

**FORMERLY UTILIZED  
SITES REMEDIAL  
ACTION PROGRAM**

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NATIONAL – Multi-State

Site	Total Estimated Federal Cost \$	Allocation Prior to FY 2017 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional To Complete After FY 2018 \$
Potential Sites, Various Locations	TBD	9,062,000	300,000	300,000 1/ 2/	300,000	TBD

The Department of Energy Office of Legacy Management (DOE-LM) considered several hundred sites in the public and private sectors for potential of residual radioactive contamination, as a consequence of work accomplished in support of nuclear energy technology development that began in the early 1940s by the Manhattan Engineer District (MED). Of these considered sites, a limited number initially were designated for remediation under FUSRAP. The others were eliminated from further consideration at that time. Thereafter, DOE-LM notifies the Corps of new information changing the status of eliminated sites to that of eligible according to FUSRAP criteria.

Funds received prior to Fiscal Year (FY) 2017 were used to start preliminary assessment at the Warehouse Site, Staten Island NY. The Warehouse Site was referred by DOE-LM. Work consisted of site inspections and other activities to determine if there is a release or threat of a release of a hazardous substance into the environment that will present an imminent and substantial danger to public health or welfare; and whether the site should be added to FUSRAP as an active site for further study and remediation.

FY 2017 funds were used to continue the preliminary assessment at the Staten Island Warehouse Site.

FY 2018 funds are being used to finish the preliminary assessment at the Staten Island Warehouse site, and to prepare a report with a recommendation as to whether the site is eligible to be included in the program.

FY 2019 funds will be used for assessment of another site, to be determined; and to finish preliminary assessment for the Wolff-Alport site.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$99,000. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.



IOWA

Site	Total Estimated Federal Cost \$	Allocation Through FY 2016 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019 \$
Iowa Army Ammunition Plant Middletown, IA St. Louis District	88,245,000	48,245,000	6,000,000	7,000,000 1/ 2/	7,000,000	20,000,000

The Iowa Army Ammunition Plant (IAAAP) is a secured, operational, Army-owned facility located on approximately 19,100 acres near Burlington in Des Moines County, in southeastern Iowa. During its use as an Army facility, portions of the IAAAP were occupied by tenant organizations including the Atomic Energy Commission (AEC). From 1947 to 1975, the AEC operated areas of the plant as the Burlington Atomic Energy Commission Plant (BAECP). In 2002 a Preliminary Assessment was completed for the BAECP and the IAAAP was included in FUSRAP. Evidence of a release was found in several areas. Two areas (Line 1 and the West Burn Pads South Area) were already investigated under other Army programs but remedial action remained. In March of 2013, FUSRAP completed remediation work at Operable Unit (OU) 1 (Soils OU) in Line 1 and West Burn Pads (WBP) Area South of the Road (ASOTR) under the Army ROD Soils (Aug 1998) except for explosive contaminated soils above the Remedial Goals (RGs) underneath building 1-70. At that time, it was determined to suspend further remedial action at this site pending the planned demolition of this structure.

Other areas at the plant required additional investigation, which was accomplished by the Corps as part of a Remedial Investigation (RI). The RI, which was completed in August 2008, identified three areas (the Firing Site area and Yards C and G) for further evaluation in the Feasibility Study. Contamination consisted of depleted uranium (DU). Alternatives to address the DU contamination were presented in the Feasibility Report and a Record of Decision was completed in September 2011. The selected remedy consists of (1) the excavation and sorting of DU contaminated soil with offsite shipment to a properly permitted disposal facility and (2) decontamination of structural surfaces in two buildings at Line 1. The primary regulators/stakeholders include the U.S. Environmental Protection Agency, Iowa Departments of Public Health and Natural Resources, Iowa Army Ammunition Plant (Army) and the local residents. The site was placed on the National Priority List in 1990.

The selected remedy implements a soil sorting process system. During excavation of soils contaminated with DU, this sorting process is used to separate soils contaminated with DU from non-DU impacted soils. This process reduces the amount of material that must be shipped offsite to an approved disposal facility. Non-DU impacted soil is used as backfill material which reduces overall project cost. The construction season at IAAAP is approximately 8 months.

In Fiscal Year (FY) 2017, funds were used to continue remediation of the depleted uranium contamination at the Firing Sites Area. Approximately 7,000 cubic yards of contaminated material were processed and sorted, with an estimate of 576 cubic yards shipped for disposal stockpiled from previous year. Additional 850 cubic yards were shipped for disposal as a result of 2017 production. Approximately 8 acres outside of the general excavation area (GEA) are being radiologically surveyed in an effort to reduce the uncertainty regarding DU contamination in this densely wooded portion of the Firing Site.

FY 2018 funds are being used to continue remediation of the Firing Sites Area, to complete remediation of Building 1-70 (Line 1 area) under OU-1 ROD and perform radiological survey of about 8 acres outside the GEA. Approximately 6,500 cubic yards of contaminated material will be processed and sorted with an

Division: Mississippi Valley

District: St. Louis

Project: Iowa Army Ammunition Plant, IA

estimate of 550 cubic yards being shipped for disposal. An additional 450 cubic yards will be stockpiled for shipping in FY2019.

FY 2019 funds will be used to process and sort approximately 6,500 cubic yards of contaminated material with an estimated 850 cubic yards being shipped for disposal (total shipped is 1,300 cubic yards including stockpile from FY18) and to close out the Line 1 area (Building 1-70)

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$163,249. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

MARYLAND

Site	Total Estimated Federal Cost \$	Allocation Prior to FY 2016 \$	Allocation FY 2016 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019 \$
W.R. Grace Site Baltimore, MD Baltimore District	42,866,030	20,063,000	4,945,000	850,000	2,000,000 1/ 2/	1,200,000	13,808,030

The W.R. Grace site is situated within a 260-acre property owned by W.R. Grace-Davidson Chemical Manufacturing Company (Grace) and located in southwestern Baltimore City on an industrialized peninsula. Currently, Grace manufactures and produces specialty chemicals at this facility. Contamination at the site is located in two separate and distinct areas of concern. The first is located in the southwestern corner of Building 23 which housed the thorium extraction process and has contaminated surfaces which were impacted by this process. The second area is the approximately 7-acre Radioactive Waste Disposal Area (RWDA) located east of the plant. This area received the process byproducts and spent monazite sand and gangue from the thorium extraction process. The Department of Energy (DOE) conducted radiological surveys at the site before transferring the site to the Corps; however, it did not perform characterization or remediation. The Corps has finalized the remedial investigation/feasibility study (RI/FS) and Record of Decision (ROD) for Building 23 and the RWDA. Remedial action for Building 23 is underway. The remedial action for the RWDA has been designed and the solicitation for the remedial action is ready.

Grace filed for bankruptcy and as a result of the bankruptcy filing, a Site-Wide Settlement Agreement was signed in 21 April 2008 by the District of Delaware, Bankruptcy Court. The agreement states that financial liability shall be shared between Grace and the Federal government in a 40/60 split and giving Grace the site lead to obtain, manage and direct the site cleanup according to the Records of Decision for each respective area of concern. Grace is given the right to seek cost reimbursement from the Federal government, through the Department of Justice Settlement Fund, for those funds spent on the government's behalf (60%) in conducting the cleanup work.

In Fiscal Year (FY) 2017, funds were used to finalize the design for the remedial action for Bldg. 23 and begin implementation of the remedial action, including oversight.

FY 2018 funds are being used to provide oversight to continue the remedial action for Bldg. 23 and to begin to contract for remedial action for the RWDA.

FY 2019 funds will be used to continue the remedial action for Bldg. 23 and to start the contract for remedial action for the RWDA.

\*\* The schedule for completion of site remediation is to be determined. The Corps and the owner discuss and develop the schedule jointly as both parties contribute to the payment of the costs for the remedial action activities. Currently, the Corps anticipates completion of the Bldg. 23 remedial action by FY 19 or 20. The RWDA remedial action by FY 2025. The total estimated Federal cost has increased due to schedule delays, additional contamination, and increase in remedial action efforts.

1/ Unobligated Carry-In Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$130,108. There were an additional \$56,679 of unobligated funds committed within the Corps for scheduled ongoing requirements in FY 2018. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

MISSOURI

Site	Total Estimated Federal Cost \$	Allocation Through FY 2016 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019 \$
Latty Avenue Properties / Hazelwood Interim Storage Site Berkeley, MO St. Louis District	171,830,000	167,714,000	600,000	500,000 1/ 2/	500,000	2,516,000

The Latty Avenue Properties site is comprised of several different tracts of land in North St. Louis County, Missouri. The project includes an 11-acre site, encompassing the Hazelwood Interim Storage Site (HISS) and Futura Coatings on Latty Avenue, and 8 Latty Avenue Vicinity Properties (VPs). The HISS/Futura sites were placed on the National Priority List in 1989. The primary contaminants of concern (as identified in the 2005 Record of Decision) are radium-226, thorium-230, and uranium-238. Surface and subsurface soils were known to be contaminated at levels which pose an unacceptable human health risk based on projected future land use scenarios. The primary regulators/stakeholders include the Environmental Protection Agency Region VII and the Missouri Department of Natural Resources. A Potentially Responsible Party Investigation is underway by the Department of Justice. Remedial activities at the HISS/Futura and Latty VPs were completed in 2013 with the removal of over 227,000 cubic yards of contaminated material and the decontamination of the two buildings at Futura, VP-01L and VP-02L. Institutional controls are being placed on the contamination that still exists under the remaining Futura buildings. The Latty Avenue site will be transferred to the Department of Energy when the cost recovery action liability is determined.

In Fiscal Year (FY) 2017, funds were used to continue environmental monitoring, apply institutional controls under the Futura buildings, and to develop a cost-to-complete and cost risk analysis for the site under Environmental Liabilities. Funds are also being used to digitize the site records preparing the site for future site closeout activities.

FY 2018 funds are being used to continue environmental monitoring and application of institutional controls under the Futura buildings.

FY 2019 funds will be used to continue environmental monitoring and application of institutional controls under the Futura buildings.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$46,176. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

Division: Mississippi Valley

District: St. Louis

Project: Latty Avenue Properties, MO

MISSOURI

Site	Total Estimated Federal Cost \$	Allocation Through FY 2016 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019 \$
St. Louis Airport Site St. Louis, MO St. Louis District	307,960,000	306,068,000	150,000	50,000 1/ 2/	50,000	1,642,000

The St. Louis Airport Site (SLAPS) consists of 21.7 acres north of Lambert International Airport in North St. Louis County, Missouri. The site is bordered by McDonnell Boulevard on the north and east, Coldwater Creek on the west, and Banshee Road and Norfolk and Western Railway on the south. There are ditches immediately adjacent to the north and south of SLAPS which are considered part of this site. The primary contaminants of concern are radium-226, thorium-230, and uranium-238. The site property is owned and managed by the St. Louis Airport Authority. The site was placed on the National Priority List in 1989. The primary regulators/stakeholders include the U.S. Environmental Protection Agency and the Missouri Department of Natural Resources. A Potentially Responsible Party Investigation is underway by the Department of Justice.

In 2007, the Corps completed remediation of SLAPS in accordance with the 2005 Record of Decision (ROD). Over 621,000 cubic yards of contaminated material were removed from the 21.7 acre site by the Corps to date. The railroad load-out area on the SLAPS property is still active. It is being used to ship out wastes from the SLAPS Vicinity Properties (VPs) FUSRAP site. Contamination exists under the railroad load out area and will be addressed after the entire SLAPS VPs FUSRAP site remediation is complete and the load-out area is no longer needed.

In Fiscal Year (FY) 2017, funds were used to perform environmental monitoring and to develop a cost-to-complete with cost risk analysis for the site under Environmental Liabilities. Funds were also used to digitize the site records preparing the site for future site closeout activities.

FY 2018 funds are being used to perform environmental monitoring.

FY 2019 funds will be used to perform environmental monitoring.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$26,512. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

MISSOURI

Site	Total Estimated Federal Cost \$	Allocation Through FY 2016 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2018 \$
St. Louis Airport Site, Vicinity Properties St. Louis, MO St. Louis District	437,002,000	142,932,000	15,500,000	15,000,000 1/ 2/	16,000,000	247,570,000

The St. Louis Airport Site Vicinity Properties (SLAPS VPs) consists of a combination of 148 industrial and commercial properties located in North St. Louis County, Missouri south of Pershall Road. The primary contaminants of concern are radium-226, thorium-230, and uranium-238. To date, 96 SLAPS VPs south of Pershall Road have been returned for beneficial use and over 87,000 cubic yards of contaminated material has been removed. Also included in the SLAPS VPs is a 14 mile stretch of Coldwater Creek (CWC) from Banshee Road to the Missouri River. In 2012, the USACE initiated the sampling of CWC which includes the creek, creek corridor and adjacent properties. The creek flows through commercial/industrial areas south of Pershall Road and residential, commercial and recreational areas north of Pershall Road. Historical sampling by the Department of Energy did not indicate the presence of contamination in CWC or adjacent properties north of Pershall Road. This data was included as part of the Remedial Investigation for the North County Record of Decision (ROD), signed in 2005. The ROD indicates that the properties adjacent to or along CWC are part of the SLAPS VPs. Additional sampling performed by the USACE indicated contamination was present in CWC and on adjacent properties north of Pershall Road. Radioactive contamination was found in recreational areas (two city parks) and on residential and commercial properties. The USACE continues to sample CWC and the adjacent properties to the Missouri River. The footprint of the SLAPS VPs increased because of the additional properties adjacent to CWC from Pershall Road north to the Missouri River. To avoid confusion with the original SLAPS VPs south of Pershall Road, the properties adjacent to CWC from Pershall Road north to the Missouri River are referred to as CWC vicinity properties. So far there are over 200 CWC adjacent properties north of Pershall Road.

Radiological contamination at the SLAPS VPs can be attributed to the prior storage of uranium processing residues and wastes at the St. Louis Airport Site (SLAPS) and subsequently at the Hazelwood Interim Storage Site (HISS)/Futura. Over time, residues migrated from other sites or were deposited as the residues were hauled along transportation routes, contaminating the soils and sediments of the vicinity properties. The potential movement of contamination into the creek occurred by wind and water. During rain events, CWC floods areas of the North St. Louis County, including portions of the SLAPS, HISS, Futura, and residential/recreational properties downstream to the Missouri River.

The increased footprint of the SLAPS VPs necessitated a new cost-to-complete estimate which was completed in 2016. The new Total Estimated Federal Cost includes the cost to complete the remediation of the remaining properties south of Pershall Road and the sampling and remediation of CWC and adjacent properties to the Missouri River. It was estimated that there is over 150,000 cubic yards of contaminated material remaining at the SLAPS VPs, which will take until 2044 to complete.

In Fiscal Year (FY) 2017, funds were used to: excavate and ship 10,000 cubic yards of contaminated material; continue sampling Coldwater Creek and adjacent properties; complete remedial activities at Duchesne Park; initiate and complete remedial activities at the 6 residential Palm Drive Properties; complete delineation

sampling at other residential properties adjacent to CWC; initiate remedial activities at the Ballfields Phase 2B; completed 2 remedial designs; and release 23 properties for beneficial use. Funds were also used to continue scanning site documents to prepare an electronic database of the site records.

FY 2018 funds are being used to: excavate and ship approximately 15,000 cubic yards of contaminated material; prepare one remedial design; complete remedial activities at Ballfields Phase 2B and initiate remedial activities at Ballfields Phase 3 and CWC Area one under the McDonnell Blvd. Bridge; continue sampling CWC and adjacent properties; and release 30 properties for beneficial use.

FY 2019 funds will be used to: remove and dispose of 18,000 cubic yards of contaminated material, continue sampling Coldwater Creek and adjacent properties, continue remedial activities at Ballfields Phase 3 and CWC Area one; prepare one remedial design to continue excavation of areas along Coldwater Creek; and prepare documentation to return 20 properties for beneficial use.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$130,117. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

MISSOURI

Site	Total Estimated Federal Cost \$	Allocation Through FY 2016 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019 \$
St. Louis Downtown Site St. Louis, MO St. Louis District	363,600,000	313,400,000	14,000,000	10,000,000 1/ 2/	10,000,000	16,200,000

The St. Louis Downtown Site and vicinity properties are located in St. Louis, Missouri. The site includes an operational chemical manufacturing facility (Mallinckrodt Inc.) and 36 surrounding properties used by a variety of interests for industrial and commercial purposes. The primary contaminants of concern are radium-226, thorium-230, uranium-238, metals, and organic compounds. The extent of contamination includes 17 acres where contaminated soils are accessible for remediation (17 buildings, subsurface soil, and vicinity properties). The primary regulators/stakeholders include the U.S. Environmental Protection Agency and Missouri Department of Natural Resources. In 1998, a Record of Decision (ROD) for the accessible areas was signed.

Approximately 300,000 cubic yards of contaminated soils have been removed to date. In 2014, a ROD for the Group 1 Inaccessible Soils Operable Unit was signed with a No Further Action remedy. The Group 2 Inaccessible Soils remaining are in the process of being addressed by Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) documentation including a ROD. The higher total estimated federal cost accounts for additional accessible soil available for remediation under the 1998 ROD. The ultimate total Federal project cost will be known upon completion of the ROD for the Group 2 Inaccessible Soils Operable Unit.

In Fiscal Year (FY) 2017, funds were used to remediate approximately 15,000 cubic yards from the Plant 1 Building 17 area and the Destrehan Street area, and to issue documentation releasing three properties in accordance with the ROD for accessible areas.

FY 2018 funds are being used to remediate approximately 8,000 cubic yards from: 3 properties with contamination, complete an RA at the Plant 1 Building 17 area and the Destrehan Street area, and issue documentation releasing three properties in accordance with the ROD for accessible areas.

FY 2019 funds will be used to remove and dispose of 9,000 cubic yards from the Plant 1 area and 2 properties with small amounts of contamination, release three properties, and issue the Feasibility Study and draft Proposed Plan for Group 2 Properties of the Inaccessible Soils Operable Unit.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$128,661. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.



NEW JERSEY

Site	Total Estimated Federal Cost \$	Allocation Prior to FY 2017 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019* \$
DuPont Chambers Works Deepwater New Jersey Philadelphia District	119,673,000	53,480,000	3,900,000	15,000,000 1/ 2/	15,000,000	32,293,000

The DuPont Chambers Works site is a 700-acre active chemical plant located in Pennsville and Carneys Point Townships on the southeastern shore of the Delaware River, north of the I-295 Delaware Memorial Bridge, and adjacent to the residential community of Deepwater, NJ. The plant is owned and operated by E.I. DuPont de Nemours & Company. Operations involving uranium at the Chambers Works site began in 1942. As part of its work on the Manhattan Engineer District (MED) Program, DuPont worked on developing a process for converting uranium oxide to produce uranium tetrafluoride and small quantities of uranium metal. The major contaminant is U-238 found in both soil and water samples.

The Corps completed the Remedial Investigation (RI) activities in 2009 which included soil and groundwater contamination. Technical Project Planning sessions are held with the stakeholders including the New Jersey Department of Environmental Protection, and there is a Community Advisory Board. Extensive coordination is conducted with the landowner for all work. The Record of Decision was signed in 2013.

From Fiscal Year (FY) 2013 - FY 2016, funds were used for remediation activities at the Site, including site preparations, construction of the water treatment plant, rail line improvements, and construction of the waste transit facility, installation of excavation sheeting and the excavation of approximately 21,000 cubic yards of contaminated material and disposal an approved landfill facility. The existing remediation contract was terminated for convenience in FY 2015 due to the discovery of additional contamination at the site and insufficient capacity on the contract to continue the remedial action.

In FY 2017, funds were used to perform maintenance operations associated with placing the site in shutdown status. Activities included storm water management, ongoing radiation and air testing, equipment and structure repair and site security inspections. Funds were also used to develop the contract documents and award the remedial action contract to excavate and remove the remaining contaminated material.

FY 2018 funds are being used to begin remediation activities including the excavation, transportation and disposal of approximately 7,000 cubic yards of contaminated material at an approved landfill facility.

FY 2019 funds will be used to continue remediation activities at the site including the excavation, transportation and disposal of approximately 11,000 cubic yards of contaminated material at an approved landfill facility.

\* The completion schedule will depend on the cleanup standards established for this site.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$297,887. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

NEW JERSEY

Site	Total Estimated Federal Cost* \$	Allocation Prior to FY 2017 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019** \$
Maywood Site Maywood, N.J. New York District	930,000,000 – 940,000,000	717,884,000	39,940,000	36,500,000 1/ 2/	37,500,000	98,176,000-, 108,176,000

The Maywood site is included on the U. S. Environmental Protection Agency (EPA) Superfund National Priorities List. The Corps is currently working under the Federal Facilities Agreement (FFA) signed by the Department of Energy (DOE) and EPA. The site consists of 140 acres of residential, commercial and industrial property totaling 88 commercial and residential properties, located 20 miles north of Newark adjacent to Interstate 80 and State Route 17. There are approximately 281,000 cubic yards of subsurface contaminated material and building materials related the processing/waste disposal of monazite sands by the former Maywood Chemical Works (MCW) which contain thorium-232, radium-226, and uranium-238. The United States owns 11.7 acres of the site, which is being used as a staging area during cleanup operations. The Stepan Company occupies part of the site and operates a chemical factory processing a patented product. Sears operates a large central distribution warehouse (leased) on the site. In the mid-1980's, 25 residential vicinity properties were remediated. In 1994 an Engineering Evaluation/Cost Analysis (EE/CA) by DOE approved a further interim removal action to remediate an additional 39 vicinity properties. As of the end of Fiscal Year (FY) 2000, all of the 39 vicinity properties included in the 1994 EE/CA have been remediated, including 23 completed by the Corps (15 in FY 1998, seven in FY 1999, and one in FY 2000). Additionally, the Corps has completed a Remedial Investigation/Feasibility Study/Proposed Plan/Record of Decision/ Remedial Design (RI/FS/PP/ROD/RD) for soils and buildings on the remainder of the site, prepared an EE/CA for an interim removal action involving 10 commercial properties impacted by New Jersey Department of Transportation projects, initiated remedial action for the remainder of soils and completed potentially responsible party (PRP) negotiations through the Department of Justice with the Stepan Company. In 2012, a Groundwater ROD was completed and approved. In FY 2013 an analysis of over 300 properties was completed to determine compliance with the 2003 Soils ROD, which resulted in the inclusion of four new vicinity properties. A new cost estimate was prepared based on revised soil volumes and the cost to complete for four additional Vicinity Properties. Annual monitoring of the estimated federal cost will continue to be performed.

In FY 2017, funds were used to continue the remedial action under the soils and groundwater RODs. The Corps excavated over 44,000 cubic yards of material.

FY 2018 funds are being used to continue the remedial action under the soils and groundwater RODs. The Corps plans to excavate and dispose of 50,000 cubic yards of material.

FY 2019 funds will be used to continue the remedial action under the soils and groundwater RODs. The Corps plans to excavate and dispose of 50,000 cubic yards of material.

\*The total cost will depend upon the vicinity property access, access to inaccessible soils, funding constraints, taking into account input from Federal, state, and local regulators, the general public, and other stakeholders.

\*\*The completion schedule will depend on the vicinity property access, and access to inaccessible soils.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$520,836. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

NEW JERSEY

Site	Total Estimated Federal Cost* \$	Allocation Prior to FY 2017 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019* \$
Middlesex Municipal Landfill Middlesex, NJ New York District	9,490,000	3,688,000	2,415,000	1,000,000 1/ 2/	1,000,000	1,387,000

The Middlesex Municipal Landfill (MML) is a 37-acre site located approximately 16 miles southwest of Newark and consists of parcels belonging to the Borough of Middlesex and the Middlesex Presbyterian Church. MML was operated as a landfill from approximately 1940 through 1972. The landfill was closed following the regulations at the time and maintained with a minimum cover of two feet of soil and establishment of vegetation. Since its closure, the site has not been developed.

In 1984 and 1986, characterization, remedial action, and a final survey were conducted for a five-acre portion at the north end of MML by DOE. Between 2001 and 2003 DOE conducted additional investigations that identified elevated radiation levels along the south boundary of the landfill as well as metals, pesticides, volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) in soil exceeding the New Jersey Department of Environmental Protection direct contact soil screening levels. The results from a 2008 radiological survey of the site identified small areas of low-level surface radiation, which led to referral by the Department of Energy (DOE) to the Corps in March 2009 for further investigation in the Formerly Utilized Sites Remedial Action Program (FUSRAP) program. The Corps completed a Preliminary Assessment (PA) in September 2010, and Site Investigation (SI) in September 2011. Based on results of the PA and SI, the Corps recommended a Remedial Investigation (RI) for the site in the FUSRAP program. MML was officially included in FUSRAP on 28 February 2014. The RI task order was awarded in June 2014 and completed in Fiscal Year (FY) 2016. The Feasibility Study (FS) was initiated in FY 2017.

In Fiscal Year (FY) 2017, funds were used to complete the Baseline Risk Assessment and to initiate the Feasibility Study.

FY 2018 funds are being used to complete the Feasibility Study and draft the Proposed Plan.

FY 2019 funds will be used to complete the Proposed Plan and draft the Record of Decision.

\*Study costs only. A preliminary cost estimate for site remediation, if necessary, will be determined during the development of the Feasibility Study. The completion schedule will depend on the cleanup standards for the site established in the Record of Decision.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$158,614. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

Division: North Atlantic

District: New York

Project: Middlesex Municipal Landfill, NJ



NEW JERSEY

Site	Total Estimated Federal Cost* \$	Allocation Prior to FY 2017 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019* \$
Middlesex Sampling Plant Middlesex, NJ New York District	123,408,057	115,186,881	435,000	1,500,000 1/ 2/	1,500,000	4,786,176 3/

The Middlesex Sampling Plant site is a Federal government-owned site located in Middlesex, NJ. There are also 36 Vicinity Properties (VPs). Primary contaminants are Uranium-232, Radium-226, and Thorium-232. The Manhattan Engineer District (MED) established the Middlesex Sampling Plant (MSP) in 1943 for use in sampling, storage, and shipment of uranium, thorium, and beryllium ores. MED operations ended in 1955, and the Atomic Energy Commission (AEC) later used the site for storage and performed limited sampling of thorium residues. In 1967, the AEC terminated activities at the MSP and decontaminated onsite structures to meet criteria then in effect. In 1980, the MSP was returned to the Department of Energy (as AEC's successor), which designated it for clean up under Formerly Utilized Sites Remedial Action Program (FUSRAP). MSP was used for interim storage of two piles of radioactively contaminated soils removed from the vicinity properties (VPs) and from the Middlesex Municipal Landfill (MML). The Middlesex site was added to the Environmental Protection Agency Superfund National Priorities List (NPL) in Fiscal Year (FY) 1999. The Corps has removed and disposed of the MML pile and the VP pile, and has completed a Remedial Investigation/Feasibility Study/Proposed Plan, Record of Decision/Remedial Design (RI/FS/PP, ROD/RD) for Soils on the remainder of the site. Coordination with Federal and state agencies and local communities is continuing.

In FY 2017, funds were used to draft the Groundwater FS.

FY 2018 funds are being used to complete the FS and draft the Groundwater PP.

FY 2019 funds will be used to complete the PP and draft the Groundwater ROD.

The schedule for completion of site remediation is to be determined, as the completion schedule will depend on the final cleanup standards established for this site.

\* The total cost will depend upon the specific cleanup standards established for this site, taking into account input from Federal, State, and local regulators, the general public, and other stakeholders. Once a final cleanup plan for the site has been approved in a Record of Decision, it will be possible to provide a more definitive estimate. Increased cost is based on the Feasibility Study estimate.

1/ Unobligated Carry-In Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$150,070. No additional unobligated funds are committed elsewhere within the Corps. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

3/ A new Cost to Complete estimate will be submitted in FY 2018 pending completion of the Feasibility Study.

NEW YORK

Site	Total Estimated Federal Cost*	Allocation Prior to FY 2017	Allocation FY 2017	Presumed Allocation FY 2018	Budgeted Amount FY 2019	Additional To Complete After FY 2019**
	\$	\$	\$	\$	\$	\$
Guterl Specialty Steel Lockport, NY Buffalo District	12,789,700	10,889,700	417,200	500,000 1/ 2/	500,000	482,800

The former Guterl Specialty Steel site, (a.k.a. Simonds Saw and Steel Corporation), comprises about 70 acres in the City of Lockport, NY, approximately 20 miles north of Buffalo, NY. The site is bordered by residential and commercial properties to the north, State Route 93 to the west, and the New York State Barge Canal to the south. An active steel plant adjacent to the site is currently being operated by ALLVAC, a business unit of Allegheny Technologies, Inc. Currently, employment is approximately 60 people. The site was used to perform rolling mill operations on about 35 million pounds of uranium metals and 40 thousand pounds of thorium metals between 1948 and 1955 under contracts issued by the Atomic Energy Commission (AEC). The buildings used to support the AEC process encompass about nine acres, and are abandoned. The site also includes a nine-acre landfill. The Corps is investigating the nature and extent of radiological contamination, and associated human health and ecological risks, resulting from the past AEC operations. The Corps coordinates proposed investigative and remedial activities with the New York State Department of Environmental Conservation, the U.S. Environmental Protection Agency, and the public through a diverse environmental outreach program. A Remedial Investigation was completed in 2010.

In Fiscal Year (FY) 2017 funds were used to continue preparation and internal review of the feasibility study (FS) and the proposed plan.

The FY 2018 funds are being used to continue preparation of the FS and proposed plan. Funds are also being used to perform annual groundwater sampling and analysis to detect potential contaminant migration. The proposed plan will present the Corps' preferred remedial alternative for the site. Funds were also used to perform annual groundwater sampling and analysis to detect potential contaminant migration.

FY 2019 funds will be used to complete and release the proposed plan for public review and comment. Additionally, funds will be used to prepare a public workshop to present the preferred remedial alternative in the proposed plan; and to begin preparation of the record of decision (ROD). The ROD documents the final selected remedy for the FUSRAP-related contamination at the site. Funds will also be used to perform annual groundwater sampling and analysis to detect potential contaminant migration.

\* The total estimated Federal cost reflects a preliminary estimate of costs to complete the study phase of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) process through the record of decision. A preliminary cost estimate for a range of potential long-term site remedies will be developed in the FS.

\*\* The completion schedule for this site will depend on the Corps selection of potential long-term remedies (cleanup standards and technologies) developed for this site in the Remedial Investigation, FS, PP, and Record of Decision.

Division: Great Lakes and Ohio River

District: Buffalo

Project: Guterl Specialty Steel, NY

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$ 2,989. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

NEW YORK

Site	Total Estimated Federal Cost* \$	Allocation Prior to FY 2017 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019** \$
Niagara Falls Storage Site Lewiston, NY Buffalo District	647,928,149	87,047,600	2,375,000	2,600,000 1/ 2/	2,600,000	553,305,549

The Niagara Falls Storage Site (NFSS) is located in the Town of Lewiston, NY approximately 19 miles north of Buffalo, NY. The NFSS is a 191-acre federally-owned site with environmental impacts from past activities supporting the nation’s early atomic weapons programs under the Manhattan Engineer District (MED) and Atomic Energy Commission (AEC). The site contains a 10-acre Interim Waste Containment Structure (IWCS) built by the Department of Energy (DOE) in the 1980s to store low level radioactive wastes brought to the site in the 1940s and 1950s. The Corps mission at the NFSS consists of three components. First, the Corps serves as the Federal site operator and maintains the facilities and grounds to ensure physical and environmental security. Second, the Corps conducts an environmental surveillance program to ensure that the IWCS is performing as designed and there are no impacts to the environment or public health exceeding Federal standards. Third, the Corps is conducting a comprehensive environmental investigation of the IWCS, site soils, groundwater, facilities and infrastructure to evaluate the nature and extent of contamination, and the associated human health and ecological risks in order to select a long term remedy for the protection of human health and the environment. The Corps also works closely with local, State, and Federal law enforcement and homeland security specialists to ensure the site’s physical security, and coordinates project activities with the New York State Department of Environmental Conservation, the New York State Department of Health, the U.S. Environmental Protection Agency and the public through a diverse environmental outreach program.

In Fiscal Year (FY) 2017, funds were used to complete the IWCS Operable Unit (OU) record of decision (ROD), execute public outreach activities, and perform annual environmental surveillance, security, and maintenance activities. The ROD documents the final selected remedy for the IWCS. Additionally, funds were used to continue preparation of the feasibility study for the Balance of Plant (BOP) OU, and to prepare the scope for a contract for the remedial investigation (RI) of Vicinity Property H-Prime.

FY 2018 funds are being used to complete the BOP OU feasibility study, execute public outreach activities, and perform annual environmental surveillance, security, and maintenance activities. Funds are also being used to award a contract and to conduct field sampling activities for the Vicinity Property H-Prime RI.

In FY 2019 funds will be used to complete the BOP OU feasibility study; to begin preparation of the BOP OU proposed plan; execute public outreach activities; and perform annual environmental surveillance, security, and maintenance activities. Funds will also be used to begin preparation of the Vicinity Property H-Prime RI report.

\* The scope of this project includes seven Operable Units (OUs): NFSS-IWCS, NFSS Balance of Plant, NFSS Groundwater, and the Off-Site Vicinity Properties E, E-Prime, G, and H-Prime. The completion schedule for this site will depend on the Corps selection of potential long-term remedies (cleanup standards and technologies) developed for all OUs.

\*\* The total estimated Federal cost reflects a preliminary estimate of costs to complete the study phase of the CERCLA process through the record of decision for all seven OUs, plus the estimated remediation cost for the IWCS based on the preferred alternative from the proposed plan, and the cost to maintain and monitor the IWCS until remediation is initiated. The ultimate total Federal project cost for closing out all OUs will be known upon completion of records of decision for all seven OUs.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$38,177. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

NEW YORK

Site	Total Estimated Federal Cost* \$	Allocation Prior to FY 2017 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019 \$
Seaway Site Tonawanda, NY Buffalo District	44,230,200	16,375,800	1,352,000	300,000 1/ 2/	300,000	25,902,400

The Seaway Site is located in the Town of Tonawanda, 10 miles north of Buffalo, New York. The Seaway Site is owned by Benderson Development Corporation and is a closed commercial landfill of 93 acres. The site is contaminated with radiological wastes, disposed in the landfill by Ashland Oil, which originated from the Linde site approximately two miles to the east. During the 1940s the Linde Division of the Union Carbide Corporation processed uranium ores in support of the Manhattan Engineering District (MED) activities to develop the nation's first atomic weapons. At the Seaway Site, approximately 16 acres of the closed landfill are contaminated with radiological waste, including thorium, uranium and radium. There are six areas associated with the Seaway Site; Areas A, B, C, D, Seaway Southside and Seaway Northside. Areas A, B and C are located within the landfill containment system. Cleanup of accessible (i.e., outside of the landfill) Area D soils was included in the Record of Decision (ROD) for the remediation of the Ashland 1 and 2 Sites. During remediation of the adjacent Ashland 1 and 2 Sites contamination was identified outside of the landfill containment system that extends beyond the fence line to the north and south sides of the Seaway Site that is considered as part of the Seaway Site (Seaway Northside and Southside). The ROD for the Seaway Site was signed by the Corps in October 2010. Remediation of FUSRAP contaminated soil in the Seaway Northside area occurred in 2015, and in the Southside area in 2017, with remedial actions within the landfill to occur at a later date contingent upon funding availability. Project activities are coordinated with the New York State Department of Environmental Conservation, the New York State Department of Health, the U.S. Environmental Protection Agency, and the public through a diverse environmental outreach program. The landfill cap remedy is ready for contract procurement, but cannot move forward until an active site phase finishes or additional funding resources become available.

In Fiscal Year (FY) 2017, funds were used to conduct test pitting to confirm the extent and depth of contamination in the Seaway Southside area; to complete remediation work plans for the Seaway Southside area; and to provide project management, stakeholder coordination and environmental outreach services. Excavation of contaminated soil from Seaway Southside and Seaway Northside areas is only a portion of the ROD-selected alternative.

FY 2018 funds are being used to complete report on the test pitting and pre-remediation activities; to close out the Seaway Southside contract; and to provide project management, stakeholder coordination and outreach services until funding is allocated to start the remedial design and action for the landfill capping remedy.

FY 2019 funds will be used to provide project management, stakeholder coordination and environmental outreach services.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$416,156. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

NEW YORK

Site	Total Estimated Federal Cost* \$	Allocation Prior to FY 2017 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019* \$
Sylvania Corning Plant Hicksville, NY New York District	35,113,000*	30,813,000	950,000	1,000,000 1/ 2/	1,000,000	1,350,000*

The Sylvania Corning Plant (Hicksville) site consists of a total area of 10.5 acres divided into three separate properties. The Verizon entities, current owners of two properties and lessees of the third property, are the corporate successors to the Atomic Energy Commission's (AEC) contract operator. The facility was used for two distinct but similar operations. The first operation (1952-1965) was under contract with the AEC for research, development and production primarily in support of the Federal government's nuclear weapons program. The other operation (1952-1967) was AEC-licensed work primarily for the production of reactor fuel, and other reactor core components. Radioactive materials, metals and volatile organic compounds were discharged to the plant sumps, which contaminated site soils and groundwater. A Preliminary Assessment (PA) was completed in 2005 and an onsite Remedial Investigation (RI) was completed in 2010. Coordination is ongoing with the New York State Department of Environmental Conservation and Verizon entities concerning cost recovery activities. The site has been included in a regional groundwater listing on the National Priorities List since 2011. A groundwater RI was started in 2011.

In Fiscal Year (FY) 2017, funds were used to complete characterization of offsite groundwater contamination for the RI.

FY 2018 funds are being used to finalize the comprehensive site-wide RI report and initiate the Feasibility Study (FS).

FY 2019 funds will be used to continue the FS.

\*Study costs only; a preliminary cost estimate for site remediation, if necessary, will be determined during the development of the Feasibility Study. The completion schedule will depend on the cleanup standards for the site established in the Record of Decision.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$853,000. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.



NEW YORK

Site	Total Estimated Federal Cost* \$	Allocation Prior to FY 2017 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019** \$
Tonawanda Landfill Vicinity Property Tonawanda, NY Buffalo District	20,746,084	6,596,084	300,000	250,000 1/ 2/	250,000	13,350,000

The Tonawanda Landfill Vicinity Property is located in the Town of Tonawanda, a suburb north of Buffalo, NY. The Tonawanda Landfill Vicinity Property consists of two separate parcels of property, or Operable Units (OUs): the Tonawanda Landfill Operable Unit (OU) and the Mudflats OU, both located about one mile north of the Linde Site. Both OUs are owned by the Town of Tonawanda. The Tonawanda Landfill OU was operated as a municipal landfill by the Town of Tonawanda from the 1930s through 1989, and accepted a variety of waste including incinerator ash, sewage sludge, construction debris, municipal waste, and yard waste. The Mudflats OU is a vacant property, apparently used in the past for pasture or agricultural purposes, and most recently used by the Town of Tonawanda for temporary storage of yard waste, mulch, road repair debris, etc. The Town of Tonawanda is currently planning to develop the Mudflats OU for commercial use.

Early investigations by the Department of Energy (DOE) found isolated locations at the site contaminated with Formerly Utilized Sites Remedial Action Program (FUSRAP) material. The Corps completed a Remedial Investigation (RI) in 2005, and issued a Proposed Plan for the site in 2007. Based on public comments, the Corps conducted additional sampling in the Tonawanda Landfill OU. An updated Baseline Risk Assessment completed in 2012 concluded that while current risks to human health under current site conditions are within the acceptable limits established in the National Oil and Hazardous Substances Pollution Contingency Plan, risks to future site users could potentially increase above the acceptable limit if the landfill is not maintained. Project activities are coordinated with the NY State Department of Environmental Conservation, the NY State Department of Health, the U.S. Environmental Protection Agency, and the public through a diverse environmental outreach program. This site is ready for contract procurement, but will not move forward until an active site phase finishes in the National Program or additional funding resources become available.

In Fiscal Year (FY) 2017, funds were used to finalize the record of decision (ROD) for the Landfill OU.

FY 2018 funds are being used to provide project management, stakeholder coordination and environmental outreach services support pending initiation of remedial design and action to implement the ROD.

FY 2019 funds will be used to provide project management, stakeholder coordination and environmental outreach services pending initiation of remedial design and action to implement the ROD.

\* The total estimated Federal cost reflects a preliminary estimate of costs to complete the study phase of the CERCLA process through the record of decision (ROD), plus the estimated remediation cost based on the preferred alternative from the proposed plan.

\*\* The completion schedule for this site will depend on the Corps selection of potential long-term remedies (cleanup standards and technologies) developed for this

site in the RI, FS, PP, and ROD.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$4,357. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

OHIO

Site	Total Estimated Federal Cost* \$	Allocation Prior to FY 2017 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019** \$
Former Harshaw Chemical Company Cleveland, OH Buffalo District	30,438,400	23,374,000	450,000	500,000 1/ 2/	500,000	5,614,400

The former Harshaw Chemical Company site is located approximately three miles south of downtown Cleveland, OH. The site consists of 12 real estate parcels owned by several owners including BASF Incorporated and Chevron Corporation. The site is approximately 40 acres in size and is located in a predominately industrial setting on the banks of the Cuyahoga River. From 1944 through 1959, the Manhattan Engineering District (MED) and the Atomic Energy Commission (AEC) contracted the Harshaw Chemical Company to process uranium in support of the Nation's early atomic energy program. Various forms of uranium were produced for shipment to Oak Ridge, Tennessee, for isotopic separation and enrichment. The Remedial Investigation for the Harshaw Site was completed in 2006 and the Feasibility Study (FS) was released in 2012. The Building G-1 (uranium process building) was demolished in 2015 to facilitate further investigation and completion of a Feasibility Study Addendum (FSA). The Corps coordinates project activities with the Ohio Environmental Protection Agency, the Ohio Department of Health, the U.S. Environmental Protection Agency and the public through a diverse environmental outreach program.

In Fiscal Year (FY) 2017 funds were used to continue preparation of the FSA and proposed plan for site remedial actions, and conduct annual groundwater sampling, testing and reporting activities. The proposed plan identifies the preferred remedy for remediating the site from the alternatives developed in the FSA.

FY 2018 funds are being used to complete the FSA and proposed plan, release the proposed plan for public review, conduct a public meeting to present the proposed plan, begin preparation of the record of decision (ROD), and conduct annual groundwater sampling, testing and reporting activities. The ROD documents the final selected remedy for the FUSRAP-related contamination at the site.

FY 2019 funds will be used to continue preparation of the ROD and conduct annual groundwater sampling, testing and reporting activities.

\* The total estimated Federal cost reflects a preliminary estimate of costs to complete the study phase of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) process through the ROD. An updated preliminary cost estimate for a range of potential long-term site remedies will be developed in the feasibility study addendum.

\*\* The completion schedule for this site will depend on completion of investigation activities and an FSA for groundwater with subsequent selection of a preferred remedial alternative.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$10,698. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.



PENNSYLVANIA

Site	Total Estimated Federal Cost \$	Allocation Prior to FY 2017 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019* \$
Shallow Land Disposal Area (SLDA) Parks Township, PA Pittsburgh District	501,000,000	84,198,800	5,000,000	7,000,000 1/ 2/	8,000,000	396,801,200

The Shallow Land Disposal Area (SLDA) site encompasses 44-acres of land located in Parks Township, Pennsylvania located about 23 miles northeast of Pittsburgh, Pennsylvania. Wastes generated from a nearby nuclear fuel production facility located in Apollo, Pennsylvania, were buried at the site in a series of 10 trenches from 1960 to 1970. This site is now known as SLDA FUSRAP site. The contamination is believed to consist primarily of uranium, thorium, byproducts, and other production waste associated with the Apollo facility. The 10 trenches cover about 1.2 acres of the 44-acre site. The site is currently owned and was operated by BWX Technologies under a Nuclear Regulatory Commission (NRC) license that was placed in abeyance by the NRC in August 2011 at the Corps' request. Future activities at the site will be conducted consistent with the terms of a Memorandum of Understanding (MOU, 5 July 2001) between the Corps and the NRC and the site-specific interagency Memorandum of Understanding (MOU, 13 June 2014) between NRC, Department of Energy (DOE), National Nuclear Security Administration (NNSA) and the Corps. This project is being coordinated with Pennsylvania Department of Environmental Protection, Pennsylvania Department of Health and U.S. Environmental Protection Agency.

In Fiscal Year (FY) 2017, funds were used to maintain physical site security, conduct operations and maintenance (O&M), complete source selection activities, and award the base remediation contract.

FY 2018 funds are being used to maintain physical site security, conduct O&M and performing source selection corrective actions following dismissal of contract award protests.

FY 2019 funds will be used to maintain physical site security and O&M, draft remediation work plans and coordinate NRC / DOE work plan review, and scope the mobilization and infrastructure construction task order.

\* The completion schedule will depend on the actual site conditions encountered during excavation.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$165,818. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.

PENNSYLVANIA

Site	Total Estimated Federal Cost* \$	Allocation Prior to FY 2017 \$	Allocation FY 2017 \$	Presumed Allocation FY 2018 \$	Budgeted Amount FY 2019 \$	Additional to Complete After FY 2019** \$
Superior Steel Site Scott Township, PA Buffalo District	13,909,754	4,896,300	457,788	1,000,000 1/ 2/	800,000	6,755,666

The former Superior Steel Site is located in Scott Township, PA about five miles southwest of downtown Pittsburgh. The Superior Steel Site property is a 25-acre site, which has five interconnected warehouse buildings (known as “Building 23”). The site processed uranium metal in support of the Atomic Energy Commission (AEC) fuel element development program between 1952 and 1957. In addition, the site was commercially licensed by the AEC in 1956 to “...receive possession of thorium metal for rolling and cutting” until the license expired in 1958. The AEC operations at the Superior Steel Site resulted in uranium-contaminated building surfaces and subsurface contamination and a collection of investigation-derived waste from a previous remediation by the current site owner, a small manufacturing firm. Any residual radioactive contamination resulting from the former commercial processing of thorium metal is not eligible for cleanup by the Corps under FUSRAP. The Corps coordinates proposed investigative and remedial activities with the Pennsylvania Department of Environmental Protection, the U.S. Environmental Protection Agency and the public through a diverse environmental outreach program.

In Fiscal Year (FY) 2017, funds were used to continue preparation and internal review of the draft remedial investigation (RI) report.

FY 2018 funds are being used to continue preparation of the RI report.

FY 2019 funds will be used to incorporate pit sampling data into the RI report and continue the internal preparation and review process.

\* The total estimated Federal cost reflects a preliminary estimate of costs to complete the study phase of the CERCLA process through the record of decision (ROD). A preliminary cost estimate for a range of potential long-term site remedies will be developed in the feasibility study.

\*\* The completion schedule for this site will depend on the Corps’ selection of potential long-term remedies (cleanup standards and technologies) developed for this site in the RI, FS, PP, and ROD.

1/ Unobligated Carry-in Funding: The actual unobligated carry-in from FY 2017 to FY 2018 was \$4,672. No additional unobligated funds were committed within the Corps for this project. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2019 from prior appropriations for use on this effort is \$0.

2/ There was no Conference Amount available at the time this justification sheet was prepared. The amount shown is the President's Budget amount for FY 2018.