PICATINNY ARSENAL

Army Cleanup Program

Installation Action Plan Final

June 2024

TABLE OF CONTENTS

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: PICATINNY ARSENAL

Installation City: PICATINNY ARSENAL

Installation County: MORRIS

Installation State: NJ

Regulatory Participation - Federal: USEPA Region II, Federal Facilities Section, US Fish &Wildlife Service for consultation for endangered species

Regulatory Participation - State: NJDEP

ACRONYMS

Acronym	Definition
AOC	Area of Concern
AOPI	Areas of Potential Interest
BSB	Bear Swamp Brook
CC	Compliance-related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
COC	Contaminant of Concern
CRL	Cleanup Restoration & Liabilities
cy	cubic yard(s)
DD	Decision Document
DRMO	Defense Reutilization and Marketing Office
ENV	Environmental
ER,A	Environmental Restoration, Army
FS	Feasibility Study
FY	Fiscal Year
FYR	Five-Year Review
GPB	Green Pond Brook
HHRA	Human Health Risk Assessment
IAP	Installation Action Plan
ID	Identification
IR	Installation Restoration
IRA	Interim Remedial Action
IRP	Installation Restoration Program
LOC	Level of Concern
LTM	Long-Term Management
LUC	Land Use Control
MCOC	Munitions Contaminants of Concern
MEC	Munitions and Explosives of Concern
mg/kg	milligrams per kilogram
mm	millimeter
MMRP	Military Munitions Response Program
MNA	Monitored Natural Attenuation
MR	Munitions Response
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
NFA	No Further Action
NJ	New Jersey
NJDEP	New Jersey Department of Environmental Protection
NPL	National Priorities List
NTCRA	Non Time-Critical Removal Action

Acronym	Definition
ORAP	Operational Range Assessment Program
PA	Preliminary Assessment
PAH	Polycyclic Aromatic Hydrocarbons
PAL	Project Action Limits
PBA	Performance-Based Acquisition
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethylene
PFAS	Per- and Polyfluoroalkyl Substances
PP	Proposed Plan
ppm	parts per million
PR	Periodic Review
PTA	Picatinny Arsenal
RA	Remedial Action
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RAB	Restoration Advisory Board
RAR	Remedial Action Report
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RDX	Cyclotrimethylenetrinitramine
RI	Remedial Investigation
RIP	Remedy-in-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SC	Site Closeout
SI	Site Inspection
SVOC	Semi-Volatile Organic Compound
TAPP	Technical Assistance for Public Participation
TBD	To Be Determined
TCE	Trichloroethylene
TCRA	Time-Critical Removal Action
TECUP	Toxic and Energetics Cleanup Program
TNT	Trinitrotoluene
US	United States
USEPA	US Environmental Protection Agency
UST	Underground Storage Tank
UU/UE	Unlimited Use /Unrestricted Exposure
UXO	Unexploded Ordnance
VOC	Volatile Organic Compound

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: 24/63

Number of Open Sites with Response Complete/Total Open MR Sites: 0/10

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

SITE-LEVEL INFORMATION

34855.1001_PICA-001_INACTIVE TETRYL WASTE PITS (SIT

Env Site ID: PICA-001

Cleanup Site: INACTIVE TETRYL WASTE PITS (SIT

Alias: 17/18

Regulatory Driver: CERCLA

RIP Date: 5/15/2014

RC Date: 5/15/2014

RC Reason: Study Completed, No Cleanup Required

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	1/1/1980	5/15/1981
SI:	7/15/1987	6/15/1989
RI/FS:	6/15/1996	5/15/2014
RD:	- -	- -
IRA:	10/31/2000	3/31/2005
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	6/15/2014	9/15/2054

Site Narrative: The Northern 2,4,6-Trinitrophenylmethylnitramine (Tetryl) Pits consisted of four unlined, bermed pits, located at the intersection of 18th Avenue and 13th Street. The two upper northern tetryl pits were located on the north side of 18th Avenue, and the two lower northern tetryl pits were located on the south side of 18th Avenue. Each pit was about 10 feet in diameter, with depths ranging from one to five feet. The pits are believed to have been used from at least 1932 (when the pits were first indicated on engineering drawings) until 1945, for disposal of waste resulting from the processing of tetryl in the nearby 1000 Area buildings. The Southern Tetryl Pit received waste from Building 1052, a nitrating building, and may have operated from 1938 to 1945. The northern and southern tetryl pits are currently inactive. Materials that may have been associated with the tetryl pits included tetryl, acid (possibly nitric acid), and water. Lead may also have been associated with the manufacturing of tetryl, although it is not a constituent of the final product. Remedial investigation (RI) activities were conducted from 1998 to 2000. Soil analysis indicated the presence of explosives (tetryl), metals (lead), and polycyclic aromatic hydrocarbons (PAH) in excess of levels of concern (LOC). Sediment in the on-site ditch, at the northern tetryl pit, contains PAHs above LOCs. An engineering evaluation/cost analysis for the removal of soil co-contaminated with explosives and lead was completed in 2001. Soil contaminated with explosives [about 300 cubic yards (cy)] was treated in a bioreactor to address explosives. A rotted catch basin and 25 cy of soil were removed at the southern tetryl pits as part of a facility-wide sump and catch basin investigation in 2004. Groundwater contains volatile organic compounds (VOC) trichloroethylene (TCE) above LOCs at both the northern and southern tetryl pits, as well as metals (lead) and explosives [cyclotrimethylenetrinitramine (RDX)] at the northern tetryl pits. The feasibility study (FS) was approved by the US Environmental Protection Agency (USEPA) in August 2009. The proposed plan (PP) was approved by regulators in 2014. The chosen remedy was no further action (NFA) with monitoring of land use. Groundwater contamination associated with the site is addressed under the PICA-204 record of decision (ROD). PICA-001 is in the 25 Site Group. In accordance with the ROD, the site will undergo annual land use monitoring to ensure the land use has not changed since the site does not allow unlimited use/unrestricted exposure (UU/UE). Long-term management (LTM) includes annual

inspections and a LTM report. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1002_PICA-002_LOWER BURNING GROUND (SITE 34)

Env Site ID: PICA-002

Cleanup Site: LOWER BURNING GROUND (SITE 34)

Alias: 34

Regulatory Driver: CERCLA

RIP Date: 12/15/2014

RC Date: 12/15/2014

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	1/1/1980	5/15/1981
SI:	7/15/1987	6/15/1989
RI/FS:	11/15/1990	8/15/2005
RD:	4/15/2006	4/15/2014
IRA:	- -	- -
RA(C):	4/15/2006	12/15/2014
RA(O):	- -	- -
LTM:	12/15/2014	9/15/2054

Site Narrative: The Lower Burning Ground encompasses an area of seven acres and contains a landfill, a waste pile area, an open burning area, and the burn pan area. The landfill operated from 1960 to 1980 and filled in low-lying ground. Direct burning of explosives-contaminated wastes on the ground surface was conducted in the open burning area until 1985. From 1985 to 2011, explosives-contaminated wastes were burned in nine burning pans. The 1993, RI results showed soil exceedances of base-neutral acids, metals, polychlorinated biphenyl (PCB), explosives, and dioxins/furans. There were exceedances of metals and VOCs in surface water and metals, pesticides, and cyanide in sediment. Metals were detected above LOC in groundwater. The FS was approved by the regulatory agencies in the fall of 2001. The ROD was signed in 2005 and included provisions that allowed the remedy to be delayed until the new incinerator was operational. The ROD included capping, long-term monitoring, and land use controls (LUC). In May 2011, the burning pans and other equipment were moved to the new burning grounds. Tree-clearing and surface unexploded ordinance (UXO) clearance was completed in Spring 2012. A change to the design of the cover was agreed to by Army and regulators. The change was from a modified asphalt technology for containment cover to a hybrid cover. An explanation of significant differences was public noticed and issued in fiscal year (FY) 2013. The full remedial design (RD) was approved by the regulators in the Spring of 2014. The RD also included wetland mitigation of two areas outside the remediation area as the cover was placed over existing wetlands. A groundwater monitoring program was also implemented. The work was completed by September 2013 including the replacement of certain wells and abandonment of others. A remedial action report (RAR) was approved by the regulators in December 2014. Requirements of the RD include groundwater monitoring, land use certifications, wetland mitigation reporting, and cap maintenance. Located on the former burning grounds cap is the Picatinny Arsenal solar project with 1,782 panels producing 588 kilowatts of direct current. The site is in the LTM phase. Groundwater and LUC monitoring will continue until the site meets criteria for unrestricted land use. Because it is anticipated that hazardous substances, pollutants, or

contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, landfill maintenance, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1003_PICA-006_GUNCOTTON LINE (SITE 16)

Env Site ID: PICA-006

Cleanup Site: GUNCOTTON LINE (SITE 16)

Alias: 16

Regulatory Driver: CERCLA

RIP Date: 5/15/2014

RC Date: 5/15/2014

RC Reason: Study Completed, No Cleanup Required

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	4/30/1996	5/15/2014
RD:	- -	- -
IRA:	6/1/2000	8/1/2000
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	6/15/2014	9/15/2054

Site Narrative: The Guncotton Line is located near the southern end of Picatinny Lake and inadvertently received nitrocellulose, referred to as guncotton. The pipeline was formerly used to discharge liquid waste from a trinitrotoluene (TNT) facility in Building 520 to Picatinny Lake. The line included a portion of open trench and a buried pipeline. The pipeline ran from an underground catch basin near Building 554, past Building 506, under the location of a former coal pile, and ended in the vicinity of Building 424-E. During the RI, a geophysical survey was conducted to identify the underground portion of the line. Soil samples were collected from the open trench portion of the undefined portion of the line, under the former coal pile, near Building 506, was identified in Spring 2000. Approximately 270 linear feet of a 12-inch pipeline, and 200 linear feet of an eight-inch pipeline, were excavated and removed with nitrocellulose-contaminated soil so that a sanitary sewer line could be safely installed. Additional sampling in 2001 delineated the horizontal and vertical extent of contamination in the open trench. Metals and explosives contamination was present along the entire length of the open trench and drainage ditch (2,200 feet). An FS was approved by the USEPA in August 2009. The packaging, handling, storage, and transportation facility was built directly on a segment of the open part of the Guncotton Line. The Army proposed and NJDEP and USEPA agreed that the soils from underneath the footprint would be placed under an asphalt cover. In a letter dated Nov. 27, 2012, USEPA approved the NFA with monitoring of land use PP for the 25 Picatinny Arsenal sites. USEPA agreed with the Army position that sites with acceptable risk under the current land use should be considered for the NFA with monitoring of land use, as the existing non-Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) LUCs prevent a different land use. The PP was public noticed in March 2013, and the ROD was signed by the Army and USEPA in May 2014. A certification of land use at the site is required each year, along with an inspection report. PICA-006 is in the 25 Site Group. The LTM phase is open. Because it is anticipated that hazardous substances, pollutants, or contaminants, will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1005_PICA-008_INACT. ROCKET FUEL TEST Areas

Env Site ID: PICA-008

Cleanup Site: INACT. ROCKET FUEL TEST Areas

Alias: 2, GROUP 3

Regulatory Driver: CERCLA

RIP Date: 6/15/2011

RC Date: 9/15/2054

RC Reason: Not assigned

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	1/1/1980	5/15/1981
SI:	7/15/1987	6/15/1989
RI/FS:	2/15/1995	8/15/2010
RD:	8/15/2010	12/15/2010
IRA:	- -	- -
RA(C):	12/15/2010	6/15/2011
RA(O):	7/15/2011	9/15/2054
LTM:	- -	- -

Site Narrative: The Inactive Rocket Fuel Test Areas is comprised of 3 areas (sites 1, 2 and 4) and is named Group 3. The site soils were not addressed by the ROD; they will be captured in the 45 Site Group B PP and ROD. In a 1996 RI, VOC groundwater contamination was identified in the two aquifers beneath the site. The extent of the groundwater contamination in the shallow aquifer was defined in 1998; the contaminants of concern (COC) are carbon tetrachloride and tetrachloroethylene (PCE). The site contained a former dumping area behind Building 3576, a former underground storage tank (UST), and a passivation house which used solvents to clean rocket components. Additional groundwater investigation and a monitored natural attenuation (MNA) evaluation was completed in 2002. The surface water COCs are ammonia and metals. The ROD was approved on Aug. 2, 2010. The approved remedy consists of in situ enhanced bioremediation, MNA, long-term groundwater monitoring, and LUCs. The remedial action (operation) (RA(O)) phase began in FY11. Per the ROD, RA(O) will be maintained until such time as contaminant levels are sufficiently reduced to allow beneficial use. The 2021 Annual Monitoring report recommendations for future changes to the monitoring program will be made in subsequent annual reports. The frequency and extent of the MNA program are reduced based on demonstration of MNA and the reduction of groundwater concentrations over time, utilizing a statistical approach to trend analysis. When the concentrations of COCs fall below the screening levels, groundwater monitoring will be continued for an additional one to three years to ensure the reduced concentration is not the result of seasonal fluctuation.

The RA(O) phase is underway per the ROD. The site will also be evaluated in the five-year reviews. It is anticipated that groundwater will reach UU/UE at the end of RA(O).

34855.1007_PICA-011_BLDG 60 SATELITE WSTE ACCOM ARE

Env Site ID: PICA-011

Cleanup Site: BLDG 60 SATELITE WSTE ACCOM ARE

Alias: 122

Regulatory Driver: CERCLA

RIP Date: 2/15/2027

RC Date: 2/15/2027

RC Reason: Not assigned

SC Date: 2/16/2056

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/15/1987	6/15/1989
SI:	10/15/1989	3/15/1991
RI/FS:	9/15/1993	8/15/2026
RD:	- -	- -
IRA:	6/15/1999	8/15/2000
RA(C):	8/15/2026	2/15/2027
RA(O):	- -	- -
LTM:	2/15/2027	2/15/2056

Site Narrative: This site is in the 45 Site Group B. In 1942, the area in and around Building 60 was used for testing and included conducting ballistic air gun launch testing, drop testing, solar radiation testing, mechanical stress, shock, vibration, and jolt testing, and static load testing. The various testing equipment and machines at this location used lubricating, hydraulic, and heating oils. In 1999, a RI was completed which showed PAHs and PCBs as COCs in soils and sediment. In 1999, an engineering evaluation/cost analysis and an interim remedial action (IRA) was performed for PCBs. A total of 387 cy of PCB contaminated soil and sediment was removed from the site. The site was included in a multiple site FS that was approved by the USEPA in July 2014. A PP was submitted to the regulators in January 2018 which recommended NFA with monitoring of land use. The Army is still waiting for USEPA comments on the PP. The Army will finalize and public notice the PP, and the NFA with monitoring of land use ROD will be signed. After the ROD is completed, the Army will conduct the required annual LTM inspections and develop the certification report required by the NFA with monitoring of land use ROD. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1009_PICA-013_OPTS PROTO PROC FAC SITE BLDG 9

Env Site ID: PICA-013

Cleanup Site: OPTS PROTO PROC FAC SITE BLDG 9

Alias: 78

Regulatory Driver: CERCLA

RIP Date: 6/15/2011

RC Date: 5/15/2032

RC Reason: Not assigned

SC Date: 5/16/2032

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	6/30/1996	3/15/2011
RD:	3/15/2011	4/15/2011
IRA:	- -	- -
RA(C):	5/15/2011	5/15/2011
RA(O):	6/15/2011	5/15/2032
LTM:	- -	- -

Site Narrative: RI Concept Site 78 or PICA-013 is located near Building 91 at the intersection of Fourth Avenue and South Sixth Street. The building was built in 1942 as a storehouse and supply building. An optics laboratory was constructed in the north. Three groundwater monitoring wells were installed as part of a tank closure in 1999 on the eastern side of the building. In 2003, a RI was completed that showed VOC contaminated groundwater. A pilot study (sodium lactate injection) was completed in 2005 for removal of the VOCs in groundwater. The soils portion of this site will be addressed under a separate ROD. The groundwater MNA ROD was signed by the Army in March 2011. The ROD estimated a cleanup goal of 13 years. However, The RD was approved in April 2011. MNA monitoring is ongoing. Based on historical data trends, concentrations trends within wells located in or near the plume center of mass indicates that the degradation half-lives are consistent with those predicted within the RD. Only one well indicates TCE concentration in exceedance of remedial goals. The site is currently in the RA(O) phase. The 2021 annual monitoring report recommended that Site 78 remain on the sixth quarter sampling schedule. The Army will continue the groundwater monitoring at the site and provide annual reports until the site meets UU/UE for groundwater.

34855.1010_PICA-015_LAKE DENMARK (SITE 54)

Env Site ID: PICA-015

Cleanup Site: LAKE DENMARK (SITE 54)

Alias: 54

Regulatory Driver: CERCLA

RIP Date: 11/15/2018

RC Date: 11/15/2018

RC Reason: Study Completed, No Cleanup Required

SC Date: 8/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	6/30/1996	11/15/2018
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	11/15/2018	8/15/2054

Site Narrative: Lake Denmark, an artificial lake located in the northeastern portion of Picatinny Arsenal, has a surface area of approximately 174 acres and an average depth of six to seven feet. Lake Denmark has a long history as a repository of munitions and their associated wastes used as an impact area for experimental mortar rounds and other explosive or pyrotechnic munitions. The lake is not used for disposal purposes anymore. The lake is used exclusively for recreational purposes. RIs completed in 1999 showed COCs of VOCs, semi-volatile organic compounds (SVOC), and metals in sediment. The FS was approved in 2015 and the PP was approved in 2017. The NFA with monitoring of land use ROD was signed in 2018. The Army will initiate and continue the required annual LTM inspections and develop the certification report as required by the ROD until the site meets unrestricted use. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1012_PICA-020_PYROTECHNIC DEMO AREA (SITE 19)

Env Site ID: PICA-020

Cleanup Site: PYROTECHNIC DEMO AREA (SITE 19)

Alias: 19

Regulatory Driver: CERCLA

RIP Date: 11/15/2008

RC Date: 11/15/2008

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	1/1/1980	5/15/1981
SI:	7/15/1987	6/15/1989
RI/FS:	9/15/1993	10/15/2008
RD:	4/15/2006	11/15/2008
IRA:	- -	- -
RA(C):	4/15/2006	11/15/2008
RA(O):	- -	- -
LTM:	12/15/2008	9/15/2054

Site Narrative: PICA-020 (Site 19) is a consolidated site under the Group of 13. The site covers 5.5 acres and is located south of the Shinkle Road and South Brook Road intersection. Two buildings are located on Site 19, Buildings 1180 and 1186. The area between the buildings was used for testing tanks and other armored vehicles in the past. Building 1180 is a 50-foot-high steel tower constructed in 1948. The tower has been used for various tests, including track technology testing for an M60 Full Tracked Combat Tank and for the candle power determination of M26 flares. Building 1186 was constructed in 1966 and used as a pyrotechnic view stand. Since 1980, it has been used to store miscellaneous non-hazardous items. During the 1993 RI phase, the site was temporarily used for storage of drums containing investigation-derived wastes such as drill cuttings and personal protective equipment. At the time, the site also contained a decontamination pad for drill rigs. During the RI Phase, beryllium and arsenic in soils were found to be the COCs. The NFA with monitoring of land use ROD was signed in 2008. Certification reports have been submitted annually since 2009. The site is in the LTM phase. The Army will continue the required annual land use inspections and develop the certification report as required by the ROD. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1014_PICA-022_POWER PLNT/HAZ WST TNKS/PROPELL

Env Site ID: PICA-022

Cleanup Site: POWER PLNT/HAZ WST TNKS/PROPELL

Alias: 50

Regulatory Driver: CERCLA

RIP Date: 5/15/2014

RC Date: 5/15/2014

RC Reason: Study Completed, No Cleanup Required

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	2/28/1995	5/15/2014
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	6/15/2014	9/15/2054

Site Narrative: The site consists of former Building 519, a still house for storage of ether and alcohol, and Building 519-A, which formerly housed an inactive 3,800-gallon aboveground storage tank that was used to store spent alcohol. Building 519 and associated buildings were a single-base propellant manufacturing area. Operations at Building 519 also included the manufacture of ether. Building 519 was deactivated in 1975. Both buildings were subsequently demolished in 1995. The COCs include PAHs and VOCs in soil. The ROD was signed in May 2014 and the remedy is NFA with monitoring of land use. The Army will continue the required annual land use inspections and develop the certification report as required by the ROD. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1019_PICA-050_FORMER REACT MTRS/RCKT FUEL TST

Env Site ID: PICA-050

Cleanup Site: FORMER REACT MTRS/RCKT FUEL TST

Alias: SITE 3

Regulatory Driver: CERCLA

RIP Date: 2/15/2027

RC Date: 2/15/2027

RC Reason: Not assigned

SC Date: 2/16/2056

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	2/28/1995	8/15/2026
RD:	- -	- -
IRA:	2/15/2001	3/15/2002
RA(C):	8/15/2026	2/15/2027
RA(O):	- -	- -
LTM:	2/16/2027	2/15/2056

Site Narrative: This 20-acre site consists of the 1500 series buildings. From the early-1950s up until 1958, liquid fuel missiles were tested in the eastern pyrotechnics area. Starting in 1958, mixing, pressing, and filling of various pyrotechnic compounds into flares, fuses, and primers was performed. The area was used from the late-1940s to 1960 for the large-scale storage, production, conditioning, loading, and testing of pyrotechnics, explosives, and solid rocket propellants from 1947 through the early-1960s. A suspected dry well and associated lead-contaminated soil were removed in 2003 and 2004. The RI completed in 2014 indicated the COCs to include RDX, aluminum, iron, and radium-266 in groundwater and the FS was approved by USEPA in July 2014. This site is in the 45 Site Group B. The Army will finalize and public notice the PP. NFA with monitoring of land use is the expected remedy to be listed in the ROD. After the ROD is completed, the Army will conduct the required annual land use inspections and develop the certification report as required by the ROD. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1025_PICA-057_PICATINNY LAKE (SITE 53)

Env Site ID: PICA-057

Cleanup Site: PICATINNY LAKE (SITE 53)

Alias: PICA-057

Regulatory Driver: CERCLA

RIP Date: 9/30/2027

RC Date: 9/30/2027

RC Reason: Not assigned

SC Date: 6/16/2056

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	2/28/1995	9/29/2024
RD:	9/29/2024	5/15/2026
IRA:	- -	- -
RA(C):	5/15/2026	9/30/2027
RA(O):	- -	- -
LTM:	9/30/2027	6/15/2056

Site Narrative: Picatinny Lake, located at the geographic center of Picatinny Arsenal, was formed in the 1880s by damming Green Pond Brook. Picatinny Lake is approximately 118 acres and approximately 5,200 feet long by 1,000 feet wide. Operations around PICA-057 include explosive manufacturing, loading and storage, shell washout, and research and development. Reportedly, Picatinny Lake may have been used as an impact area for experimental mortar rounds and other explosives or pyrotechnic munitions; underwater storage for smokeless powder, standard ammunition boxes, and explosives; and as a disposal location. The RI conducted in 1996 and 2000 (approved in 2000) shows the COCs as RDX and TNT in sediments and surface water. The final FS was approved by the regulators in December 2016. The Army's chosen remedy is sediment capping and LUCs. The PP was approved in 2021. The Army will work to finalize the ROD. The Army will public notice the PP and work to finalize the ROD. An RD will be prepared followed by the remedial action which is anticipated to be capping and LUCs. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, cap maintenance, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1026_PICA-058_600 HILL GROUNDWATER PLUME

Env Site ID: PICA-058

Cleanup Site: 600 HILL GROUNDWATER PLUME

Alias: 12

Regulatory Driver: CERCLA

RIP Date: 9/30/2025

RC Date: 9/30/2054

RC Reason: Not assigned

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: High

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	6/30/1996	7/30/2020
RD:	8/15/2020	5/30/2023
IRA:	- -	- -
RA(C):	6/1/2023	9/29/2025
RA(O):	9/30/2025	9/30/2054
LTM:	- -	- -

Site Narrative: This site is defined as the contaminated groundwater beneath and adjacent to PICA-058. The site is located in the northwestern portion of Picatinny Arsenal, near former Building 656. The site was operated for evaluating munitions from approximately 1955 until the mid-1980s. Historical practices consisted of testing munitions. In the early-1990s, the sampling of a production well nearby indicated contamination with TCE. An RI revealed high concentrations of TCE (170 parts per billion) beneath PICA-058. An FS was approved by the USEPA in March 2010 and the PP was submitted in spring 2010. However, USEPA requested an investigation to determine if a burial area represents a continuing source of groundwater contamination, and a vapor intrusion investigation for Building 660. The results of the trenching did reveal a burial area that contained not only munitions and explosives of concern (MEC) and MEC-related items, but drums labeled TCE and soils that were contaminated with parts per million (ppm) levels of TCE. This was determined to be the source area for the TCE plume. MEC CoCs are addressed under PICA-013-R-01. A revised FS for the combined Military Munitions Response Program (MMRP) Site and Installation Restoration Program (IRP) site was approved in 2017. The PP was approved in 2018 and the ROD was approved by the regulators on Oct. 31, 2019. The site remedy includes TCE source removal, pit removal, MNA of the groundwater, and LUCs. RA(C) is underway. The RA(O) phase will continue until the remedial action objectives are met. Soil is expected for NFA at the end of remedial action (construction) (RA(C)). Groundwater monitoring, LUCs, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1032_PICA-065_POST FARM LANDFILL (SITE 23)

Env Site ID: PICA-065

Cleanup Site: POST FARM LANDFILL (SITE 23)

Alias: PICA-065

Regulatory Driver: CERCLA

RIP Date: 8/31/2007

RC Date: 8/31/2007

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	5/31/1991	5/31/2005
RD:	6/30/2005	10/31/2006
IRA:	12/31/1991	1/31/1993
RA(C):	4/30/2006	8/31/2007
RA(O):	- -	- -
LTM:	9/15/2007	9/15/2054

Site Narrative: The Post Farm Landfill consists of 10.3 acres located along the top of the unnamed hill that forms the southeastern boundary of Picatinny Arsenal. It contains a borrow pit near the central portion of the site, and two landfilled areas where drums and other materials were buried. In the 1960s, landfilling activities began in the southern and northern area of the site. These areas are referred to as the northern Drum Burial Area and southern Drum Burial Area. The Drum Burial Areas reportedly received fly ash from coal burning operations, paint stripping wastes, phenols, and spent explosive-laden hydraulic oils in containers or as free liquid. In 1992, a non-time-critical removal action (NTCRA) was performed to remove buried containers at the site. During the removal action, small containers, garbage cans, batteries, and drums were removed and disposed of off-site. Post-excavation sampling and exploratory trench sampling were also completed as part of the action. The last phase of the action included placing at least six to 18 inches of native soil over the former burial areas. An RI was completed in 1994 with additional sampling in 1996 and 1997. The COCs are VOCs, metals, radiological parameters and SVOCs in soil. The FS was approved in 2000. A PP was finalized in December 2003. The ROD was approved in December 2004. The remedy included groundwater monitoring and LUCs. The USEPA and the NJDEP approved the RD in December 2006. Surface soil sampling conducted in May 2007 confirmed that the existing vegetative cover is sufficient. The initial quarterly groundwater monitoring has been downgraded to annual sampling per the approved exit strategy in the RD. Annual reports and certification continue. The site is in LTM with only one well requiring sampling. Groundwater annual reports and LUCs certification are submitted annually. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, cap maintenance, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1033_PICA-066_SANITARY LANDFILL(NEAR SITE 20)

Env Site ID: PICA-066

Cleanup Site: SANITARY LANDFILL(NEAR SITE 20)

Alias: PICA-066

Regulatory Driver: CERCLA

RIP Date: 9/15/2003

RC Date: 9/15/2003

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/17/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	9/30/1993	6/30/2002
RD:	7/15/2003	8/15/2003
IRA:	- -	- -
RA(C):	8/15/2003	9/15/2003
RA(O):	- -	- -
LTM:	9/16/2003	9/16/2054

Site Narrative: PICA-066 contains sites 20 and 24. Site 24 occupies approximately 28 acres adjacent to the southern boundary in the southwestern corner of the arsenal. Records indicated that sanitary waste, fly ash, ordnance, industrial wastes, and wastewater treatment plant sludge were dumped on a portion of the site. Site groundwater is being addressed under Area B Groundwater (PICA-205). A 1994 RI showed the COCs were PCBs, lead and dichlorodiphenyltrichloroethane in soil and groundwater. Additional RI activity was completed in 1997 to delineate PCB contamination in surface soil. In 2000, an FS was conducted. The PP was completed in 2001 and the ROD was signed in 2002. The remedy included excavation and off-site disposal of soils containing PCBs at concentrations over 297 milligram/kilogram. The vegetated soil cover was completed in 2003. The wetlands that were destroyed by the capping were replaced with an enhanced wet land project. The site is in the LTM phase. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, cap maintenance, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1034_PICA-067_SANITIARY LANDFILL(NEAR SITE 26

Env Site ID: PICA-067

Cleanup Site: SANITIARY LANDFILL(NEAR SITE 26

Alias: PICA-067

Regulatory Driver: CERCLA

RIP Date: 9/30/2007

RC Date: 9/30/2007

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	9/30/1993	8/31/2007
RD:	4/30/2006	8/31/2007
IRA:	- -	- -
RA(C):	4/30/2006	9/30/2007
RA(O):	- -	- -
LTM:	9/30/2007	9/30/2054

Site Narrative: The Landfill and Dredge Pile is composed of sites 25 and 26. PICA-067 is approximately eight acres in size and is located within the central valley of Picatinny Arsenal. The site includes the southern borrow area, a two-acre grass-covered area formerly used for landfilling and the dredge pile, a 2,000 square foot area in the center of the site and about 15 to 20 feet high. A variety of wastes were disposed of at the site from the 1940s through the 1970s, including rubbish, industrial wastes, munition shells, and sewage treatment plant sludge. The landfill was closed and covered in 1972. An RI was completed in 1994 and COCs in surface soil include copper, lead, PAHs, and PCBs. The PP was completed in 2004 and the ROD was signed in 2007. LUCs were implemented and five-year reviews are ongoing. The site remedy was a soil cover, and it was constructed in 2007. The site is in the LTM phase. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, cap maintenance, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1038_PICA-071_DRUM STRG AREA(B31 YARD) SITE 2

Env Site ID: PICA-071

Cleanup Site: DRUM STRG AREA(B31 YARD) SITE 2

Alias: PICA-071

Regulatory Driver: CERCLA

RIP Date: 2/15/2027

RC Date: 2/15/2027

RC Reason: Not assigned

SC Date: 2/16/2056

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	9/30/1993	8/15/2026
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2026	2/15/2027
RA(O):	- -	- -
LTM:	2/15/2027	2/15/2056

Site Narrative: PICA-071 is in the 45 Site Group B. PICA-071 (Site 29) is a former drum storage area located in an outside courtyard between wings one and two near the northwest corner of Building 31. Building 31 activities included manually transferring oil into drums and metal shavings covered in oil were stored in a dumpster in the parking lot. An oil sump was located along Building 29 which connected to a storm drain that discharged into Bear Swamp Brook. Under Resource Conservation and Recovery Act (RCRA) closure activities in FY04, all tanks associated with this site were removed, as was approximately 500 tons of petroleum contaminated soil (six to 10 feet below ground surface) located off the northwest corner of Building 31. The RI was completed in 2005, which showed COCs of PAHs in surface soil, and PAHs, cadmium, copper, chromium, chrysene, mercury, and lead in sediment. The final 48 Site feasibility study for PICA-008, 011, 013, 050, 071, 075, 091, 107, 108, 122, 134, 135, 136, 162, 175, 200, and 209 was completed in 2014. A PP is under regulatory review. The site is in the RI/FS phase. The PP and ROD will be completed. The assumed remedy is NFA with monitoring of land use. After the ROD is signed, the Army will initiate the required annual land use inspections and certification reports. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, cap maintenance, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1039_PICA-072_FORMER GAS STATION/ DRMO(SITE 3

Env Site ID: PICA-072

Cleanup Site: FORMER GAS STATION/ DRMO(SITE 3

Alias: PICA-072

Regulatory Driver: CERCLA

RIP Date: 10/31/2009

RC Date: 10/31/2009

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	9/30/1993	7/31/2009
RD:	7/31/2009	9/30/2009
IRA:	4/30/1993	5/31/1993
RA(C):	9/30/2009	10/31/2009
RA(O):	- -	- -
LTM:	11/15/2009	9/15/2054

Site Narrative: PICA-072 contains sites 31 and 101. This site is located on six acres of land along Eleventh Avenue, south of the intersection of Sixth Street and Reilly Road. The site had been used as a storage yard for disposal, salvage, and sale of excess materials. A variety of items including materials used in the manufacturing and testing of explosives, pyrotechnics, and munitions, potential PCB-containing transformers, scrap metal, used batteries, and motor vehicles were stored at this site. The RI was completed in 2000, six areas of concern (AOC) were found based on exceedance levels of metals, PCBs, and PAHs, which are the site COCs. The PP was final in October 2007 and the ROD was signed in June 2009. The remedy was excavation and off-site disposal of lead and PCB contaminated soil, on-site consolidation of PAH, arsenic, PCB, and metal contaminated soil, installation of an asphalt cap, a soil cover, and implementation of LUCs. The remedy was implemented in 2009. Simultaneously, a time-critical removal action (TCRA) of improved conventional munitions was completed on a portion of this site under the associated MMRP site. Site groundwater is addressed under the Mid-Valley (PICA-204) ROD. Certification reports are submitted annually, and the site is in the LTM phase. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, cap maintenance, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1042_PICA-075_EQPMT & WASTE STORAGE IN 3000-A

Env Site ID: PICA-075

Cleanup Site: EQPMT & WASTE STORAGE IN 3000-A

Alias: SITE 36

Regulatory Driver: CERCLA

RIP Date: 2/15/2029

RC Date: 2/15/2029

RC Reason: Not assigned

SC Date: 8/17/2058

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	6/30/1996	8/15/2028
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2028	2/15/2029
RA(O):	- -	- -
LTM:	2/16/2029	8/16/2058

Site Narrative: PICA-075 is in the 45 Site Group D. Building 3100 was constructed as a storage facility in 1942 and used until the early-1950s for explosives storage and was serviced by a rail line on the west side of the building. From the early-1950s until 1975, the building was utilized as an environmental test building. Materials tested in the lab included fully loaded rocket components and ordnance items, such as solid propellant boosters and sustainers, prepackaged liquid rocket engines, and gas generators. However, no exposed explosives were tested. Use of the building, as a waste storage facility, began in 1981 under interim status until March 1991, when Picatinny Arsenal was granted a hazardous waste facility permit. In 1996, a preliminary assessment (PA) /site inspection (SI) detected beryllium at a concentration equal to the LOC in soil. RI activities were concluded in 2001 and showed COCs of PAHs, manganese, and arsenic in soil, as well as methylene chloride in groundwater. The final 48 Site FS was approved by USEPA in July 2014, although NJDEP did not concur. The site is in the RI/FS phase. The Army will finalize and public notice the PP and the ROD. The remedy is expected to be NFA with monitoring of land use. After the ROD, the Army will conduct the required annual inspections and develop the certification reports under the LTM phase. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, cap maintenance, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1043_PICA-076_FORM METL PLATG WSTWTR FAC/LAGO

Env Site ID: PICA-076

Cleanup Site: FORM METL PLATG WSTWTR FAC/LAGO

Alias: PICA-076

Regulatory Driver: CERCLA

RIP Date: 9/15/2007

RC Date: 9/15/2054

RC Reason: Not assigned

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	4/30/1985	3/31/1990
RI/FS:	5/31/1991	9/30/2004
RD:	10/31/2004	12/31/2006
IRA:	9/30/1992	9/30/2006
RA(C):	4/15/2006	9/15/2007
RA(O):	9/15/2007	9/15/2054
LTM:	- -	- -

Site Narrative: PICA-076 contains sites 21 and 37 and is called Area D. The site consists of the chlorinated volatile organic compound (VOC) contaminated groundwater from a former wastewater treatment facility and lagoons associated with the metal plating activities formerly housed in Building 24. Final closure of the Building 24 surface lagoons occurred in 1991, including demolition of the concrete basins and excavation of additional soils, which was done under the Picatinny Arsenal building demolition funds. The action removed 660 cy of soil and 240 cy of concrete. A dry well which never had interim status was constructed in 1961 and was closed in 1991 in accordance with New Jersey hazardous waste regulations. In 1992, an IRA for the contaminated groundwater was initiated and included a hydraulic barrier pump-and-treat system to impede the flow of TCE to Green Pond Brook. The plant operated from 1992 to 2007. The RI was completed in 1994 and solvents in groundwater were the COCs and media of concern. The FS and PP were finalized in May 2003 and the ROD was signed in 2004. The remedy in the ROD was installation of a permeable reactive barrier wall and LUCs. The RD was final in January 2007. The reactive barrier was installed in spring 2007. The interim action pump-and-treat system was shut down in 2007 and dismantled in 2010. The RA(O) phase is ongoing and annual reports are submitted each year. The site is in the RA(O) phase. The LUCs, maintenance of permeable reactive barrier, and the required monitoring will continue in accordance with the approved RD. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, cap maintenance, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1044_PICA-077_Area E Groundwater (Site 38)

Env Site ID: PICA-077

Cleanup Site: Area E Groundwater (Site 38)

Alias: PICA-077

Regulatory Driver: CERCLA

RIP Date: 10/15/2008

RC Date: 9/15/2054

RC Reason: Not assigned

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	4/30/1985	5/31/1990
RI/FS:	5/31/1991	9/30/2007
RD:	4/30/2006	9/30/2007
IRA:	- -	- -
RA(C):	4/30/2006	9/30/2008
RA(O):	10/15/2008	9/15/2054
LTM:	- -	- -

Site Narrative: PICA-077 includes both RI Concept Sites 38 and 22. The site is named Area E. The site consists of chlorinated VOC-contaminated groundwater from the former underground treatment tanks at Building 95. Solvents in groundwater are the COCs and affected media. PICA-077 covers all environmental media at this site. Building 95 served as a circuit board etching operation from 1961 to 1988. Manufacturing at Building 95 consisted of electroplating operations. The wastewater was discharged into the treatment system where it was stored and treated in nine USTs. The USTs were filled with concrete as part of RCRA closure activity in 1991. The RI was completed in 1998, the FS in 1992, and the PP in 2004. The ROD was signed in September 2007. MNA and LUCs were the selected remedies for the site. The RD MNA model estimated it would take 45 years for the groundwater cleanup to be complete. The site is in the RA(O) phase. The LUCs and MNA remedy will continue in accordance with the approved RD plan. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, cap maintenance, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1046_PICA-079_ORDNANCE/EXPLOSIVE BLDGS 800 AR

Env Site ID: PICA-079

Cleanup Site: ORDNANCE/EXPLOSIVE BLDGS 800 AR

Alias: PICA-079

Regulatory Driver: CERCLA

RIP Date: 9/30/2010

RC Date: 4/30/2054

RC Reason: Not assigned

SC Date: 5/1/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	2/28/1995	9/30/2010
RD:	4/30/2006	9/30/2010
IRA:	- -	- -
RA(C):	4/30/2006	9/30/2010
RA(O):	4/30/2006	4/30/2054
LTM:	- -	- -

Site Narrative: PICA-079 contains sites 40, 93, 156, and 157 and the group name is Group 1. This site consists of the areas around Building 809 a wastewater treatment plant and Building 810 a melt-pour facility. Building 809 was constructed in 1944 and included the steam cleaning of off-specification projectiles. Explosives-contaminated wastewater from shell washout operations was discharged to a nearby leaching pool. The 2002 Group 1 RI defined the extent of explosives compounds in groundwater. The site COCs are explosives, and the media of concern are soil sediment and groundwater. The Group 1 FS was completed in late-2004 and addressed explosives compounds in all contaminated media at the site. The ROD and the RD were both finalized in 2010. The selected remedy consisted of the excavation and off-site disposal of explosive-contaminated soil bioremediation of groundwater and LUCs. A remedial action completion report was submitted in Spring 2011, documenting the implementation of the remedy. The annual reports with the results of the monitoring required by the RD continue to be submitted and approved. Reports are submitted annually. The site is in the RA(O) phase. Monitoring and annual reports will continue to be submitted and assessed. Because it is anticipated that hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE cap maintenance annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1052_PICA-085_BLDS IN 500-AREA

Env Site ID: PICA-085

Cleanup Site: BLDS IN 500-AREA

Alias: SITE 46

Regulatory Driver: CERCLA

RIP Date: 6/15/2014

RC Date: 6/15/2014

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	2/28/1995	5/15/2014
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	6/15/2014	6/15/2014
LTM:	6/15/2014	9/15/2054

Site Narrative: PICA-085 is in the 25 Sites Group. PICA-085 is a consolidated site that includes the following 9 sites- 46, 32, 33, 97, 105, 147, 148, 150 and 184. PICA-085 consisted of Building 507 which was constructed in 1929, for use as a train engine maintenance facility. From 1987 to the present, the building has been used as a garage facility for utility line maintenance vehicles. Waste materials, such as waste oil and spent cleaning solvents, were reportedly stored in 55-gallon drums in a shed adjacent to the eastern side of the building. A RI was completed from 1994 through 2003. The FS was approved by the USEPA in August 2009. The PP went final in March 2013 and the ROD was approved in May 2014. The remedy for all sites included in PICA-085 is NFA with monitoring of land use. Per the ROD, annual land use certification reports are completed. The site is in the LTM phase. Land use certification reports are submitted annually. The site will also be evaluated in the five-year reviews. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1057_PICA-091_BLDGS IN 200-AREA

Env Site ID: PICA-091
Cleanup Site: BLDGS IN 200-AREA
Alias: PICA-091
Regulatory Driver: CERCLA
RIP Date: 2/15/2029
RC Date: 2/15/2029
RC Reason: Not assigned
SC Date: 2/16/2058
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: Yes
Hazardous Ranking Score: 43
RRSE: Medium
MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	2/28/1995	8/15/2028
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2028	2/15/2029
RA(O):	- -	- -
LTM:	2/15/2029	2/15/2058

Site Narrative: PICA-091 represents 10 locations in the Area H portion of the Arsenal which is located to the northwest of Downtown Picatinny Arsenal within the Robinson enclosure. This site is included in 45 Site Group D. This area was used from about 1918 to the mid-1970s for explosive manufacturing. Operations in these 10 sites included the following- explosives production, testing and storage; machining and light assembly of prototype explosives and propellant units; fuze assembly, mine assembly; munitions packout; demilling and disassembly of explosive projectiles; black powder storage; and explosive melt and pour operations. Most liquid wastes from this area were discharged to the ground or to Bear Swamp Brook. The NJDEP required that the after the completion of RCRA activities that further action was required. The 1996 RI revealed soil concentrations of SVOCs, PCBs, and arsenic exceeded LOCs. Additional RI sampling completed in 2000 delineated the extent of PCBs in soil. Groundwater at PICA-091 is addressed through the Mid-Valley groundwater ROD (PICA-204). The Army submitted a 48 Site FS, which includes the 10 PICA-091 sites, in the Summer of 2014. The FS was approved by USEPA in July 2014. The draft PP is undergoing regulatory review. The Army will finalize and public notice the PP, and an NFA with monitoring of land use ROD will be signed. The Army will initiate the required annual inspection and develop the certification report as part of the long-term management required by a NFA with monitoring of land use ROD. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1059_PICA-093_WASTE BURIAL AREA NEAR SITES 19

Env Site ID: PICA-093

Cleanup Site: WASTE BURIAL AREA NEAR SITES 19

Alias: PICA-093

Regulatory Driver: CERCLA

RIP Date: 9/30/2007

RC Date: 9/30/2007

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	9/30/1993	8/31/2007
RD:	4/30/2006	9/30/2007
IRA:	- -	- -
RA(C):	4/30/2006	9/30/2007
RA(O):	- -	- -
LTM:	9/30/2007	9/30/2054

Site Narrative: The waste burial area is situated in a low marshy area formerly containing several debris piles of drums, concrete rubble, scrap, metal, lumber, railroad ties, and trees. Landfilling operations have taken place in this portion of Area C over the years. Groundwater contamination is covered under the Area C ROD. This group name is Waste Burial Area. Materials were disposed of in large burial pits and in surface piles. The years of operation are unknown although the disposal activities are believed to have taken place in the 1960s and 1970s. During the RI phase (mid-1990s), a trenching investigation under RCRA removed some debris piles and asbestos found at the site and restored native vegetation to the area. Impacts to groundwater are covered under an area-wide action addressed in Area C Groundwater (PICA-206). COCs in soil include PAHs, PCBs, dieldrin, and metals. A ROD was approved in September 2007. An RD was approved in October 2007. LUCs were the only requirement and were implemented. Certifications have been submitted annually. Parts of the original site is overlapped by the cap installed on PICA-002T. The site is in the LTM phase, and the Army will continue to provide annual certification reports for this site. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1062_PICA-096_BLDG 22,PRECISION MACHINE SHOP(

Env Site ID: PICA-096

Cleanup Site: BLDG 22,PRECISION MACHINE SHOP(

Alias: NFA SITES

Regulatory Driver: CERCLA

RIP Date: 4/15/2015

RC Date: 4/15/2015

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	9/30/1993	4/15/2015
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	4/15/2015	4/15/2015
LTM:	4/15/2015	9/15/2054

Site Narrative: PICA-096 is named the 21 Site Group. It includes the RI Concept Plan Sites 10 (chemical burn pit), 27 (former salt storage building), 69 (rail beds), 117 (propellant storage and a precision machine shop), 119 (propellant storage), 120 (propellant and smokeless powder storage), 121 (smokeless powder storage), 123 (metal plating facility, 134 (drainage ditches associated with Building 302), 136 (storehouse), 145, 164 , 172 (parking lot with intentional oil spill), 174, 175 (600 buildings – ammunition, testing, etc.), 176 (former material dumping pit), 177, 185, 186, and a scrap storage area. The site underwent an RI in 1994. The only LOC exceedances were for beryllium in surface soil. An FS was approved in 2010. The PP was public noticed in June 2014 and the ROD was approved in 2015. The remedy was NFA with monitoring of land use. Land use certification reports are submitted annually. The Army will continue to provide annual certification reports for this site. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1063_PICA-097_BLD 41,PESTICIDE STR & FORM OIL

Env Site ID: PICA-097

Cleanup Site: BLD 41,PESTICIDE STR & FORM OIL

Alias: PICA-097

Regulatory Driver: CERCLA

RIP Date: 9/28/2019

RC Date: 9/28/2019

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	9/30/1993	9/15/2017
RD:	9/16/2017	5/14/2018
IRA:	- -	- -
RA(C):	5/1/2018	9/28/2019
RA(O):	- -	- -
LTM:	9/29/2019	9/29/2054

Site Narrative: This site is part of the 3 Site Group. The site consists of Building 41 which is located in the middle of the golf course. In 1964, this building was reassigned for storage of fertilizer, lime and miscellaneous inert materials and has been predominantly used for storage of pesticides and herbicides that are applied on the golf course and lawn surrounding the site. Until 1988, it was a common occurrence for open bags of pesticides and herbicides stored at Building 41 to leak onto the wooden floor due to a leaky roof. Groundwater at this site is covered under the Area D or PICA-076. In 2009, the site was included in the 5 Site FS which was approved in December 2013. The media of concern is soil and the COCs are pesticides and arsenic. The PP was public noticed in September 2014. The ROD was signed in 2017 and the remedy was a soil dig and haul remediation followed by LUCs. The dig and haul activities occurred during 2018. The RAR was final in 2019, along with an explanation of significant difference to account for increases in some NJDEP cleanup levels. LTM is underway. Because it is anticipated that hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1068_PICA-102_FORMER WASTE DUMP/CHEMICAL LAB

Env Site ID: PICA-102

Cleanup Site: FORMER WASTE DUMP/CHEMICAL LAB

Alias: PICA-102

Regulatory Driver: CERCLA

RIP Date: 9/30/2008

RC Date: 9/30/2008

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	9/30/1993	9/30/2008
RD:	4/30/2006	9/30/2008
IRA:	- -	- -
RA(C):	4/30/2006	9/30/2008
RA(O):	- -	- -
LTM:	9/30/2008	9/30/2054

Site Narrative: PICA-102 (Site 61) encompasses approximately three acres and consists of Buildings 171 and 176. The group name is Waste Dumps and Labs. Trash, including cars and unknown materials, were reportedly used to fill in the swamp area west of Buildings 171 and 176 sometime before 1960. Building 171 had been used as a photo processing unit. Building 176 was constructed in 1944, for storage of laboratory equipment and sampling of ammunition. The site investigation was completed in 2000. The COCs in soil and sediment are metals, PAHs, and 4,4'-Dichlorodiphenyldichloroethene. An FS was final in 2005. Groundwater under the site is being addressed under PICA-204. The ROD, RD, and remedial action implementation were all completed in FY08. The remedy is excavation and off-site disposal of metals-contaminated soils and LUCs. LTM began in 2008. An annual monitoring report is submitted annually. The site is in the LTM phase. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1073_PICA-107_BLDGS 404,407,&408,CHMCL LAB&PR

Env Site ID: PICA-107

Cleanup Site: BLDGS 404,407,&408,CHMCL LAB&PR

Alias: SITE 138

Regulatory Driver: CERCLA

RIP Date: 2/15/2029

RC Date: 2/15/2029

RC Reason: Not assigned

SC Date: 2/16/2058

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: High

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	9/30/1993	8/15/2028
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2028	2/15/2029
RA(O):	- -	- -
LTM:	2/15/2029	2/15/2058

Site Narrative: This site has an area of approximately seven acres and includes Buildings 404, 407, and 408. The group name is 45 Site Group D. Building 404 was constructed as a storehouse for sodium nitrate and used in the 1950s as a chemical laboratory. Building 407 was originally used as an experimental chemistry lab, then as an energetics lab. Building 408 was used for the experimental loading and nitrating of cottons, linens, and wood pulp for the production of nitrocellulose and was later modified for use as a chemical research facility in the experimental pressing of explosives. In 1974, the building was used as a lead azide production facility. The building was demolished in 2013. The Phase I RI indicated LOC exceedances in soil for SVOCs and PCBs, metals in sediment, metals in surface water, and TCE in groundwater. The site is included in the NFA 48-Site FS approved by the USEPA in July 2014. The draft PP is undergoing regulatory review. The assumed remedy is NFA with monitoring of land use. The Army will finalize and public notice the PP, and the NFA with monitoring of land use ROD will be signed. After the ROD is signed, the Army will conduct the required annual land use inspections. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1074_PICA-108_BLDGS in 400/300 AREA

Env Site ID: PICA-108

Cleanup Site: BLDGS in 400/300 AREA

Alias: SITE 139

Regulatory Driver: CERCLA

RIP Date: 2/15/2027

RC Date: 2/15/2027

RC Reason: Not assigned

SC Date: 2/16/2056

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	9/30/1993	8/15/2026
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2026	2/15/2027
RA(O):	- -	- -
LTM:	2/16/2027	2/15/2056

Site Narrative: This site is in the 45 Site Group A. PICA-108 (Concept Site Plan site 139) consists of Building 424 and the surrounding area. The building was a heat exchanger plant with a sump that discharged to the marsh area southwest of the building via an open trough and a small outfall ditch. During the Phase II RI, sediment samples from the drainage ditch contained elevated levels of several explosive compounds and metals. In order to delineate the existing contamination, additional samples were collected in 2000 and 2001. The RI was completed in 2003. The COCs in soils include PAHs, arsenic, and PCBs. COCs in sediment include PAHs, metals. In 2004, the neutralization tank and approximately 94 cy of soil were removed from Building 424 under RCRA closure activities. The 48 Site FS was finalized in 2014. The PP is undergoing regulatory review. The Army will finalize and public notice the PP, and the NFA with monitoring of land use ROD will be signed. The Army will conduct the required annual inspections. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1077_PICA-111_FORMER BLDG 435,PROPELLANT SOL

Env Site ID: PICA-111

Cleanup Site: FORMER BLDG 435,PROPELLANT SOL

Alias: SITE 142

Regulatory Driver: CERCLA

RIP Date: 2/15/2028

RC Date: 2/15/2028

RC Reason: Not assigned

SC Date: 2/16/2057

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	7/31/1987	6/30/1989
RI/FS:	9/30/1993	8/15/2027
RD:	- -	- -
IRA:	8/15/2003	10/15/2004
RA(C):	8/15/2027	2/15/2028
RA(O):	- -	- -
LTM:	2/16/2028	2/15/2057

Site Narrative: PICA-111 consists of former Building 435 and the surrounding area. In the early-1950s, the building was demolished. Lead and perchlorate contamination was delineated in 2001. An IRA (lead removal) was conducted in 2003 through 2004. In April 2010, the FS was finalized. A draft PP was submitted to the regulators in June 2013 and is still being negotiated. The Army will finalize and public notice the PP, and the NFA with monitoring of land use ROD will be signed. The Army will conduct the required annual land use inspections. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1088_PICA-122_PROPELLANT TESTING (BLDG 197) S

Env Site ID: PICA-122

Cleanup Site: PROPELLANT TESTING (BLDG 197) S

Alias: SITE 126

Regulatory Driver: CERCLA

RIP Date: 2/15/2029

RC Date: 2/15/2029

RC Reason: Not assigned

SC Date: 2/17/2058

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	9/30/1993	8/15/2028
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2028	2/15/2029
RA(O):	- -	- -
LTM:	2/16/2029	2/16/2058

Site Narrative: The site is included in 45 Site Group D. The site includes demolished Building 197 and the surrounding area. This part of Picatinny Arsenal was used for chemistry and other testing laboratories. The building was constructed in 1942 for surveillance testing. The RI conducted in 1994 found PAH contamination in soil. The final 48 Site FS was approved in July 2014. The PP was submitted to the regulators in 2018 and is still under their review. The site is in the RI/FS phase. The Army will finalize and public notice the PP, and NFA with monitoring of land use ROD will be signed. The Army will conduct the required annual land use monitoring. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1097_PICA-131_FORMER ORDNANACE MANUFAC. (BLDG

Env Site ID: PICA-131

Cleanup Site: FORMER ORDNANACE MANUFAC. (BLDG

Alias: PICA-131

Regulatory Driver: CERCLA

RIP Date: 10/9/2019

RC Date: 10/9/2019

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	2/28/1995	7/15/2018
RD:	9/15/2017	10/9/2019
IRA:	- -	- -
RA(C):	5/15/2018	10/9/2019
RA(O):	- -	- -
LTM:	10/9/2019	9/29/2054

Site Narrative: PICA-131 is part of the 3 Site Group. Building 266 served as an explosives production facility from the time of its construction in 1903 until the early-1950s. Explosives production ceased sometime before 1953, when the building was converted to its current use as a wind tunnel research facility. At one time, operations of the wind tunnel resulted in the generation and dispersion of mercury condensate in and around the wind tunnel exhaust area. RIs conducted in 2000 and 2016 determined PAHs and arsenic were above the LOCs in soil. The COCs in soil are arsenic and PAHs and in groundwater are ammonia, aluminum, arsenic, chromium, chloroform, and TCE. The site was included in the 3 Site FS and the 3 Site PP, both of which were approved in 2014. The public notice for the PP was issued in September 2014. The preferred alternative in the PP and ROD was a soil dig and haul remedy with LUCs. The ROD was signed in FY17. The dig and haul activities occurred during 2018. The RAR was final in 2019 along with an explanation of significant difference to account for increases in some NJDEP cleanup levels. LTM is underway. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1100_PICA-134_R&D LAB/Chem Storage 3000-Area

Env Site ID: PICA-134

Cleanup Site: R&D LAB/Chem Storage 3000-Area

Alias: SITE 70

Regulatory Driver: CERCLA

RIP Date: 2/15/2026

RC Date: 2/15/2026

RC Reason: Not assigned

SC Date: 2/17/2055

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Low

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	2/28/1995	8/15/2025
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2025	2/15/2026
RA(O):	- -	- -
LTM:	2/16/2026	2/16/2055

Site Narrative: This site is in the 45 Site Group A. PICA-134 address concept plan sites 30, 70, and 83. Site 70 consists of Building 3028, which was used as a research and development laboratory, and Building 3029, which was a general-purpose warehouse. Between 1980 and 1982, the building was renovated and used as laboratories and offices. An RI completed in 2002 indicated exceedances of PAHs and arsenic in soils. The final 48 Site FS was approved in 2014. The PP the 45 Site Group A recommends is NFA with monitoring of land use and was submitted for regulatory review in 2017 and is still undergoing regulatory review. The site is in the RI/FS phase. The Army will finalize and public notice the PP and the NFA with monitoring of land use ROD will be signed. The Army will conduct the required annual land use inspections. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1101_PICA-135_BLDGS IN THE 900-AREA

Env Site ID: PICA-135

Cleanup Site: BLDGS IN THE 900-AREA

Alias: SITE 71

Regulatory Driver: CERCLA

RIP Date: 2/15/2026

RC Date: 2/15/2026

RC Reason: Not assigned

SC Date: 2/16/2055

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Low

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	2/28/1995	8/15/2025
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2025	2/15/2026
RA(O):	- -	- -
LTM:	2/15/2026	2/15/2055

Site Narrative: This site is in the 45 Site Group A. PICA-135 addresses concept sites 71, 82, 158, and 159. The site is considered the area around Building 910, which was constructed in 1950, for use as a storage magazine and is located on the northwestern shore of Picatinny Lake. It was utilized until the 1970s for the environmental testing of munitions. During the building demolition, chip samples indicated the presence of arsenic, beryllium, cadmium, chromium, copper, lead, nickel, and zinc. The RI conducted in 2001 through 2002 showed exceedances of SVOCs and arsenic in soils above the screening criteria. The final 48 Site FS was approved in 2014. The PP the 45 Site Group A recommends is NFA with monitoring of land use and was submitted for regulatory review in 2017 and is still undergoing regulatory review. The site is in the RI/FS phase. The Army will finalize and public notice the PP and the NFA with monitoring of land use ROD will be signed. The Army will conduct the required annual land use inspections. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1102_PICA-136_HIGH PRESSURE BOILER (BLDG 3013

Env Site ID: PICA-136

Cleanup Site: HIGH PRESSURE BOILER (BLDG 3013

Alias: SITE 79

Regulatory Driver: CERCLA

RIP Date: 2/15/2026

RC Date: 2/15/2026

RC Reason: Not assigned

SC Date: 2/16/2055

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	2/28/1995	8/15/2025
RD:	- -	- -
IRA:	1/15/1990	8/15/1992
RA(C):	8/15/2025	2/15/2026
RA(O):	- -	- -
LTM:	2/15/2026	2/15/2055

Site Narrative: This site is in the 45 Site Group A. PICA-136 addresses concept plan site 79 which is building 3013 and the surrounding area. Built in 1901, Building 3013 was first used as a boiler house. During World War I and World War II, the building was used to produce explosives and for water treatment. In 1967, two 20,000-gallon USTs were installed for storage of fuel oil for the boiler. The building was demolished in 2013. During the demolition work, discolored soil was found when the two USTs were dug up. About 1,500 tons of contaminated soil were removed from a 15-foot-deep excavation. This soil removal was not completed under CERCLA. Phase II RI activities were conducted at the site in 1996. Additional investigations performed in 2000 delineated the extent of the arsenic and lead contamination in soil; however, additional samples were collected in 2001 to complete the PAH delineation in soil. The media of concern is soil and the COCs are arsenic, lead, and PAHs. The final 48 Site FS approved by USEPA in July 2014. The PP for the 45 Site Group A recommends NFA with monitoring of land use for PICA-136 and was submitted for regulatory review in 2017 and is still undergoing regulatory review. The site is in the RI/FS phase. The Army will finalize and public notice the PP and the NFA with monitoring of land use ROD will be signed. The Army will conduct the required annual land use inspections. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1103_PICA-137_XRAY PHOTOPROCESSING LAB(BLDG 9

Env Site ID: PICA-137

Cleanup Site: XRAY PHOTOPROCESSING LAB(BLDG 9

Alias: PICA-137

Regulatory Driver: CERCLA

RIP Date: 6/30/2032

RC Date: 6/30/2032

RC Reason: Not assigned

SC Date: 7/1/2032

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	2/28/1995	6/30/2032
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: Building 908 was constructed in 1918 for use as a general-purpose magazine. In 1945, a request was made to equip Bldg 908 with a radiographic inspection laboratory that would x-ray loaded shells for manufacturing defects. By 1964, several x-ray units were in operation in the building. There have been numerous concerns for high-energy gamma rays produced by the betatron x-ray units at the building. During periods of operation, despite the thick protective barriers and increased shielding, high levels of radiation were recorded in the building during radiation surveys conducted by Picatinny Arsenal (PTA). Building 908 also housed a silver recovery unit from 1963 to 1983. Phase II RI activities performed at this site included a radiological survey and the collection of soil, surface water, and sediment samples. The radiological survey identified elevated alpha radiation and radium-226 levels near the southeastern portion of the building. Radium-226 has also been detected in soil at elevated levels and is a COC due to the radiological nature of operations performed at the site. Additional samples were collected in 2001 to delineate the arsenic contamination in the soil. Human health risk assessment results indicate that the chemical risks and hazards associated with soil, sediment and surface water exposure at the site are below the target levels of 1 x 10-4 and 1, respectively. Radiological risk from exposure to surface soil exceeds the target level. Five radiological compounds were identified as risk drivers. An FS will be prepared to evaluate remedial alternatives for the residual soil contamination. Until the RI/FS is complete it is unknown if unacceptable risk exists or not, thus preventing future planning beyond the RI/FS phase.

34855.1109_PICA-143_ORDNANCE FAC (BLDGS 717,722,732

Env Site ID: PICA-143

Cleanup Site: ORDNANCE FAC (BLDGS 717,722,732

Alias: SITE 108

Regulatory Driver: CERCLA

RIP Date: 5/15/2014

RC Date: 5/15/2014

RC Reason: Study Completed, No Cleanup Required

SC Date: 5/17/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	2/28/1995	5/15/2014
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	5/16/2014	5/16/2054

Site Narrative: This site is included in the 25 Site Group. The site consists of the area of Building 717, an ordnance facility, former Building 722, a physics and flare-testing laboratory, and former Building 732, a physics laboratory and ordnance facility. RI results identified AOCs at the site, including metals contamination at Flare Island, metals and mirex contamination in the catch basins and sumps of Building 732, soil contamination on the south side of Building 722, and PCB contamination near a transformer pad. Additional sampling was performed in 2001 to delineate the extent of contamination at the various AOCs. The RI was completed in 2003. The COCs in soils were metals. The FS was approved in August 2009. The PP was a public notice issued in March 2013 and the ROD was signed by the Army and USEPA by May 2014. The site remedy is NFA with monitoring of land use. A certification of land use for the site with an inspection report is submitted annually. The site is in the LTM phase. The Army will continue the required annual land use inspections and develop the certification report as required by the ROD. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1111_PICA-145_500 AREA BUILDINGS SITE 110

Env Site ID: PICA-145

Cleanup Site: 500 AREA BUILDINGS SITE 110

Alias: SITE 110

Regulatory Driver: CERCLA

RIP Date: 2/15/2028

RC Date: 2/15/2028

RC Reason: Not assigned

SC Date: 2/17/2057

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	2/28/1995	8/15/2027
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2027	2/15/2028
RA(O):	- -	- -
LTM:	2/16/2028	2/16/2057

Site Narrative: This site is in the Non-Lakes Group and addresses PICA-145 (concept plan site 110). Built in 1901, Building 3013 was originally used as a main boiler house used to produce explosives during World War I and World War II and was expanded in the 1940s to include a water treatment system. As a result of the identification of discolored soil during the removal of the two USTs, about 1,500 tons of contaminated soil was removed from a 15-foot-deep excavation as a RCRA remedial action. Investigations performed in 2000 delineated the extent of the arsenic and lead contamination in soil. The RI was completed in 2005. The building was demolished as of 2013. The site was included in an FS submitted in October 2009 and approved in 2014. A draft PP is undergoing regulatory review. The site is in the RI/FS phase. The Army will finalize and public notice the PP, and the NFA with monitoring of land use ROD will be signed. The Army will conduct the required annual LTM inspections. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1115_PICA-149_PROPELLANT PLANT (BLDG541) SITE

Env Site ID: PICA-149

Cleanup Site: PROPELLANT PLANT (BLDG541) SITE

Alias: SITE 149

Regulatory Driver: CERCLA

RIP Date: 10/9/2019

RC Date: 10/9/2019

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	2/28/1995	9/15/2017
RD:	9/15/2017	3/18/2018
IRA:	- -	- -
RA(C):	5/15/2018	10/9/2019
RA(O):	- -	- -
LTM:	10/9/2019	9/30/2054

Site Narrative: PICA-149 is part of the 3 Site Group. Building 541 was constructed in 1943 to perform the water drying process to harden explosive powder grains and was used to house two Plymouth gas locomotives during the 1960s. Picatinny Arsenal personnel reported that a vat in Building 541 ruptured, causing liquid containing propellant to leak onto the building floor and to the outside area. Building 541 was demolished under Toxic and Energetics Cleanup Program (TECUP) in 1983. The RI was completed in 2005, and the COCs in soil are PAHs and 2,4- Dinitrotoluene. The site was included in a 3 Site FS and a Site 3 PP, both of which were submitted in Spring 2014. The public notice for the PP was issued in September 2014. The preferred alternative in the PP and ROD was a soil dig and haul remedy with LUCs. The ROD was signed in FY17. The dig and haul activities occurred during 2018. The RAR was final in 2019, along with an explanation of significant difference to account for increases in some NJDEP cleanup levels. LTM is underway. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1121_PICA-155_TECUP BUILDINGS SITE 178

Env Site ID: PICA-155

Cleanup Site: TECUP BUILDINGS SITE 178

Alias: SITE 155

Regulatory Driver: CERCLA

RIP Date: 2/15/2028

RC Date: 2/15/2028

RC Reason: Not assigned

SC Date: 2/17/2057

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Low

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	2/28/1995	8/15/2027
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2027	2/15/2028
RA(O):	- -	- -
LTM:	2/16/2028	2/16/2057

Site Narrative: This site is in the Non-Lakes Group. PICA-155 consists of 80 buildings that were used for a variety of purposes ranging from munitions production to inert storage that have been demolished under TECUP program that was instituted in the 1980s to demolish potentially contaminated buildings. The majority of the TECUP operations were performed in the 1980s. Before 1981, formal records of building demolition operations were not maintained. Between 1981 and 1989, approximately 145 buildings at Picatinny Arsenal were demolished under TECUP, after being decontaminated by fire or washing. After the decontamination process, the buildings were demolished, and the area graded. In the past, buildings were sometimes demolished and buried-in-place without any preparatory decontamination measures. During the 2005 RI Phase, lead was determined to be the COC in soil. The Non-Lakes FS, which includes 500 Area buildings, TECUP buildings, Site 94, and Site 77, was submitted to and approved by the USEPA in July 2014. The draft PP for this site is undergoing regulatory review. The site is in the RI/FS phase. The Army will finalize and public notice the PP, and the NFA with monitoring of land use ROD will be signed. The Army will conduct the required annual land use inspections. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1128_PICA-162_SHELL BURIAL AREAS NEAR SITE 5

Env Site ID: PICA-162

Cleanup Site: SHELL BURIAL AREAS NEAR SITE 5

Alias: PICA-162

Regulatory Driver: CERCLA

RIP Date: 10/15/2028

RC Date: 10/15/2028

RC Reason: Not assigned

SC Date: 7/16/2058

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	3/31/1996	9/30/2025
RD:	10/1/2025	9/30/2026
IRA:	- -	- -
RA(C):	9/30/2026	10/15/2028
RA(O):	- -	- -
LTM:	10/15/2028	7/15/2058

Site Narrative: PICA-162 (the Site 5 Shell Burial Area) is located northwest of Building 3150 in the vicinity of a crater caused by the 1926 Lake Denmark explosion. Exploded and UXO, as well as building debris from the explosion, was deposited/disposed in the crater. Ordnance in the shell burial area includes mines, depth charges, fuses, projectiles, explosives, ammunition, and propellants. A 1981 installation assessment addendum stated that the shell burial areas also contained acids, pickling liquors, cyanide, phenol, and metals. The RI was completed in 2001 for Site 5 and 1999 for Site 6. The COC in groundwater is PCE on Site 5 and SVOCs in soil and PCE, TCE, and methylene chloride in groundwater. Groundwater contamination is currently being addressed under the Mid-Valley (PICA-204) ROD. The 48 Site FS which included PICA-162, was approved by USEPA in 2014, but NJDEP did not concur. The Army, with regulator concurrence, decided in 2014 that the two IRP shell burial areas PICA-162 and PICA-052, would be addressed together with MMRP site PICA-010-R-01 (Shell Burial Grounds) since they occupy the same geographic site. The MMRP FS was approved by the NJDEP and USEPA in 2018. The draft Shell Burial Grounds PP is undergoing regulatory review. The site is in the RI/FS phase. Once the PP is approved, the ROD will be developed, and the remedy implemented. The expected remedy is LUCs. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1129_PICA-163_Propellnt/Rcket Prod 1300/1400

Env Site ID: PICA-163

Cleanup Site: Propellnt/Rcket Prod 1300/1400

Alias: SITE 91

Regulatory Driver: CERCLA

RIP Date: 5/15/2014

RC Date: 5/15/2014

RC Reason: Study Completed, No Cleanup Required

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	6/30/1996	5/15/2014
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	6/15/2014	9/15/2054

Site Narrative: This site is in the 25 Site Group and addresses the following five concept plan sites- 35, 91, 161, 155, and 168. The site consists of former Building 130 and the surrounding area. The building was demolished in 2005. The RI was completed in 2000. All lead-lined troughs and catch basins were removed in 2002 and lead-contaminated soil (62 cy) directly adjacent to Building 1301 was removed as part of the facility-wide sump and dry well investigation which was completed under RCRA. The PP was public noticed in 2013 and the ROD was signed in 2014. The site remedy is NFA with monitoring of land use. LTM is ongoing. The Army will continue the required annual inspections. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1130_PICA-164_RESERVOIR NEAR BLDG 3159 SITE 1

Env Site ID: PICA-164

Cleanup Site: RESERVOIR NEAR BLDG 3159 SITE 1

Alias: SITE 103

Regulatory Driver: CERCLA

RIP Date: 11/15/2018

RC Date: 11/15/2018

RC Reason: Study Completed, No Cleanup Required

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	6/30/1996	11/15/2018
RD:	- -	- -
IRA:	- -	- -
RA(C):	11/15/2018	11/15/2018
RA(O):	- -	- -
LTM:	8/15/2019	9/29/2054

Site Narrative: The 16,000,000-gallon reservoir, known as Explosive Ordnance Disposal Pond, is located near Building 3159, and was constructed 1951 and 1953. Prior to its construction, the reservoir was an undeveloped marsh area. No spills have been documented from the four surrounding buildings into the reservoir. Materials associated with the area surrounding the reservoir may include pesticides (variety), flammable materials (unknown) and PCBs. The RI was completed in 2005. The contaminant of concern in soil is thallium. A revised FS was submitted in spring of 2014 and the PP was approved in 2017. The NFA with monitoring of land use ROD was signed in 2018. The site is in the LTM phase. The Army will continue the required annual land use inspections as required by the ROD. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1137_PICA-171_ORDNANCE BLDG/EXPLOSIVES PROD.

Env Site ID: PICA-171

Cleanup Site: ORDNANCE BLDG/EXPLOSIVES PROD.

Alias: SITE 171

Regulatory Driver: CERCLA

RIP Date: 5/15/2014

RC Date: 5/15/2014

RC Reason: Study Completed, No Cleanup Required

SC Date: 6/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	6/30/1996	5/15/2014
RD:	- -	- -
IRA:	1/1/2004	12/31/2004
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	6/15/2014	6/15/2054

Site Narrative: This site is included in the 25 Site Group and addresses concept plan sites 162 & 171. Site 171 consists of Buildings 3106, 3109, and 3111 that were used as magazines while under naval ownership and used for physical and environmental testing of ordnance items. The Navy constructed Building 3111 in 1943, for use as a smokeless powder storage building. In the 1960s, the building was converted as an air gun facility. The RI was completed in 2003. COCs in soils are lead, cadmium, zinc, PAHs, and the COC in groundwater is TCE. Groundwater is being addressed on an area-wide basis as part of the Mid-Valley (PICA-204) ROD. Approximately 180 cy of metals-contaminated soil were removed in 2004. The FS was completed in 2009. The PP was completed in 2013 and the ROD was signed in 2014. The remedy NFA with monitoring of land use. The Army will continue the required annual land use inspections and develop the certification report as required by the ROD. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1141_PICA-175_ORDNANCE BLDGS in 600-AREA

Env Site ID: PICA-175

Cleanup Site: ORDNANCE BLDGS in 600-AREA

Alias: SITE 115

Regulatory Driver: CERCLA

RIP Date: 2/15/2027

RC Date: 2/15/2027

RC Reason: Not assigned

SC Date: 2/16/2056

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	6/30/1996	8/15/2026
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2026	2/15/2027
RA(O):	- -	- -
LTM:	2/15/2027	2/15/2056

Site Narrative: This site is in the 45 Site Group B. PICA-175 addresses the following five concept plan sites- 133, 154, 175, 178, and 179. The site includes Building 611 and the surrounding area. Building 611 was constructed in 1965 and has been used for the testing of small munitions since its construction. The RI was completed in 2001. COCs include lead in groundwater and PCBs and 2,4-Dinitrotoluene in sediment and soil. The final 48 Site FS was approved by USEPA in July 2014. The draft PP is undergoing regulatory review and recommends NFA with monitoring of land use. The site is in the RI/FS phase. The Army will finalize and public notice the PP and the NFA with monitoring of land use ROD will be signed. The Army will then conduct the required annual land use inspections and reports. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1150_PICA-184_BUILDINGS(1600,1601,1609,1610)

Env Site ID: PICA-184

Cleanup Site: BUILDINGS(1600,1601,1609,1610)

Alias: SITE 94

Regulatory Driver: CERCLA

RIP Date: 2/15/2028

RC Date: 2/15/2028

RC Reason: Not assigned

SC Date: 2/17/2057

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	6/30/1996	8/15/2027
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2027	2/15/2028
RA(O):	- -	- -
LTM:	2/16/2028	2/16/2057

Site Narrative: This site is in the Non-Lakes Group. PICA-184, Site 94 consists of the areas around six buildings- (1) Building 1609 North (2) 1609 South, (3) 1610, (4) former Building 1600, (5) former Building 1601, and (6) former Building 1604. Building 1601 was once used for explosives testing, and later was used as a photographic laboratory. Building 1604 was built in 1942 as a flare and pyrotechnics assembly plant and was listed as an ordnance facility in 1949 and added a plating facility. Building 1609 South was constructed in 1942 as a machine shop, while Building 1609 North was constructed in 1951 as a physics lab. A PA/SI was conducted in 1996 and the RI was complete in 2005. Metals were detected in soil at concentrations greater than LOC. About 25 cy of metals-contaminated soil were removed from the area of the former sand basin. This removal action was completed as part of the building demolition which does not use environmental funds (non-CERCLA). PICA-184 was included in the Non-Lakes FS which was approved by the USEPA in July 2014. A draft PP is undergoing regulatory review. The site is in the RI/FS phase. The Army will finalize and public notice a PP, and the NFA with monitoring of land use ROD will be signed. The Army will then conduct the required annual land use inspections. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1158_PICA-192_APPLE TREES RECREATIONAL AREA

Env Site ID: PICA-192

Cleanup Site: APPLE TREES RECREATIONAL AREA

Alias: SITE 189

Regulatory Driver: CERCLA

RIP Date: 5/15/2014

RC Date: 5/15/2014

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	2/29/1992	4/30/1992
RI/FS:	2/28/1995	5/15/2014
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	6/15/2014	9/15/2054

Site Narrative: This site is in the 25 Site Group. This site had been an apple orchard and recreational area. In 1992, a health risk assessment study at the site was performed. Arsenic was the only compound that exceeded its LOC. In 2000, an extensive soil sampling program determined that the arsenic contamination was widespread but limited to the top one to two feet of soil. Arsenic was the COC and soil was the affected media. In Spring 2004, this site was reclassified by the Army from an apple orchard to a recreational area. Additional sampling was conducted in the Summer 2004. The RI was completed in 2005. An FS was approved by the USEPA in August 2009. The PP was issued in March 2013 and the ROD was signed by the Army and USEPA by May 2014. The site remedy is NFA with monitoring of land use. The Army will continue the required annual land use inspections and develop the certification report as required by the ROD. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1159_PICA-193_GREEN POND AND BEAR SWAMP BROOK

Env Site ID: PICA-193

Cleanup Site: GREEN POND AND BEAR SWAMP BROOK

Alias: PICA-193

Regulatory Driver: CERCLA

RIP Date: 9/30/2026

RC Date: 9/30/2026

RC Reason: Not assigned

SC Date: 9/30/2055

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	9/30/1993	7/31/2005
RD:	8/31/2001	2/28/2007
IRA:	8/31/2003	10/31/2004
RA(C):	4/30/2006	9/30/2026
RA(O):	- -	- -
LTM:	9/30/2026	9/30/2055

Site Narrative: PICA-194 (Green Pond Brook) was administratively closed and all actions are now captured under PICA-193. The group name is Green Pond and Bear Swamp Brook. The Green Pond Brook area begins at the outfall of Picatinny Lake and extends to the southern installation boundary. The Bear Swamp Brook area begins on Green Pond Mountain and extends until Bear Swamp Brook's confluence with Green Pond Brook. These two brooks are the main drainages for the watershed on the southern portion of Picatinny Arsenal and flow past several industrial areas that previously had waste discharges to surface water. The site underwent an RI in 1994. Arsenic and PCBs in the sediments are the COCs. A PP public meeting occurred in December 2003. The ROD was signed in July 2005 and the remedy was chemical and biological monitoring. An RD was approved in March 2007. In September 2007, 900 tons of impacted sediment was removed from an oil/water separator and 13 tons of impacted sediments were excavated near RI concept site 34 in region 3 of the brook. The chemical and biological monitoring required by the ROD was implemented in 2007 and is ongoing. Data reports and LUC certifications have been submitted annually since 2007. Due to an Applicable or Relevant and Appropriate Requirement update a ROD change document is underway. The site is in the RAC phase.

34855.1161_PICA-195_BLDGS IN 1400/1300/3100/1000 AR

Env Site ID: PICA-195

Cleanup Site: BLDGS IN 1400/1300/3100/1000 AR

Alias: SITE 77

Regulatory Driver: CERCLA

RIP Date: 2/15/2028

RC Date: 2/15/2028

RC Reason: Not assigned

SC Date: 2/17/2057

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Low

MRSPP: N/A

Phase	Start	End
PA:	7/31/1976	5/31/1981
SI:	10/31/1989	3/31/1991
RI/FS:	6/30/1996	8/15/2027
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2027	2/15/2028
RA(O):	- -	- -
LTM:	2/16/2028	2/16/2057

Site Narrative: The original PICA-195 or Site 77 consisted of Building 3150 that was constructed in 1942 as a storage building and housed a precision machine shop and a gymnasium. The site was included in the Non-Lakes FS which was approved by the USEPA in July 2014. In 2003, the following eight sites (former hazardous waste tank storage, former lab pack facility, former PCB storage area, pesticide storage area, reservoir, former ordinance facility, and former propellent/ordinance facility), and propellent melting plant were administratively closed [listed as response complete (RC)]. The RI was completed in 2005. The Army will finalize and public notice a PP, and the NFA with monitoring of land use ROD will be signed. The Army will conduct the required annual LTM inspections. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1164_PICA-199_FORMER PISTOL RANGE DUMP&NAVY M

Env Site ID: PICA-199

Cleanup Site: FORMER PISTOL RANGE DUMP&NAVY M

Alias: SITE 199

Regulatory Driver: CERCLA

RIP Date: 5/15/2014

RC Date: 5/15/2014

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	12/31/1993	4/30/1994
SI:	8/31/1994	9/30/1995
RI/FS:	3/31/1997	5/15/2014
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	6/15/2014	9/15/2054

Site Narrative: Site 199 consists of an abandoned pistol range and a former dumping area. This site is part of the 25 Site Group. The pistol range was active from approximately 1936 to 1980. The one-acre area to the north of the pistol range was used as a dumping area and contained construction and demolition debris and domestic waste. The type of trash present at the former dumping area suggests that the site was active from the 1920s to the mid-1930s. A 1940 naval ammunition depot map indicated that a manure pit occupied the southeastern half of Site 199. Lead in the soil was the COC. The FS was approved in August 2009 by the USEPA. This PP recommended NFA with monitoring of land use and it was public noticed in March 2013 and the ROD was signed by the Army and USEPA in May 2014. This site is part of the 25 Site Group. The Army will conduct the required annual inspection and develop the certification report as required by the NFA with monitoring of land use ROD. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1165_PICA-200_AREA (L) OTHER BUILDINGS

Env Site ID: PICA-200

Cleanup Site: AREA (L) OTHER BUILDINGS

Alias: PICA-200

Regulatory Driver: CERCLA

RIP Date: 2/15/2027

RC Date: 2/15/2027

RC Reason: Not assigned

SC Date: 2/16/2056

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	12/31/1993	4/30/1994
SI:	8/31/1994	4/30/1995
RI/FS:	12/31/1995	8/15/2026
RD:	- -	- -
IRA:	- -	- -
RA(C):	8/15/2026	2/15/2027
RA(O):	- -	- -
LTM:	2/15/2027	2/15/2056

Site Narrative: The PICA 200 site represents 13 buildings in Area L. The group name for this site is 45 Site Group A. The PICA 200 buildings were included as part of the 1996 PA/SI where metals in the soils were detected. Groundwater at this site is addressed under the Mid-Valley ROD. The USEPA approved the FS in July 2014. A PP for remedy with monitoring of land use NFA was submitted in 2017 to the regulators. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1169_PICA-204_MID-VALLEY GROUNDWATER

Env Site ID: PICA-204

Cleanup Site: MID-VALLEY GROUNDWATER

Alias: PICA-204

Regulatory Driver: CERCLA

RIP Date: 2/15/2013

RC Date: 9/15/2054

RC Reason: Not assigned

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	9/30/1993	4/30/1996
SI:	8/31/1996	6/30/1998
RI/FS:	9/30/1998	9/15/2012
RD:	10/15/2012	12/15/2012
IRA:	- -	- -
RA(C):	12/15/2012	2/15/2013
RA(O):	3/15/2014	9/15/2054
LTM:	- -	- -

Site Narrative: The Mid-Valley region at Picatinny Arsenal consists of groundwater under study Areas F, G, H, and the northwestern part of Area L. A groundwater RI was started in late-2001 to delineate the plumes. During the Phase II and Phase III, RIs (completed in 2005), TCE, PCE, RDX, and metals were detected at concentrations greater than LOC in groundwater in Areas H and L. The TCE plume is over 5,000 feet long. The RDX plume covers a smaller area and has concentrations of about 80 micrograms per liter. The Robinson Run VOC MNA Plum is located near Building 3109 where the TCE concentration is over one ppm. The northern VOC MNA plum source is unknown. Historical operations, such as presumed sporadic disposal of degreasing solvents associated with Building 3109, and operations at Building 241 are the likely source of the Robinson Run and western VOC plumes, respectively. Former Defense Reutilization and Marketing Office (DRMO) Yard (Area G) has been used for a variety of industrial and storage uses, including a maintenance shop and service shops, a gasoline station, metallurgy laboratories, and a laundry facility where explosives-contaminated clothing was washed. An FS was approved in 2009; additional investigation revealed higher levels of TCE contamination near Building 3109. The FS addendum was submitted and approved by the regulators in calendar year 2012. The PP was public noticed and the ROD was signed in September 2012. A cleanup timeframe of approximately 15 years for the unconfined/weathered bedrock aquifer and 35 years for the bedrock aquifer was determined from site-specific data. MNA durations to achieve the NJDEP non-promulgated interim specific standards were also calculated (25 years for the unconfined/weathered bedrock aquifer and 46 years for the bedrock aquifer). The analysis suggests that the overall remedial timeframe for RDX will increase by 11 years (from 35 to 46 years) to meet the NJDEP non-promulgated interim specific standard. The RD was approved in January 2013. The ROD includes enhanced bioremediation, MNA, and LUC. The groundwater monitoring system also includes the monitoring of the two shell burial sites (PICA-052 and -162) and the groundwater beneath the former DRMO (PICA-072) which are all located in the Mid-Valley Area. The remedial action began in FY14, with an estimated 34-year time frame for remediation (until 2048). The LUCs, MNA, and enhanced bioremediation are ongoing. The required monitoring of the two

shell burial areas, the DRMO yard, and the drinking water well are also included under PICA-204. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1170_PICA-205_Area B Groundwater

Env Site ID: PICA-205

Cleanup Site: Area B Groundwater

Alias: AREA B GW

Regulatory Driver: CERCLA

RIP Date: 4/30/2009

RC Date: 9/15/2032

RC Reason: Not assigned

SC Date: 9/16/2032

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	9/30/1993	4/30/1996
SI:	- -	- -
RI/FS:	8/31/1996	4/15/2009
RD:	4/30/2006	4/15/2009
IRA:	- -	- -
RA(C):	4/30/2006	4/15/2009
RA(O):	4/30/2009	9/15/2032
LTM:	- -	- -

Site Narrative: Area B addresses the contaminated groundwater at two RI concept sites, Site 20 (a pyrotechnic range) and Site 24 (a sanitary landfill). The area is approximately 28 acres and is located in the southern portion of Picatinny Arsenal. Documentation indicates that fly ash, ordnance, industrial waste, and sludge from the water treatment plant were reportedly disposed of at Site 24 until 1972. The RI was completed in 2004. The COCs in groundwater are vinyl chloride, PCE, TCE, 1,1-dichloroethane, and cis-dichloroethane. The PP was finalized in 2005 and the ROD was complete in 2009. The remedy is in situ amendment injections and MNA. Amendment injections and monitoring have been ongoing since 2008. VOC concentrations have been decreasing across the site. The ROD estimated that the concentrations of COCs within groundwater would reach the soil cleanup levels within seven years, but it is taking longer. Therefore, degradation of residual vinyl chloride is expected to continue as total organic carbon within groundwater is depleted and the groundwater conditions transition from an anaerobic/reducing to aerobic environment. Annual reports continue to be submitted with the results and analysis of the sampling required by the approved RD of groundwater and surface water. The 2016 five-year review determined that the remedy is performing as expected. Continue RA(O) until the groundwater meets the RAO levels. Annual reports will be submitted. Groundwater is expected to be cleaned by 2026. Injections and MNA will continue until UU/UE is achieved.

34855.1171_PICA-206_AREA C GROUNDWATER

Env Site ID: PICA-206

Cleanup Site: AREA C GROUNDWATER

Alias: PICA-206

Regulatory Driver: CERCLA

RIP Date: 9/15/2009

RC Date: 9/15/2009

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	9/30/1993	4/30/1996
SI:	- -	- -
RI/FS:	8/31/1996	9/15/2009
RD:	8/15/2009	9/15/2009
IRA:	- -	- -
RA(C):	9/15/2009	9/15/2009
RA(O):	- -	- -
LTM:	11/30/2009	9/15/2054

Site Narrative: PICA-206 is known as Area C Groundwater and addresses approximately 126 acres in the southwestern portion of Picatinny Arsenal, near the southern boundary of the arsenal. The site addresses the groundwater at the following six sites- Site 19 - Pyrotechnic Demonstration Area, Site 23 - Post Farm Landfill, Site 25 - Sanitary Landfill, Site 26 - Dredge Piles from Green Pond Brook, Site 163 - Baseball Fields, and Site 180 - Waste Burial Area. During the RI, groundwater was found to be contaminated by solvents and metals. An FS was completed in 2005, the PP was issued in 2007, and the ROD with LUCs and LTM was signed in September 2009. The RD was finalized in 2009 and LTM began in 2009. The LUCs and LTM will continue in accordance with the approved RD. The Army will continue the sampling of the southern boundary wells for explosives, metal, and volatile organics. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1172_PICA-207_STORAGE BUILDING 63

Env Site ID: PICA-207

Cleanup Site: STORAGE BUILDING 63

Alias: PICA-207

Regulatory Driver: CERCLA

RIP Date: 8/15/2030

RC Date: 8/15/2030

RC Reason: Not assigned

SC Date: 8/16/2059

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Low

MRSPP: N/A

Phase	Start	End
PA:	9/30/1993	4/30/1996
SI:	- -	- -
RI/FS:	8/31/1996	6/15/2026
RD:	8/15/2026	8/15/2028
IRA:	- -	- -
RA(C):	8/15/2028	8/15/2030
RA(O):	- -	- -
LTM:	8/15/2030	8/15/2059

Site Narrative: PICA-207 is a consolidated site and addresses itself and five other concept plan sites. PICA-207 is a lumber and transformer storage facility. Site 187 was an oil and acid storage building. Site 52/95/96 is an area that was used for vehicle maintenance, petroleum storage, an explosives-contaminated laundry, and a solvent storehouse. Site 173 was a solid propellant testing laboratory. The RI, which was completed in 2015 found very low levels of PAHs and arsenic in soil at sites 52/95/96 and the oil and acid storage building. A PP was submitted and to regulators Nov. 2019. The ROD for PICA-207 will be submitted for regulatory review. The expected remedy is dig and haul for PAHs exceeding acceptable risk levels at site 173 and LUCs at the remaining sites. An RD will be submitted for the remedial action and long-term monitoring of land use. The site will also be evaluated in the five-year reviews. The expected remedy is dig and haul for petroleum hydrocarbons exceeding acceptable risk levels at the solid propellant testing laboratory and LUCs at the remaining sites except for Site 187, which recommends NFA. A PP is currently being developed. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1174_PICA-209_BUILDING 167, LOCOMOTIVE AREA,

Env Site ID: PICA-209

Cleanup Site: BUILDING 167, LOCOMOTIVE AREA,

Alias: PICA-209

Regulatory Driver: CERCLA

RIP Date: 8/15/2028

RC Date: 8/15/2028

RC Reason: Not assigned

SC Date: 8/16/2057

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	9/30/1993	4/30/1996
SI:	8/31/1996	6/30/1998
RI/FS:	9/30/1998	2/15/2028
RD:	- -	- -
IRA:	8/31/2003	10/31/2004
RA(C):	2/15/2028	8/15/2028
RA(O):	- -	- -
LTM:	8/15/2028	8/15/2057

Site Narrative: PICA-209 consists of five separate buildings or former buildings (Building 167 used as a nuclear test facility, Building 303 contained two waste pits that drained wastewater and spent petroleum products, Building 426 was used as a mixing house, Building 426A use is unknown, and Building 430 was used to produce and test small batches of nitroglycerine in Area F. This site is 45 Site Group C. Samples were collected and metals, explosives, and PAHs were detected in the soil. VOCs, explosives, and metals were identified in the groundwater. Prior to 1951, Building 167 had no system in place for lab waste removal and it was assumed the waste was hand carried out of the building. After 1951, all wastes were discharged into holding tanks. Building 430 was converted into a propellant process lab in the 1950s. The waste was discharged into three lead catch tanks. Overflow pipes discarded directly onto the soil surface. Lead was also a health concern at these two buildings. An IRA was conducted. Approximately 145 cy of contaminated soil (PAHs from Building 167, lead/explosives from Building 430, and lead from Buildings 303 and 430) were removed in 2003 and 2004. Lead was also a health concern at Buildings 167 and 430. An IRA was conducted. Approximately 145 cy of contaminated soil (PAHs from Building 167, lead/explosives from Building 430, and lead from Buildings 303 and 430) were removed in 2003 and 2004. Groundwater contamination is addressed as part of the Mid-Valley groundwater ROD. The site is in the RI/FS phase. The PP is under regulatory review; the expected remedy is NFA with monitoring of land use. The Army will finalize and public notice the PP, and the NFA with monitoring of land use ROD will be signed. After the ROD is completed, the Army will conduct the required annual LTM inspections and develop the certification reports required by the ROD. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1191_CC-057_FORMER SKEET RANGE

Env Site ID: CC-057

Cleanup Site: FORMER SKEET RANGE

Alias: #

Regulatory Driver: OTHER

RIP Date: 9/30/2028

RC Date: 9/30/2028

RC Reason: Not assigned

SC Date: 9/30/2057

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 42.3

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
PA:	11/30/2008	1/31/2009
SI:	1/31/2009	6/30/2010
RI/FS:	3/31/2010	9/30/2024
RD:	9/30/2024	9/30/2026
IRA:	- -	- -
RA(C):	9/30/2026	9/30/2028
RA(O):	- -	- -
LTM:	9/30/2028	9/30/2057

Site Narrative: The site was used as a skeet range and archery range. This group name is Mortar and Skeet. Aerial photos also indicate there was extensive historical fill operations in this area. The site is situated within a floodplain and partially within a wetland. A high level of lead in the soil was first encountered in 2006. An investigation in 2008 further defined the problem and determined the lead and PAHs were from activities related to the closed Skeet Range. The area of the known soil contamination is approximately 2 acres. This site is located within the footprint of MMRP site PICA-006-R-01, and the two sites are being addressed together within the FS. The PP was approved by regulators and public noticed in 2020. The selected remedy is surface MEC removal in the high density MEC area, contaminated soil/sediment removal, and LUCs. Complete the PP and ROD and conduct cleanup and LTM. Cleanup will consist of both MMRP and IRP actions such as soil removal and MEC clearances. A PP and IRA are underway. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1199_CC-211_EASTERN EDGE OF GREEN POND BROOK

Env Site ID: CC-211

Cleanup Site: EASTERN EDGE OF GREEN POND BROOK

Alias: #

Regulatory Driver: CERCLA

RIP Date: 4/25/2029

RC Date: 4/25/2029

RC Reason: Not assigned

SC Date: 4/26/2029

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
PA:	2/15/2012	6/15/2014
SI:	8/15/2014	6/15/2017
RI/FS:	6/15/2017	3/15/2026
RD:	3/15/2026	3/25/2028
IRA:	3/15/2012	3/15/2021
RA(C):	3/25/2028	4/25/2029
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: The Site Eastern Edge of Green Pond Brook is a small area (500 feet by 10 feet) along the eastern bank of Green Pond the brook across from the former DRMO Yard that was used as a fill area in the past. RI sediment and soil sampling found numerous metals including antimony, arsenic, copper, lead, and zinc at concentrations above their respective LOCs. The RI fieldwork was completed in 2018 with the associated RI report submitted in 2019. The RI/FS is underway which will determine if any action is needed at this site. The RI/FS report is under regulatory review. The RI/FS phase is underway, Once the RI/FS is approved the Army will complete the PP and ROD. An RD will be prepared for the assumed soil dig and haul remedy which will result in UU/UE.

34855.1201_PICA-PFAS_PFAS

Env Site ID: PICA-PFAS

Cleanup Site: PFAS

Alias: #

Regulatory Driver: CERCLA

RIP Date:2/2/2029

RC Date: 2/2/2029

RC Reason: Not assigned

SC Date: 2/2/2029

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	9/30/2017	9/27/2018
SI:	9/28/2018	4/30/2022
RI/FS:	1/3/2022	2/2/2029
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: The per- and polyfluoroalkyl substances (PFAS) PA/SI report is under Army review and was submitted for regulatory review in early 2021. The PA/SI identified 10 areas of potential interest (AOPI)- Building 169 – Firehouse 1; Buildings 3316/3321 – Firehouse 2; Former Pyrotechnic Area and Sanitary Landfill; Former Lower Burning Grounds; Area 1222 - Gorge; Lawn to the North of Building 3409/3410; Former Building 24; Post Farm Landfill; Former Wastewater Treatment Plant Facility; and Building 3801 – New Jersey Army National Guard Helipad Area. PFAS constituents were found above the USEPA Health Advisory in all but one AOPI (Post Farm Landfill). The PA/SI has been approved by regulators in 2022. The RI workplan is underway. The Army will conduct an RI at the installation once the workplan is approved. Future action is anticipated.

34855.1202_PICA-211_OFF-RANGE AREA 1

Env Site ID: PICA-211

Cleanup Site: OFF-RANGE AREA 1

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/28/2029

RC Date: 9/28/2029

RC Reason: Not assigned

SC Date: 9/29/2029

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	2/1/2017	8/1/2018
SI:	2/1/2017	8/22/2018
RI/FS:	5/8/2020	9/28/2029
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: The Off-Range Area 1 site addresses contaminants that have migrated off operational ranges 1 and 2 at Picatinny Arsenal. Site environmental conditions at on-range portions of the Picatinny Arsenal active testing ranges have been evaluated as part of various investigations since the late-1990s. One of the objectives of these investigations has been to determine whether or not contaminants originating from range sources are migrating off-range. Results from a 2014 Operational Range Assessment Program (ORAP) Phase II investigation indicated that munitions contaminants of concern (MCOC) associated with Operational Ranges 1, 2, 5, 6, 7, and 8 may be migrating off the ranges at concentrations that could pose an unacceptable risk to human and/or ecological receptors in off-range areas. This SI was prepared to evaluate the presence or absence of MCOCs above project action limits (PAL) in off-range surface water ,sediment, and groundwater immediately downgradient of Operational Ranges 1, 2, 5, 6, 7, and 8. Off-range Area 1 includes Operational Ranges 1 and 2. Explosives and metals were the focus of Off-Range sampling along surface water and sediment migratory pathways downgradient of Operational Range 2. The surface water data indicate that RDX, copper, lead, and zinc (as well as non-MCOC metals) were present in surface water downgradient of Operational Range 2 were less than PALs. Lead and the non-MCOC metals arsenic and mercury were detected in surface water samples at concentrations greater than PALs. Three explosive compounds were detected in the off-range sediment samples, although none of the detected concentrations were greater than PALs. The site is in the RI/FS phase and the Army will perform the RI and FS. Until the RI/FS is complete, it will not be known whether unacceptable risks exist or not, thus preventing future planning beyond the RI/FS phase.

34855.1203_PICA-212_OFF-RANGE AREA 2

Env Site ID: PICA-212

Cleanup Site: OFF-RANGE AREA 2

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/28/2029

RC Date: 9/28/2029

RC Reason: Not assigned

SC Date: 9/29/2029

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	1/1/2014	8/22/2018
SI:	1/1/2014	8/22/2018
RI/FS:	5/8/2020	9/28/2029
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: The Off-Range Area 2 site addresses contaminants that have migrated off operational ranges 5 and 6 at Picatinny Arsenal. Environmental conditions at on-range portions of the Picatinny Arsenal active testing ranges have been evaluated as part of various investigations since the late-1990s. One of the objectives of these investigations has been to determine whether or not contaminants originating from range sources are migrating off-range. Results from a 2014 ORAP Phase II investigation indicated that MCOCs associated with Operational Ranges 1, 2, 5, 6, 7, and 8 may be migrating off the ranges at concentrations that could pose an unacceptable risk to human and/or ecological receptors in off-range areas. This SI was prepared to evaluate the presence or absence of MCOCs above PALs in off-range surface water, sediment, and groundwater immediately downgradient of Operational Ranges 1, 2, 5, 6, 7, and 8. Off-Range Area 2 consists of ranges 5, and 6. The site is in the RI/FS phase and the Army will perform the RI and FS. Until the RI/FS is complete, it will not be known whether unacceptable risks exist or not, thus preventing future planning beyond the RI/FS phase.

34855.1204_PICA-213_OFF-RANGE AREA 3

Env Site ID: PICA-213

Cleanup Site: OFF-RANGE AREA 3

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/28/2029

RC Date: 9/28/2029

RC Reason: Not assigned

SC Date: 9/29/2029

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 43

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	1/1/2014	8/22/2018
SI:	1/1/2014	8/22/2018
RI/FS:	5/8/2020	9/28/2029
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: The Off-Range Area 3 site addresses contaminants that have migrated off operational ranges 7 and 8 at Picatinny Arsenal. Environmental conditions at on-range portions of the Picatinny Arsenal active testing ranges have been evaluated as part of various investigations since the late-1990s. One of the objectives of these investigations has been to determine whether or not contaminants originating from range sources are migrating off-range. Results from a 2014 ORAP Phase II investigation indicated that MCOCs associated with Operational Ranges 1, 2, 5, 6, 7, and 8 may be migrating off the ranges at concentrations that could pose an unacceptable risk to human and/or ecological receptors in off-range areas. Off-Range Area 2 consists of ranges 7 and 8. ORAP Operational Range 7 is an active testing area with enclosed above-test grade structures. A small, unnamed tributary run along the eastern side of the site and discharges to Green Pond Brook downstream of Range 8 to the west, which ultimately discharges to Picatinny Lake. Based on the conclusions of the ORAP Phase II, RDX was identified as possibly migrating from ORAP Operational Range 7. Migratory pathways of RDX and lead from ORAP Operational Range 7 to Off-Range areas would include surface water, sediment, and groundwater. Green Pond Brook flows south through the Gorge along the western wall and forms a small pond near the middle of the Gorge. Based on conclusions of the ORAP Phase II investigation, which evaluated historical IRP and annual ODA results for soil, surface water, sediment, and or groundwater samples, this range was referred for additional investigation due to lead and RDX observed in both surface water and groundwater that is potentially migrating from the range. The site is in the RI/FS phase and the Army will perform the RI and FS. Until the RI/FS is complete, it will not be known whether unacceptable risks exist or not, thus preventing future planning beyond the RI/FS phase.

34855.1205_PICA-214_Water Tower

Env Site ID: PICA-214
Cleanup Site: Water Tower
Alias: #
Regulatory Driver: CERCLA
RIP Date: 9/28/2029
RC Date: 9/28/2029
RC Reason: Not assigned
SC Date: 9/29/2029
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: Yes
Hazardous Ranking Score: 43
RRSE:
MRSPP: N/A

Phase	Start	End
PA:	2/8/2018	8/27/2018
SI:	8/8/2018	8/27/2018
RI/FS:	5/8/2020	9/28/2029
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: The Water Tower Site addresses lead contaminated soil found adjacent to a water tower in a residential area of Picatinny Arsenal. As part of an investigation related to the installation of a cellular antenna, three soil samples were taken (from six to 12 inches below the surface) inside the water tower fence (Building 3254). The results (between 800-850 ppm) all indicated lead concentrations above the NJ residential direct contact soil cleanup criteria of 400 ppm. Various water towers have been at this location since 1918. It is believed that the elevated concentrations of lead in the soil are due to old paint either peeling or being scraped off prior to re-painting. Lead paint was eventually banned for use in homes in 1978 but was still used commercially after that. In the most recent painting of the tower, the paint being scraped off and the new paint being applied did not contain lead. Since the water tower was located near a residential area, Picatinny Arsenal thought it would be prudent to sample the soil outside of the fence. Nine additional surface soil samples were taken (four inside the fence and five outside the fence). Concentrations and locations are shown on the map. The outside samples were taken 10 feet away from the fence. In the open area adjacent to the residence two of the three samples exceeded the residential standard. The levels found were 649 ppm lead and 461 ppm lead, the third sample nearest the residential area was 56 ppm lead. The 56 ppm could be considered natural or very slight lead contamination. Because of the two exceedances it was decided to prevent foot traffic in this area by erecting a snow fence. To further delineate the contamination, eight more surface soil samples were taken, including three samples in the backyard of residential Building 3266. All eight of the delineation samples were below the NJ residential standard. The three samples taken in the backyard yielded results 25 ppm, 32ppm, and 29ppm that were indicative of natural lead levels in the soil at Picatinny Arsenal. Therefore, indicating no contamination at these locations. The snow fence will be maintained to prevent any unnecessary foot traffic in this area until it can be determined the best way forward. The Army will perform the RI and FS. Until the RI/FS is complete, it will not be known whether unacceptable risks exist or not, thus preventing future planning beyond the RI/FS phase.

34855.1176_PICA-008-R-01_Lakes

Env Site ID: PICA-008-R-01

Cleanup Site: Lakes

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/30/2030

RC Date: 9/30/2030

RC Reason: Not assigned

SC Date: 9/30/2059

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 3

Phase	Start	End
PA:	12/10/2002	12/9/2003
SI:	2/28/2006	5/31/2008
RI/FS:	10/31/2009	9/30/2026
RD:	9/30/2026	9/30/2027
IRA:	2/15/2010	9/30/2030
RA(C):	9/30/2027	9/30/2030
RA(O):	- -	- -
LTM:	9/30/2030	9/30/2059

Site Narrative: The Lakes Munitions Response Site (MRS) is composed of Lake Denmark and Picatinny Lake which were both used historically as ranges. This MRS covers 741 acres and includes the lakes as well as some adjacent land. Lake Denmark is located in the northern portion of the installation and was used as a mortar impact area and an experimental munitions testing range. Three ranges [60 millimeter (mm), 81mm, and 4.2-inch inert projectile ranges] were identified. These ranges shared a single firing point on the southern end of the lake but had several lines of fire. Several impact areas were located on the northern end of the lake. A 20mm cannon range that fired across Lake Denmark toward an impact area near Building 1221 was also identified. Picatinny Lake is located in the central portion of the installation and has had several uses, including a range and a testing and storage area. A three-inch Barbette gun firing range was previously located on the southeast shore of the lake; the impact area was located across the lake near Buildings 810 and 824. Flare Island, an artificial island, was formerly used to test flares and pyrotechnics. The lake was also used for the underwater storage of smokeless powder and explosives. The RI was final in 2014. MEC are the COCs in soil and sediment. NTCRA LUCs are in place at the site. The FS was approved in 2020. The site is in the RI/FS phase. The PP is underway and will be completed, as will the ROD. The proposed remedy MEC removal and LUCs. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1179_PICA-006-R-01_Former Operational Areas

Env Site ID: PICA-006-R-01

Cleanup Site: Former Operational Areas

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/30/2032

RC Date: 9/30/2032

RC Reason: Not assigned

SC Date: 9/30/2061

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 3

Phase	Start	End
PA:	12/10/2002	12/9/2003
SI:	2/28/2006	5/31/2008
RI/FS:	10/15/2009	9/30/2027
RD:	9/30/2027	9/29/2029
IRA:	2/15/2010	9/29/2029
RA(C):	9/30/2029	9/30/2032
RA(O):	- -	- -
LTM:	9/30/2032	9/30/2061

Site Narrative: This MRS covers approximately 1,651 acres in the south, southwest, and northcentral portions of the installation. Throughout the years there have been numerous UXO items found at this MRS. According to an installation survey report from 1973, this area of the installation was used for munitions and weapons research, development, and testing. The RI was completed in 2014. MEC are the COCs in soil and sediment. NTCRA LUCs are in place at the site. The FS was approved in 2020. The site is in the RI/FS phase. The PP is underway and will be completed, as will the ROD. The proposed remedy will be MEC removal and LUCs. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1184_PICA-010-R-01_Shell Burial Grounds

Env Site ID: PICA-010-R-01

Cleanup Site: Shell Burial Grounds

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/30/2027

RC Date: 9/30/2027

RC Reason: Not assigned

SC Date: 9/30/2056

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 5

Phase	Start	End
PA:	12/10/2002	12/9/2003
SI:	2/28/2006	5/31/2008
RI/FS:	10/31/2009	9/30/2025
RD:	9/30/2025	9/29/2026
IRA:	3/15/2012	9/29/2027
RA(C):	9/30/2026	9/30/2027
RA(O):	- -	- -
LTM:	9/30/2027	9/30/2056

Site Narrative: In 1926, a massive explosion occurred at the then Lake Denmark Naval Ammunition Depot, destroying the facility and spreading munitions and debris in all directions up to one mile. This explosion created three large craters which were then used as burial grounds for the explosion related debris found during the cleanup and rebuilding effort. Materials that were disposed of at these burial grounds include projectiles, mines, depth charges, fuses, explosives, small arms ammunition, propellants, and possibly rocket fuels. The Navy continued to use these craters for explosives disposal until 1945. It was also reported that the craters potentially contain acids, pickling liquors, cyanide, and phenol. After the Navy discontinued its use of these areas, they were covered with 20 feet of fill, bringing them up to grade. The two western craters became one pit after being filled (four acres). The eastern pit is 1.5 acres. These two locations near the center of the installation are the Shell Burial Grounds MRS. Both burial grounds are fenced and posted with warning signs. The remedial investigation was completed in 2014. MEC are the COCs in soil. NTCRA LUCs are in place at the site. The FS was approved by regulators in 2019. The PP has been under regulatory review since November 2019. The proposed remedy is LUCs. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1185_PICA-004-R-01_1926 EXPLOSION SITE-TD

Env Site ID: PICA-004-R-01

Cleanup Site: 1926 EXPLOSION SITE-TD

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/30/2030

RC Date: 9/30/2030

RC Reason: Not assigned

SC Date: 9/30/2059

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 3

Phase	Start	End
PA:	12/10/2002	12/9/2003
SI:	2/28/2006	5/31/2008
RI/FS:	9/3/2009	9/29/2027
RD:	- -	- -
IRA:	11/15/2007	9/30/2030
RA(C):	9/30/2028	9/30/2030
RA(O):	- -	- -
LTM:	9/30/2030	9/30/2059

Site Narrative: This MRS consists of all off-post properties that fall within the one-mile (1,609 meters) radius of the center of the 1926 Lake Denmark Naval Ammunition Depot explosion. The MRS consists of 833 acres and consists of forested land, residential, and commercial property, including the Mt. Hope Quarry, which covers the largest area of this MRS. The MRS is located adjacent to the installation's eastern boundary. Munitions have been found and removed from the quarry. Several TCRAs were conducted between 2006 and 2011, to clear land of munitions before mining activity. The RI was completed in 2014 and the FS is underway. MEC are the COCs in soil and sediment. The FS, PP, and ROD will be completed. The proposed remedy is MEC removal and LUCs. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1186_PICA-003-R-01_1926 Explosion Radius

Env Site ID: PICA-003-R-01

Cleanup Site: 1926 Explosion Radius

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/28/2031

RC Date: 9/28/2031

RC Reason: Not assigned

SC Date: 9/30/2060

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 3

Phase	Start	End
PA:	12/10/2002	12/9/2003
SI:	2/28/2006	5/31/2008
RI/FS:	10/31/2009	9/30/2026
RD:	9/30/2026	9/28/2028
IRA:	10/15/2012	9/28/2028
RA(C):	9/30/2028	9/28/2031
RA(O):	- -	- -
LTM:	9/29/2031	9/29/2060

Site Narrative: PICA-003-R-01 is known as the 1926 Explosion Radius MRS and includes the on-post area affected by the 1926 explosion at the Lake Denmark Naval Ammunition Depot. The MRS consists of 1,603 acres which includes 833 acres of forested land, residential and commercial/industrial/recreational property. Munitions have been found and removed from the quarry. Several TCRAs were conducted between 2006 and 2011, to clear land of munitions before mining activity. The RI was completed in 2014 and the FS was approved in 2020. The RI was completed in 2014 and MEC was found in soil and sediment. The COCs are MEC. The site is in the RI/FS phase. The PP is underway and will be completed, as will the ROD. The proposed remedy will be MEC removal in high density areas and LUCs. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1188_PICA-012-R-01_Lake Denmark - Off-Post

Env Site ID: PICA-012-R-01

Cleanup Site: Lake Denmark - Off-Post

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/25/2035

RC Date: 9/25/2035

RC Reason: Not assigned

SC Date: 9/26/2035

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 5

Phase	Start	End
PA:	12/31/2002	12/31/2003
SI:	2/28/2006	5/31/2008
RI/FS:	10/31/2009	9/25/2035
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: This MRS covers approximately 96 acres to the northeast of the installation and consists of all off-post property that falls under the safety fan of the Lake Denmark ranges. This site contains commercial and light industrial properties as well as forested land. No munitions have been found on this MRS, but due to access restrictions, the Army has not been able to fully characterize the site. Although no munitions have been found, MEC are assumed to be the COCs in soil and sediment. A PP is currently underway; to be followed by the ROD. The PP is underway and will be completed, as will the ROD. Until the RI/FS phase is complete, it will not be known whether unacceptable risks exist or not, thus preventing future planning beyond the RI/FS phase.

34855.1189_PICA-013-R-01_Inactive Munitions Waste P

Env Site ID: PICA-013-R-01

Cleanup Site: Inactive Munitions Waste P

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/29/2025

RC Date: 9/29/2025

RC Reason: Not assigned

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 4

Phase	Start	End
PA:	12/31/2002	12/31/2003
SI:	2/28/2006	11/30/2011
RI/FS:	4/30/2011	11/30/2019
RD:	8/15/2020	5/30/2023
IRA:	3/15/2012	5/30/2025
RA(C):	6/1/2023	9/29/2025
RA(O):	- -	- -
LTM:	9/29/2025	9/29/2054

Site Narrative: The MRS covers 53 acres along the installation's western boundary, just northwest of the northernmost end of Picatinny Lake. This site contains a historical range and the associated safety fan. A portion of the safety fan falls off-post and is tracked separately. This site was reportedly used from 1955 to the mid-1980s, for the testing and storage of munitions and explosives. The site consists of forested land, an open field with a burn cage and a disposal pit. MEC and munitions have been found in the pit. MEC are the COCs in soil. TCE is the COC in groundwater which is addressed under the IRP Site PICA-058. NTCRA LUCs are in place at the site. The RI was final in 2014, the FS was approved in 2017, the PP was approved in 2018, and the ROD was final in 2019. The RD and IRA phases are currently underway. Complete RD, remedial action (construction) [RA(C)] and LTM. The expected remedy is total munitions waste pit removal, TCE source material removal, and LUCs, which will be designed and implemented because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1190_PICA-014-R-01_Inactive Munitions Waste P

Env Site ID: PICA-014-R-01

Cleanup Site: Inactive Munitions Waste P

Alias: #

Regulatory Driver: CERCLA

RIP Date: 8/15/2029

RC Date: 8/15/2029

RC Reason: Not assigned

SC Date: 8/16/2029

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 4

Phase	Start	End
PA:	12/31/2002	12/31/2003
SI:	2/28/2006	5/31/2008
RI/FS:	10/31/2009	8/15/2029
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: This MRS covers 7.5 acres and consists of all off-post property that falls within the safety fan of the on-post Inactive Munitions Waste Pit MRS (i.e., within a 1,250-foot radius from the center of the inactive munitions waste pit MRS). The on-post site was reportedly used from 1955 to the mid-1980s, for the testing and storage of munitions and explosives. Small amounts of munitions debris were found during the RI, but no MEC were found. Although none have been found, MEC are the COCs in soil. The PP was submitted to regulators in 2019 and is under review. The site is in the RI/FS phase. The PP is underway and will be completed, as will the ROD. Until the RI/FS phase is complete, it will not be known whether unacceptable risks exist or not, thus preventing future planning beyond the RI/FS phase.

34855.1197_PICA-003-R-02_FUZE AREA

Env Site ID: PICA-003-R-02

Cleanup Site: FUZE AREA

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/29/2030

RC Date: 9/29/2030

RC Reason: Not assigned

SC Date: 9/30/2059

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: Yes

Hazardous Ranking Score: 43.5

RRSE: N/A

MRSPP: 4

Phase	Start	End
PA:	12/15/2002	12/15/2003
SI:	2/15/2006	5/15/2008
RI/FS:	10/15/2009	9/29/2026
RD:	9/30/2026	9/28/2028
IRA:	2/15/2017	9/29/2030
RA(C):	9/29/2028	9/29/2030
RA(O):	- -	- -
LTM:	9/30/2030	9/30/2059

Site Narrative: The Fuze Area MRS is 1.63 acres in size in a wooded area located just northwest of the shell burial grounds and is characterized by a high concentration of MK2 base detonating and MK2 point detonating fuzes predominantly found on the ground surface. The release mechanism for these fuzes is unknown; however, a building foundation is directly adjacent to where the fuzes were found, thus it is possible that the fuzes may have been associated with the former building. MEC are the COCs in soil. NTCRA LUCs are in place at the site. An IRA and PP is currently underway. The draft PP was submitted to regulators for review in November 2020. The site currently is fenced off with signs as part of the interim LUCs. The site is in the RI/FS phase. The PP and the ROD will be finalized. The assumed remedy of complete surface MEC removal and LUCs will be implemented and followed by LTM. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

34855.1198_PICA-006-R-02_FORMER OPERATIONAL AREAS M

Env Site ID: PICA-006-R-02

Cleanup Site: FORMER OPERATIONAL AREAS M

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/30/2028

RC Date: 9/30/2028

RC Reason: Not assigned

SC Date: 9/30/2057

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: Yes

Hazardous Ranking Score: 43.5

RRSE: N/A

MRSPP: 3

Phase	Start	End
PA:	12/15/2002	12/15/2003
SI:	2/16/2006	5/15/2008
RI/FS:	3/31/2010	9/30/2024
RD:	9/30/2024	9/30/2026
IRA:	- -	- -
RA(C):	9/30/2026	9/30/2028
RA(O):	- -	- -
LTM:	9/30/2028	9/30/2057

Site Narrative: This MRS is a 190.5-acre area, located in the southcentral portion of Picatinny Arsenal. The area was determined to be an historical unmarked mortar range impact area that contained concentrated munitions. The RI was completed in 2014. Sixty-two MEC items, including 60mm and 81mm mortars, have been recovered. The MRS also overlaps a skeet range with lead and PAH contamination (IRP site CC-057). The calculated MEC density is approximately two items per acre. MEC are the COCs in soil and sediment. NTCRA LUCs are in place at the site. The remedy for this MRS is combined with IRP site CC-057 to address overlapping contamination. The PP was final in 2020. The site is in the RI/FS phase. The ROD will be completed and signed. The remedy (surface MEC removal in the high density MEC area, contaminated soil/sediment removal, and LUCs) will be designed and implemented. Because it is anticipated that hazardous substances, pollutants, or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, annual inspections, and periodic remedy reviews will continue indefinitely.

SITE SUMMARY

SITE CLOSEOUT SUMMARY

CRL ID	Site Name	Site Closeout Date
34855.1004	PICA-007_INACT.ROCKET FUEL TEST G-2 AREA	6/30/2003
34855.1006	PICA-010_BUILDING 95 FORMER WASTE IMPOUN	6/30/2003
34855.1008	PICA-012_BLDG 3022 PHYS ANAL LAB/ENERG(S	6/30/2003
34855.1011	PICA-018_FLUOROCHEMICAL STRG(3045)(SITE	6/30/2003
34855.1013	PICA-021_FORMER NG PROC AREA (1361A-1364	6/30/2003
34855.1015	PICA-029_BUILDINGS IN 300 AREA	6/30/2005
34855.1016	PICA-036_FORMER PROPELLANT PLANT(1010)(S	12/31/1996
34855.1017	PICA-037_FORMER HAZ WST TANK STOR(1380)(	6/30/2003
34855.1018	PICA-047_STEAM POWER PLANT BLDG 506(SITE	6/30/2003
34855.1020	PICA-052_SHELL BURIAL AREA(NEAR B-3100)(	6/30/2003
34855.1021	PICA-053_MUNITS&PROPLTS TST AREA/CHEM BU	5/31/2005
34855.1022	PICA-054_MUNITS&PROPLT TST AREA(B-1222)(	12/31/1996
34855.1023	PICA-055_MUNITS&PROPLT TEST AREA(B670,B6	7/31/2000
34855.1024	PICA-056_FORMER CHEMICAL BURIAL AREA (SI	6/30/2003
34855.1027	PICA-059_MUNITS/PYROTEC TEST AREA(B-640)	12/31/1996
34855.1028	PICA-060_MUNITIONS TEST AREA (B-636) SIT	7/31/2000
34855.1029	PICA-061_MUNITIONS TEST AREA(B616,B654)(	7/31/2000
34855.1030	PICA-063_PYROTECHNIC TESTING RANGE (SITE	3/31/2002
34855.1031	PICA-064_POACH HOUSE (520) (SITE 147)	6/30/2003
34855.1035	PICA-068_DREDGE PILE (SITE 26)	12/31/1996
34855.1036	PICA-069_PROPELLANT/CHEM/MATERIAL STORAG	6/30/2005
34855.1037	PICA-070_SEWAGE TRMT PLANT SLUDGE BEDS(B	12/31/1996
34855.1040	PICA-073_BLDG 553 STORAGE TANKS(SITE 32)	6/30/2003
34855.1041	PICA-074_BLDG 527A STORAGE TANKS (SITE 3	6/30/2003
34855.1045	PICA-078_VEHCL MAINT FORMER-WW PRETRTMT	10/31/2000
34855.1047	PICA-080_FORMER LAB PACK FAC (B-1094) S	6/30/2003
34855.1048	PICA-081_FORMER PCB STORAGE AREA (B-3114	6/30/2003
34855.1049	PICA-082_PESTICIDE STORAGE AREA (B-3157)	6/30/2003
34855.1050	PICA-083_Golf Course Maintenance(BLDG 39	3/31/2000
34855.1051	PICA-084_VEHICLE MAINTENCE (BLDG 33)SITE	7/31/2004
34855.1053	PICA-086_HEAVY EQUIP. MAINTENANCE(BLDG 3	6/30/2003
34855.1054	PICA-087_Auto Hobby Shop (BLDG 3315)- Si	11/30/2000
34855.1055	PICA-088_Soldering Storage Area (BLDG 19	3/31/1997
34855.1056	PICA-089_PETROLEUM LEAK AREA(BLDG 305)SI	6/30/2003
34855.1058	PICA-092_BASEBALL FIELDS (SITE 163)	12/31/1996
34855.1060	PICA-094_SURVEILLANCE LABORATORY(BLDG 92	6/30/2004
34855.1061	PICA-095_BLDG 12, PHOTO PROCESSING FAC (	12/31/1996
34855.1064	PICA-098_METAL PLATING SHOP, BLDG 64 (SI	6/30/2005
34855.1065	PICA-099_BLDG 5,ARSENAL REPRTION & TRNG	12/31/1996
34855.1066	PICA-100_GRAPHIC REPRODUCTION &TRNG BLDG	12/31/1996
34855.1067	PICA-101_BLDG 163, PHOTOGRAPHY LAB (SITE	6/30/2004
34855.1069	PICA-103_BLDGS 161&162,CHEMICAL LAB(SITE	6/30/2003

CRL ID	Site Name	Site Closeout Date
34855.1070	PICA-104_BLDGS 454&455,PROPELLANT BAG FL	6/30/2003
34855.1071	PICA-105_BLDG 166,PROPELLANT TEST (SITE	12/31/1996
34855.1072	PICA-106_BLDGS 172&183 & BLDGS IN 400 AR	6/30/2003
34855.1075	PICA-109_BLDGS 427&427B,PROPELLANT PRO(S	6/30/2006
34855.1076	PICA-110_BLDG 429,PROPELLANT CRUSHING(SI	3/31/2000
34855.1078	PICA-112_BLDG 436,PROPELLANT PROCESSING(	12/31/1996
34855.1079	PICA-113_BLDG 462,PROPELLANT FINISHING (	6/30/2003
34855.1080	PICA-114_BLDG 477,EXPLOSIVE&PROPELLANT M	6/30/2005
34855.1081	PICA-115_BLDG 497,POWDER PRESSING (SITE	6/30/2003
34855.1082	PICA-116_BLDGS 311&319, FORMER GAS STATI	6/30/2003
34855.1083	PICA-117_BLDG 302,SERVICE SHOPS (SITE 13	6/30/2003
34855.1084	PICA-118_METALLURGY LAB, BLDG 315 (SITE	8/31/2001
34855.1085	PICA-119_BLDG 355,METALLURGY LAB (SITE	6/30/2003
34855.1086	PICA-120_FORMER BLDG 24 PLATING FACIL (S	6/30/2000
34855.1087	PICA-121_BUILDING 336 - EXPLOSIVE LAUNDR	9/30/2006
34855.1089	PICA-123_FORMER HAZ WASTE STOR/FUSE ASS(	6/30/2003
34855.1090	PICA-124_LOADING/DISASSEMBLY PLT (BLDG24	6/30/2003
34855.1091	PICA-125_MINE ASSEMBLY FACILITY(BLDG 268	6/30/2003
34855.1092	PICA-126_EXP LOADING FACILITY (BLDG 276)	6/30/2003
34855.1093	PICA-127_MELT CASTING OPERATION (BLDG 23	6/30/2003
34855.1094	PICA-128_EXP PRESSING PLT (BLDGS235/236)	6/30/2003
34855.1095	PICA-129_CHANGE HOUSE (BLDG 240) SITE 12	6/30/2003
34855.1096	PICA-130_POWDER PRESS/PELLETING(BLDG 252	6/30/2003
34855.1098	PICA-132_FORMER LOAD FACILITY (BDLGS271/	6/30/2003
34855.1099	PICA-133_CHANGE HOUSE (BUILDING 600) SIT	6/30/2003
34855.1104	PICA-138_ELECTROMAG. GUN TEST SHED(BLDG3	6/30/2003
34855.1105	PICA-139_AMMUN DEMO 1 ORD FAC(BLDGS800/8	6/30/2003
34855.1106	PICA-140_POST ENG MAINT SHOP (BLDG 501)	6/30/2003
34855.1107	PICA-141_FORMER ENLISTED MENS BARRACKS(B	6/30/2003
34855.1108	PICA-142_PROPELLANT PLANT (BLDG 511) SIT	6/30/2003
34855.1110	PICA-144_PYROTECHNIC PLANT (BLDG 445) SI	6/30/2003
34855.1112	PICA-146_PROPELLANT PLANT (BLDG 561) SIT	6/30/2003
34855.1113	PICA-147_ADMINISTRATION BLDG (BLDG 382)	6/30/2003
34855.1114	PICA-148_CHANGE HOUSE (BLDG 527) SITE 14	6/30/2003
34855.1116	PICA-150_PROPELLANT PLANT (BLDG 555) SIT	6/30/2003
34855.1117	PICA-151_Ordnance Bldgs 813, 816/816B	6/30/2003
34855.1118	PICA-152_ORDNANCE FAC (BLDGS 820,823) SI	6/30/2003
34855.1119	PICA-153_HIGH-EXP MAGAZINE (BLDG 926) SI	6/30/2003
34855.1120	PICA-154_SUPPLIES & SER. BLDG (BLDG 975)	6/30/2003
34855.1122	PICA-156_REFRIG. & INERT GAS PLT(BLDG 52	6/30/2003
34855.1123	PICA-157_FORMER MOTORS/ROC FUEL TST AREA	6/30/2003
34855.1124	PICA-158_HELICOPTER MAINTENANCE(BLDG 380	6/30/2005
34855.1125	PICA-159_PARKING AREA ACROSS FROM BLDG 3	6/30/2003
34855.1126	PICA-160_CHEM LAB & ADMIN BLDG (BLDG 340	6/30/2003
34855.1127	PICA-161_SEWAGE TRMT/CHEM LAB/FIREHOUSE/	6/30/2005

CRL ID	Site Name	Site Closeout Date
34855.1131	PICA-165_FORMER EXPLOSIVES LOADING (BLDG	6/30/2003
34855.1132	PICA-166_FORMER ORDNANCE FACILITY (BLDG	6/30/2003
34855.1133	PICA-167_FORMER PROP PLT/ORD FAC(BLDGS13	6/30/2003
34855.1134	PICA-168_PROPEL PLTS/PRESS HOUSE 1400,14	6/30/2003
34855.1135	PICA-169_PROP PLTS (BLDGS1408,1408A-C,14	6/30/2003
34855.1136	PICA-170_PROP MELT PLTS (BLDGS1462-1464)	6/30/2003
34855.1138	PICA-172_FORMER NITRATION BLDG (BLDG 103	6/30/2003
34855.1139	PICA-173_FORMER EX MAN/STOR(BLDGS1070,10	6/30/2003
34855.1140	PICA-174_FORMER PROP PLTS(BLDGS1354,1357	6/30/2003
34855.1142	PICA-176_LITTLE LEAGUE BASEBALL FIELD SI	6/30/2004
34855.1143	PICA-177_SAN SEWER SYSTEM BREAKS/LEAKS S	6/30/2004
34855.1144	PICA-178_ORDNANCE FAC (BLDGS 604,604C) S	6/30/2003
34855.1145	PICA-179_ORDINANCE FACILITY (BLDG 606) S	6/30/2003
34855.1146	PICA-180_FIELD OFF,DISASS(BLDGS 617,617G	6/30/2003
34855.1147	PICA-181_ORDINANCE FAC (BLDGS 620,620B)	7/31/1997
34855.1148	PICA-182_MUN TEST RANGES (BLDGS647,649,6	12/31/1996
34855.1149	PICA-183_GEN PURPOSE MAGAZINE (BLDG1217)	6/30/2004
34855.1151	PICA-185_PROP STORAGE (BLDGS46,47,48) SI	6/30/2003
34855.1152	PICA-186_PROPELLANT STORAGE (BLDG 50) SI	6/30/2003
34855.1153	PICA-187_CHEMICAL STORAGE (BLDG 57) SITE	6/30/2003
34855.1154	PICA-188_FORMER LABORATORY IN BLDG 350 S	6/30/2003
34855.1155	PICA-189_FIREHOUSE (BUILDING 3316) SITE	6/30/2003
34855.1156	PICA-190_OIL & ACID STORAGE (BLDG 67) SI	6/30/2005
34855.1157	PICA-191_FORMER COAL STORAGE AREA (BLDG	6/30/2003
34855.1160	PICA-194_GREEN POND BROOK	7/31/2000
34855.1162	PICA-197_AREA ""O"" OTHER BUILDINGS	7/31/1997
34855.1163	PICA-198_AREA ""N""OTHER BUILDINGS	7/31/1997
34855.1166	PICA-201_Other Bldgs in Area P	7/31/1997
34855.1167	PICA-202_Other Bldgs in Area J	7/31/1997
34855.1168	PICA-203_FORMER POISON GAS LAB	6/30/2003
34855.1173	PICA-208_D.U. SCRAP STORAGE AREA	6/30/2003
34855.1175	PICA-210_BUILDING 321	6/30/2003
34855.1187	PBC Picatinny_PBC	3/15/2014
34855.1192	CC-055_MTBE Contaminated GW in 600 Area	5/31/2011
34855.1200	CC-212_ABANDONED RAILROAD TRACKS	1/15/2017
34855.1177	PICA-002-R-01_1000-METER RANGE	12/9/2003
34855.1178	PICA-001-R-01_FormerMunitions&Propellant	3/15/2012
34855.1180	PICA-009-R-01_PICATINNY LAKE SITE	12/9/2003
34855.1181	PICA-005-R-01_Green Pond	12/15/2013
34855.1182	PICA-007-R-01_Former-DRMO YARD	9/30/2009
34855.1183	PICA-011-R-01_SHELL BURIAL GROUND #2	12/9/2003
34855.1194	PBA@MR PICA_PBA for MR sites at Picatinn	3/15/2014
34855.1195	CC-054_Open Detonation Area/Gorge/Bldg 1	10/15/2011

COMMUNITY INVOLVEMENT

Community Involvement Plan (Date Last Reviewed):	4/1/2018
Technical Review Committee Establishment Date:	N/A
Restoration Advisory Board (RAB) Establishment Date:	12/31/1995
RAB Adjournment Date:	N/A
RAB Adjournment Reason:	N/A
Reasons for Not Establishing RAB:	N/A
RAB Date of Solicitation from Community:	N/A
RAB Results of Solicitation:	N/A
Current Technical Assistance for Public Participation (TAPP):	N/A
TAPP Title:	N/A
Potential TAPP:	N/A
Administrative Record Location:	Building 3002 Picatinny Arsenal, NJ 07806
Information Repository Location:	Building 3002 Picatinny Arsenal, NJ 07806, Rockaway Township Library, Morris County

FIVE-YEAR / PERIODIC REVIEW SUMMARY

Status	Review Type	Start Date	End Date	Plans Narrative	Actions Narrative	Results Narrative
Future	FYR	1/1/2026	9/1/2027	TBD	TBD	TBD
Completed	FYR	10/1/2020	1/26/2022	Monitoring of LUCs: The "Group of 13 Sites," LUCs aren't working for some of these sites; requires additional investigation. The annual inspection photos showed that corrections need to be initiated.		All but 2 sites received a protectiveness determination. Group 1 Sites received a deferred recommendation which will be revised after the Lakes FS is complete. Area D was deemed protective in the short-term, but not in the long-term.