamination. Results of chemical analysis of confirmation samples indicated that no contaminates were detected exceeding New Mexico Residential SSLs.

The ACA report was submitted to NMED in July 2008. NMED issued an NOD in August 2009 and a revised ACA report was submitted in December 2009. A NOD was submitted to WSMR on the revised ACA report in July 2010. WSMR submitted Revision 2 ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated 15 February 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that NFA will be required for the site.

35955.1158_CCWS-30_HARRIET AST SITE

Env Site ID: CCWS-30

Cleanup Site: HARRIET AST SITE

Alias: SWMU 204

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: Originally listed as CC site 35955.1128 (CCWS-30) (SWMU 204), the Harriet AST site was transferred to the DERP as site 35955.1158. SWMU 204 was used as an instrumentation and testing site on WSMR located in the northwest part of the range. The current and reasonably anticipated future land use for this site is industrial. The media of concern was soil. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

The ASTs at this site contributed to diesel contamination. Former ASTs were used for fueling generators supporting testing operations. An unknown amount of diesel fuel was released over an extended period ending in 2003. The site contamination was discovered in May 2003. An initial investigation was performed and reported to the NMED. Results indicated TPH contamination to a depth of 16-ft. DROs were detected at a highest concentration of 3,400 ppm.

A VCM Work Plan (dated November 2005) was submitted to NMED In January 2006. Excavation fieldwork was completed in 2007. After delineation of the site, excavation of the soil took place in two stages until clean soil was obtained. Excavation to the south of the site was halted as it neared a fiber optic line. Further excavation was completed under supervision from communications personnel. Results of chemical analysis of confirmation samples indicate no contaminates were detected exceeding NMED SSLs with one exception of TPH on the south wall. Due to this finding, further excavation took place and TPH was not detected in any confirmation samples. Confirmation samples indicated that the majority of contamination was removed and that no contaminants of concern are present.

The ACA report was submitted to NMED in July 2008. NMED issued an NOD in August 2009 and a revised ACA report was submitted in December 2009. A NOD was submitted to WSMR on the revised ACA report in July 2010. WSMR submitted Revision 2 ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR

sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that NFA will be required for the site.

35955.1159_CCWS-31_SE-70 AST SITE

Env Site ID: CCWS-31

Cleanup Site: SE-70 AST SITE

Alias: SWMU 205

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: This site was originally listed as CC site 35955.1129 (CCWS-31) (SE-70 AST Site) (SWMU 205); however, it has been transferred to the DERP as site 35955.1159. SWMU 205 consisted of diesel fuel contamination which was released at this site over an extended period ending in FY03. The current and reasonably anticipated future land use for this site is industrial. The media of concern was soil. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

An initial investigation was performed and reported to the NMED in accordance with RCRA Part B Operating Permit in February 2004. DROs were detected at concentrations up to 21,000-ppm.

WSMR developed a VCM Work Plan (dated November 2005) which was submitted to the NMED in January 2006. The presumptive remedy for the site was excavation and removal of contaminated soil and other debris. In December 2005, approximately 200-cubic yards of petroleum contaminated soil was excavated and disposed in accordance with the VCM Work Plan. The excavation fieldwork was completed in 2005.

The ACA report was submitted to NMED in July 2008. NMED issued an NOD in August 2009 and a revised ACA report was submitted in December 2009. A NOD was submitted to WSMR on the revised ACA report in July 2010. WSMR submitted Revision 2 ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that NFA will be required for the site.

35955.1160_CCWS-32_ATOM AST SITE #1

Env Site ID: CCWS-32

Cleanup Site: ATOM AST SITE #1

Alias: SWMU 206

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: This site was originally listed as a CC site 35955.1130 (CCWS-32) (SWMUs 206) but was transferred to the DERP as site 35955.1160. The current and reasonably anticipated future land use for this site is industrial. The media of concern was soil. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

Initial preliminary assessment was performed and reported to the regulatory authority (NMED) in accordance with RCRA Part B Operating Permit in February 2004. DROs were detected at a concentration up to 13-ppm.

A VCM Work Plan (dated November 2005) was submitted to NMED in January 2006. The presumptive remedy was excavation. The excavation fieldwork was completed in 2007. The determination of the extent of soil contamination was accomplished through excavation and soil removal. When contamination was determined to extend laterally beyond the excavation boundaries, excavation was extended in the appropriate direction until no physical evidence remained of further contamination in that direction. Results of chemical analysis of confirmation samples indicate no contaminants were detected exceeding NMED SSLs.

The ACA report was submitted to the NMED in July 2008. The NMED issued a NOD in August 2009 and a revised ACA report was submitted in December 2009. A second NOD was submitted to WSMR on the revised ACA report in July 2010. WSMR submitted Revision 2 of the ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that NFA will be required for the site.

35955.1161_CCWS-33_ATOM AST SITE #2

Env Site ID: CCWS-33

Cleanup Site: ATOM AST SITE #2

Alias: SWMU 207

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: This site was originally listed as CC site 35955.1131 (CCWS-32) (SWMU 207) but was transferred to the DERP as site 35955.1161. The current and reasonably anticipated future land use of this site is industrial. The media of concern was soil. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for off-site migration of potential contaminants.

Initial preliminary assessment was performed and reported to the regulatory authority (NMED) in accordance with RCRA Part B Operating Permit in February 2004. DROs were detected at concentrations up to 13,000-ppm.

A VCM Work Plan (dated November 2005) was submitted to NMED in January 2006. The presumptive remedy was excavation. The excavation fieldwork was completed in 2007. The determination of the extent of soil contamination was accomplished through excavation and soil removal. When contamination was determined to extend laterally beyond the excavation boundaries, excavation was extended in the appropriate direction until no physical evidence remained of further contamination in that direction. Results of chemical analysis of confirmation samples indicate no contaminants were detected exceeding NMED SSLs.

The ACA report was submitted to the NMED in July 2008. The NMED issued a NOD in August 2009 and a revised ACA report was submitted in December 2009. A second NOD was submitted to WSMR on the revised ACA report in July 2010. WSMR submitted Revision 2 ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy - The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that NFA will be required for the site.

35955.1162_CCWS-34_SE-50 AST SITE

Env Site ID: CCWS-34

Cleanup Site: SE-50 AST SITE

Alias: SWMU 208

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: The SE-50 AST Site (35955.1162) (CCWS-34) was identified during a Range-wide AST survey. This site was originally listed as a CC site 35955.1132 but has been transferred to the DERP as WBS 35955.1162. The current and reasonably anticipated future land use for this site is industrial. The media of concern was soil. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

In 2003, a preliminary investigation took place in which surface staining was identified beneath the location of the former AST. A stained area of gravel with clay was located during the preliminary investigation. DROs were detected at concentrations up to 26,000-ppm. Naphthalene was detected up to 5,500-ppb. Pyrene was detected up to 1,000-ppb. During the preliminary investigation, the full extent of contamination was not determined. The determination of furthest extent of contamination and remediation was accomplished through excavation and soil removal during the ACA. Excavation was extended in the appropriate direction until no physical evidence remained of further contamination. WSMR excavated approximately 160-cubic yards of contaminated soil. Results of chemical analysis of confirmation samples indicated that no contaminates were detected exceeding New Mexico Residential SSLs.

The ACA report was submitted to NMED in July 2008. NMED issued an NOD in August 2009 and a revised ACA report was submitted in December 2009. A second NOD was submitted to WSMR on the revised ACA report in July 2010. WSMR submitted Revision 2 ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that NFA will be required for the site.

35955.1163_CCWS-35_EC-50 AST SITE

Env Site ID: CCWS-35

Cleanup Site: EC-50 AST SITE

Alias: SWMU 208

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: The EC-50 AST Site (CCWS-35) (SWMU 209) was identified during a Range-wide AST survey. This site was originally listed as a CC site 35955.1133 but has been transferred to the DERP as WBS 35955.1163. The current and reasonably anticipated future land use for this site is industrial. The media of concern was soil. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

In 2003, a preliminary investigation took place in which surface staining was identified beneath the location of the former AST. Multiple soil borings found that TPH values were above NMED SSLs. DROs were detected at concentrations up to 4,700-ppm. Pyrene was detected up to 810-ppb.

In July 2007, WSMR completed the ACA remediation at the site. Excavation was extended in the direction of contamination until no physical evidence remained of further contamination. WSMR excavated approximately 800-cubic yards of contaminated soil. The results of confirmation sampling indicated that the majority of contamination was removed from the site and that no contaminants of concern related to diesel fuel were present at the site above the applicable screening levels.

In July 2008, the ACA Completion Report was submitted to the NMED. The ACA report asserted that contaminated material and contaminant sources had been removed and the site did not pose a risk to potential receptors. Based on the results of the report, WSMR determined that the site should be eligible for NFA. The NMED responded with a NOD in August 2009 requesting a revised report. In December 2009, WSMR submitted a Revised ACA Completion Report. In July 2010, NMED responded with a second NOD and required an additional revised report. WSMR submitted Revision 2 ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018 requiring additional confirmation sampling. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3

of the ACA report was approved by NMED in January 2021; however, additional investigation was still required by NMED.

WSMR submitted a confirmation sampling Work Plan in August 2018 which was subsequently approved by NMED in August 2019. Field work for the investigation was completed in the summer of 2022. WSMR expects to submit the investigation report in 2024.

Cleanup/exit strategy- The objective at CCWS-35 is to continue the corrective action efforts through investigation and submission of a CAC petition. This site is still undergoing corrective action under the study phase.

35955.1164_CCWS-36_MINNOW AST SITE

Env Site ID: CCWS-36

Cleanup Site: MINNOW AST SITE

Alias: SWMU 210

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: Minnow AST Site (35955.1164) (CCWS-36) (SWMU 210) is used as an instrumentation/ testing site on WSMR. This site was originally listed under the Compliance Cleanup program as 35955.1134 but has been transferred to the DERP as 35955.1164. The current and reasonably anticipated future land use for this site is industrial. The media of concern was soil. Contaminants of potential concern are those constituents associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

SWMU 210 is located in the east central part of the range. Former ASTs were used for fueling generators supporting testing operations. The site was identified during a range-wide AST survey. In 2003, a preliminary investigation took place in which surface staining was identified beneath the location of an inactive AST and associated equipment rack at the site. During the preliminary investigation, only low levels of DRO (up to 170-ppm) were detected at the site. The investigation found no significant contamination and the potential source identified in the AST survey has since been removed. No removal action has occurred at this site nor was it determined to be required by WSMR.

In July 2008, the ACA Completion Report was submitted to the NMED. The ACA report asserted that the site did not pose a risk to potential receptors. Based on the results of the report, WSMR determined that the site should be eligible for NFA. The NMED responded with a NOD in August 2009 requesting a revised report. In December 2009, WSMR submitted a Revised ACA Completion Report. In July 2010, NMED responded with a second NOD and required an additional revised report. WSMR submitted Revision 2 ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that no excavation or further action will be required for the site.

35955.1165_CCWS-37_COWAN AST SITE

Env Site ID: CCWS-37

Cleanup Site: COWAN AST SITE

Alias: SWMU 211

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: The Cowan AST Site (35955.1135) (CCWS-37) (SWMU 211) is used as an instrumentation/ testing site on WSMR which is located in the east central part of the range. This site was originally listed as a CC WBS 35955.1135 but has been transferred to the DERP as 35955.1165. The current and reasonably anticipated future land use for this site is industrial. The media of concern was soil. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for off-site migration of potential contaminants.

Former ASTs were used for fueling generators supporting testing operations on the range. The ASTs at this site contributed to diesel contamination in the soil. In 2003, a preliminary investigation took place in which surface staining was identified beneath the location of the former AST. DROs were detected at concentrations up to 11,000-ppm. Naphthalene was detected up to 4,100-ppb. During the preliminary investigation, the full extent of contamination was not determined. The determination of furthest extent of contamination and remediation was accomplished through excavation and soil removal during the ACA. In July 2007, WSMR completed the ACA remediation at the site. Excavation was extended in the direction of contamination until no physical evidence remained of further contamination. WSMR excavated approximately 80-cubic yards of contaminated soil. Results of chemical analysis of confirmation samples indicated that no contaminates were detected exceeding New Mexico Residential SSLs. The results of confirmation sampling indicated that the majority of contamination was removed from the site and that no contaminants of concern related to diesel fuel were present at the site above the applicable screening levels.

In July 2008, the ACA Completion Report was submitted to the NMED. The ACA report asserted that contaminated material and contaminant sources had been removed and the site did not pose a risk to potential receptors. Based on the results of the report, WSMR determined that the site should be eligible for NFA. The NMED responded with a NOD in August 2009 requesting a revised report. In December 2009, WSMR submitted a Revised ACA Completion Report. In July 2010, NMED responded with a second NOD and required an additional revised report. WSMR submitted Revision 2 of the ACA

Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018 requiring additional confirmation sampling. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that NFA will be required for the site.

35955.1166_CCWS-38_GRAN JEAN AST SITE

Env Site ID: CCWS-38

Cleanup Site: GRAN JEAN AST SITE

Alias: SWMU 213

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: The Gran Jean AST Site (35955.1166) (CCWS-38) (SWMU 213) is used as instrumentation / testing site on WSMR. This site was originally listed in the CC program as WBS 35955.1136 but has been transferred to the DERP as WBS 35955.1166. The current and reasonably anticipated future land use for this area is industrial. The media of concern was soil. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

Former ASTs were used for fueling generators supporting testing operations on the range. The site was identified during a range-wide AST survey. In 2003, a preliminary investigation took place in which surface staining was identified beneath the location of the former AST. Concentrations of DRO (up to 18,000-ppm) were found above screening level guidelines after soil boring and sampling. Naphthalene was detected at concentrations up to 8,200-ppb. During the preliminary investigation, the full extent of contamination was not determined. The determination of furthest extent of contamination and remediation was accomplished through excavation and soil removal during the ACA. A total of 820-cubic yards of contaminated soil was removed.

In July 2008, the ACA Completion Report was submitted to the NMED. The ACA report asserted that contaminated material and contaminant sources had been removed, and the site did not pose a risk to potential receptors. Based on the results of the report, WSMR determined that the site should be eligible for NFA. The NMED responded with a NOD in August 2009 requesting a revised report. In December 2009, WSMR submitted a Revised ACA Completion Report. In July 2010, NMED responded with a second NOD and required an additional revised report. WSMR submitted Revision 2 ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that NFA will be required for the site.

35955.1167_CCWS-39_NE-50 AST SITE

Env Site ID: CCWS-39

Cleanup Site: NE-50 AST SITE

Alias: SWMU 214

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: The NE-50 AST site was originally listed as a CC site 35955.1137 (CCWS-39) (SWMU 214). The NE-50 AST Site has been transferred to the DERP as site WBS #35955.1167. SWMU 214 was used for instrumentation/testing and located in the east central part of WSMR. The current and reasonably anticipated future land use for this area is industrial. The media of concern was soil. Contaminants of concern are those constituents associated with diesel fuel. There is not an expected potential for off-site migration of potential contaminants.

Former ASTs were used for fueling generators supporting testing operations on the range. The site was identified during a range-wide AST survey. In 2003, a preliminary investigation took place in which surface staining was identified beneath the location of the former AST. Four soil borings indicated that TPH were above NMED screening levels. DROs were detected at concentrations up to 11,000-ppm. Naphthalene was detected at concentrations up to 13,000-ppb. During the preliminary investigation, the full extent of contamination was not determined. The determination of furthest extent of contamination and remediation was accomplished through excavation and soil removal during the ACA. In July 2007, WSMR completed the ACA remediation at the site. Excavation was extended in the direction of contamination until no physical evidence remained of further contamination. WSMR excavated approximately 80-cubic yards of contaminated soil. Results of chemical analysis of confirmation samples indicated that no contaminates were detected exceeding New Mexico Residential SSLs. The results of confirmation sampling indicated that the majority of contamination was removed from the site and that no contaminants of concern related to diesel fuel were present at the site above applicable screening levels.

In July 2008, the ACA Completion Report was submitted to the NMED. The ACA report asserted that contaminated material and contaminant sources had been removed and the site did not pose a risk to potential receptors. Based on the results of the report, WSMR determined that the site should be eligible for NFA. The NMED responded with a NOD in August 2009 requesting a revised report. In December 2009, WSMR submitted a Revised ACA Completion Report. In July 2010 NMED responded

with a second NOD and required an additional revised report. WSMR submitted Revision 2 of the ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that NFA will be required for the site.

35955.1168_CCWS-42_RAM AST SITE

Env Site ID: CCWS-42

Cleanup Site: RAM AST SITE

Alias: SWMU 201

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: This site was originally listed as a Compliance Cleanup (CC) site 35955.1138 but was transferred to the DERP as site 35955.1168. The RAM AST Site (CCWS-42) (SWMU 201) was used as an instrumentation/testing site on WSMR. The current and reasonably anticipated future land use of this area is industrial. The media of concern was soil. Contaminants of potential concern are those constituents associated with diesel fuel. There is not an expected potential for off-site migration of potential contaminants.

Former ASTs were used for fueling generators supporting testing operations. The site was identified during a range-wide AST survey. In 2003, a preliminary investigation took place in which surface staining was identified beneath the location of the former AST. At the time of preliminary investigation, the tank had been removed. During the investigation, no DROs were detected at the site. It was determined that because the AST potentially serving as a future point of release had been removed from the site, no corrective action was required.

In July 2008, the ACA Completion Report was submitted to the NMED. The ACA report asserted that the site did not pose a risk to potential receptors. Based on the results of the report, WSMR determined that the site should be eligible for NFA. The NMED responded with a NOD in August 2009 requesting a revised report. In December 2009, WSMR submitted a Revised ACA Completion Report. In July 2010, NMED responded with a second NOD and required an additional revised report. WSMR submitted Revision 2 of the ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that no excavation or further action will be required for the site.

35955.1169_CCWS-43_DEAD HORSE AST SITE

Env Site ID: CCWS-43

Cleanup Site: DEAD HORSE AST SITE

Alias: SWMU 202

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: This site was originally listed as a Compliance Cleanup (CC) site 35955.1139 but was transferred to the DERP as site 35955.1169. The Dead Horst AST Site (CCWS-43) (SWMU 202) was a former Aboveground Storage Tank (AST) location. The current and reasonably anticipated future land use of this area is industrial. The media of concern was soil. Contaminants of potential concern are those constituents associated with diesel fuel. There is not an expected potential for off-site migration of potential contaminants.

The site was identified during a range-wide AST survey. In 2003, a preliminary investigation took place in which surface staining was identified beneath the location of the former AST. Soil borings were completed at the site of the former AST during the investigation and no DROs were detected above SSLs. It was determined through the preliminary investigation that no analytical evidence of an environmental release was found at this site. The AST had been removed at the time of the 1998 AST survey, so it would not serve as a potential future source. Because the AST potentially serving as a future point of release has been removed from the site, no corrective action was required.

In July 2008, the ACA Completion Report was submitted to the NMED. The ACA report asserted that the site did not pose a risk to potential receptors. Based on the results of the report, WSMR determined that the site should be eligible for NFA. The NMED responded with a NOD in August 2009 requesting a revised report. In December 2009 WSMR submitted a Revised ACA Completion Report. In July 2010 NMED responded with a second NOD and required an additional revised report. WSMR submitted Revision 2 ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy-The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that no excavation or further action will be required for the site.

35955.1170_CCWS-53_NW-70 AST SITE

Env Site ID: CCWS-53

Cleanup Site: NW-70 AST SITE

Alias: SWMU 212

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	8/29/1988	8/29/1988
CS:	- -	- -
RFI/CMS:	5/15/2003	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: This site was originally listed as a CC site 35955.1140 but was transferred to the DERP as 35955.1170. The NW-70 AST Site (CCWS-53) (SWMU 212) was used as an instrumentation/testing site on WSMR. The current and reasonably anticipated future land use of this area is industrial. The media of concern was soil. Contaminants of potential concern are those constituents associated with diesel fuel. There is not an expected potential for offsite migration of potential contaminants.

Former ASTs were used for fueling generators supporting testing operations on the range. The site was identified during a range-wide AST survey. In 2003, a preliminary investigation took place in which surface staining was identified beneath the location of the former AST. DRO was not detected above reporting limits in any of the samples collected. The preliminary investigation indicated that no evidence of an environmental release was found at the site and because the ASTs had been removed, no corrective action was recommended.

In July 2008, the ACA Completion Report was submitted to the NMED. The ACA report asserted that the site did not pose a risk to potential receptors. Based on the results of the report, WSMR determined that the site should be eligible for NFA. The NMED responded with a NOD in August 2009 requesting a revised report. In December 2009, WSMR submitted a Revised ACA Completion Report. In July 2010 NMED responded with a second NOD and required an additional revised report. WSMR submitted Revision 2 of the ACA Completion Report to the NMED in October 2017. NMED issued an NOD on the second revision dated Feb. 15, 2018. WSMR resubmitted the third revision to the ACA report to NMED in August 2018. WSMR received the fourth disapproval in November 2018. WSMR sent a letter contesting the fourth NOD and submitted the ACA field notes at NMED's request. Revision 3 of the ACA report was approved by NMED in January 2021.

Cleanup/Exit Strategy- The objective at this site is to continue the corrective action efforts through submission of a CAC petition. This site is still undergoing corrective action under the study phase. WSMR expects that no excavation or further action will be required for the site.

35955.1074_WSMR-003-R-01_Stallion Range Center Cantonment Area

Env Site ID: WSMR-003-R-01
Cleanup Site: Stallion Range Center Cantonment Area
Alias: AOC AA
Regulatory Driver: RCRA-C
RIP Date: 1/2/2027
RC Date: 1/2/2027
RC Reason: Not assigned
SC Date: 1/3/2027
Program: ENV Restoration, Army
Subprogram: MR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: N/A
MRSPP: 9

Phase	Start	End
RFA:	5/14/2002	5/1/2003
CS:	6/30/2006	6/30/2010
RFI/CMS:	1/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1074 (WSMR-003-R-01) (AOC AA) is the SRC Cantonment Area. This site is comprised of 461-acres coinciding with an auxiliary cantonment area in the northern portion of WSMR. The current and reasonably anticipated future land use is industrial. The media of concern is soil. Contaminants of potential concern include explosives and metals. There is not an expected potential for offsite migration of potential contaminants.

AOC AA is located approximately 115-miles north of the installation's main cantonment area. This site is located within the northwest corner of the historical Alamogordo Bombing and Gunnery Range used to train bomber aircrews during the early to mid-1940s. Based on available documentation the nearest bombing target area was five miles east of this Munitions Response Site (MRS). The MRS was directly within the flight path for the aerial gunnery range used to train aircraft gun crews to shoot aerial targets.

A SI was conducted in August 2008 to determine the presence or absence of munitions, munitions and explosives of concern (MEC), and munitions constituents (MC). No MEC was observed; however, one item of munitions debris and one item of non-munitions military debris were observed during the SI survey. Explosives were not detected in any soil samples, and none of the metals analytical results exceeded the screening criteria established for this project. The SI was submitted to the NMED in April 2009. In September 2009, the NMED submitted a NOD on the Final SI. On Dec. 15, 2009, WSMR submitted a Revised Final Site Inspection Report to the NMED that addressed all comments from the NOD. In May 2010, WSMR received a second NOD from the NMED. On July 6, 2010, WSMR responded to the May 2010 NOD by stating they will continue to regulate this site under the RCRA process as stated in the WSMR RCRA permit and submitted the Revised Final Revision 1 Site Inspection Report on Sept. 13, 2010.

A RFI was completed and submitted to the NMED in February 2015. A NOD was issued by the NMED dated April 29, 2016. The Final RFI was submitted in September 2016 and subsequently approved by the

NMED in a letter dated Jan. 5, 2017. The RFI recommended NFA and that the site is eligible for a determination of CAC without controls.

Cleanup/exit strategy- The objective at AOC AA is to complete the required efforts through submission of a CAC without controls petition to the NMED for review and approval. WSMR is expecting to achieve site completion under the RFI/CMS phase.

35955.1075_WSMR-004-R-01_Main Post Wastewater Treatment Plant

Env Site ID: WSMR-004-R-01
Cleanup Site: Main Post Wastewater Treatment Plant
Alias: AOC AB
Regulatory Driver: RCRA-C
RIP Date: 1/2/2027
RC Date: 1/2/2027
RC Reason: Not assigned
SC Date: 1/3/2027
Program: ENV Restoration, Army
Subprogram: MR
NPL Status: No
Hazardous Ranking Score: 0
RRSE: N/A
MRSPP: 9

Phase	Start	End
RFA:	5/14/2002	5/1/2003
CS:	6/30/2006	6/30/2010
RFI/CMS:	1/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1075 (WSMR-004-R-01) (AOC AB) is the Main Post Wastewater Treatment Plant (WWTP). The current and reasonably anticipated future land use is industrial. The media of concern is soil. Contaminants of potential concern include explosives and metals. There is not an expected potential for off-site migration of potential contaminants.

AOC AB encompasses 11-acres and lies within the northern boundary of the historical 3-inch (in) Anti-Aircraft Artillery (AAA) range that was located to the south at Camp Beasley and used from approximately 1940 to 1942. Available records did not identify any response actions associated with munitions from the Camp Beasley AAA range activities. This site is included in WSMR's 2009 Hazardous Waste Permit under Table 4-1 Requiring Corrective Action.

A SI was conducted in August 2008 to determine the presence or absence of MEC and MC. Explosives were not detected in any of the soil samples, and none of the metals analytical results exceeded the screening criteria established for this project. The SI was submitted to the NMED in April 2009. In September 2009, the NMED submitted a NOD on the Final SI. On Dec. 15, 2009, WSMR submitted a Revised Final Site Inspection Report to the NMED that addressed all comments from the NOD. In May 2010, WSMR received a second NOD from the NMED. On July 6, 2010, WSMR responded to the May 2010 NOD by stating they will continue to regulate this site under the RCRA process as stated in the WSMR RCRA permit and submitted the Revised Final Revision 1 Site Inspection Report on Sept. 13, 2010.

A RFI was completed and submitted to the NMED in February 2015. A NOD was issued by the NMED dated Apr. 29, 2016. The Final RFI was submitted in September 2016 and subsequently approved by the NMED in a letter dated Jan. 5, 2017. The RFI recommended NFA and that the site is eligible for a determination of CAC without controls.

Cleanup/exit strategy- The objective at AOC AB is to complete the required efforts through submission of a CAC without controls petition to the NMED for review and approval. WSMR is expecting to achieve site completion under the RFI/CMS phase.

35955.1077_WSMR-006-R-01_MAIN CANTONMENT AREA

Env Site ID: WSMR-006-R-01

Cleanup Site: MAIN CANTONMENT AREA

Alias: AOC AD

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 9

Phase	Start	End
RFA:	5/14/2002	5/1/2003
CS:	6/30/2006	6/30/2010
RFI/CMS:	1/31/2011	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1077 (AOC AD) is the Main Cantonment Area (MCA) site, which encompasses 1687 acres and lies within the boundary of the 3-in AAA range that was located to the south at Camp Beasley and used from approximately 1940 to 1942. The current and reasonably anticipated future land use is industrial. The media of concern is soil. Contaminants of potential concern include explosives and metals. There is not an expected potential for offsite migration of potential contaminants.

The MCA is located in the far northwestern area of the historical AAA range boundary. Available records did not identify any response actions associated with munitions from the Camp Beasley AAA range activities. This site is included in WSMR's 2009 Hazardous Waste Permit under Table 4-1 requiring Corrective Action.

A SI was conducted in August 2008 to determine the presence or absence of MEC and MC. No MEC or munitions debris were observed during the visual survey. Surface soil samples were collected in locations most likely impacted by munitions use to determine whether MC was present. No explosives were detected in any soil samples, and no metals were detected above the screening criteria established for this project. The SI was submitted to NMED in April 2009. In September 2009, the NMED submitted a NOD on the Final SI. On Dec. 15, 2009, WSMR submitted a Revised Final Site Inspection Report to the NMED that addressed all comments from the NOD. In May 2010, WSMR received a second NOD from the NMED. On July 6, 2010, WSMR responded to the May 2010 NOD by stating they will continue to regulate this site under the RCRA process as stated in the WSMR RCRA permit and submitted the Revised Final Revision 1 Site Inspection Report on Sept. 13, 2010.

A RFI was completed and submitted to the NMED in February 2015. A NOD was issued by the NMED dated Apr. 29, 2016. The Final RFI was submitted in September 2016 and subsequently approved by the NMED in a letter dated Jan. 5, 2017. The RFI recommended NFA and that the site is eligible for a determination of CAC without controls.

Cleanup/exit strategy- The objective at AOC AD is to complete the required efforts through submission of a CAC without controls petition to the NMED for review and approval. WSMR is expecting to achieve site completion under the RFI/CMS phase.

35955.1078_WSMR-007-R-01_RAMAH RANCH

Env Site ID: WSMR-007-R-01

Cleanup Site: RAMAH RANCH

Alias: #

Regulatory Driver: CERCLA

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 6

Phase	Start	End
PA:	5/31/2002	5/31/2003
SI:	6/30/2006	9/30/2009
RI/FS:	10/31/2009	1/2/2027
RD:	- -	- -
IRA:	10/13/2011	5/31/2012
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: The Ramah Ranch MRS (WSMR-007-R-01) (formerly identified as the Bartlett Ranch MRS) is a transferred MRS comprised of 5,150-acres located on private property approximately 300-miles northwest of the main post area of WSMR. The current and reasonably anticipated future land use is residential. The media of concern is soil. Contaminants of potential concern include perchlorate, explosives, and metals. There is not an expected potential for offsite migration of potential contaminants.

Rocket propellant of an unknown origin was recovered from this site in 2006. The site is not an established area used for rocket testing, and the propellant release is considered an isolated incident. According to the September 2007 final, Historical Records Review (HRR), MEC, and MC were suspected at this site.

A SI was conducted in August 2008 to determine the presence or absence of MEC and MC. The SI did not determine the full extent of contamination at the site or conduct a risk assessment. MEC has been previously reported, but no MEC or munitions debris were observed during the SI. No samples exceeded the established screening criteria for metals or perchlorate. The SI recommendation for MEC was to further investigate via a RI.

The Ramah Ranch MRS, RI, and IRA were completed in May 2012. In 2013, the RI report was provided for review to the stakeholders (i.e., USEPA and NMED). The USEPA provided comments dated June 25,2015. WSMR responded to these comments and received a letter from the USEPA dated Aug. 15, 2016 approving the WSMR comments. WSMR completed a Proposed Plan for the Ramah Ranch site in January 2023 and provided for a Public Comment Period through Feb. 17, 2023.

Cleanup/exit strategy- The NMED called for Ramah Ranch to be added to the RCRA permit. WSMR is contesting the idea that the site needs to be included in the RCRA permit, and WSMR has completed all cleanup actions under the Comprehensive Environmental Response, Compensation and Liability Act of

1980 (CERCLA) process. WSMR's objective is to finish the CERCLA process through completion of a Decision Document (DD).

35955.1109_CCWS-02_HELSTF LSTC WASTEWATER DISCHARGE

Env Site ID: CCWS-02

Cleanup Site: HELSTF LSTC WASTEWATER DISCHARGE

Alias: SWMU-144

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP:

Phase	Start	End
RFA:	1/31/1994	10/31/1994
CS:	2/28/1995	12/31/1995
RFI/CMS:	1/16/1996	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1109 (CCWS-02) (SWMU 144) is in the HELSTF area and is listed as a CC site. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. Contaminants of potential concern include metals (mainly chromium) and unspecified solvents. There is not an expected potential for offsite migration of potential contaminants.

SWMU 144 is a rock filled wastewater discharge pit approximately 10-ft in diameter and 8-ft deep, located approximately 430-ft northeast of the Laser System Test Center (LSTC). The pit was filled with rocks sometime during 1991. Originally, the Multi-Array Radar (MAR) site used the waste line and pit to discharge non-sewage wastewater. From 1960 through 2008, condensate was piped from the LSTC to the pit.

A 1992 Phase I RFI and a 1994 Phase II RFI were completed. The results of the investigations identified arsenic and lead above regulatory action levels in groundwater. A March 2002 NMED letter required a final RFI report, an ecological risk assessment a background study, to rule out arsenic as a soil contaminant and data showing that groundwater contamination is from another source. These requirements were addressed through Phase III RFI.

WSMR submitted a revised Phase III RFI Work Plan for site investigation in January 2007, which the NMED approved in January 2007. The Phase III RFI report was submitted to NMED in February 2008 following field activities. Phase III RFI activities determined chromium (maximum 607-ppb) and selenium (maximum 169-ppb) exceeded standards in groundwater and there were detections of 1,1-DCE (maximum 3.05-ppb), chloroform (maximum 3.32-ppb), and TCE (maximum 35.1-ppb) below standards. In response to an NMED NOD, a revised report was submitted to the NMED in September 2009. The NMED issued a second NOD to the revised Phase III RFI report. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD on the report in March 2012. WSMR addressed the comments concerning requirements for additional investigation found in the March 2012 NOD through submission of a Phase IV RFI Work Plan for NMED review (January 2017). NMED issued a

NOD on the Phase IV Work Plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a letter dated Mar. 15, 2021. To address data gaps, WSMR submitted the revised Phase IV RFI work plan to NMED in September 2023 and is awaiting review and approval.

Cleanup/exit strategy- WSMR's strategy is to complete the RFI for this site since it is still undergoing the RFI phase and has not achieved regulatory (NMED) concurrence with extent of potential contamination. Phase IV RFI will move forward. WSMR feels that speculation past the study phase is not reasonable until concurrence can be reached with the regulatory authority on current and potential future actions for the site.

35955.1110_CCWS-03_HELSTF STP DRY POND

Env Site ID: CCWS-03

Cleanup Site: HELSTF STP DRY POND

Alias: SWMU-146

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP:

Phase	Start	End
RFA:	1/31/1994	10/31/1994
CS:	2/28/1995	12/31/1995
RFI/CMS:	1/31/1996	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1110 (CCWS-03) (SWMU 146) was formally Installation Restoration Program (IRP) site WSMR-45 before being removed in CY2000. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. Contaminants of potential concern include hexavalent chromium, nitrate, and unspecified solvents. There is not an expected potential for off-site migration of potential contaminants.

CCWS-03 is located approximately 400-ft southwest of the HELSTF sewage lagoons. The site consists of an unlined surface impoundment with dimensions of 120 x 120 x 7-ft. In 1991, a Phase I RFI was performed, and in 1994, a Phase II RFI was performed. The results of the two investigations identified arsenic and selenium above regulatory action levels in groundwater. Additionally, arsenic was detected in the soil above NMED SSLs. The unit had been active since the 1980s, catching treated wastewater overflow from the HELSTF sewage lagoons. The lagoons were replaced and rebuilt in a separate location in 2007.

WSMR submitted a revised Phase III RFI Work Plan for site investigation in January 2007 which the NMED approved in January 2007. The Phase III RFI report was submitted to NMED in February 2008 following field activities. Nitrate was detected at a highest concentration of 67.5-ppm. Chloroform was detected at 7.37-ppb. In response to an NMED NOD, a revised report was submitted to the NMED in September 2009. The NMED issued a second NOD to the revised Phase III RFI report. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD on the report in March 2012. WSMR addressed the comments concerning requirements for additional investigation found in the March 2012 NOD through submission of a Phase IV RFI Work Plan for NMED review (January 2017). NMED issued a NOD on the Phase IV Work Plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a letter dated Mar. 15, 2021. To address data gaps, WSMR submitted the revised Phase IV RFI work plan to NMED in September 2023 and is awaiting review and approval.

Cleanup/exit strategy- WSMR's strategy is to complete the RFI for this site since it is still undergoing the RFI phase and has not achieved regulatory (NMED) concurrence with extent of potential contamination. Phase IV RFI will move forward. WSMR feels that speculation past the study phase is not reasonable until concurrence can be reached with the regulatory authority on current and potential future actions for the site.

35955.1117_CCWS-11_OB/OD at HTA Site

Env Site ID: CCWS-11

Cleanup Site: OB/OD at HTA Site

Alias: SWMU56,55

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP:

Phase	Start	End
RFA:	12/31/2000	12/31/2000
CS:	- -	- -
RFI/CMS:	12/31/2000	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1117 (CCWS-11) (SWMUs 55, 56, and 56a) was utilized in the past for demolition of explosives and propellants. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. Contaminants of potential concern include explosives residue, perchlorate, metals, and nitrate. There is not an expected potential for offsite migration of potential contaminants from WSMR, but there is likely potential for migration past the SWMU boundaries.

The OB/OD unit (SWMUs 55, 56, and 56a) consisted of an OD area, two prepared pits and an OB pan. The two adjacent prepared pits were treated as a single thermal treatment unit under permit number NM275021123¬OB/OD. The NMED, in a Jan. 12, 2000, letter, instructed WSMR to cease using the unit by Dec. 31, 2000. The unit began operations in 1966, and the last detonation at the OD pits occurred on Nov. 30, 2000.

The partial closure of OB/OD was completed according to the provision of the closure plan under the operating permit. Closure activities were performed in 2001 and are described in the Risk Assessment and Closure Report for the OB/OD unit at the HTA dated September 2002. WSMR submitted a closure certification to NMED on Nov. 4, 2002. SWMU 56, 56a, and 55 are listed as operating units OB/OD 1, 2, and 3, respectively on the NMED Annual Fee Letter.

Cyclotrimethylenetrinitramine (RDX) (up to 60-ppb), perchlorate (up to 53-ppm) and Nitrates (up to 11.2-ppm) have been detected above regulatory limits in groundwater samples. In the recent past, 48 wells were sampled annually at this site. A subgroup of these wells (approximately 23 wells) were sampled quarterly for three quarters of the year. A risk assessment was performed in which a soil cover corrective measure study and implementing an annual erosion prevention measures plan was recommended. The soil cover has been installed along with other remedial measures. Work was amended to delineate the extent of a perchlorate plume. Installation of new monitoring wells was required in FY00 to map the perchlorate and explosives residue plumes and demonstrate water flow in the aquifer.

The NMED returned WSMR's OB/OD PCCP in February 2003 stating that it was administratively incomplete and required that a perchlorate investigation take place under RFI rules as part of the post-closure care. The NMED again returned the PCCP in September 2004 stating that it was administratively incomplete.

A Work Plan for a SI to conduct a soil sampling and analysis, perform groundwater monitoring, in situ remediation, installation of a soil cover, and aquifer tests was submitted to NMED in February 2012. WSMR received approval from the NMED in October 2012. Following investigation activities, a SI Report was submitted in September 2013. As a supplemental to the SI, a letter report dated May 2014 was submitted to NMED in June 2014. WSMR received a letter of disapproval of the SI Report from NMED dated Nov. 21, 2014. NMED comments were addressed in the revised SI Report dated February 2015. The investigation report proposed to use In Situ Enhanced Bioremediation (ISEB) to clean the groundwater. The investigation report was approved (with modifications) by the NMED in a letter dated Feb. 17, 2016. The approval letter required WSMR to submit a Pilot Study Work Plan to ensure that anaerobic conditions can be effectively induced to promote the proposed bioremediation.

The Pilot Study Work Plan was submitted to the NMED in July 2017. NMED issued a NOD dated Aug. 30, 2017. A revised Pilot Study Work Plan was submitted to NMED in January 2018. WSMR received a NOD on the revised Work Plan dated Mar. 5, 2018. WSMR responded to the NOD in a letter dated Nov. 13, 2018. NMED disapproved WSMR’s response in a letter dated Jan. 28, 2019, requiring additional investigation. WSMR has put the Pilot Study on hold at this time.

A RFI Work Plan was submitted to NMEID in April 2021 which received an NOD in June 2022. A revised RFI Work Plan was submitted to NMED in October 2022. WSMR is awaiting NMED review and approval.

Cleanup/exit strategy- The objective at this site is to complete further investigation based on NMED's disapproval of the Pilot Study Work Plan to implement PCCP for the site and continue annual groundwater monitoring. Future remedy cannot be determined at this time until the RFI phase can be completed.

35955.1141_CCWS-65_TULA PEAK ORDNANCE DISPOSAL SITE

Env Site ID: CCWS-65

Cleanup Site: TULA PEAK ORDNANCE DISPOSAL SITE

Alias: SWMU 57/61

Regulatory Driver: RCRA-C

RIP Date: 10/1/2024

RC Date: 10/1/2024

RC Reason: Not assigned

SC Date: 9/30/2054

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP:

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	8/31/1994	12/31/1994
DES:	- -	- -
IRA:	- -	- -
CMI(C):	5/31/2008	10/1/2024
CMI(O):	- -	- -
LTM:	10/2/2024	9/30/2054

Site Narrative: 35955.1141 (CCWS-65) (SWMUs, 57 and 61). Tula Peak Ordnance Disposal Site consisted of bomblet burial areas (pits) and an incinerator (NMED regulated unit Incin-1). The current and reasonably anticipated future land use of this site is industrial. The media of concern was soil and groundwater. Contaminants of potential concern include explosives residues, perchlorate, and metals. There is not an expected potential for off-site migration of potential contaminants.

The site is located near the boundary between Holloman Air Force Base and WSMR. SWMU 57 was originally divided into SWMUs 57-60 but were administratively combined. These SWMU pits were designated as RCRA Subpart X units. SWMU 61 was an ordnance incinerator located onsite to the east of the Unexploded Ordnance (UXO) burial areas. The start date of the unit is unknown. Operations at the site ended in 1988. Cluster bomb units and other small ordnance were placed in the incinerator as part of an ordnance disposal procedure. Miscellaneous aircraft and missile parts were observed in the pits. Partially melted cluster bomb units and other small ordnance debris were left in the incinerator and were scattered on the surface of the ground.

In 1988, a RFA report detailed their preliminary review and visual site inspections of several SWMU sites including Tula Peak Burial areas (SWMUs 57-60) and the Tula Peak Incinerator (SWMU 61). In 1992, a Phase I investigation involved an EOD team sweep of the area, a geophysical survey to delineate disposal areas, and the collection of five surface soil samples inside of five identified disposal areas. During the EOD sweep, no live ordnance was observed. Results of the RFI indicated a series of possible UXO disposal trenches and pits which varied in size and shape. Soil samples were collected from five identified disposal areas. One SVOC, Butylbenzlphthalate (0.44 mg/kg), was detected in soil samples taken from one of the southern pits.

In 1995, a CMI was completed at this site. The CMI consisted of construction of a fence to restrict access. In 1997, four monitoring wells were installed at the site. WSMR conducted a semi-annual groundwater

monitoring program between 1997 and 2001 as stipulated under Subpart X. Groundwater monitoring ceased in 2001.

WSMR submitted a Clean Closure Work Plan in November 2007. In April 2008, NMED approved the Work Plan with direction. Execution of the Work Plan began in May 2008. The closure report noted that the majority of submunitions and bombs have been removed from the site with removal conducted to levels specified by the approved Work Plan. During excavation, no munitions were determined to be active. Due to the potential for UXO still on site, WSMR chose to implement Land Use Controls (LUC) and keep the site fenced for safety concerns. The report also determined that the unit was closed by removing all wastes from the landfill cells and properly disposing off-site. Confirmation samples indicated no hazardous constituents on site above applicable screening levels. Perchlorate was detected at the highest concentration of 4,800-ppb. After the closure activities, WSMR submitted a RCRA Clean Closure Report to the NMED and was received on Sept. 19, 2011. After review, NMED responded with a disapproval on the report and required WSMR to submit a revised report that addresses all the comments found within the disapproval. NMED did not consider clean closure for the site, because they considered the site to not be released for unrestricted use and required additional background samples.

Additional sampling activities were completed in 2017, and a revised closure report for the site was submitted in November 2017. WSMR received a second disapproval on the revised closure report in March 2018. WSMR submitted a groundwater sampling Work Plan to NMED in June 2018 in response to NMED comments. The Work Plan was approved by the NMED in July 2018. The Revision 2 Closure Report was approved by the NMED in December 2018 requiring WSMR to submit a PCCP. Groundwater sampling was completed with the report submitted to NMED in April 2019. The PCCP was submitted to NMED in December 2020 and is awaiting NMED review and approval.

Cleanup/exit strategy- The objective for this site is to complete a PCCP based on the NMED approval of SC. The PCCP was completed and submitted in December 2020. Following approval of the PCCP, post closure care activities will commence. WSMR will begin periodic reviews for this site every five years.

35955.1142_CCWS-71_LIQ PROPELLANT EVAP/NEUT PITS

Env Site ID: CCWS-71

Cleanup Site: LIQ PROPELLANT EVAP/NEUT PITS

Alias: SWMU92-100

Regulatory Driver: RCRA-C

RIP Date: 9/29/2020

RC Date: 10/30/2025

RC Reason: Not assigned

SC Date: 10/31/2025

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP:

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1994
RFI/CMS:	8/31/1994	10/31/1994
DES:	8/31/1994	10/31/1994
IRA:	- -	- -
CMI(C):	9/30/2009	9/29/2020
CMI(O):	10/15/2017	10/30/2025
LTM:	- -	- -

Site Narrative: 35955.1142 (CCWS-71) was previously known as IRP Site WSMR-11. The site consists of 10 earthen pits (SWMUs 92 A/B - 100) at the Liquid Propellant Storage Area, east of the WSMR Main Post. The current and reasonably anticipated future land use of the site is industrial. The media of concern was soil. There is not an expected potential for off-site migration of potential contaminants.

Historically, the pits were associated with storage areas that contained IRFNA; liquid propellants such as monomethyl hydrazine (MMH), UDMH, and ammonia; and POLs. RCRA Phase II RFI findings indicated high levels of TPH and low levels of solvents.

From June through September 1995, a remedial action was performed when the existing storage shed drains were plugged, as well, as the drain lines leading from the storage shed to the pits. The drain lines were sampled, characterized, and properly disposed in the WSMR landfill and scrap yard. SWMU 92B and 94 are designated as RCRA Operating Units requiring closure by the state regulatory agency.

A Closure Report was submitted to the NMED on June 21, 2011. The NMED issued a NOD on Feb. 27, 2012, requiring WSMR to submit a Closure Plan providing an outline for additional activities to demonstrate clean closure. A Closure Plan was submitted on July 3, 2013. The NMED announced a Notice of Public Comment Period dated May 2016 and issued a draft Closure Plan for the Pits. The NMED issued their Final Closure Plan for the Acid Neutralization Pits on Aug. 18, 2016.

A soil background study was completed in 2019 and approved by NMED in May 2020. WSMR completed the remaining closure activities in 2020. A clean closure report was submitted to NMED in September 2020 (RIP). A revised clean closure report was submitted to NMED in 2021 and approved in July 2021. WSMR submitted closure certification and survey plat in April 2022.

Cleanup/exit strategy- The objective is to continue closure plan efforts at CCWS-71. WSMR expects to achieve clean closure of the site.

35955.1146_CCWS-75_FORMER HELSTF LANDFILL

Env Site ID: CCWS-75

Cleanup Site: FORMER HELSTF LANDFILL

Alias: SWMU 38/39

Regulatory Driver: RCRA-C

RIP Date: 12/31/2028

RC Date: 12/31/2028

RC Reason: Not assigned

SC Date: 1/1/2029

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP:

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	3/30/1991	12/31/2028
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: WBS 35955.1146 (CCWS-75) (SWMU 38/39) consists of two construction landfills located east of the HELSTF. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. Contaminants of potential concern include hexavalent chromium (Cr+6), TPH, SVOCs, VOCs, heptachlor, and asbestos. There is not an expected potential for off-site migration of potential contaminants.

Both landfills were in operation from the early 1960s to 1989 and described as two unlined trenches approximately 300x50x8-ft. They reportedly received non-hazardous construction waste; including wood, piping material, paper, and insulation. The landfills may have also received drummed soil from the SWMU 143 hexavalent chromium spill. The units are listed by NMED as LDU-6 and 9.

Phase I RFI (1992) included a geophysical survey, surface sediment sampling, and a SVS and did not show significant levels of contaminants of concern. Phase II RFI (1994) included a SVS soil sampling and groundwater sampling. The SVS did not detect any Contaminants of Concern (COCs). Chromium was detected during the groundwater investigation above the Federal MCL. TPH was detected in soil up to 999-ppm.

Semi-annual groundwater monitoring has been underway since 1997. Five wells were monitored, and the data indicated that the area remains impacted from previous releases. The waste received did not correspond to the types of potential contaminants detected. This may indicate vapor phase constituents from another source migrating to this area or disposal of items not previously identified.

A HELSTF Phase III RFI commenced in 2003 to address all HELSTF sites under one comprehensive study. Phase III RFI included a Conceptual Site Model (CSM) that considered HELSTF as a single corrective action unit for the purpose of evaluating and determining appropriate remedial options. A Phase III Work Plan was submitted to the NMED in September 2005. The NMED submitted comments on the Work Plan in July 2006. WSMR responded in August 2006 with the commitment that the Work Plan would be revised

in response to NMED comments. However, with NMED concurrence, WSMR requested the fieldwork commence in September 2006 with the understanding that official Work Plan approval would follow. WSMR submitted the revised Work Plan in January 2007, and the NMED approved it in January 2007. Chromium was detected in groundwater up to 987-ppb, TCE was detected up to 6.46-ppb. The original Phase III RFI Report was submitted in February 2008. Per NMED's NOD, a revised Phase III RFI report was submitted to the NMED in September 2009. Following submittal of the revised Phase III RFI Report, NMED conducted a preliminary review of the document and provided comment to the Revised RFI Report. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD on the second revision of the Phase III RFI report in March 2012.

In June 2011, WSMR submitted a Closure Plan for the Landfills to NMED. On Oct. 7, 2011, WSMR received a NOD on the Closure Plan calling for a response to comments and a revised plan. The Closure Plan is on hold pending completion of the investigation. WSMR has addressed the comments found in the March 2012 NOD (on the Phase III RFI report) through submission of a Phase IV RFI for NMED review (January 2017). WSMR received an NOD from the NMED on the Phase IV work plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a letter dated Mar. 15, 2021. A revised Phase IV RFI work Plan (including only SWMUs 38-39) was submitted to NMED in October 2022 which was approved by NMED in Dec. 20, 2022. Field work for the investigation was completed in the summer of 2023. A Phase IV RFI report will be submitted to NMED in early 2024.

Cleanup/exit strategy- A Phase IV RFI will move forward along with revision of the closure plan following approval of the RFI. WSMR will also continue periodic groundwater monitoring at the site. Further speculation on actions past the RFI and closure plan are not warranted at this time until WSMR can obtain approval of the nature and extent of contamination and determine if an off-site source is contributing to contamination at this site.

35955.1147_CCWS-76_FORMER MAIN POST LANDFILL #3 (SCRAP YARD)

Env Site ID: CCWS-76
Cleanup Site: FORMER MAIN POST LANDFILL #3 (SCRAP YARD)
Alias: SWMU 65
Regulatory Driver: RCRA-C
RIP Date: 1/2/2027
RC Date: 1/2/2027
RC Reason: Not assigned
SC Date: 1/3/2027
Program: Compliance-related Cleanup
Subprogram: CC
NPL Status: No
Hazardous Ranking Score: 0
RRSE: N/A
MRSPP:

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	8/31/1988	8/31/1988
RFI/CMS:	3/31/1991	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1147 (CCWS-76) (SWMU 65) is a former main post landfill covering an approximate 55-acre area. The current and reasonably anticipated future land use for this site is industrial. The media of concern is soil and groundwater. There is not an expected potential for off-site migration of potential contaminants.

The landfill is in the southeast portion of Main Post and reportedly operated from 1965 to 1982. The landfill's northern portion (approx. 5-acres), known as the scrap yard, was fenced and used as the WSMR scrap metal accumulation point between 1982 and 1998. In 1998, the scrap yard was identified as possibly containing UXO. In 1999, the area's surface was cleared of UXO; however, subsurface UXO concerns still exist. No historical information is available on the design construction or operating procedures of the landfill and no documentation of a release from the unit was found. The NMED has designated this site as a RCRA operating unit requiring closure, and it is listed as RCRA Unit LDU-10.

Monitoring wells were installed during the Phase II RFI (1994). Conclusions of the Phase II RFI recommended that a request for a Class III Permit Modification be submitted to terminate the RCRA Facility Investigation/CMS. It was also recommended that the SWMU be monitored semi-annually, because of its proximity to the aquifer utilized by WSMR for potable water. WSMR conducted groundwater monitoring activities from 1996 until 2001 and ceased for a period after submitting an additional RFI report (June 2001).

In 2003, WSMR received NMED comments on the 2001 RFI report requesting supplemental information including background soil, metals, TPH levels in groundwater, and a reevaluation of the groundwater monitoring system. NMED concerns included alleged deficiencies with soil and groundwater background concentrations, TPH levels detected in groundwater, and detections of VOCs, SVOCs, TPH, and metals in soil. WSMR responded with a background soil study groundwater sampling and evaluation of the groundwater monitoring system. The NMED requested that additional downgradient monitoring wells be installed.

WSMR submitted a Phase III RFI Work Plan to the NMED in July 2006. After one revision, the Phase III RFI fieldwork was completed in late 2007. There were no significant detections of metals, VOCs, SVOCs, explosives residues, TPH, or cyanide in soil and groundwater samples. Annual groundwater sampling continued after the Phase III RFI field work. A RFI report was submitted to NMED in January 2009. NMED rejected the RFI in September 2009. WSMR responded to the rejection with responses to the comments in December 2009. WSMR received its second set of comments on the RFI report in a NOD from NMED dated September 2009. WSMR submitted Revision 2 of the Phase III RFI on Feb. 9, 2011. The NMED responded with a disapproval dated June 25, 2014.

In March 2011, WSMR submitted a Closure Plan to the NMED for review. On Oct. 7, 2011, WSMR received a NOD from NMED. This NOD included comments on the RFI submitted Feb. 9, 2011. The Closure Plan is on hold until the investigation for the site is completed and approved by the NMED.

WSMR has addressed comments found in the June 2014 disapproval (on the Phase III RFI report), through submission of a Phase IV RFI for NMED review (December 2016). WSMR received an NOD from the NMED on the Phase IV RFI Work Plan dated August 2017. WSMR submitted a revised Phase IV RFI Work Plan dated November 2017 and received a second NOD in May 2018. WSMR resubmitted the Work Plan in November 2018. A third disapproval was received from NMED in February 2019. WSMR responded to the third disapproval with submittal of the third revision to the Phase IV RFI Work Plan in July 2019. NMED issued a fourth disapproval in July 2020. WSMR proceeded at risk and completed a surface asphalt pile cleanup action and geophysical survey as part of the Phase IV RFI work.

Cleanup/exit strategy- WSMR will continue groundwater monitoring and RFI activities. WSMR submitted a Frequent Monitoring Plan in April 2021 which was approved by NMED in March 2023. WSMR's strategy is to complete the investigation of the site and submit it to the NMED. This site is still undergoing the RFI (Fourth Phase) and has not achieved regulatory (NMED) concurrence with data collected for the site and the extent of potential contamination. It is unknown at this time what closure of the site will entail. WSMR will complete an approved Phase IV RFI and continue routine groundwater monitoring.

35955.1150_CCWS-79_HELSTF STP LAGOONS (PONDS 1-4)

Env Site ID: CCWS-79

Cleanup Site: HELSTF STP LAGOONS (PONDS 1-4)

Alias: SWMU 27-30

Regulatory Driver: RCRA-C

RIP Date: 1/2/2027

RC Date: 1/2/2027

RC Reason: Not assigned

SC Date: 1/3/2027

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP:

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	6/30/1992	1/2/2027
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: 35955.1150 (CCWS-79) (SWMU 27-30). HELSTF STP Lagoons consists of four large sanitary treatment impoundments that replaced the previous unlined impoundment (SWMU 148) in the early 1980s. The current and reasonably anticipated future land use of this site is industrial. The media of concern is soil and groundwater. There is not an expected potential for off-site migration of potential contaminants.

Each of the impoundments consists of a polyethylene-lined cell surrounded by earthen berms, and the four impoundments collectively cover an area of approximately two acres. The two westernmost impoundments are interconnected by a narrow inlet and have a total operating volume of 1.3 million gallons. The two easternmost impoundments are also interconnected by a narrow inlet and have a total operating volume of 2.3 million gallons. The site formerly received sanitary wastewater and surface run-off from the HELSTF. The site was taken out of service in 2007.

HELSTF Phase III RFI commenced in 2003 to address all HELSTF sites under one comprehensive study. WSMR submitted the revised Work Plan in January 2007, and the NMED approved it in January 2007. The original Phase III RFI Report was submitted in February 2008. Per NMED's NOD, a revised Phase III RFI report was submitted to the NMED in September 2009. Following submittal of the revised Phase III RFI Report, NMED provided comments. WSMR submitted a second revision to the Phase III RFI report in August 2010. WSMR received a third NOD on the second revision of the Phase III RFI report in March 2012. WSMR addressed the comments concerning requirements for additional investigation found in the March 2012 NOD through submission of a Phase IV RFI Work Plan for NMED review (January 2017). NMED issued a NOD on the Phase IV Work Plan in December 2017. Since NMED was dismissing data obtained during the Phase III RFI, WSMR revised and resubmitted the Phase III RFI report in late 2020. Phase III RFI was finally approved by the NMED in a letter dated March 15, 2021. To address data gaps, WSMR submitted the revised Phase IV RFI work plan to NMED in September 2023 and is awaiting review and approval.

Cleanup/exit strategy- WSMR's strategy is to complete the RFI for this site since it is still undergoing the RFI phase and has not achieved regulatory (NMED) concurrence with extent of potential contamination. Phase IV RFI will move forward. WSMR feels that speculation past the study phase is not reasonable until concurrence can be reached with the regulatory authority on current and potential future actions for the site.

35955.1151_CCWS-62_Former STP Percolation Ditches

Env Site ID: CCWS-62

Cleanup Site: Former STP Percolation Ditches

Alias: SWMU 82

Regulatory Driver: RCRA-C

RIP Date: 1/7/2020

RC Date: 9/30/2054

RC Reason: Not assigned

SC Date: 9/30/2054

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP:

Phase	Start	End
RFA:	5/31/1988	8/31/1988
CS:	5/31/1988	8/31/1988
RFI/CMS:	3/15/1991	9/14/2016
DES:	- -	- -
IRA:	- -	- -
CMI(C):	9/15/2016	1/6/2020
CMI(O):	1/7/2020	9/30/2054
LTM:	- -	- -

Site Narrative: 35955.1151 (CCWS-62) (SWMUs 82 and 83) consists of two excavated soil ditches east of the STP used from 1958 until 1986 as discharge trenches. The current and reasonably anticipated future land use is industrial. The media of concern is soil and groundwater. Contaminants of concern include cyanide and nitrate. There is not an expected potential for off-site migration from WSMR; however, groundwater contamination has migrated past the SWMU boundary.

The north drainage ditch (SWMU 82) extends from the STP headgate to an infiltration/evaporation pond. The south drainage ditch (SWMU 83) originated at the STP. The site is listed by the NMED as a RCRA operating unit requiring closure. In 1992, a Phase I RFI was conducted. Soil samples were analyzed for VOCs, SVOCs, metals, and total cyanide. During the 1994 Phase II RFI, soil samples were analyzed for metals and total cyanide. Total chromium was detected below the hexavalent chromium Subpart S level. Groundwater samples indicated total cyanide above federal and state action levels.

In 1997, excavation of soil from the two ditches was completed. Groundwater samples were collected up and downgradient. A baseline analysis was performed indicating concentrations of cyanide in excess of the New Mexico Water Quality Control Commission and Environmental Protection Agency (EPA) standards. A SC Report was completed and submitted to NMED.

In 1999, a risk assessment was conducted evaluating the potential for exposure to contaminants. Aluminum, fluoride, iron, lead, nitrate, nitrite, and cyanide were detected above their respective Preliminary Remediation Goals. After an evaluation of toxicity, only cyanide posed an unacceptable risk for a residential scenario. A 1999 Site Characterization Report was filed.

The wells were sampled semi-annually through 1999 for cyanide and effluent-related constituents. A CMS was completed in 2000 recommending Monitored Natural Attenuation (MNA). Quarterly groundwater monitoring occurred between 2000 and 2001. Since 2002, wells have been monitored semiannually. Total cyanide has concentrations up to 0.52-ppm. Nitrate is detected at concentrations up to 12-ppm.

In July 2003, WSMR received NMED comments on the 2000 CMS in the form of a NOD requesting additional data to support the MNA Action Plan. Several CMS addendums have been submitted by WSMR. NMED responses have generally stated that evidence justifying MNA is inadequate.

A Closure Plan was submitted to NMED in July 2011. Closure of the site will consist of monitoring to show MNA is occurring. WSMR received a NOD on the Closure Plan and resubmitted a revised Closure Plan in July 2013. WSMR received a second NOD concerning the Closure Plan in August 2014. Revision 2 of the Closure Plan was completed in January 2015. The NMED issued a Public Notice dated May 2016 for a public comment period on the WSMR Closure Plan. Following the comment period, the NMED issued a Final Closure Plan for the Former STP Percolation Ditches dated Sept. 14, 2016. As part of closure requirements, WSMR installed two additional downgradient monitoring wells in late 2016 and completed required quarterly monitoring of the new wells in 2017.

WSMR submitted a Closure Report to the NMED in June 2018. WSMR received a NOD on the closure report dated September 2018. A revised closure report was submitted in January 2019. WSMR received a second disapproval on the Revised Closure Report dated May 9, 2019. WSMR submitted the Revision 2 Closure Report dated September 2019 and was subsequently approved by the NMED in a letter dated Jan.6, 2020. WSMR developed a PCCP and submitted the plan to NMED in September 2020. WSMR is awaiting NMED review of the PCCP.

Cleanup/exit strategy- The objective for this site is to complete and implement a PCCP based on the NMED approval of SC. PCC includes MNA indefinitely. WSMR will begin periodic reviews for this site every 5 years.

SITE SUMMARY

SITE CLOSEOUT SUMMARY

CRL ID	Site Name	Site Closeout Date
35955.1001	WSMR-01_YONDER IMPACT AREA	4/30/1979
35955.1002	WSMR-02_RED RIO MUNITION DISPOSAL AREA(P	8/31/1988
35955.1003	WSMR-03_OSCURA MUNITION DISPOSAL AREA	8/31/1988
35955.1004	WSMR-04_OSCURA RANGE IMPACT AREA	8/31/1988
35955.1006	WSMR-08_PISTOL/RIFLE RANGE	4/30/1979
35955.1007	WSMR-09_NUC EFFECTS REACTOR FACILITY(BLD	9/30/2006
35955.1008	WSMR-11_LIQ PROPELLANT EVAP/NEUT PITS (1	8/31/1996
35955.1009	WSMR-12_OB/OD DISPOSAL PITS HAZ TEST ARE	8/31/1996
35955.1010	WSMR-13_TRINITY SITE	4/30/1979
35955.1012	WSMR-15_FORMER HAZARDOUS WASTE LANDFILL	9/30/1990
35955.1013	WSMR-17_SEWAGE TREATMENT PLANT MAIN POST	12/31/1994
35955.1014	WSMR-18_FLOWER AREA BURIAL SITE	4/30/1979
35955.1015	WSMR-19_BURIAL SITE NORTH OF ARMY BLOCKH	4/30/1979
35955.1016	WSMR-20_BOMBLET BURIAL SITE	8/31/1996
35955.1017	WSMR-23_TULA PEAK BURIAL PITS	8/31/1995
35955.1018	WSMR-24_TULA PEAK BURIAL SITE INCINERATO	8/31/1994
35955.1022	WSMR-31_MAIN POST FORMER FFTA & PIT	2/15/2016
35955.1025	WSMR-34_TTF HDPE-LINED LAGOON (REMOVED)	9/30/1993
35955.1026	WSMR-35_TTF 25,000 GAL EVAP TANK	2/15/2016
35955.1027	WSMR-36_FORMER WASTE/OIL TANK&SUMP EAST	9/30/2007
35955.1028	WSMR-37_HWSF EVAP TANK	11/30/1991
35955.1032	WSMR-42_STP DISCHARGE SITE @ PLAYA LAKE	3/15/2014
35955.1034	WSMR-44_HELSTF STP LAGOONS (PONDS 1-4)	12/31/1996
35955.1035	WSMR-45_HELSTF STP DRY POND	12/31/1994
35955.1036	WSMR-46_HELSTF SEPTIC SYSTEMS (3)	7/31/1997
35955.1037	WSMR-47_HELSTF LSTC WASTEWATER DISCHARGE	12/31/1996
35955.1038	WSMR-48_HELSTF CLEANING FACILITY SUMP	10/31/1996
35955.1041	WSMR-52_FORMER HELSTF LANDFILL	6/30/2006
35955.1045	WSMR-56_PAINT SHOP SUMP	6/30/2022
35955.1046	WSMR-57_FORMER GOLF COURSE PESTICIDE STG	2/15/2016
35955.1050	WSMR-61_FORMER MAIN POST LANDFILL #3 (SC	9/30/2007
35955.1051	WSMR-62_FORMER STP PERCOLATION DITCHES (	8/31/1988
35955.1052	WSMR-66_STALLION RANGE CENTER FORMER FFT	4/30/1979
35955.1054	WSMR-68_SEWAGE LAGOONS @ STALLION RANGE	8/31/1992
35955.1055	WSMR-69_SEPTIC TANK/DRAINFIELD @ RHODES	5/31/1997
35955.1058	WSMR-72_ABAND DISPOSAL TRENCH AT NEW COM	6/30/2012
35955.1061	WSMR-75_RHODES CANYON SUBGRADE ASPHALT T	4/16/2022
35955.1062	WSMR-76_SEWAGE LAGOON AT ORO GRANDE RANG	10/31/1992
35955.1063	WSMR-77_MCAFFEE & VET CLINIC INCINERATOR	6/30/2022
35955.1065	WSMR-79_HEAVY EQPT WASHPAD & DRAIN @ BLD	7/31/2014
35955.1066	WSMR-80_STEAM WASHPAD,DRAIN,OIL/H2O SEP	12/31/1994
35955.1070	WSMR-84_FORMER LC-37 PAINT DUMP	2/15/2016

CRL ID	Site Name	Site Closeout Date
35955.1079	PBA@WSMR_PBA@WSMR	10/15/2013
35955.1083	CCWS-08_AMRAAD UST SITE	9/30/2004
35955.1085	CCWS-04_STALLION RANGE CENTER FORMER FFT	6/30/2022
35955.1086	WSMR-85_Waste Oil Accumlation	7/31/2014
35955.1090	CCWS-82_TTF SWMUs 106, 109-113, AOC H-L	3/15/2014
35955.1095	CCWS-87_SWMUs 133-134 Accumulation Area	1/15/2014
35955.1104	CCWS-96_PESTICIDE STORAGE AREA	9/30/2015
35955.1105	CCWS-97_BRINE(MeCL) STORAGE TANK	1/15/2014
35955.1111	CCWS-101_ RAMS BURIED DRUMS	6/30/2022
35955.1072	WSMR-001-R-01_ATHENA BOOSTER DROP ZONE 1	5/1/2003
35955.1073	WSMR-002-R-01_ATHENA BOOSTER DROP ZONE 2	5/1/2003
35955.1076	WSMR-005-R-01_CONDRON FIELD	9/30/2012
35955.1108	CCWS-01_WASHPAD, DRAIN, OWS @ BLDG 1753	9/30/2012
35955.1113	CCWS-06_RED RIO MUNITIONS DISPOSAL AREAS	8/31/2007
35955.1114	CCWS-07_Oscura Munitions Disposal Areas	9/30/2007
35955.1118	CCWS-14_HWSF EVAP TANK, CLOSE PERMITTED	3/31/2004
35955.1119	CCWS-15_BLDG 23638 Burn Site	9/30/2003
35955.1121	CCWS-18_DENVER SPILL SITE	6/30/2022
35955.1123	CCWS-20_MALPAIS SPILL SITE	6/30/2022
35955.1124	CCWS-23_MISSILE GRAVEYARD SITE	1/31/2002
35955.1125	CCWS-27_HARDIN Ranch AST Site (SWMUs 199	6/30/2022
35955.1126	CCWS-28_HARDIN RANCH 2 - HWSI	11/30/2003
35955.1127	CCWS-29_OSCURA COMMO AST SITE	6/30/2022
35955.1128	CCWS-30_HARRIET AST SITE	6/30/2022
35955.1129	CCWS-31_SE-70 AST SITE	6/30/2022
35955.1130	CCWS-32_ATOM AST SITE	6/30/2022
35955.1131	CCWS-33_ATOM AST SITE #2	11/30/2003
35955.1132	CCWS-34_SE-50 AST SITE	6/30/2022
35955.1133	CCWS-35_EC-50 AST SITE	6/30/2022
35955.1134	CCWS-36_MINNOW AST SITE	6/30/2022
35955.1135	CCWS-37_COWAN AST SITE	6/30/2022
35955.1136	CCWS-38_GRAN JEAN AST SITE	6/30/2022
35955.1137	CCWS-39_NE-50 AST SITE	6/30/2022
35955.1138	CCWS-42_RAM AST SITE	6/30/2022
35955.1139	CCWS-43_Dead Horse AST Site	6/30/2022
35955.1140	CCWS-53_NW-70 AST SITE	6/30/2022
35955.1144	CCWS-73_ORO GRANDE RANGE CAMP SEWAGE LAG	9/30/2012
35955.1149	CCWS-78_AAFES Gas Station Fuel Release	9/30/2012
35955.1152	CCWS-80_Main Post Skeet Range	9/30/2009

COMMUNITY INVOLVEMENT

Community Involvement Plan (Date Last Reviewed):	6/15/2012
Technical Review Committee Establishment Date:	N/A
Restoration Advisory Board (RAB) Establishment Date:	N/A
RAB Adjournment Date:	N/A
RAB Adjournment Reason:	N/A
Reasons for Not Establishing RAB:	No sufficient, sustained community interest in a RAB has been expressed by the community
RAB Date of Solicitation from Community:	09/01/2023
RAB Results of Solicitation:	No interest.
Current Technical Assistance for Public Participation (TAPP):	N/A
TAPP Title:	N/A
Potential TAPP:	N/A
Administrative Record Location:	WHITE SANDS MR, IMSW-WSM-PW-E-EC, 163 Springfield Street, White Sands Missile Range
Information Repository Location:	WHITE SANDS MR, IMSW-WSM-PW-E-EC, 163 Springfield Street, White Sands Missile Range

FIVE-YEAR / PERIODIC REVIEW SUMMARY

Status	Review Type	Start Date	End Date	Plans Narrative	Actions Narrative	Results Narrative
Completed	PR	4/23/2019	9/30/2019	Continue annual LTM as required by the Approved CMI Work Plan.	The periodic review was conducted to assess the status of corrective measures completed at WSMR-14.	The review was intended for use by WSMR and AEC for post closure management. The remedy is functioning as intended by the CMI, exposure assumptions, toxicity data, cleanup levels, and RAOs are valid and no new information will effect the remedy.
Planned	PR	4/23/2024	9/30/2024	Begin Monitoring as proposed in the PCCPs at 35955.1141 and 35955.1151. Continue LTM at 35955.1011.	The periodic review will be conducted to assess the status of Post Closure Care at 35955.1011, 35955.1141 and 35955.1151.	N/A