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of **ENERGY**

Office of Environmental
Management

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Action Memorandum for the C-Area Buildings at the Bettis Atomic Power Laboratory

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Prepared for:

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Prepared by:



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LIST OF ACRONYMS

ACM	Asbestos-Containing Material
ALARA	as low as reasonably achievable
ARAR	Applicable or Relevant and Appropriate Requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR	Code of Federal Regulations
Ci	Curie
DOE	U.S. Department of Energy
DOE-EM	Department of Energy Office of Environmental Management
EE/CA	Engineering Evaluation/Cost Analysis
EPA	U.S. Environmental Protection Agency
HSA	Historical Site Assessment
LFM	Legacy Facility Management
LLW	Low-Level Waste
M	Million
NEPA	National Environmental Policy Act of 1970
NR	Office of Naval Reactors
NTCRA	Non-Time-Critical Removal Action
PCB	Polychlorinated Biphenyl
RmAO	Removal Action Objective
SVTF	Shock and Vibration Test Facility
U.S.	United States

EXECUTIVE SUMMARY

This Action Memorandum has been prepared for the United States (U.S.) Department of Energy (DOE) Office of Environmental Management (DOE-EM) and Office of Naval Reactors (NR) to identify the selected alternative for the disposition of the C-Area buildings at the Bettis Atomic Power Laboratory (Bettis Laboratory) in West Mifflin, Pennsylvania. As the C-Area Buildings have reached the end of their mission and cannot be reused by the Bettis Laboratory in their present state, NR no longer has a need for the buildings and is working in partnership with DOE-EM to select a disposition alternative that protects human health and the environment while balancing the evaluation criteria of effectiveness, implementability, and cost.

Disposition of the C-Area buildings is being planned as a Non-Time-Critical Removal Action (NTCRA) under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). In addition, National Environmental Policy Act (NEPA) values are incorporated into the CERCLA process in accordance with DOE NEPA policy (DOE 2002).

The C-Area buildings are located in the northeastern portion of the Bettis Laboratory site and consist of two buildings (referred to herein as “CX Building” and “CY Building”). The buildings were constructed between 1953 and 1956 and supported the Bettis Laboratory mission throughout their lifetime. From the early 1950s to the 1980s, the buildings housed a variety of test reactors. At the end of the research phase for each reactor, the nuclear fuel was removed, leaving all, or portions, of the reactor vessels in place. The CX Building houses four small test reactor vessels, and the CY Building houses one large test reactor vessel.

A Historical Site Assessment (HSA) has been prepared to document the operational history and presence of residual contamination within the C-Area buildings (DOE 2025a). Low levels of radioactive contamination are present in equipment, piping, and building surfaces. In addition, regulated and hazardous materials, such as friable and non-friable asbestos, are present in areas throughout the buildings. Chemical contamination includes lead in paint and shielding around reactor components, and polychlorinated biphenyls in electrical equipment and light ballasts.

Over time, as the facilities age, costs to maintain conditions that protect human health and the environment increase, and the potential for a release to the environment increases. Therefore, an Engineering Evaluation/Cost Analysis (EE/CA) was prepared to evaluate three alternatives for addressing the residual contamination and hazardous materials in the C-Area buildings (DOE 2025b). A qualitative risk evaluation was also completed as part of the EE/CA to identify potential risks to human health and the environment and to justify the need for a removal action. The three removal action alternatives are summarized in Table ES-1. Both the HSA and EE/CA are part of the project’s Administrative Record.

Table ES-1. Removal Action Alternatives	
Alternative	Description
Alternative 1 – Continued Legacy Facility Management (LFM) (“No Action” Alternative)	Under this alternative, the buildings, test reactor vessels, and associated equipment and piping would remain in their current state while LFM activities would continue.
Alternative 2 – Cleanout	This alternative would involve the removal of the test reactor vessels and their associated tanks, equipment, and piping along with decontamination/stabilization of the affected rooms. LFM activities would continue.
Alternative 3 – Demolition	This alternative would involve the removal of the test reactor vessels and all tanks, equipment, and piping; demolition of the CX and CY buildings; and removal of floor slabs and potentially contaminated soil beneath the buildings.

DOE's goal for the C-Area buildings is to implement a removal action that is consistent with its continuing research mission at the Bettis Laboratory and protects human health and the environment. In the EE/CA, DOE evaluated the three removal action alternatives in terms of effectiveness, implementability, and cost. The advantages and disadvantages of each alternative were analyzed relative to one another to identify key trade-offs that would affect the remedy selection. As a result of that analysis, DOE recommends that Alternative 3, Demolition, be selected as the preferred removal action. Demolition will be a permanent and effective remedy that is readily implemented with demonstrated technologies and will make the building footprint available for future use by DOE in continuing its research mission at the Bettis Laboratory.

The EE/CA was issued for public comment on September 4, 2025, with a public comment period from September 4 to October 4, 2025. A public meeting was held at the West Mifflin Borough Administration Building on September 18, 2025, which twenty-three people attended. DOE-EM hosted the meeting and was supported by NR. NR provided information on the site's history, its mission, and operation. DOE-EM presented information on the C-Area buildings, their residual contamination, the removal action alternatives, and the basis for the recommended alternative. A question-and-answer session followed the presentation. One formal comment was received during the public comment period, as described in the Responsiveness Summary (Appendix A). The comment indicated support for DOE's preferred removal action alternative.

This Action Memorandum is prepared in accordance with *Superfund Removal Guidance for Preparing Action Memoranda* (Environmental Protection Agency [EPA] 2009) and presents the rationale for selecting the removal action.

1. PURPOSE

The purpose of this Action Memorandum is to document the selection of a removal action for disposition of the C-Area buildings, located at the Bettis Laboratory in West Mifflin, Pennsylvania. The U.S. DOE no longer has a need for the C-Area buildings, which were formerly used by NR to conduct research on nuclear reactors to be used in naval operations. DOE, using its authority under the CERCLA, is pursuing disposition of the C-Area buildings using the NTCRA process. Due to residual contamination in the buildings, the C-Area buildings cannot be reused by the Bettis Laboratory in their present state. While the C-Area buildings continue to be maintained in a safe condition, the potential for a release to the environment increases as the facilities age.

2. SITE CONDITIONS AND BACKGROUND

2.1 Background

As part of the CERCLA process, DOE prepared a HSA (DOE 2025a) and an EE/CA (DOE 2025b). The HSA contains detailed information on the operational history, use, and environmental condition of the C-Area buildings. The EE/CA describes the alternatives identified and analyzed to address the environmental conditions described in the HSA and presents the basis for the preferred alternative. More details on the C-Area buildings are found within these documents.

Neither the Bettis Laboratory nor the C-Area buildings are listed, or proposed for listing, on the National Priorities List. DOE has provided, and will continue to provide, the EPA and the Pennsylvania Department of Environmental Protection with ongoing information on the project, including project documents and the process being followed. DOE has the lead for NTCRA at DOE facilities and provides the EPA and the Commonwealth with information on the actions being taken.

2.2 Site Description

The Bettis Laboratory site is located in West Mifflin Borough, Allegheny County, Pennsylvania, approximately eight miles southeast of central Pittsburgh (Figure 1). The C-Area buildings are located on a hilltop in the northeastern portion of the Bettis Laboratory site (Figure 2).

The C-Area buildings consist of two masonry and steel frame buildings (CX and CY). The buildings were constructed between 1953 and 1956 and supported the Bettis Laboratory mission throughout their lifetime. From the early 1950s to the 1980s, the buildings housed a variety of test reactors. At the end of the research phase for each reactor, the nuclear fuel was removed, leaving all or portions of the test reactor vessels in place. The layout of the CX and CY Buildings within the C-Area is shown on Figure 3.

Figure 1. Regional Location of the Bettis Laboratory

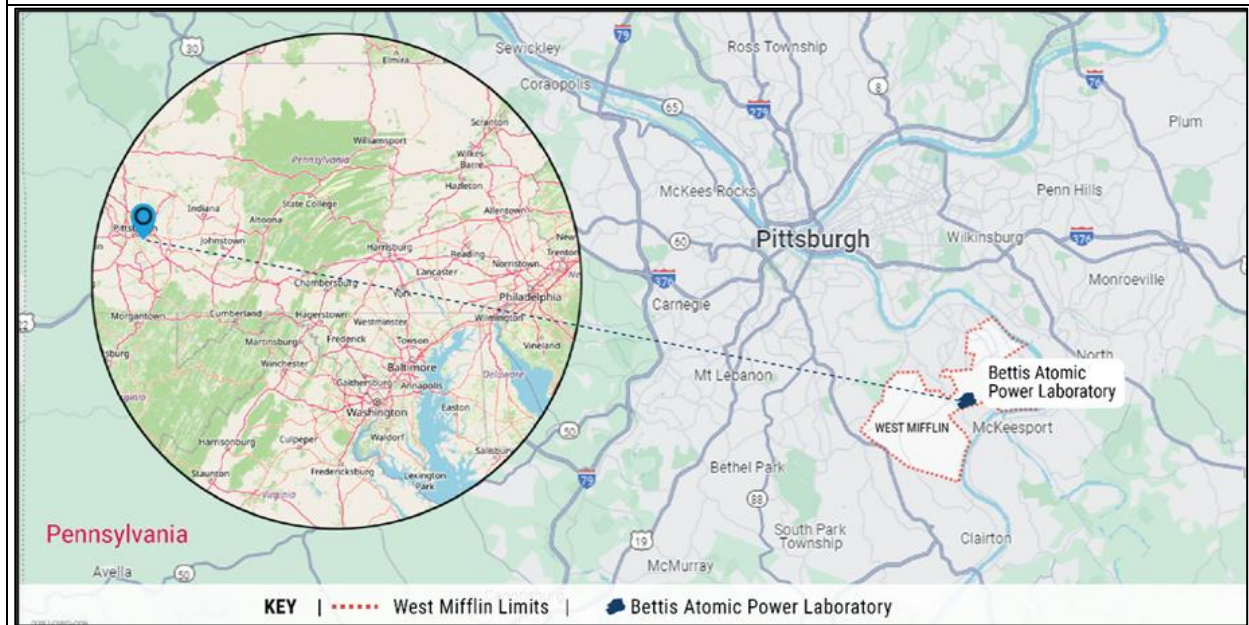


Figure 2. Location of the C-Area Buildings on the Bettis Laboratory Site

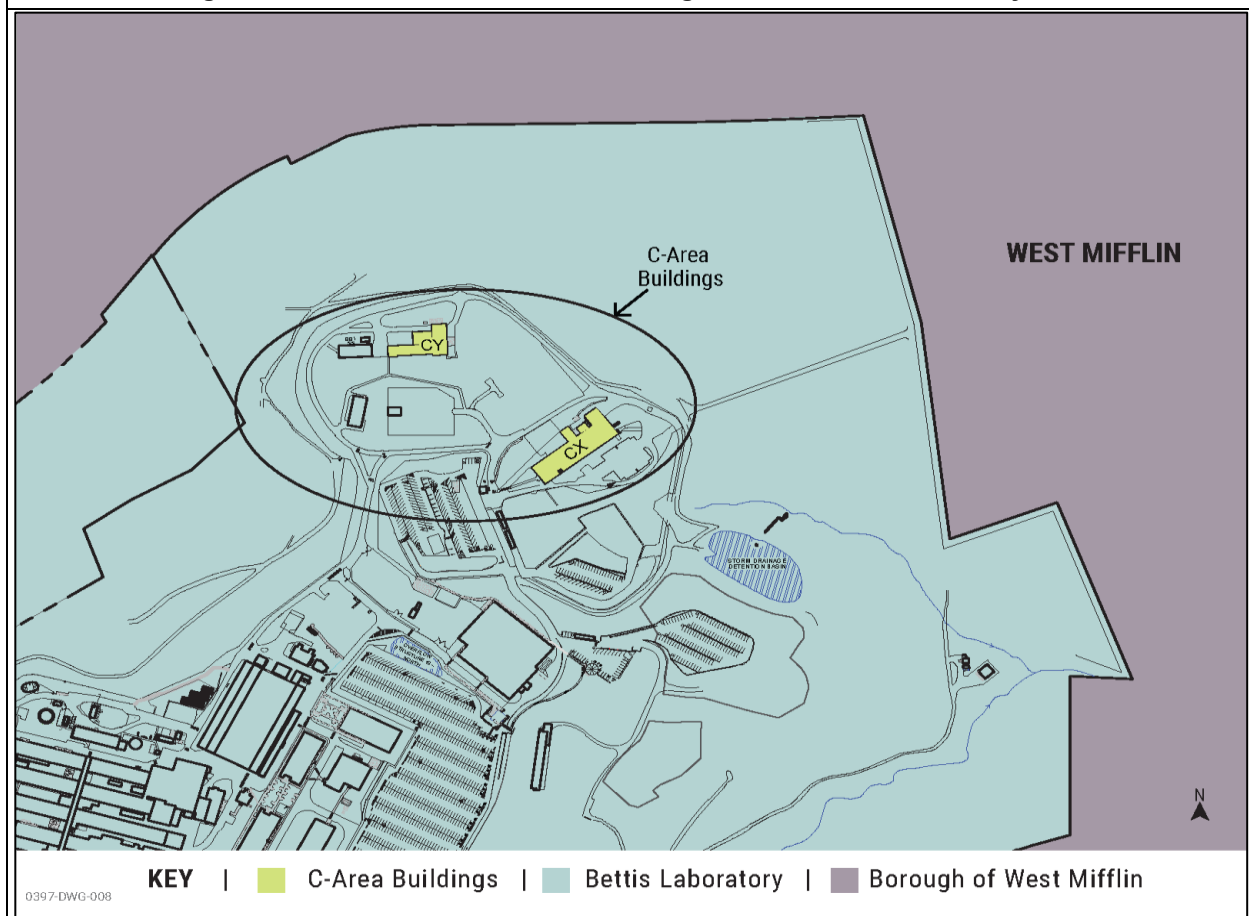


Figure 3. C-Area Layout



The CX Building, built in 1953 to conduct experiments on low-power and unpressurized test reactors, is currently being used for office space and storage. High Bay 1 contains two test reactor vessels. High Bays 2A and 2B each contain one test reactor vessel. All test reactor vessels have been defueled. High Bays 1, 2A, and 2B contain miscellaneous contaminated support equipment, tanks, and associated piping. High Bay 3 houses the Shock and Vibration Test Facility (SVTF), which will remain in operation and is not included in the scope of this NTCRA. The CX Building's first floor plan is shown on Figure 4.

The CY Building was built in 1956 to conduct experiments on a pressurized test reactor under high temperatures. Currently, the west wing of the building houses the Bettis Reactor Engineering School, while the remainder of the building is unused. The CY Building High Bay houses a large test reactor vessel, which was deactivated and defueled in 1984, and auxiliary equipment. The CY Building first floor plan is shown on Figure 5.

Ongoing activities in the C-Area buildings include Legacy Facilities Management (LFM). LFM activities maintain the environmental, structural, and system integrity of the buildings through walkdowns, condition assessments, surveys, inspections, and system checks to ensure that conditions are safe and protective of human health and the environment.

Figure 4. CX Building First Floor Plan

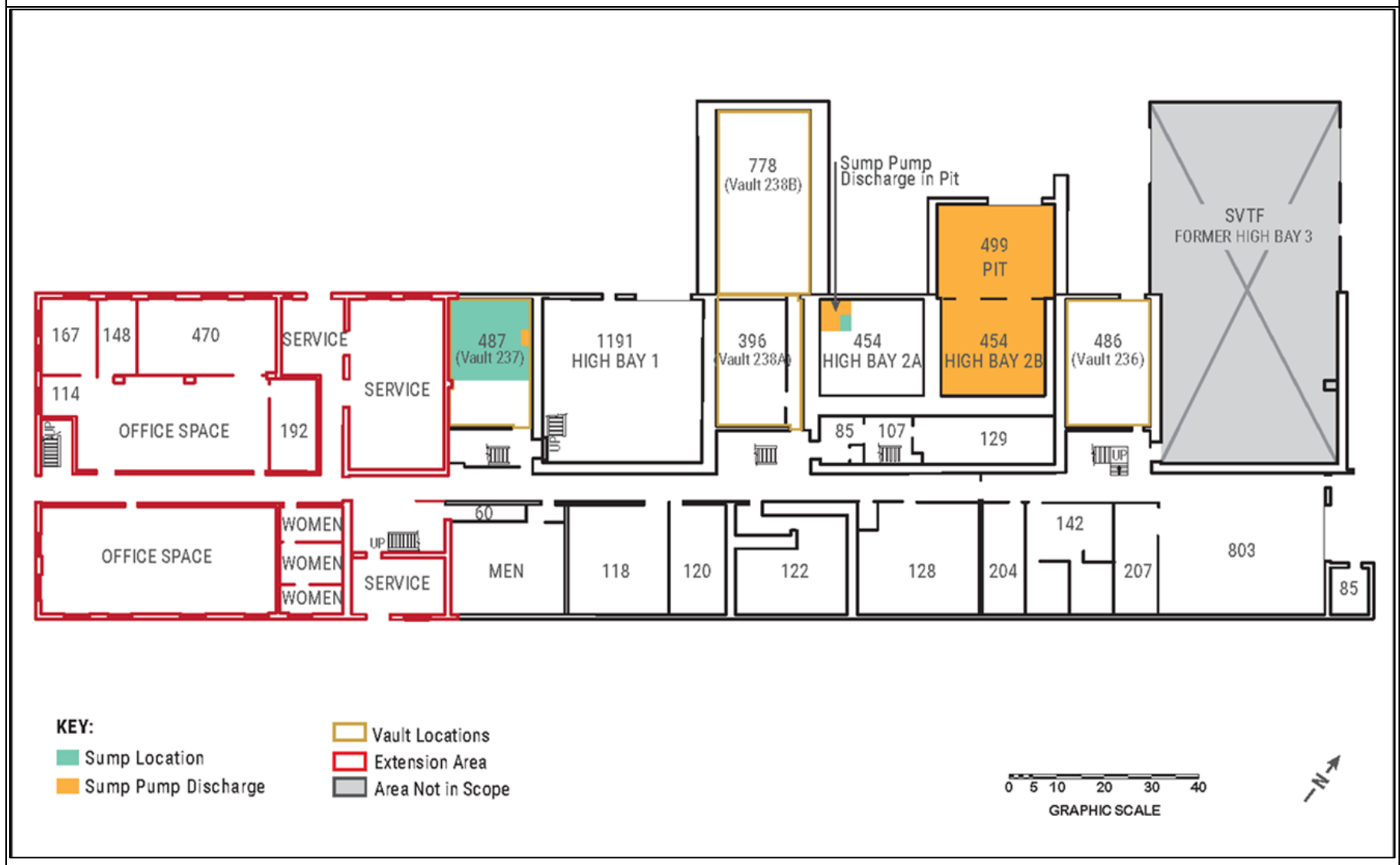


Figure 5. CY Building First Floor Plan



2.3 Previous Actions

One of the earlier test reactors in the CX Building High Bay 3 was defueled, deactivated, and removed as its research phase ended to allow the high bay to be reused for the SVTF. The five remaining test reactor vessels in the CX and CY Buildings have been defueled and deactivated but remain within the buildings.

In 1994, an underground waste oil tank was removed near the CX Building. Soil surrounding the area contained perchloroethene and toluene at levels that were not considered to be a significant source for groundwater degradation. Similarly, an underground waste oil tank was also removed near the CY Building. Soil surrounding the area contained trichloroethylene and Polychlorinated Biphenyl (PCBs) at levels that were not considered to be a significant source for groundwater degradation (DOE 2025a).

In the early 2000s, 11 radioactive liquid collection tanks in an area adjacent to the CX Building, known as the “CX Tank Farm,” were excavated and removed, and much of the associated piping leading from the CX Building was cut, capped, and left in place. There is the potential for residual radiological contamination, metals, and volatile organic compounds in this piping and surrounding soil (DOE 2025a).

A former Dump Tank and Process Room Pump Pit had historically been used to dump, recirculate, and demineralize moderator water in the former CX Building High Bay 3. In 1999, approximately 37,000 pounds of lead-containing polyethylene beads and the top three inches of soil in the area of the former Dump Tank were excavated and disposed of off-site. In 2000, the EPA concluded that the remediation was complete (DOE 2025a). In 2021, the former Dump Tank and Process Room Pump Pit were demolished.

3. THREATS TO PUBLIC HEALTH, WELFARE, AND/OR THE ENVIRONMENT

As discussed in Section 4.0, the C-Area buildings contain varying levels of radiological and chemical contamination, hazardous substances, and potentially hazardous materials. These could cause potential risk to human health, welfare, and/or the environment.

The potential threats of a release causing an unacceptable risk to human health, welfare, and/or the environment are currently low due to shielding, access control, maintenance, and monitoring that are routinely performed within the C-Area buildings and are protective in the short-term (the 30-year LFM planning period). As the facilities continue to age, the threat of a release of radiological and hazardous substances increases. An objective of CERCLA is the long-term effectiveness and permanence of a remedy addressing hazardous substances or contaminants (EPA 2021b). Neither Alternative 1 nor Alternative 2 provide a permanent remedy. For both Alternatives 1 and 2, residual contamination would ultimately need to be removed to achieve permanent site closure. A removal action is warranted to minimize those potential threats.

4. ENDANGERMENT DETERMINATION

This section provides a summary of any known and potential radiological and chemical contamination associated with the C-Area buildings. A detailed description of the nature and extent of hazardous substances and potentially hazardous materials within the C-Area buildings is found in the HSA, including radiological contamination, chemical contamination, contaminated materials, and construction materials (DOE 2025a).

4.1 Radiological Contamination

It is estimated, based on historical information and operational experience, that approximately 1 Curie (Ci) of radioactivity is present within each of CX and CY Buildings (total of approximately 2 Ci). The highest radioactivity levels are associated with the inactive test reactor vessels, vaults, and piping housed

within the buildings, primarily within the high bays. There is the potential for low, but detectable, levels of radioactive contamination on surfaces that may become newly exposed.

4.2 Chemical Contamination

Hazardous substances (e.g., asbestos, lead, PCBs, mercury, and cadmium) are the primary chemical contaminants of concern. These substances were commonly used in building materials and equipment at the time the buildings were constructed and are, therefore, found throughout the buildings. Friable and non-friable asbestos-containing material (ACM) is present in thermal pipe insulation, flooring, cove bases, ceiling tiles, transite, insulation, and caulk/sealant. Lead is present in reactor shielding components, masonry wall anchors, lead-based paint, and various equipment (e.g., switches, relays, wiring, piping, meters, fluorescent lamps, and batteries). PCBs are present in electrical equipment (e.g., switches, wiring, and light ballasts) and in machine oils. Mercury contamination is likely to be found in old utility switches and gauges. Structural steel may contain cadmium. There is also potential for sub-slab soil contamination in areas near underground drain lines or piping.

Contaminants within the C-Area buildings are contained by the structures themselves; therefore, current risks to human health or the environment are negligible. However, the probability of contaminant release to the environment would increase over time if building deterioration were to occur, which could lead to structural failure and subsequent contaminant release. As a part of the EE/CA (DOE 2025b), DOE qualitatively evaluated the potential risks to identify the relative levels of risk (e.g., “low,” “medium,” or “high”) that could be encountered. The risk evaluation used available sampling and survey data from the site to identify the specific contaminants of concern, provided an estimate of how and to what extent people may be exposed to them, and provided an assessment of the health effects associated with them. This risk evaluation approach is consistent with 40 Code of Federal Regulations (CFR) 300.415, the National Contingency Plan “Removal Action” authorities (EPA 2021a).

Risks to the C-Area buildings from fire and adverse weather that could cause contaminant release, causing danger to public health, welfare, and/or the environment, are managed through the ongoing LFM program activities, such as walkdowns, inspections, and overall building maintenance. Although the magnitude of risk to human health and the environment is considered small, the intent of CERCLA is to eliminate the potential for future releases. The controlled removal of the C-Area buildings will ensure that the intent of CERCLA is met.

5. SELECTED ACTION AND ESTIMATED COSTS

5.1 Selected Action

The EE/CA (DOE 2025b) identified and evaluated three alternatives to address the contamination within the C-Area buildings. The EE/CA recommended that Alternative 3, Demolition, be selected as the preferred alternative. This Action Memorandum documents the selection of Demolition as the removal action for the C-Area buildings. DOE selected this alternative following completion of the public comment period. The selected removal action involves demolishing the CX and CY Buildings, including removing the test reactor vessels and associated tanks, equipment, and piping. This removal action will fully satisfy the removal action objectives (RMAOs) by eliminating the sources of both radiological and chemical contamination. All applicable or relevant and appropriate requirements (ARARs) will be attained. The following describes the actions to be taken, as presented in the EE/CA.

5.1.1 Preparatory Planning

Utility and service systems, including electrical, communications, steam and condensate, potable water, sanitary sewer, storm drains, cooling water, sumps and drains, fire water, natural gas, and compressed air systems will be isolated and/or rerouted. Building components will be stabilized as necessary to minimize risks to workers or contaminant release during equipment removal and building demolition. Stabilization includes checking structural integrity and building isolation, removing liquids from pipes and equipment,

and removing any stored gases, solids in bulk, radioactive materials, hazardous chemicals, trash, or other housecleaning items from the work areas.

Preparatory planning also includes designing the removal action, addressing regulatory requirements, and completing the necessary internal readiness reviews to receive authorization to proceed with building cleanout, demolition, and waste disposition. Additional building characterization surveys and sampling will be performed as needed to develop radiological and hazardous waste profiles for handling and disposal of the wastes. Asbestos abatement will be performed in accordance with requirements for asbestos control to remove all friable or non-friable ACM prior to demolition. Any other potentially hazardous materials (e.g., PCB light ballasts) will also be removed.

5.1.2 Cleaning Out the CX Building

Cleanout of the CX Building will involve removing the two test reactor vessels in High Bay 1, each of the test reactor vessels in High Bays 2A and 2B, and contaminated support equipment, tanks, and associated piping. Prior to equipment removal, the equipment showing higher levels of radiation will be stabilized or shielded in place to maintain worker exposure to levels as low as reasonably achievable (ALARA). The four test reactor vessels will then be systematically disassembled and removed. Cleanout will also include systematic dismantling and removing all utilities and service systems, and the removal of all piping, equipment, tanks, ductwork, and other removable systems throughout the building.

5.1.3 Cleaning Out the CY Building

The CY Building houses the largest of the test reactor vessels within the C-Area facilities (44 tons), requiring greater planning and engineering during final design. Cleanout of the CY Building High Bay will involve removing a significant amount of equipment that supported former operation of the reactor; this equipment is located on multiple levels of the high bay portion of the building. In addition, there are two reactor heads containing instrumentation and controls situated on support stands located on the operating mezzanine.

The large test reactor vessel within the CY Building High Bay will be disassembled and cut as required to reduce its size to facilitate its removal and subsequent transport for disposal. To support removal, either the bridge crane in the high bay will be refurbished or the high bay building slab will be reinforced as required to support mobile equipment. Similar to the CX Building, prior to equipment removal, the equipment showing higher levels of radiation will be stabilized or shielded in place to maintain worker exposure to ALARA levels. The test reactor vessel and tanks, equipment, and piping will then be systematically disassembled and removed. Cleanout will also include dismantling and removing all utilities and service systems and removing all piping, equipment, tanks, ductwork, and other removable systems throughout the building.

5.1.4 Demolishing the Buildings

Buildings CX and CY are identified as complex structures to be demolished. Building demolition will include demolition of the thick concrete walls surrounding the former high bays. The CX Building will require surgical separation of the building from the adjoining SVTF (High Bay 3). Surgical demolition is a precise method of dismantling a structure by removing specific parts (e.g., beams, walls, roofing, etc.) while leaving the walls of the SVTF intact and minimizing interference with SVTF operations. The CY Building High Bay may require a high-reach excavator for structure demolition because the building is built into a hillside, thereby limiting accessibility for demolition equipment.

5.1.5 Removing Slabs and Soil

The building slabs will be removed, including basement structures and any sumps and pits. Slab removal will include removing incidental soil adjacent to the slabs or footings. Removal of below-grade basement structures and pits will use Occupational Safety and Health Administration-required benching and/or sloping to safely remove the subgrade structure. Depending on final design details, a portion of the

southern CY Building High Bay wall and footer may be left in place in order to minimize, or prevent, hillside erosion once the building is removed.

Once the building, rubble, and incidental soil are removed, the soil will be surveyed, sampled, and characterized to identify any areas of residual contamination. Further excavation of soil to remediate the building footprint areas to meet cleanup standards will be implemented, pending the soil characterization results.

5.1.6 Waste Management

Wastes generated during this removal action will be characterized and segregated by waste type (e.g., Low-Level Waste [LLW], mixed LLW, hazardous, and nonhazardous) and will be transported off-site. All waste shipments will be containerized according to U.S. Department of Transportation requirements and will be transported using established commercial truck routes and rail lines. It is currently assumed that the LLW will be shipped from the project site by rail to the disposal facility; Resource Conservation and Recovery Act of 1976-regulated/hazardous waste and solid waste or debris may be shipped by either truck or rail to their respective permitted disposal facilities.

5.2 Schedule

Completion of this removal action, including preparatory planning, cleanout, and demolition is anticipated to take 4 years. Upon completion of the full scope of the removal action, the C-Area buildings site will be returned to the NR program.

5.3 Estimated Costs

Capital costs associated with demolishing the C-Area buildings include costs for cleaning out the radiologically-contaminated test reactor vessels and associated tanks, equipment, and piping within the high bays and throughout the rest of the buildings; removing the chemically-contaminated building materials, hazardous substances, and other potentially hazardous materials; demolishing the structures; removing the slabs and contaminated soils; and disposing of the associated waste. Capital costs are estimated at \$79.0 Million (M). There are no long-term operation and maintenance costs associated with the proposed removal action. Correspondingly, the total present worth cost is estimated at \$79.0M. Table 1 summarizes the estimated costs associated with the selected removal action alternative.

Table 1. Estimated Costs of the Selected Removal Action Alternative	
Cost Category	Estimated Costs
Capital Costs	
Preparatory Planning	\$5,505,000
Cleaning Out the CX Building	\$10,078,000
Demolishing the CX Building	\$33,997,000
Removing Slab/Soil from the CX Building	\$2,550,000
Cleaning Out the CY Building	\$10,920,000
Demolishing the CY Building	\$14,433,000
Removing Slab/Soil from the CY Building	\$1,550,000
Total Capital Cost	\$79,033,000
Operation and Maintenance Costs	
Total Operation and Maintenance Costs	\$0
Present Worth Costs	
Total Present Worth Costs	\$79,033,000

6. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Should the proposed removal action be delayed or not taken, DOE would be required to continue surveillance and maintenance activities within the C-Area buildings to prevent unacceptable exposures to on-site personnel or inadvertent release of contaminants to the environment. All structures and former reactors would remain in their current state and all contamination within the buildings would remain unchanged. Routine surveillance activities would include access control, radiation monitoring, air monitoring, and personnel monitoring. Maintenance activities would include necessary repairs and routine maintenance activities.

7. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues.

8. ENFORCEMENT

The DOE Office of Environmental Management Consolidated Business Center is conducting this removal action as the lead agency under the authority of 40 CFR 300.5, "Definitions" (EPA 2021c) and 40 CFR 300.415, "Removal Action (EPA 2021a)."

9. RATIONALE FOR SELECTION

DOE has followed the CERCLA process in evaluating removal action alternatives in the EE/CA (DOE 2025b) and in evaluating public input received during the public comment period. Based on those evaluations, DOE has selected the demolition of the C-Area buildings as the preferred removal action alternative. Although it will cost more than other options and will take longer to complete the capital construction activities, it will be an effective and permanent remedy that is readily implemented with demonstrated technologies, will not require any post-construction long-term monitoring or maintenance, and will make the building footprint available for future use by NR in continuing its research mission at the Bettis Laboratory. Demolition of the C-Area buildings fully satisfies RmAOs by eliminating the sources of both radiological and chemical contamination and their associated risks. The one formal public comment on the EE/CA received during the public comment period indicated support for DOE's preferred remedy.

While it is recognized that this alternative presents a greater potential for certain impacts, such as noise and waste transportation traffic, than the other alternatives, the majority of the impacts (e.g., impacts to air quality, water quality, soil or groundwater, or aesthetics), are negligible or minor. Numerous best management practices will be employed to mitigate these impacts. For example, potential noise impacts during construction, particularly demolition, are expected to be minor due to the location of the C-Area buildings on the hilltop at the northeastern end of the Bettis Laboratory, away from any residential areas. These impacts will be managed by scheduling work during hours consistent with local ordinances. Potential air quality impacts during asbestos removal and building demolition will be minimized through use of appropriate engineering controls and compliance with ARARs to protect against off-site release. Potential off-site impacts will be negligible, as the removed equipment, waste, and debris will be disposed of in existing, permitted facilities authorized to accept such waste. Potential transportation impacts and risks will be greater than other alternatives due to the greater volume of waste to be disposed of off-site and the greater number of trips. However, transportation risks will be minimized by using established haul routes and using rail for LLW transportation. Traffic impacts will be minimized by scheduling trips in consideration of commuting peak times, school bus routes and schedules, road and street maintenance, etc. Additional waste management optimization measures, such as segregating waste by type and reusing or recycling materials to the extent practicable, will also be implemented to minimize both traffic and transportation impacts.

The selected alternative will be planned, designed, and implemented to achieve compliance with action-specific ARARs governing general construction practices, building demolition, waste management, and waste transportation. The alternative will comply with radiation protection requirements in controlling radiation exposures to ALARA levels.

10. AUTHORIZING SIGNATURES

This document presents the selected removal action for the C-Area buildings within the Bettis Laboratory site located in West Mifflin, Pennsylvania, developed in accordance with CERCLA. This decision is based on the Administrative Record for the site.

John Zimmerman, Environmental Management
Consolidated Business Center, Director

Thomas M. Stuhldreher, Assistant Manager for
Operations – Pittsburgh

Date

Date

11. REFERENCES

- DOE 2002 *DOE Policies on Applications of NEPA to CERCLA and RCRA Cleanup Actions*. Memorandum from B. Cook, Assistant Secretary, Environment, Safety and Health, to DOE Secretarial Officers and Heads of Field Organizations. July 11, 2002.
- DOE 2025a *Historical Site Assessment for the C-Area Buildings at the Bettis Atomic Power Laboratory*. DOE Environmental Management Consolidated Business Center. August 2025.
- DOE 2025b *Engineering Evaluation / Cost Analysis for the C-Area Buildings at the Bettis Atomic Power Laboratory*. DOE Environmental Management Consolidated Business Center. August 2025.
- EPA 2009 *Superfund Removal Guidance for Preparing Action Memoranda*. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C. September 2009.
- EPA 2021a 40 Code of Federal Regulations, Part 300.415, “Removal Action.” Office of the Federal Register. July 2021.
- EPA 2021b 40 Code of Federal Regulations, Part 300. “National Oil and Hazardous Substances Pollution Contingency Plan,” Office of the Federal Register. July 2021.
- EPA 2021c 40 Code of Federal Regulations, Part 300.5. “Definitions.” Office of the Federal Register. July 2021.

APPENDIX A

RESPONSIVENESS SUMMARY

One comment was received during the public comment period for the EE/CA. The comment was supportive of the preferred alternative and did not include recommendations for modifications to the preferred alternative. See the Executive Summary and Section 9.0 for a description of the public involvement process employed for the C-Area buildings' removal action.