

UNITED STATES DEPARTMENT OF COMMERCE National Institute of Standards and Technology Gaithersburg, Maryland 20899

August 31, 2009

U. S. Nuclear Regulatory Commission Attn: Document Control Desk Director of Nuclear Material Safety and Safeguards USNRC 11555 Rockville Pike Rockville, Maryland 20852

Attn: Mary Adams, Project Manager Fuel Manufacturing Branch Division of Fuel Cycle Safety and Safeguards USNRC Mail Stop EBB 2-C40 Washington, DC 20555 301-492-3110 Ref: Docket #70-398 License No. SNM-362 TAC # L32643

SUBJECT: RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION ON DECOMMISIONING FUNDING FOR THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY LICENSE RENEWAL APPLICATION (TAC # L32643)

As part of the license renewal process for the SNM-362 license, the Nuclear Regulatory Commission sent a series of Requests for Additional Information. The majority of these were resolved via a response provided on February 29, 2008. The remaining RAI involved NIST's estimate of the cost for decommissioning the facilities. As discussed in our telephone conversation with you on August 11, 2009, I have enclosed the final report of the funding analysis performed by Philotechnics under contract with NIST to satisfy these requirements. We have also transmitted this report to you electronically. Please review this submittal and inform us if there are any additional concerns.

As per the statement of intent letter submitted with the license renewal application, NIST acknowledges the responsibility to appropriately decommission the facilities at the time of license termination or transfer from the existing facilities. The enclosed report serves as NIST's good faith estimate and projection of the required funds. This analysis estimates the current cost for decommissioning the laboratory facilities, including a 25 % uncertainty escalation, to be \$3,268,975. It estimates the costs for decommissioning the accelerator facilities, including the 25 % uncertainty escalation, to be \$2,222,204 and is based on the premise that certain sub grade portions linear accelerator facility will be held for restricted use during a decay period of approximately 31 years from the present. As a government entity, NIST commits to seek funding from the appropriate budgetary authorities to cover the expenses at the time of initiating the license termination process.



Sincerely,

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Decontamination and Decommissioning Cost Estimate

National Institutes of Standards and Technology Gaithersburg, MD

Revision 2

Prepared by:

TECHNICS

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August 2009

License No. SNM-0362 August, 2009 Revision 2

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ACRONYM LIST

ALARA	As Low As Reasonably Achievable
CFR	Code of Federal Regulations
D&D	Decontamination and Decommissioning
DCGL _{EMC}	Derived Concentration Guideline Level – Elevated Measurement Comparison
DCGLw	Derived Concentration Guideline Level - Wilcoxon Rank Sum
DOE	United States Department of Energy
DQO	Data Quality Objective
DSV	Default Screening Value
HSA	Historical Site Assessment
HVAC	Heating, Ventilation, Air Conditioning
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MDC	Minimum Detectable Concentration
NMSS	Nuclear Materials Safety and Safeguards
NRC	U.S. Nuclear Regulatory Commission
NUREG	Nuclear Regulatory Commission Guidance Document
QAPP	Quality Assurance Project Plan
RSO	Radiation Safety Officer
RSC	Radiation Safety Committee
TEDE	Total Effective Dose Equivalent

1.0 Executive Summary

The National Institute of Standards and Technology (NIST) headquartered in Gaithersburg, Maryland, contracted Philotechnics, Ltd. to develop facility decommissioning cost estimates (DCE) for their non-reactor radiological facilities in Gaithersburg. Such facilities include particle accelerators and laboratories operated under U.S. NRC License No. SNM-0362. Per NIST's request, Philotechnics developed detailed "bottom-up" cost estimates based on review of facility design features, current and historical radionuclide use, present radiological conditions and physical waste inventory. Philotechnics also evaluated Decontamination and Decommissioning (D&D) work approaches and task sequences in order to estimate labor, materials and supplies.

This report describes the overall process applied to developing the cost estimate, the general assumptions regarding facility D&D, general assumptions regarding radioactive waste processing and disposal, and specific assumptions and calculations with respect to this facility. Included in the report are abbreviated Decommissioning Plans for laboratories and accelerator facilities.

Laboratory facilities are expected to be completely decontaminated and remediated. This work will consist of removing all radioactive material, decontamination of contaminated building surfaces, and remediation or removal of volumetrically-contaminated materials. Laboratory facilities will then be surveyed and released for unrestricted use in\accordance with NUREG 1575, Multi-Agency Radiation Site Survey and Investigation Manual (MARSSIM),

Radioactive accelerator components, waste, and non-structural material will be removed and disposed of as radioactive waste. Accelerator facilities contain activated structural material that cannot be safely removed without demolishing the entire building, which in most cases consists of several stories. Such activities would be extremely costly and would subject personnel to unnecessary risks during the decommissioning process. Furthermore, the NIST property is U.S. Government owned and is expected to remain long after the facility is decommissioned. For those reasons, a limited release followed by long-term monitoring is the preferred avenue for estimation of decommissioning costs.

Cost estimates were developed using conservative "middle of the road" assumptions regarding likely extent and duration of remediation activities. Remediation was assumed to proceed to levels suitable for unrestricted release of the site. Cost estimates were prepared in accordance with and in the format of NUREG 1757 "Consolidated NMSS Decommissioning Guidance" Volume 3. Per NUREG 1757, a contingency of 25% is required to be added to decommissioning estimates to address unidentified and unanticipated conditions. The overall estimate for the Gaithersburg facility is:

	Estimate	25%	Subtotal
Laboratory Areas	\$2,615,180	\$653,795	\$3,268,975
Accelerator Areas	\$1,777,763	\$444,440	\$2,222,204
TOTAL	\$4,392,943	\$1,098,235	\$5,491,178

Table 1.1 – NIST Gaithersburg, MD Facilities Overall D&D Cost Estimate

In accordance with 10 CFR 30.35, this decommissioning plan should be evaluated in 3 years and revised to account for any changes in the costs required for decommissioning activities.

This report describes the thought process and methodologies used to estimate decommissioning costs. Cost estimate details are included in the attached spreadsheets included as appendices. Additionally, a scoping survey was conducted in the accelerator spaces; that report is also included as Appendix A.

Nothing in this document should be construed as binding at the time of final decommissioning. The survey methods, release limits, radionuclides of concern, and facility configurations described are based on conditions observed during the site visit, historical documentation, sample analysis, and professional opinion as to the process of the final decommissioning and survey.

2.0 Objectives

The principal objectives of this analysis are to: 1) develop reliable estimated total facility decommissioning costs for NIST's Gaithersburg operations, 2) provide a documented inventory of facility features and characteristics, and, 3) describe the steps that will need to be taken to effect complete decommissioning of the site.

3.0 Process

A schedule of equipment, features and characteristics was developed to capture the size of each space and key features relevant to developing decommissioning cost estimates. Specifically, facility floor plans were reviewed, and the principle features and equipment of each laboratory were inventoried and categorized.

Each active laboratory was inspected, and radiation and contamination surveys were reviewed. In most laboratories, direct contamination measurements were impossible due to the presence of radioactive materials; NIST management advised us to use existing routine contamination surveys to determine the likely extent of contamination in laboratory areas. The radioactive materials database was reviewed to determine the radionuclides of concern in each area.

Samples of structural materials and shielding were collected in spaces affected by accelerator operation to determine the radionuclides present and estimate the extent of activation. Historical records were reviewed including the radioactive materials license, previous DCEs, and laboratory closure surveys. NIST management was consulted regarding past and present operations and their effect on future decommissioning.

The work scope and activity sequence to support license termination were developed. Cost estimates for projects were based on anticipated Time and Materials rates for goods, labor and services necessary to complete each project. It became clear that unrestricted release of accelerator facilities would be expensive and dangerous work, because many of those areas are activated throughout the volume of structural materials and possibly into the soil. Some of those areas are below the water table, rendering safe handling of radioactive material and control of the spread of radioactivity virtually impossible while those structures are being dismantled and removed. For those reasons, after consultation with NRC personnel, it was decided to pursue restricted release combined with long-term surveillance for those areas.

Labor estimates were derived from the work scope and a project plan outline. A project plan outline was developed for each facility detailing the sequence of tasks required to decommission the facility and terminate its radioactive material license. An overall project schedule was estimated that considered work to be performed, material flow paths, optimal number of crews and crew size and constraints (i.e., bottlenecks) in the D&D process. Crew sizes and task durations were estimated based on the numbers and locations of tasks to be performed.

Marketplace rates were obtained for each element of the project including project labor, materials, supplies, sampling and waste packaging, processing and disposal. NUREG 1757 requires the cost estimate to assume an out-of-state contractor performs the work; therefore nationwide mean salaries for the appropriate labor categories were used based on the latest available data from the U.S. Department of Labor, Bureau of labor Statistics. The unit rates were extended through the estimated quantities to determine total cost for each line item. Costs were summed by each element of the project to determine sub-total by element. Element sub-totals were summed to total project cost.

Radioactive waste estimates were based upon the volume of material in the laboratories storage areas and supporting systems. For D&D purposes, contaminated equipment was assumed to be disposed of as radioactive waste rather than being decontaminated and released. This is due to the cost of labor required to decontaminate and survey equipment typically exceeding the cost of disposal. Material that is not likely to be contaminated above release limits is assumed to be surveyed for unconditional release in accordance with Regulatory Guide 1.86. Activated shielding, structural material and equipment, and debris from remediation of contaminated surfaces will be handled and disposed of as radioactive waste.

4.0 General Assumptions

Overall, "middle of the road" assumptions were made concerning the likely extent and duration of necessary remedial activities. For laboratories, remediation to unrestricted levels (i.e., the facility could be released for any future use without restrictions) was assumed, meaning there are no long term costs associated with site surveillance and monitoring following decommissioning. Some accelerator facilities will require surveillance and monitoring after license termination as discussed later. It is assumed decommissioning activities will begin within a few months after accelerator operations cease such that short-lived activation products will have decayed to negligible levels.

4.1 Radioactive Waste Materials

In developing estimates of volume of radioactive waste, overall outside dimensions were used for equipment, components and furnishings. These overall volumes were assumed to be size reduced somewhat on site, so they were multiplied by an average density of 15 lb/ft3 (DAW) and 20 lb/ft3 (metal) to determine the total mass of waste. For example a standard office desk would be estimated as 5 ft. wide by 2.5 ft. deep and 2.5 ft. tall with an overall volume of 31.25 ft3 and an estimated mass of 470 lbs. A waste fraction was then applied based on the anticipated percentage of equipment expected to be contaminated. Consumables used in the D&D process showed up in waste estimates under Dry Active Waste (DAW).

The accelerators and directly affected equipment such as targets, beam dumps, and shielding are assumed to be radioactive and will be disposed as radioactive waste.

Ventilation system waste estimates were based on dimensions of components. Ventilation up to and including the HEPA filters is considered in this report.

Waste mass is multiplied by marketplace rates for waste processing and disposal. Packaging and transportation costs were estimated by volume and were added to the total waste disposal figure. Potential overestimates of component volumes as a result of using overall dimensions were offset by smaller pieces of equipment that were not individually estimated. Actual volume of waste expected to be removed from the site was considered in the cost estimate. No credit was given for reuse at other facilities or possible resale value. Waste processing activities were assumed to take place at a licensed facility in Tennessee, with a one way travel distance of 525 miles.

4.2 Sealed Sources

According to the Health Physics database, NIST possesses approximately 373 sealed or encapsulated sources that will need to be packaged and shipped for disposal or storage. Appendix D contains a list of the current sources at the facilities along with their activity and location at the site.

Since the closure of Barnwell, no disposal option exists for many sources. NIST is critical to the success of a technological society and it is difficult to imagine a scenario whereby it is completely eliminated. Decommissioning of the Gaithersburg site would most likely be associated with construction of a new facility elsewhere and most sources would be moved and put into service in the new facility. Still, complete decommissioning and disposal of all sources remains a remote possibility and some cost should be attributed to it. Rather than itemize individual sources and weigh hypothetical transfer/disposal/storage options, we will assume for now that sealed sources will be transferred to the U.S. Department of Energy. Discussions with DOE personnel indicated \$500,000 may be reasonable. The sources will be shipped as a Type B shipment to Nevada, a distance of 2400 miles. Additional costs are \$100,000 for a Type B package and shielding, \$84,000 for transportation to Nevada, and \$60,000 for security and administration of Increased Controls at NIST during the decommissioning project.

Only sources belonging to NIST and having activity greater than 1 μ Ci are considered here. Sources belonging to other licensees will be returned to them. Sources less than or equal to 1 μ Ci will be included with other waste and shipped to a waste processor for treatment and/or disposal.

4.3 Unsealed Sources

The health physics database was used to estimate the amount of radioactive material in the form on unsealed sources on site. The total activity of those sources is approximately 370 mCi. This material can be mixed with other low level waste for disposal. Only sources belonging to NIST are included in this estimate; it is assumed all other sources will be returned to the customer.

4.4 Labor Estimates

All labor estimates are expressed in workdays. Workdays are actual days on the job. Project schedules were based on 5-day workweeks excluding weekends, holidays, etc., consisting of 8 hours per day.

Labor estimates for Planning and Preparation include time for document preparation, decommissioning plan submittal to regulatory agencies, work plan development, equipment procurement, staff training and mobilization. Pre-planning labor estimates assume

straightforward internal and external document, plan and procedure reviews and approvals. The duration of field activities for decontaminating and dismantling the facilities were estimated based on the task sequence and project schedule.

Crew sizes and number of workers were limited to those that could be efficiently utilized in the field. The size of the work force size will vary. At its peak, it is assumed to consist of one Project Manager directing the activities of two crews. Each crew will consist of one Supervisor; two Health Physics Technicians; four Skilled Craftsmen, and four Unskilled Laborers. Additionally, one shipper and one administrative assistant will report directly to the Project Manager.

The duration of activities for remediation of facilities and grounds was based on the expected level of remediation that would be required to return the facility to unrestricted release conditions. Similarly, estimates for the level of effort required for the final radiation survey were based on previous experience with facilities of comparable complexity. As noted above the assumed endpoint is license termination and unrestricted release of the facility; consequently, long term stabilization and monitoring is not required and no costs are incurred for this element.

Annual labor rates were estimated for the project manager, a project supervisor, a health physicist, a shipper, health physics technicians, radiation workers and administrative support. Labor rates included base salary and fringe benefits (e.g., vacation, health insurance, etc.). A rate of 75% was applied for overhead costs. The base annual labor rate plus the overhead expenses was divided by the number of workdays per year (taken as 260) to determine a daily cost for each category of employee.

Living expenses were taken from allowable government per diem rates - \$273 per day for Montgomery County, MD. Project management, supervision and technical staff are paid the daily living allowance since they are assumed to be from outside the local area. Radiation workers (laborers) and administrative support staff were assumed to be local hires and are not paid a living allowance. The daily living expenses were multiplied by 7 days per week then divided by 5 workdays per week to correctly incorporate living expenses into the daily wage rate.

5.0 Release Criteria

The ultimate release criteria is specified in 10 CFR 20.1402: "A site will be considered acceptable for unrestricted use if the residual radioactivity that is distinguishable from background radiation results in a TEDE to an average member of the critical group that does not exceed 25 mrem (0.25 mSv) per year, including that from groundwater sources of drinking water, and the residual radioactivity has been reduced to levels that are as low as reasonably achievable (ALARA). Determination of the levels which are ALARA must take into account consideration of any detriments, such as deaths from transportation accidents, expected to potentially result from decontamination and waste disposal."

For the NIST facilities in Gaithersburg, it is assumed the buildings will be reused for some other, as yet unknown, purpose. The occupant will have unrestricted access. Pathways applicable to such an occupant include external dose, inhalation, soil ingestion, and drinking water from radioactivity that migrates to ground water.

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Tools, materials, and removable equipment will be surveyed for unconditional release as applicable using the guidance contained in Regulatory Guide 1.86 for the radionuclides of concern.

Building surfaces and installed equipment will be surveyed using the guidance contained in NUREG 1575, Multi-Agency Radiological Site Survey and Investigation Manual (MARSSIM). Areas adjacent to one another having similar radiological characteristics will be grouped together as applicable into survey units. Contamination release limits will be derived from a number of sources. For planning purposes, the radionuclide know to be present or shown in the database as having been used that is associated with the lowest release limit will be used according to the following guidance:

- Default screening values listed in NUREG 1757, Appendix B, are used where they are listed.
- For radionuclides not listed in NUREG 1757, the release limit will be derived using the NRC DandD Ver. 2.1 software code default parameters.
- At the time of actual decommissioning and License termination, future site usage may be more stringent; in that case the RESRAD family of codes may be used.

Actual radionuclides of concern and the relative abundance of each will be determined early in decommissioning, during the characterization phase; that process will yield accurate derived concentration guideline limits (DCGLs). Therefore, the limits derived in support of this DCE are thought to be quite conservative.

In this DCE, the following values are limiting, assuming no more than ten percent of the total activity is removable:

Radionuclide(s)	Default Screening Value (dpm/100 cm ²)	Basis
Beta-gamma emitters except H-3 and C-14	7,100	Co-60
Transuranics	23	Am-241
Uranium	88	U-238
H-3	1.2E+07	10% of screening value
C-14	3.7E+06	Screening value

Table 5.1 - Limiting Radionuclides

For activated building components, the major dose pathway is external exposure from gamma emitting radionuclides. Default screening values for contaminated surface soil listed in NUREG 1757, Appendix B are used. They are:

Table:	5.2 -	Surface	Soils	DSVs
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Radionuclide	DSV pCi/g
Co-60	3.8
Eu-152	8.7

6.0 **Review of Previous Clearance Surveys**

Surveys supporting clearance of several rooms from radiological controls were reviewed as shown below:

Building	Room(s)
218	C002
245	C112; C115; B030; C201; B009; B024; C334; B01; C133; B133; C116
224	A114
222	A206; A110; A116; A122; A128; A132; A148; B125; B126
221	A41

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1 adle 0.1 -	– Previously	Cleared	Laboratories	or Rooms

In general, surveys appear to indicate no residual radioactive material is likely to be present; however documentation lacks sufficient detail to make that determination with certainty. For instance:

- Dose rate surveys indicate radiation dose rates are at or near ambient levels.
- Results of direct measurements for total contamination are not routinely recorded.
- Smears are counted for gross alpha and beta; however results are reported in units of net cpm. Instrument efficiency is not shown on the survey. Each page bears a statement in bold type that reads, "≤20 dpm/100 cm² Alpha and ≤1000 dpm/100 cm² Beta/Gamma removable unless noted."

Residual contamination levels in those labs may in fact be less than the DCGL that would be in effect today based on usage; however in the event of license termination, some follow-up surveys would need to be performed.

- Room 222/A122 contained natural and depleted uranium and thorium. The DCGL for depleted uranium is in the neighborhood of 88 dpm/100 cm² total contamination, assuming less than 10% is removable. It is not clear from reviewing the clearance survey that the DCGL would be met.
- Rooms 222/A132 and 245/C133 contained Pu-238. The DCGL for that radionuclide is approximately 24 dpm/100 cm² total contamination, assuming less than 10% is removable. It is not clear from reviewing the clearance survey that the DCGL would be met.

Philotechnics believes laboratories previously released from radiological controls will require some type of follow-up survey, described in following sections. Many previously-used rooms have been completely gutted and remodeled; others are now offices; still others had adjoined other radiological laboratories and the wall separating them was removed. Rather than list every previously-used room individually; time and resources are allotted to performing follow-up surveys in all previously-used rooms as a group.

7.0 Decommissioning Process and Cost Estimate Details

The work crew consists of:

- Project Manager (1)
- Project Supervisor (2)
- Shipper (1)
- Health Physics Technicians (4)
- Skilled Laborers (2)
- Unskilled Laborers (2)
- Administrative Assistant (1)

The time required to complete the project is approximately 150 days on site: 90 days for the laboratories and 60 for the accelerators. This is less than the maximum limit of 180 days per calendar year to work under reciprocity with the U.S. NRC. Therefore, one reciprocity fee of \$1400 will cover both aspects of the work.

Following is a description of the assumptions made and data entered into individual worksheets to calculate the potential cost of decommissioning. Two sets of spreadsheets were developed for this cost estimate. One set of spreadsheets pertains to laboratory areas and the other to the accelerator areas. The spreadsheets pertaining to the laboratories are provided in Appendix B and the spreadsheets for the accelerator areas are provided in Appendix C.

7.1 Tab 3.5, Detailed Descriptions of Facilities and Equipment

For clarity, this worksheet was split up into multiple parts, each labeled by building number.

Accelerator facilities and associated equipment, housed in Building 245, are attached.

In addition to the accelerators, Building 245 also houses most of the active radiological laboratories.

Laboratories vary in size, configuration, materials, and equipment according to their function. Each individual laboratory that was inventoried for this DCE is listed in Tab 3.5. The inventory lists, as a minimum, room dimensions, amount of furnishings and equipment used and stored in the room, the radionuclide(s) currently or previously used, and the expected MARSSIM class based on current use and survey data.

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Initial assignment of MARSSIM class for final status surveys is as follows:

CLASS 1	 Current use of unsealed material Current or previous use of neutron sources Areas adjacent to accelerators Areas with uncertain history 	 Some remediation may be expected Some radwaste may be expected – fraction inversely proportional to release limit. Accelerator facilities will have a lot of radwaste Some rooms are not listed in the database as ever having radioactive materials – so if we don't know what was used, we assume the worst.
CLASS 2	 Accelerator support areas separated by shielding Previous use of unsealed TRU, U, Ra, or Th sources and clearance surveys were done (many have been gutted and remodeled). 	 Verification that materials are not activated or contaminated Removable contamination surveys previously performed cannot detect alpha emitters below DCGL No remediation is expected No radwaste (except sources) is expected.
CLASS 3	 Current use of sealed beta, gamma or alpha sources Previous use of unsealed beta- gamma sources but clearance surveys were done Restrooms and hallways "upstream" of personnel contamination monitors. 	 No history of leaking sources. Removable contamination surveys previously performed should detect most beta-gamma emitters. No remediation is expected No radwaste (except sources) is expected

Table 7.1 – Previously Cleared Laboratories or Rooms

There are approximately 100 previously-used rooms not specifically listed in the inventory. Average dimensions of 20 feet by 25 feet with 15-foot ceilings. They are assumed to be 50% Class 2 and 50% Class 3.

7.2 Tab 3.6, Planning and Preparation

This tab includes such tasks as filing for reciprocity to conduct the decommissioning, preparation of work plans including the Decommissioning Plan, site-specific training for workers, and mobilization to the site. The Project Manager develops work plans and submits reciprocity applications. The laborers and administrative assistant are assumed to be local hires and no time is required for mobilization; the other workers need a full day to mobilize to the site. The Project Manager also must secure a contract for a crane and crew.

This tab also includes facility characterization. Characterization is performed to determine the radionuclides present in each area and the extent of contamination. Health physics technicians will enter each area where radioactive materials have been used, collect samples, scan surfaces, segregate potentially radioactive material from non radioactive, and identify any mixed waste.

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In most cases, the health physics database maintained by NIST identifies current and historical use of radionuclides in each room. The time estimated to characterize the room is based on that information. For instance: if a room contained transuranics, uranium, radium, beta-gamma emitters and I-129, the room will be scanned three times. A beta-gamma probe (floor monitor for large floor areas and BP19 or equivalent for other surfaces will be used to measure contamination from most beta-gamma emitters. An alpha-sensitive probe will be used to measure contamination from alpha emitters. A very slow scan rate of only an inch or so per second is required. Finally, a probe sensitive to gamma and very low energy beta emitters (such as the GP-13 or equivalent) will be used to measure contamination from I-129, Co-57, and similar difficult-to-detect radionuclides. Smears will be collected and counted for gross alpha and gross beta and analyzed on a liquid scintillation counter. Samples will be sent to an independent laboratory for radionuclide identification. These assumptions will also apply to Tabs 3.7 and 3.9.

7.3 Tab 3.7, Decontamination or Dismantling of Radioactive Facility Components

This tab includes removal and packaging of radioactive material such as contaminated equipment and preparation for transport to a licensed processor or disposal facility. Most material is neither contaminated nor activated and will be surveyed for unconditional release. Labor hours are allotted for those unconditional release surveys as well as to move, remove, and break down equipment as necessary to facilitate release surveys or make areas accessible for MARSSIM surveys.

The order in which various buildings will be decommissioned is unknown; however, in Building 245, laboratory areas will be decontaminated and decommissioned before accelerator facilities for a number of reasons: accelerators contain short-lived byproduct material and delaying work allows for some decay; most accelerator spaces are below laboratory spaces and it makes sense to start at upper floors and work down; laboratories will be fully decontaminated and remediated while some accelerator spaces will be locked shut and subject to long-term surveillance.

7.4 Tab 3.8, Restoration of Contaminated Areas

Based on existing survey data, surface scans performed during the site visit, and interviews with knowledgeable individuals, very few laboratory areas will require any remediation.

Accelerator facilities (described separately) will require extensive remediation of floor, walls, equipment, and structural materials. The Time of Flight Facility is above grade and remediation efforts will result in partial demolition of the building. Other activated accelerator spaces are below grade. Many are below the water table, such that demolition of those structures would increase the likelihood of releasing radioactive materials to the environment. Many of the most highly activated areas are load-bearing or exterior walls. Complete remediation would therefore require complete demolition of all of Building 245 – a costly endeavor. For reasons of cost reduction, worker safety and protection of the environment, those areas will be remediated to the extent practicable and then re-evaluated. It is assumed the sub basements containing those accelerators will be secured, and long-term monitoring instituted, until activation products decay to levels acceptable for unconditional release.

7.5 Tab 3.9, Final Radiation Survey

The final radiation survey is performed by health physics technicians, with guidance from the project manager and project supervisors and administrative support. In cases where no

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decontamination or remediation was required, the characterization survey may be used as the final status survey for a particular area.

7.6 Tab 3.10, Site Stabilization and Long-Term surveillance

Because the goal is unconditional release of the laboratory facilities, there are no long-term surveillance requirements associated with them.

7.7 Tab 3.11, Total Days by Labor Category

This is the sum of person-days listed in Tabs 3.6 through 3.10.

7.8 Tab 3.12, Worker Unit Cost Schedule

Worker mean nationwide salaries are taken from the Bureau of Labor Statistics and are adjusted to account for the cost of fringe benefits. A 75% multiplier is also added to account for profit to the contractor performing the decommissioning work. Workers who are not local hires are paid the government per diem rate of \$273 daily for the Gaithersburg area.

7.9 Tab 3.13, Total Labor Costs by Major Decommissioning Task

This tab shows the cost of each major task from Tabs 3.6 through 3.10 multiplied by the daily labor cost for each worker shown in Tab 3.12

7.10 Tab 3.14, Packaging, Shipping, and Disposal of Radioactive Wastes

This tab reflects the most costly component of the facility decommissioning. It is assumed waste is shipped to a licensed waste processor in Oak Ridge, Tennessee, a distance of approximately 600 miles.

7.11 Tab 3.15, Equipment Supply Costs (excluding containers)

This tab shows the approximate costs of personnel protective clothing and respirators, rental of specialty equipment including health physics survey instruments, and consumables required to complete the decommissioning.

It is assumed a crane and crew will be needed for removal of accelerators and large equipment. Other equipment includes health physics survey instrumentation, concrete cutters, jack hammers, containment structures, vacuum cleaners, negative ventilation systems, nibblers, and shears.

7.12 Tab 3.16, Laboratory Costs

This tab shows the total of all samples to be collected and sent out for analysis as shown in the various subsections of Tab 3.5. It is assumed all samples will be analyzed for gamma emitters, Sr-90, H-3, C-14, and alpha emitters such as uranium, plutonium, and americium isotopes. Samples collected from accelerator facilities will be analyzed for gamma emitters.

7.13 Tab 3.17, Miscellaneous Costs

This tab shows other costs not specifically captured elsewhere. It is assumed the decommissioning contractor will perform the work under reciprocity agreement with the U.S. NRC at a cost of \$1400. Liability insurance and state/local taxes are included at the rate of 6 percent and 10 percent, respectively, of the on-site labor costs.

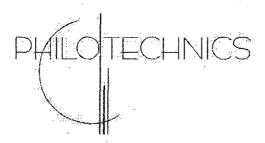
8.0 **Periodic Updates to Decommissioning Cost Estimate**

This cost estimate was prepared using the tables and instructions provided in NUREG 1757. Tables were converted to Excel spreadsheets and modified as necessary to enhance their applicability to the NIST site and to facilitate updating costs in the future. As areas are decommissioned from radiological use or new areas are added, that information may be changed in the spreadsheet. Labor and per diem rates are likely to change in the future. That information may be updated in Tab 3.12 to reflect future labor costs. Transportation costs including mileage, fuel surcharges, overweight/oversize charges; costs of shipping containers; and disposal, site access and license costs may be updated by inserting applicable values into Tab 3.14.

For reference, the table below shows expected escalation of decommissioning costs over the next 20 years. The annual escalation rate was estimated as the average annual United States rate of inflation between 1946 (the first full year after World War II) and 2008 according to the U.S. Consumer Price Index. That rate is 4.1 percent.

	Escalation	Laboratory	Accelerator	25%	
Year	Factor	Areas	Areas	Contingency	TOTAL
2009		\$2,615,180	\$1,777,763	\$1,098,236	\$5,491,179
2010	0.041	\$2,722,402	\$1,850,651	\$1,143,263	\$5,716,317
2011	0.041	\$2,834,021	\$1,926,528	\$1,190,137	\$5,950,686
2012	0.041	\$2,950,216	\$2,005,516	\$1,238,933	\$6,194,664
2013	0.041	\$3,071,175	\$2,087,742	\$1,289,729	\$6,448,645
2014	0.041	\$3,197,093	\$2,173,339	\$1,342,608	\$6,713,040
2015	0.041	\$3,328,174	\$2,262,446	\$1,397,655	\$6,988,275
2016	0.041	\$3,464,629	\$2,355,206	\$1,454,959	\$7,274,794
2017	0.041	\$3,606,678	\$2,451,770	\$1,514,612	\$7,573,060
2018	0.041	\$3,754,552	\$2,552,292	\$1,576,711	\$7,883,556
2019	0.041	\$3,908,489	\$2,656,936	\$1,641,356	\$8,206,782
2020	0.041	\$4,068,737	\$2,765,871	\$1,708,652	\$8,543,260
2021	0.041	\$4,235,555	\$2,879,271	\$1,778,707	\$8,893,533
2022	0.041	\$4,409,213	\$2,997,322	\$1,851,634	\$9,258,168
2023	0.041	\$4,589,991 [′]	\$3,120,212	\$1,927,551	\$9,637,753
2024	0.041	\$4,778,180	\$3,248,140	\$2,006,580	\$10,032,901
2025	0.041	\$4,974,086	\$3,381,314	\$2,088,850	\$10,444,250
2026	0.041	\$5,178,023	\$3,519,948	\$2,174,493	\$10,872,464
2027	0.041	\$5,390,322	\$3,664,266	\$2,263,647	\$11,318,235
2028	0.041	\$5,611,325	\$3,814,501	\$2,356,457	\$11,782,283
2029	0.041	\$5,841,390	\$3,970,895	\$2,453,071	\$12,265,356

Appendix A Accelerator Radiological Scoping Report



Radiological Scoping Report

National Institute of Standards and Technology

Prepared for: National Institute for Standards and Technology Radiation Physics Building Gaithersburg, MD 20899

...working with industry to foster innovation, trade, security and job

Survey Dates: March 23 - 27, 2009 Report Date: May 21, 2009

Prepared by: Philotechnics, Ltd. 201 Renovare Blvd. Oak Ridge, TN 37830

Section 1.0 Executive Summary

A scoping survey was performed the Radiation Physics building located at the National Institute of Standards and Technology (NIST) where linear accelerators (LINACS) currently or have historically been in operation. The survey was limited to accelerators which have enough energy to create free neutrons (>8 MV). The purpose of the survey was to determine if any of the facility structures had become neutron activated as a result of the LINAC operation and to provide a cost estimate to remediate any activated areas to unrestricted levels. The project was performed to aid in the writing of the decommissioning funding plan which is required under 10 CFR 30.35 "Financial Assurance and Recordkeeping for Decommissioning".

Core samples were collected throughout the facility and sent to an offsite laboratory for gamma spectroscopy analysis. The sample locations were chosen based on two criteria: areas where elevated readings were detected using the hand-held equipment and professional judgment of the Project Manager. As a general rule, judgmental samples were taken on structures near beam targets, beam dumps and any areas where the beam made a directional change.

A total of 23 volumetric samples were collected and sent to a NVLAP accredited laboratory to be analyzed via gamma spectroscopy. In areas where elevated readings were found, samples were collected from two sampling depths (0 to 6 inches and 6 to 12 inches). In areas where elevated readings were not found, only one core sample was taken from 0 to 6 inches. The results of the two sampling depths will be used to estimate the amount of remediation that will be required to bring the areas below unrestricted release levels. At the time of the survey, the unrestricted release limits were based on a total effective dose equivalent of 25 mrem/yr.

Section 2.0 Scoping Survey

Radiological surveys were conducted using a Canberra portable multi-channel analyzer with a lanthium bromide (LaBr) probe for nuclide identification and a 100 cm² cesium iodide (CsI) hand-held gamma probe connected to a Ludlum 2350-1 survey meter. The gamma probe was selected because the typical activation products (Co-60, Eu-152 and Eu-154) all have gamma emissions which are easily detectable.

Ten (10) one-minute background readings were collected in non-impacted areas of the basement and sub-basement with similar construction materials to the areas being surveyed. The average of the backgrounds counts was calculated and used for purposes of background subtraction. Using a scan rate of 5 cm/sec, the entire tunnel was surveyed, any areas which showed elevated readings were marked and a static measurement was performed. Volumetric samples were taken at the areas with the highest static readings.

Initially we planned on collecting the core samples using a rotary hammer with a 2 inch dry coring bit; however, the concrete was too dense to penetrate. We switched to a chiseling bit and this was effective for the 0 to 6 inch sample. For the 6 to 12 inch sample, a concrete drill bit was used. One benefit of using the chiseling and drill bits is the material collected was a homogenized fine powder and no additional preparation was necessary before sending the sample in for analysis.

The following paragraphs discuss areas in the Radiation Physics building that were surveyed looking for activated components. These areas include: the previously decommissioned 100 MeV linear accelerator tunnel, the Magnet and Measuring rooms, the Medical Industrial Radiation Facility (MIRF), the CLINAC room and the Time of Flight Facility. These areas were chosen because of their potential for neutron activated components.

100 MeV Linear Accelerator Tunnel

The first area surveyed was the previously decommissioned linear accelerator (LINAC) tunnel which housed a 100 MeV accelerator. The tunnel is located in the sub-basement of the Radiation Physics building and is approximately 156 feet long by 9 feet wide. The scan survey was initiated using the gamma probe at the particle source and continued down the tunnel to a concrete wall which was erected after the accelerator was removed. On the other side of the wall are the Measurement and Magnet Rooms which were surveyed separately.

After scanning was completed, four (4) sample locations were selected where elevated readings were detected and two (2) core samples were collected at each location (0 to 6 inches, 6 to 12 inches). It is important to note that all core samples were from the walls of the tunnel; the subbasement is below the water table and core samples were not collected on the floor to prevent possible flooding from ground water.

The first set of core samples were collected adjacent to the newly erected concrete wall. Using both the chiseling and drill bit, approximately 2000 grams of material was collected from each core depth. Three additional sample locations in the tunnel were chosen based on elevated readings noted during the scan survey. A scaled drawing of LINAC tunnel is attached as Appendix A detailing where the core samples were collected.

Magnet Room and Hallway

The concrete wall separates the LINAC tunnel from the Magnet room and Measurement rooms 1 & 3. After the wall, the accelerator beam had the option of being diverted 3 directions; either to one of the two Magnet rooms that are perpendicular to the beam line or at a 45 degree angle to where the MIRF facility is currently housed. A total of 5 volumetric sample locations were selected based on elevated static readings and professional judgment. Three of the locations had elevated readings and core samples were collected at two depths (0" to 6", 6" to 12"). The other two core sample locations were chosen due to the potential for activation; one at the beam dump and the other where the beam was re-directed to Measurement Room #3. No elevated readings were detected with the hand-held meters so the core samples were only taken from 0 to 6 inches in order to confirm that no activation was present.

Medical Industrial Radiation Facility

The Medical Industrial Radiation Facility (MIRF) currently houses a high energy electron beam accelerator which can produce energies from 7 million to 32 million electron volts (MeV). It is ideally suited for medical radiation calibration research and industrial radiation technology department. The facility is currently located in the space where Measurement Room 2 for the 100 MeV LINAC used to occupy. The facility is rectangular in shape, approximately 45 feet long and 38 feet wide and at one time was the location of the beam stop. The MIRF accelerator

was in use on a daily basis which made it difficult to scan due to activated components from the beam line. Static measurements were performed along the perimeter walls of the facility which were far enough from the beam to avoid any contribution from the activated beam line. One volumetric sample (0" to 6") was collected at the end of the former beam dump tunnel.

CLINAC Room

The CLINAC room houses a 6 MeV to 20 MeV electron-beam (6 MV and 18 MV bremsstrahlung beam) Varian Clinac 2100C to support the development of direct, therapy-level dosimetry calibrations. The square room (30' x 30') was scanned and static measurements were taken. It was determined that no volumetric samples would be collected due to all the static measurements being below 5,000 dpm/100 cm².

Time of Flight Facility

The Time of Flight Facility (TOFF) was previously used to calculate neutron capture cross sections for a variety of different radionuclides. Elevated readings were noticed immediately upon entering the facility ranging from 40,000 to 200,000 cpm/100 cm². Volumetric samples were taken at the two highest static reading locations. There is a pit inside the room where the neutron beam entered the room from the basement and a third sample location was selected in the pit at the highest static reading location.

Positive Ion Van de Graaff Generator

A Van de Graaff generator is an electrostatic machine which uses a moving belt to accumulate very high electrostatically stable voltages on a hollow metal globe. The potential differences achieved at the Van de Graaff generator located in the basement, room 26, can reach 3 MV's. A scan survey using the hand-held gamma meter was performed on all structural surfaces in the room. No elevated readings exceed in the DCGLw were found and the decision was made not to collect any volumetric samples. Based on the hand-held readings, the room meets the release criteria for unrestricted use and no remediation is necessary.

1.5 MeV Dynamitron

The Dynamitron is a dc beam accelerator capable of producing electrons or hundreds of microamps of positive ions from 0.2 to 1.5 MeV. The Dynamitron located in rooms B21, B22 and B23 was scan surveyed using the hand-held gamma meter. No elevated readings exceed in the DCGLw were found and the decision was made not to collect any volumetric samples. Based on the hand-held readings, the room meets the release criteria for unrestricted use and no remediation is necessary.

SURF III Synchrotron

The SURF III Synchrotron Ultraviolet Radiation Facility is the world's senior dedicated source of synchrotron radiation, in continuous operation since 1961. Synchrotron radiation is the light emitted by electrons as they are propelled around a donut-shaped ring in a strong magnetic field. The light emitted from SURF III covers the infrared, visible, ultraviolet and extends into the X-ray region of the electromagnetic spectrum. It is exceptionally pure, and scientists can tune it to a desired wavelength to probe and measure a wide variety of materials and devices.

The maximum energy that electrons are accelerated to in the storage ring is 400 MeV. At injection, the electrons are accelerated to 10 MeV using a Microtron system and then extracted and injected into the storage ring. At injection, 2 micro-second pulses of 10 MeV electrons are sent into the ring at a repetition rate of 7.5 Hz, with an average current of up to 80 mA. Once the injection parameters are optimized, the Microtron injection is stopped and the captured electrons are ramped up in energy. The normal operating energy is 380 MeV and one beam normally lasts for 7 hours which is the time it takes for the beam to decay from 300 mA to 150 mA. The remaining 150 mA is usually dumped and the injection process is repeated.

Based on empirical calculation using neutron detectors located outside the SURF facility, it is estimated that roughly 10E+11 neutrons per second are generated during the injection process. However, the neutron flux is indistinguishable from background when the storage ring is operational. Concrete is used as shielding material in the room with walls up to 8 feet thick.

Section 3.0 Release Criteria

The radiological release criteria of NRC 10CFR20 Subpart E for unrestricted use will be used for decommissioning the accelerator facilities. Specifically the buildings and facilities being released under this decommissioning effort will be surveyed in accordance with the guidance contained in MARSSIM to demonstrate compliance with the criteria specified in 10CFR20.1402 Radiological Criteria for Unrestricted Use. The specified criteria is that residual radioactivity results in a TEDE to an average member of the critical group that does not exceed 25 mrem per year and that the residual radioactivity has been released to levels that are as low as reasonably achievable (ALARA).

Default Screening Values

The DCGL's for the known radionuclides were determined using NUREG 1757 Vol.2, Table H-1 or calculated using DandD v2.1.

Radionuclide	Half-Life	Radiation Type	Default Screening Value (DPM/100 cm ²)
Co-60	5.27 years	Beta/Gamma	7.0E+03
Eu-152	13.54 years	Beta/Gamma	1.27E+04

For situations where multiple radionuclides with their own DCGLs are present, a gross activity DCGL can be developed. This approach enables field measurement of gross activity, rather than determination of individual radionuclide activity, for comparison to the DCGL. The gross activity DCGL for surfaces with multiple radionuclides is calculated as follows:

(Equation 3-1) Gross Activity
$$DCGL = \frac{1}{\left(\frac{f_1}{DCGL_1} + \frac{f_2}{DCGL_2} + \dots + \frac{f_n}{DCGL_n}\right)}$$

Based on the volumetric sampling results, the following ratios of radionuclides have been established for the heavy and normal concrete used for shielding material:

Sample ID	Location	Depth	Concrete Density	Co-60 (pCi/g)	Eu-152 (pCi/g)	Ratio Co/Eu
NIST-LINAC-004-6	LINAC Tunnel	6 inches	Normal	50.100	16.900	3.0
NIST-LINAC-004-12	LINAC Tunnel	12 inches	Normal	25.700	10.100	2.5
NIST-MAG-001-6	Magnet Room	6 inches	High	9.040	0.254	35.6
NIST-MAG-001-12	Magnet Room	12 inches	High	3.330	U.	N/A
NIST-MAG-002-6	Magnet Room	6 inches	High	11.200	0.352	31.8
NIST-MAG-002-12	Magnet Room	12 inches	High	2.920	0.117	25.0 🐟
NIST-MAG-003-6	Magnet Room	6 inches	High	4.460	1.460	3.1
NIST-MAG-003-12	Magnet Room	12 inches	High	1.440	0.663	2.2
NIST-MAG-004-6	Magnet Room	6 inches	Normal	0.381	0.152	2.5
NIST-MAG-005-6	Magnet Room	6 inches	Normal	<u> </u>	U	N/A
NIST-TOFF-001-6	Time of Flight Facility	6 inches	Normal	38.000	11.200	3.4
NIST-TOFF-001-12	Time of Flight Facility	12 inches	Normal	13.600	6.120	2.2
NIST-TOFF-002-6	Time of Flight Facility	6 inches	Normal	46.200	14.800	3.1
NIST-TOFF-002-12	Time of Flight Facility.	12 inches	Normal	43.000	13.100	3:3
NIST-TOFF-003-6	Time of Flight Facility	6 inches	Normal	3.610	1.790	2.0
NIST-TOFF-003-12	Time of Flight Facility	12 inches	Normal	1.610	0.811	2.0
NIST-MIRF-001-6	MIRF	6 inches	Normal	0.191	U	N/A

Two different concrete densities were being used in the Radiation Physics building; heavy density and demountable. The heavy concrete has iron added to increase the density. Typically Cobalt-60 (Co-60) is the activated component in heavy concrete and there is very little Europium-152 (Eu-152). For the demountable concrete, the ratio of Eu-152 to Co-60 increases. Using ResRad Build it was determined that the concrete walls would need to be remediated to 3 pCi/g to meet the criteria for unrestricted release.

The volumetric sample data is used to determine the depth of the neutron activation. The overall criteria as to whether the areas meet the release criteria will be based on static measurements.

Section 5.0 Areas Requiring Remediation

In order to release the facility for unrestricted use, significant remediation of the neutron activated concrete will be necessary. Based on the volumetric sample data presented in the table above, the following cost estimate has been put together. The estimates have been based on previous experience remediating activated concrete. Typically normal concrete has a density of 2,400 kg/m³ and high density concrete has a density of 3,400 kg/m³.

Linear Accelerator Tunnel

There are four areas (4) inside the tunnel (identified by the capital letters on the survey map) that require remediation before the area can be released for unrestricted use. The following table outlines the amount of area impacted, the estimated depth of the activation, the total volume of concrete which will need to be removed and the density of the concrete.

Survey Map Location	Area Impacted (L x W)	Estimated Depth	Volume	Weight	Concrete Type
A 2	$1m^2$ (1m x 1m)	15-30cm	$0.15 - 0.30m^3$	510-1,020 Kg	High Density
В	0.5m ² (0.5m x 1m)	15-30cm	$0.08 - 0.15 m^3$	272-510 Kg	High Density
С	0.25m ² (0.5m x 0.5m)	15-30cm	$0.04 - 0.08m^3$	136-272 Kg	High Density
D	2.0m ² (2.0m x 1m)	>30cm	>0.60m ³	≥1,440 Kg	Normal Density

Three of the areas requiring remediation (A, B, C) are on interior, load bearing concrete walls that are thick enough to have up to a foot of material removed without impacting the structure of the building. The fourth area that requires remediation (D) is on an exterior wall that is below the water table. The results of the volumetric sampling show the depth of activation exceeds 30cm (1 foot). The amount of effort involved to remediate this area would be exorbitant. A better option would be to seal off this area and provide long-term surveillance.

Magnet Room & Hallway

There are four (4) areas near the magnet rooms that will require remediation.

Survey Map Location	Area Impacted (L x W)	Estimated Depth	Volume	Weight	Concrete Type
E, F, G, H	$1.5m^2$ (1.5m x 1m)	<30cm	<0.45m ³	<1,080 Kg	Normal Density
<u>I, J</u>	1.5m ² (0.75m x 2m)	15cm	0.23m ³	552 Kg	Normal Density
K	$1.0m^2$ (1m x 1m)	<15cm	<0.15m ³	<360 Kg	Normal Density
L	$0.25m^2$ (0.5m x 0.5m)	5cm	0.013m ³	31 Kg	Normal Density

All of the areas listed above that require remediation are interior walls which are easily accessible are can be remediated using a jackhammer or a Brokk (remote controlled concrete demolition equipment).

Medical Industrial Radiation Facility

All readings were below the release criteria and no remediation is necessary in this area.

CLINAC Facility

All readings were below the release criteria and no remediation is necessary in this area.

Time of Flight Facility

Significant remediation is required in this area in order to meet the free release criteria. The DPM values of the hand-held detector ranged from 200,000 DPM to 1.5 million DPM throughout the facility.

Survey Map Location	Area Impacted (L x W)	Estimated Depth	Volume	Weight	Concrete Type
S	9.0m ² (3.0m x 3.0m)	>30cm	>2.7 m ³	6,480 Kg	Normal Density
T	21.0m ² (7.0m x 3.0m)	>30cm	>6.3 m ³	15,120 Kg	Normal Density
U	21.0m ² (7.0m x 3.0m)	30cm	6.3 m ³	15,120 Kg	Normal Density
<u> </u>	1.75m ² (2.3m x 0.76m)	2.5cm	0.04m ³	96 Kg	Normal Density
w	3.0m2 (1.0m x 3.0m)	30cm	0.9m ³	2,160 Kg	Normal Density

The Time of Flight Facility is on the ground level and is easily accessible. The data from volumetric sample number NIST-TOFF-002-12 showed Co-60 activation of 43 pCi/g at a 12 inch depth. In order to remediate this area to unrestricted levels it is likely the entire 7 $\frac{1}{2}$ feet thick wall will need to be removed.

Van de Graaff Room

All scans and static readings were below the release criteria and no remediation is necessary in this area.

Dynamitron Facility

All scans and static readings were below the release criteria and no remediation is necessary in this area.

SURF III Synchrotron Facility

No evidence of neutron activation was noted in the SURF III facility and remediation is not necessary in this area.

Section 6.0 Restricted Release

The majority of the areas where activation was found can be remediated to unrestricted levels through the use of hand-held tools or larger equipment such as an excavator. In some circumstances, it is not feasible to remediate these impacted areas and they must be left in place. The LINAC tunnel is located in the sub-basement of the Radiation Physics building which is situated below the water table. Some of the activated areas are on exterior walls and remediation of the concrete is not practical at this time due to the impact the remediation activities would have on the facility. This area would fall under restricted release which means that conditions are placed on future uses of the site. Common restrictions include legally enforceable

institutional controls, such as deed restrictions and describing what the property can and cannot be used for.

There are several stipulations that need to be considered when contemplating restricted release:

- The Radiation Physics building needs to be included in the NRC's Site Decommissioning Management Plan (SMP);
- The licensee must demonstrate that reductions of residual radioactivity to unrestricted levels is not feasible because it would: (1) result in net public or environmental harm; or (2) levels are already ALARA;
- The dose to the average member of the critical group is less than 25 mrem/year with restrictions in place;
- The licensee has made provisions for legally enforceable institutional controls that provide reasonable assurance that the TEDE from residual radioactivity distinguishable from background to the average member of the critical group will not exceed 25 mrem per year;
- If institutional controls fail, the annual dose would not exceed 500 mrem;
- The licensee describes the site end use for areas proposed for restricted release.

The restricted release would only be in effect as long as the areas residual radiation is above 25 mrem/yr. Since the activation components have reasonably short half-lives, (Co-60 - 5.27 years, Eu-152 - 13.5 years) administrative controls and area monitoring can be implemented until the radionuclides have had time to decay to unrestricted levels.

Appendix B Laboratory Areas Cost Estimating Worksheets

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			Fraction				ft ³	
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Hoods		60						
Benches/Tables/		-120	0					
Casework/Cabine		270	0					
Reefers, Large E		2000	0		•		· · ·	
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Ceiling Area, ft ²	900		<u> </u>	0	0		4	
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Drains					<u> </u>			
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Ventilation Drops	NO.[0.0		
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Wall Area, ft ²	13630	. 2250		0	0					
Ceiling Area, ft ²	7200	1250		0	0	5050				
			Fraction	2	2	2	ft ³			
Componei	nts ,	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete	-		
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Ventilation Drops	[0	· ·]		
					Total ft ³	0.0		ļ		
Drains	No.[No.[Inch Dia.		Total ft ³ Total ft ³	0.0]		
	No.[No.[Total ft ³	0.0		j		
Drains Ventilation Drops Person-hours	No.	Supvsr	Inch Dia. Inch Dia. HP Tech	Shipper	Total ft ³	0.0 Unskilled] ·]		
Drains Ventilation Drops Person-hours Characterize	No.[Supvsr 23	Inch Dia. Inch Dia. HP Tech 60	Shipper 0	Total ft ³ Skilled 0	0.0 Unskilled 0	11.5			
Drains Ventilation Drops Person-hours Characterize Equip. Release	No. Mgr 11.5 12.6	Supvsr 23 23.25	Inch Dia. Inch Dia. HP Tech 60 61	Shipper 0 0	Total ft ³ Skilled 0 0	0.0 Unskilled 0 0	11.5 12.6			
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	No. Mgr 11.5 12.6 1.65	Supvsr 23 23.25 3.5	Inch Dia. Inch Dia. HP Tech 60 61 0	Shipper 0 0 16	Total ft ³ Skilled 0 0 27	0.0 Unskilled 0 0 27	11.5 12.6 1.65			
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed.	No. Mgr 11.5 12.6 1.65 0.85	Supvsr 23 23.25 3.5 0	Inch Dia. Inch Dia. HP Tech 60 61 0 0	Shipper 0 0 16 0	Total ft ³ Skilled 0 0 27 0 0	0.0 Unskilled 0 0 27 0	11.5 12.6 1.65 0.85	•		
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	No. Mgr 11.5 12.6 1.65	Supvsr 23 23.25 3.5	Inch Dia. Inch Dia. HP Tech 60 61 0	Shipper 0 0 16	Total ft ³ Skilled 0 0 27	0.0 Unskilled 0 0 27	11.5 12.6 1.65	•		
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	No. Mgr 11.5 12.6 1.65 0.85 6.6	Supvsr 23 23.25 3.5 0 13.25	Inch Dia. Inch Dia. HP Tech 60 61 0 37	Shipper 0 0 16 0	Total ft ³ Skilled 0 0 27 0 0	0.0 Unskilled 0 0 27 0	11.5 12.6 1.65 0.85	•		
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed.	No. Mgr 11.5 12.6 1.65 0.85 6.6	Supvsr 23 23.25 3.5 0 13.25	Inch Dia. Inch Dia. HP Tech 60 61 0 0	Shipper 0 0 16 0	Total ft ³ Skilled 0 0 27 0 0	0.0 Unskilled 0 0 27 0	11.5 12.6 1.65 0.85	•		
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	No. Mgr 11.5 12.6 1.65 0.85 6.6	Supvsr 23 23.25 3.5 0 13.25	Inch Dia. Inch Dia. HP Tech 60 61 0 37	Shipper 0 0 16 0	Total ft ³ Skilled 0 0 27 0 0	0.0 Unskilled 0 0 27 0	11.5 12.6 1.65 0.85	•		
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	No. Mgr 11.5 12.6 1.65 0.85 6.6	Supvsr 23 23.25 3.5 0 13.25	Inch Dia. Inch Dia. HP Tech 60 61 0 37	Shipper 0 0 16 0	Total ft ³ Skilled 0 0 27 0 0	0.0 Unskilled 0 0 27 0	11.5 12.6 1.65 0.85	•		
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	No. Mgr 11.5 12.6 1.65 0.85 6.6	Supvsr 23 23.25 3.5 0 13.25	Inch Dia. Inch Dia. HP Tech 60 61 0 37	Shipper 0 0 16 0	Total ft ³ Skilled 0 0 27 0 0	0.0 Unskilled 0 0 27 0	11.5 12.6 1.65 0.85	•		
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	No. Mgr 11.5 12.6 1.65 0.85 6.6	Supvsr 23 23.25 3.5 0 13.25	Inch Dia. Inch Dia. HP Tech 60 61 0 37	Shipper 0 0 16 0	Total ft ³ Skilled 0 0 27 0 0	0.0 Unskilled 0 0 27 0	11.5 12.6 1.65 0.85	•		
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	No. Mgr 11.5 12.6 1.65 0.85 6.6	Supvsr 23 23.25 3.5 0 13.25	Inch Dia. Inch Dia. HP Tech 60 61 0 37	Shipper 0 0 16 0	Total ft ³ Skilled 0 0 27 0 0	0.0 Unskilled 0 0 27 0	11.5 12.6 1.65 0.85	•		
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	No. Mgr 11.5 12.6 1.65 0.85 6.6	Supvsr 23 23.25 3.5 0 13.25	Inch Dia. Inch Dia. HP Tech 60 61 0 37	Shipper 0 0 16 0	Total ft ³ Skilled 0 0 27 0 0	0.0 Unskilled 0 0 27 0	11.5 12.6 1.65 0.85	•		
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	No. Mgr 11.5 12.6 1.65 0.85 6.6	Supvsr 23 23.25 3.5 0 13.25	Inch Dia. Inch Dia. HP Tech 60 61 0 37	Shipper 0 0 16 0	Total ft ³ Skilled 0 0 27 0 0	0.0 Unskilled 0 0 27 0	11.5 12.6 1.65 0.85	•		
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	No. Mgr 11.5 12.6 1.65 0.85 6.6	Supvsr 23 23.25 3.5 0 13.25	Inch Dia. Inch Dia. HP Tech 60 61 0 37	Shipper 0 0 16 0	Total ft ³ Skilled 0 0 27 0 0	0.0 Unskilled 0 0 27 0	11.5 12.6 1.65 0.85	•		
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	No. Mgr 11.5 12.6 1.65 0.85 6.6	Supvsr 23 23.25 3.5 0 13.25	Inch Dia. Inch Dia. HP Tech 60 61 0 37	Shipper 0 0 16 0	Total ft ³ Skilled 0 0 27 0 0	0.0 Unskilled 0 0 27 0	11.5 12.6 1.65 0.85	•		

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Building		Ro	om or Area			115]
Use			Surface	and Micro	analysis			}
Radionuclides, Ex Area Classification		tamination	n]		Unsealed	TRU, U, Th		
# Floors above Ba # Floors below Ro				ft2	·		· ·	* .
	Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3		
Floor Area, ft ² Wall Area, ft ²	1250 2250			0	· · ·			
Ceiling Area, ft ²	1250			0]	
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes Hoods					<u> </u>			
Benches/Tables/D Casework/Cabinet		400 200	0					
Reefers, Large Equ Misc. Equip./Labw		2000 100	0					
Hot Cells Storage Tanks Other	-	·						
Sinks Drains		20	0	·····				
Ventilation Drops	1		<u> </u>		<u> </u>		L]	
Drains Ventilation Drops	No. No.	1	Inch Dia. Inch Dia.	2	Total ft ³ Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled		
Characterize Equip. Release	8	<u> 16 </u>	32 32				88	
Pack/Load waste Decon/Remed.					8	8		-
Final Survey	4	8	16				4	
# Lab Samples to b	e collected	t	1					
						<u>.</u>		· · · · · · · · · · · · · · · · · · ·

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Building	217	Ro	om or Area		D	120		
Use	r	······.	Surface	e and Micro	analysis			1
036			Ounace		anarysis			3
Radionuclides, Ex		taminatio	n		Sealed I	Kr-85 only]
Area Classification		3						
# Floors above Ba			4					
# Floors below Ro	of	· · · ·				1	1	
			%	ft2				
	Tatal	Class 1	needing	needing	Class 2	Class		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	600			0		600		
Nall Area, ft ²	1500			0	<u> </u>	1500		
Ceiling Area, ft ²	600			0		600		
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componer	nte	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes	1.3			DAT	motur		oonorete	1
loods		100	. 0		-			
Benches/Tables/D	esks							
asework/Cabinet		600	0					
Reefers, Large Equ	uipment		1					
/lisc. Equip./Labw		200	0					
lot Cells								
Storage Tanks								
Other					ļ			
Sinks		20	0	···· · ····				
Drains		0.0						
/entilation Drops	. [0.0			I			
	N. [] 		Total ft ³			
Drains	No.		Inch Dia.			0.0		
/entilation Drops	No.	··· ·	Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.5	1	4				0.5	
quip. Release	2	2	8				2	
Pack/Load waste	0.25	0.5		2	4	4	0.25	
Decon/Remed.								
inal Survey	0.5	1	4				0.5	

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Building	217	′] Ro	om or Area		D	113		Į
Use			Surfac	e and Micro	panalysis		· · · · · · · · · · · · · · · · · · ·	
Dedlemusking Fr			_	1	0 -1 /1		· · · · ·	
Radionuclides, Ex Area Classificatio		3	n 7		Sealed	e-55 only		
# Floors above Ba		<u>-</u>	1				·	
# Floors below Ro		 	-				•	
" · 10010 bolow //c		1	%	ft2	<u>r</u>	}		
	ļ		needing	needing		ļ		1
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	900)		0		900		
Wall Area, ft ²	1800			0	1	1800		
Ceiling Area, ft ²	900	·	t	0	1	900		
	I	4,	L		_L			
			Fraction	Fraction	Fraction	Fraction	Fraction	1
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes								
Hoods								1
Benches/Tables/D		120	0					
Casework/Cabinet		150	0					
Reefers, Large Eq		50	0					
Misc. Equip./Labw	are	100	0		·			
Hot Cells			ŀ		<u> </u>			
Storage Tanks Other								
Sinks		20	0 .					
Drains		0.0						
Ventilation Drops		0.0			<u> </u>		<u> </u>	1
		L	<u> </u>		L	_		
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		1
		L		L	1			1
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	1
Characterize	0.5	1	4				0.5	1
Equip. Release	0.5	1	4				0.5	1
Pack/Load waste	0.5	1		2	4	4	0.5	1
					1 1		0.5	
Decon/Remed. Final Survey	0.5		4				0.5	•

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Building	217] Ro	om or Area		D	101		
Use			Suface	and Micro	analveie		······································	
	۲ <u>ــــــــــــــــــــــــــــــــــــ</u>		Julace		undiyələ			
Radionuclides, Ex	ctent of Cor	taminatio	n		Sealed F	- e-55 only		
Area Classificatio		3]					
# Floors above Ba			4					
# Floors below Ro	pof T		%	ft2	<u>г</u> .	T	1	
:			needing	needing			1	
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	600			0		600		· ·
Wall Area, ft ²	1500			0		1500		
Ceiling Area, ft ²	600		<u> </u>	0		600		
		· · · ·	J	·	4		1	1
			Fraction	Fraction	Fraction	Fraction	Fraction	
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes								
Hoods					ļ			n,
Benches/Tables/D		100	0		ļ	ļ		
Casework/Cabine Reefers, Large Eq		300 25	0		·	1		
Misc. Equip./Labw		<u> </u>	0					
Hot Cells								
Storage Tanks		· · · ·	<u> </u>	•	1			
Other								
Sinks								
Drains		0.0						
Ventilation Drops		0.0			L			
			1		13			
Drains	No.		Inch Dia.		Total ft ³	0.0		х.
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.5	<u> </u>	4	5		Justice	0.5	
Equip. Release	1	2	8				1	
Pack/Load waste	0.25	0.5		2	2	2	0.25	
Decon/Remed.								
Final Survey	0.5	1	4				0.5	

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Building	217] Ro	om or Area		D108				
Use			Surface	e and Micro	panalysis				
Radionuclides, Ex	tent of Cor	taminatio	n	J	Sealed I	- e-55 only	1		
Area Classification	n	3]			*			
# Floors above Ba								ય	
# Floors below Ro	of	ļ					1		
			%	ft2					
	Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3			
Elect Area #2	1500		Kemeu.		010552				
Floor Area, ft ² Wall Area, ft ²	1900			0	+	1500 1900			
Ceiling Area, ft ²	1900		+	0	<u> </u>	1900			
Centry Area, IL	1000	L	1	<u> </u>	L	11500			
			Fraction	Fraction	Fraction	Fraction	Fraction		
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete		
Glove Boxes									
Hoods					<u> </u>				
Benches/Tables/D		200	0		ļ	ļ	·		
Casework/Cabinet		150	0		<u> </u>				
Reefers, Large Equ Misc. Equip./Labwa		300	0	·	<u> </u>				
Hot Cells	are				<u> </u>				
Storage Tanks					<u> </u>				
Other			1						
Sinks									
Drains		0.0							
Ventilation Drops	l	0.0			L				
	. 1	•	1 I]		1		
Drains	No.		Inch Dia.		Total ft ³ Total ft ³	0.0			
Ventilation Drops	No.	·	Inch Dia.		Jiotain	0.0			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Characterize	0.25	0.5	2	<u> </u>			0.25		
Equip. Release	0.25	0.5	2		ł		0.25		
Pack/Load waste	0.1	0.25		2	2	2	0.1		
Decon/Remed.									
Final Survey	0.25	0.5	2				0.25		
# Lab Samples to b	e collected	1	0						

Building	217] Ro	om or Area		D	119			ר
Use			Precsio	on Microde	position]	
Radionuclides, Ex	tent of Cor	ntaminatio	n		Sealed beta	sources on	lv.	-	
Area Classification		3	j '			0001000 01	,	4	
# Floors above Ba		N N]						
# Floors below Ro	of		%	ft2		· · · · · · · · · · · · · · · · · · ·	1		
	}		needing	needing					1
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²	750			0		750			
Wall Area, ft ²	1320	•		0		1320	4		
Ceiling Area, ft ²	750			0		750	1		
					_ //				
Compone	ote	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete		
Glove Boxes		Totarity		DAW	Wetai	Leau	Concrete	ר ר	
Hoods		175	0			·		1	
Benches/Tables/D		150	0]	
Casework/Cabinet		300	0	•]	
Reefers, Large Eq		100	0					1	
Misc. Equip./Labw	are							4	
Hot Cells					· · · · · · · · · · · · · · · · · · ·			4 .	
Storage Tanks Other								-	
Sinks								1	
Drains		0.0	1	······································				-	
Ventilation Drops		0.0			-]	
			1 г		L 3				
Drains	No.		Inch Dia.		Total ft ³	0.0			
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	1	
Characterize	0.5	1	4				0.5	1	1
Equip. Release	0.25	0.5	2				0.25	·	1
Pack/Load waste	0.25	0.5		2	2	2	0.25		1
Decon/Remed.	0.25						0.25		
Final Survey	0.25	0.5	2				0.25		
# Lab Samples to t	be collected	d	0						
				_					_
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Building	217] Ro	om or Area		С	118		
Use			Surface	e and Micro	analysis			7
					unaryoio			1
Radionuclides, Ext			n T	Se	aled source	es - beta, Po	-210	J
Area Classification # Floors above Bas		3	4					
# Floors below Ro							_	
			%	ft2				1
٥	Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3		
Floor Area, ft ²	700			0		700]	
Wall Area, ft ²	1320			0		1320	1	
Ceiling Area, ft ²	700			0	L	700	. .	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componen	its	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes					· .			
Hoods Benches/Tables/De	seke	150	0			<u> </u>		
Casework/Cabinets		100	0	·				
Reefers, Large Equ	uipment	50	0					
Misc. Equip./Labwa	are	50	0					
Hot Cells Storage Tanks								
Other								
Sinks								
Drains		0.0						<i></i>
Ventilation Drops	l	0.0	I					
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.	<u> </u>	Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.5	<u>Supvsr</u> 1	4	Subher	JKIIIEU	UTISKINED	0.5	
Equip. Release	0.25	0.5	2				0.25	
Pack/Load waste	0.1	0.25	L	2	1	1	0.1	
Decon/Remed. Final Survey	0.25	0.5	2				0.25	. I.
						ر ، ۸		
# Lab Samples to b	e collected	ł	0					
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	Building	217	Ro	om or Area		C'	121		
		L			۰ ۱ ــــــــــــــــــــــــــــــــــــ			<u> </u>	1
	Use			Pa	rticle Metro	logy			1
									•
	Radionuclides, Ex		taminatio	n		Sealed beta	sources on	ly	
	Area Classification		3					•	
	# Floors above Ba			4					
	# Floors below Ro	of				· ·		1	
				%	ft2				
	1	_		needing	needing				
		Total	Class 1	Remed.	Remed.	Class 2	Class 3	4	•
	Floor Area, ft ²	300		<u> </u>	0	 		4	
	Wall Area, ft ²	840		· · · · ·	0	ļ	ļ	ļ	
· .	Ceiling Area, ft ²	300		<u> </u>	0			J	
				Fraction	Fraction	Fraction			
	Component	- 4 -	Total ft3	RW			Fraction	Fraction	
	Componer Glove Boxes	nts i	Total Its		DAW	Metal	Lead	Concrete	1
	Hoods	•	300	0	· · · ·				
	Benches/Tables/D	esks	100	, 0					
	Casework/Cabinet		50	0					
	Reefers, Large Eq								
	Misc. Equip./Labw								
	Hot Cells								
	Storage Tanks								
	Other								
	Sinks								
	Drains		0.0						
	Ventilation Drops		0.0					·	
		1		1		I		1	ſ
	Drains	No.		Inch Dia.		Total ft ³	0.0		l
	Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
	Davaar baure	BAme	<u></u>		Chinana	CLUII	line letter -	Cleric - L	
	Person-hours Characterize	Mgr 0.25	Supvsr 0.5	HP Tech 2	Shipper	Skilled	Unskilled	Clerical 0.25	•
i	Equip. Release	0.25	0.5	<u> </u>				0.25	
	Pack/Load waste	0.1	0.25		2	2	2	0.1	
	Decon/Remed.	0.1	5.20			-	-	0.1	
	Final Survey	0.1	0.25	1				0.1	
	<u> </u>	.							
•	# Lab Samples to t	be collected	a i	<i>i</i> 0					
			I						
					· · ·				
				x	•				
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- <u>.</u>		· · ·			•				
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Building	217] Ro	om or Area		D	104		
Use			Surfac	e and Micro	analysis] [
Radionuclides, Ex		taminatio	<u>n</u>		Sealed I	e-55 only		
Area Classification # Floors above Ba # Floors below Ro	sement	3		• .				
			% needing	ft2 needing		T		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	600			0		ļ		
Wall Area, ft ² Ceiling Area, ft ²	1200 600			0				Í
Componer		Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes								
Hoods Benches/Tables/D	esks	200	. 0					
Casework/Cabinet	s	150	0					
Reefers, Large Equ		200 50	0	ļ				
Misc. Equip./Labw Hot Cells	are							
Storage Tanks								
Other Sinks								
Drains		0.0	· · · · · · · · · · · · · · · · · · ·					
Ventilation Drops	ĺ	0.0						
Drains	No.		Inch Dia.	·	Total ft ³	0.0		
Ventilation Drops	No.	····	Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.5	1	4				0.5	
Equip. Release Pack/Load waste	0.25	0.5 0.25	2	2	2	2	0.25	
Decon/Remed.						Br		
Final Survey	0.25	0.5	2				0.25	
# Lab Samples to b	e collected	Ŀ	0					
			· · · · · · · · · · · · · · · · · · ·			<u></u>		
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	Building	218	Ro	om or Area					· · · · ·	1
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	Use	L				. <u> </u>		:	1	
•										
	Radionuclides, Ex Area Classification		tamination	ו 						
	# Floors above Ba	sement	· · · · · · · · · · · · · · · · · · ·		÷					
	# Floors below Ro	of		%	ft2	1		1		
				needing	needing					
	Floor Area, ft ²	Total 0	Class 1	Remed.	Remed.	Class 2	Class 3		,	
	Wall Area, ft ²	0			0	<u></u>	0			
	Ceiling Area, ft ²	0		:	0		0		. ,	
				Fraction		,		ft ³		
	Componer	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete		
	Glove Boxes		0	2	0					
	Hoods Benches/Tables/D	esks	0	0			· · ·	•		
	Casework/Cabinet	S	0	0				÷	•	
•	Reefers, Large Equ Misc. Equip./Labwa		0	0						<i>i</i>
	Hot Cells		0		· · · · · · · · · · · · · · · · · · ·		•			
-	Storage Tanks Other		0							
	Sinks	,	0	;						
	Drains		0			· · · ·				
	Ventilation Drops	1	0							-
		N						I	с ¹	
	Drains Ventilation Drops	No. No.		Inch Dia. Inch Dia.		Total ft ³ Total ft ³	0.0	. · ·		
						•				
	Person-hours Characterize	Mgr 1	Supvsr 2	HP Tech 4	Shipper 0	Skilled 0	Unskilled 0	Clerical 1	•	
	Equip. Release	0	0	0	0	0	0	0	·	
	Pack/Load waste Decon/Remed.	· 0	0	0	0	0	0	0		
	Final Survey	0.5	· 1	2	0	-	0	0.5	· · ·	
	# Lab Samples to b	e collecter	4	1						
		e conecter		•						
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x										
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	Building	218	B Ro	om or Area	I <u></u>	C	002		J .	
	Use			Former	ly a lab - no	w offices	• • • • • • • • • • • • • • • • • • • •		1	
		· · ·						······································		
	Radionuclides, Ex	tent of Co.	sterninetie.	-		N I.	one	,		
	Area Classificatio		3	1	L			<u></u>	1 <u>.</u>	
4	# Floors above Ba	isement				•				
	# Floors below Ro	of .	·	%	ft2	r	T	1		· ·
				needing	needing					
		Total	Class 1	Remed.	Remed.	Class 2	Class 3			
	Floor Area, ft ²				0			ľ		
	Wall Area, ft ²	ļ	<u> </u>	 	0		ļ			
	Ceiling Area, ft ²	L	<u> </u>	<u>l</u>	-0		1	I .		
				Fraction	Fraction	Fraction	Fraction	Fraction		· ·
	Compone Glove Boxes	nts	Total ft3	RW	DAW	Metal	Lead	Concrete		
	Glove Boxes Hoods					· · · · · ·				
	Benches/Tables/D									
	Casework/Cabinet									
	Reefers, Large Eq Misc. Equip./Labw									
	Hot Cells									
	Storage Tanks									
	Other Sinks			· · ·		·				
	Drains		0.0	··			-			
	Ventilation Drops		0.0					· ·		
	Drains	No.		Inch Dia.		Total ft ³	0.0			
	Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0			
								· .		
	Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	· ·	
	Characterize Equip. Release	1	2	4						
	Pack/Load waste									
	Decon/Remed.		· · · ·							λ.
	Final Survey	0.5	1	2]		0.5		
•	# Lab Samples to I	be collecte	d	1				·]	
<u>.</u>			•					· · ·		
					2					
	· .		, ,	•	. ~					
										е. С. с. с.
		1	•							
1		• •								
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Building	220		om or Area	r	·			r
	220	j Kot	JIII OF Alea]
Use]
								- - -
Dedienvelidee Ev	tent of Co.	-4						
Radionuclides, Ex Area Classification		Tramination						l
# Floors above Ba		····					•	
# Floors below Ro								
			%	ft2	ľ]	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	1390			40	+	and the state of t	4	
Wall Area, ft ²	3960			0			-	
Ceiling Area, ft ²	1390	400		0	990	0]	•
			Fraction				ft ³	
Componer	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete	
Glove Boxes		0		0				
Hoods		100						
Benches/Tables/D		500	0				•	
Casework/Cabinet		750	0					
Reefers, Large Eq		0	0					
Misc. Equip./Labw Hot Cells	are	300 0						Í
Storage Tanks		0					·	
Other		0						
Sinks		50	\sim					
Drains		0.555556						
Ventilation Drops	,	13.61111						
Drains	No.]	Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
	7.5	15	30	0	0	0	7.5	
Characterize	5.25	11.5	22	0	0	0	5.25	
Characterize Equip. Release	0.7	1.5 1	0.5	1 · 0	7 2	7 2	0.7 0.5	
Characterize Equip. Release Pack/Load waste			1 18	0	0	2	0.5 4.5	
Characterize Equip. Release Pack/Load waste Decon/Remed.	0.5 4.5	a		U U		0	т.Ј	, 1
Characterize Equip. Release Pack/Load waste	0.5 4.5	9	10					1
Characterize Equip. Release Pack/Load waste Decon/Remed.	4.5		3					

Use Radionuclides, Ex Area Classificatio								
Radionuclides, Ex			<u> </u>	Office				
	tont of Con	tominatio	-		Lincol			
		2	n]	L	Unseale	ed U, Th	- <u>-</u> l	. [
# Floors above Ba								
# Floors below Ro			%	ft2	<u> </u>		I .	İ
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ² Wall Area, ft ²	750		\	0	750		ļ	4
Wall Area, π Ceiling Area, ft ²	1320 750			0	1320 750		<i>,</i>	ł
connig / i ca, it	/00	L	. 			·	I .	i
Componei	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes					L.		· .	j
Hoods Benches/Tables/D	oske	200	0					
Casework/Cabinet	1	350	0					
Reefers, Large Eq		·····				•		1
Misc. Equip./Labw	are	100	0	· · · · · · · · · · · · · · · · · · ·				1
Hot Cells Storage Tanks								
Other				······				
Sinks		20	0					
Drains			<u> </u>					
Ventilation Drops	L							
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		ļ
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	2	4	· 8				2	
Equip. Release Pack/Load waste	1 0.5	2	4		2	2	<u> </u>	
Decon/Remed.	0.0					<u> </u>		
Final Survey	2	4	8				2	1
# Lab Samples to b	e collected							

Building	220	Ro	om or Area		A	266]
Use		N	licro and Na	no Analysi	s Sample Pr	гер	· · · · · · · · · · · · · · · · · · ·	1.
				,			•	
Radionuclides, Ex			ן ז		Unseal	ed U, Th		ļ
Area Classification		1 2				x		
# Floors above Ba		2	-					
# Floors below Ro			%	ft2	T		1	
	1		needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	400	400	<u> </u>	40	JOIU33 L	01033 0		
Wall Area, ft ²	1800			0		<u> </u>	· ·	
Ceiling Area, ft ²	400	400		0	1		1	•
	<u> </u>	400	I	· · · · ·	.1	I	1	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	_
Glove Boxes								
Hoods		<u>)</u> 100	0.5		1			۱. ۱
Benches/Tables/D		200	0					
Casework/Cabinet		300	0					
Reefers, Large Eq								
Misc. Equip./Labw	are	200	0.1	0.2	0.8			
Hot Cells								
Storage Tanks								
Other								
Sinks		30	0		· ·			
Drains		0.6	0					
Ventilation Drops		13.6	0					•
Drains	No.	. 2	Inch Dia.	2	Total ft ³	0.6		
Ventilation Drops	No.	2	Inch Dia.		Total ft ³	13.6		
ventilation props	NO.	۷	inch Dia.	14		13.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	4	8	16				4	
Equip. Release	4	8	16				4	
Pack/Load waste	0.1	0.25	0.5	1	· 4	4,	0.1	
Decon/Remed.	0.5	• 1	1		2	2	0.5	
Final Survey	2	4	8				2	
# Lab Samples to b	oe collected	j į	1					

Building	220	Ro	om or Area	[A	122		
Use				Office				
Radionuclides, Ex	tent of Con	taminatio	n	ľ	Formerly	unsealed U		1
Area Classification		2]					·
# Floors above Ba]					
# Floors below Ro	of		<u> </u>				-	1
			%	ft2		 	1 ·	
			needing	needing			· ·	
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	}	. 1
Floor Area, ft ²	240			0	240			· -
Wall Area, ft ²	840		L	0	840	· · · · · · · · · · · · · · · · · · ·		
Ceiling Area, ft ²	⁻ 240		<u> </u>	· 0	240	<u> </u>] .	
Componen	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes				· ·				
Hoods								
Benches/Tables/De		100	0					
Casework/Cabinet	1	100	0					
Reefers, Large Equ					·			
Misc. Equip./Labwa	are							
Hot Cells					<u> </u>			
Storage Tanks			l	<u> </u>	·		· ·	
Other Sinks		·						
Drains		0.0						
Ventilation Drops	-	0.0	╂────┤		<u> </u>			1
ventilation Drops	L	0.0	L.,l	•	I	·		· · ·
Drains	No.	· · ·	Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
- sindiadon Diopa			ייים וייטיין			0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	1.5	3	6				1.5	
Equip. Release	0.25	1.5	2			•	0.25	
Pack/Load waste	0.1	0.25	l		1	1	0.1	
Decon/Remed.								
inal Survey	0.5	1	2		ll		0.5	х. — — — — — — — — — — — — — — — — — — —
# Lab Samples to b	e collected	I.	1					

Building	221] Ro	om or Area					
Use								
				r				
Radionuclides, Ex	tent of Cor	taminatior	1					
Area Classification								
# Floors above Ba								
# Floors below Ro			%	ft2	<u>r </u>	1	1	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	1900			0	t	1700		
Wall Area, ft ²	4040			0		3440		
Ceiling Area, ft ²	1900	200		0		1700		
					•	_		
			Fraction		3		ft ³	
Componer	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete	
Glove Boxes Hoods		0 60		0	·			
Benches/Tables/D	esks	350	0					
Casework/Cabinet		1000	0					
Reefers, Large Equ		1000	0					
Misc. Equip./Labw	are	1000						
Hot Cells		0						
Storage Tanks Other		60 0						
Sinks		40						
Drains	Ì	0						
Ventilation Drops		0						
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
tonination brops								
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	4.35	8.75	27	0	0	0	3.35	
Equip. Release	1.2	2.5	12	0	. 0		1.2	
Pack/Load waste	0.55	1.25	0	12	8		0.55	
Decon/Remed. Final Survey	0 2.45	0 5	0 16	0	0		0 1.45	
Final Survey	2.4J	5	10	U	0	U	1.40	
# Lab Samples to b	e collected	ł -	1					
-								

					1			
Building	221		om or Area			47	r	
Banang						<u> </u>	I	
Use			X-	ray Calibra	tion			ļ
}							······	
Radionuclides, Ex	tent of Co	ntaminatio	1		Sealed I	- e-55 only		
Area Classificatio		3	י ו					{
# Floors above Ba	sement		1					
# Floors below Ro	of		1					
			%	ft2		1	7	
[needing	needing	1		l I	
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²				0]	
Wall Area, ft ²				0	1		1	
Ceiling Area, ft ²				0			1	
	<u> </u>	······································	•·		_	A	1	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes								
Hoods								
Benches/Tables/D								
Casework/Cabinet								·
Reefers, Large Eq								
Misc. Equip./Labw	are							
Hot Celis								
Storage Tanks								
Other		ļ						l l
Sinks		·						
Drains			┝		L	<u> </u>	├ ────┤	
Ventilation Drops		L	L I		L		LI	
Dustas		<u> </u>			Total ft ³		I	
Drains	No.		Inch Dia.			0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.5	1	4				0.5	ļ
Equip. Release			2					
Pack/Load waste				2				1
Decon/Remed.								
Final Survey	0.25	0.5	2				0.25	1

Building	221] Ro	om or Area		В	149	
Use	•			X-ray Optic	S		
Radionuclides, Ex	ctent of Con	taminatio	n		Sealed F	e-55 only	· · · · · ·
Area Classificatio		3	1			······	
# Floors above Ba	asement]				
# Floors below Ro	oof]		-		-
			%	ft2			
			needing	needing			· ·
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	1
Floor Area, ft ²	400			0		400	
Wall Area, ft ²	800			0		800	
Ceiling Area, ft ²	400			0		400	
Compone	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concret
Glove Boxes			1		1		
Hoods							
Benches/Tables/D)esks	150	0				
Casework/Cabine		300	· 0				
Reefers, Large Eq							
Misc. Equip./Labw	/are	200	0				
Hot Cells	ļ						
Storage Tanks							
Other					ļ		
Sinks		20	0				
Drains		0.0					
Ventilation Drops	L	0.0					
Drains	No.		Inch Dia.		Total ft ³		
	F					0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	. 0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	0.5	1	4				0.5
	0.25	0.5	2				0.25
Equip. Release				2	2	2	0.1
Equip. Release Pack/Load waste	0.1	0.25		2	2		0
Equip. Release	0.1	0.25	2		2		

Building	221	Ro	om or Area		. A	142		
·								
Use	·			ergy Level	Data Cente	r		
Radionuclides, Ex Area Classificatio		taminatio	n T	L	Sealed I	e-55 only		
# Floors above Ba		<u>_</u>	1			•	,	
# Floors below Ro	pof		%	ft2		·		
			needing	needing	1			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ² Wall Area, ft ²	200		<u> </u>	0	<u> </u>	200 600		
Ceiling Area, ft ²	200			0		200		
Compone		Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes								
Hoods Benches/Tables/D)ockc	200	0		<u> </u>	ļ	L	
Casework/Cabinet		200				<u> </u>		
Reefers, Large Eq	uipment							
Misc. Equip./Labw Hot Cells	vare	100	0	·	ļ			J
Storage Tanks			<u>+</u>					
Other					ļ			
Sinks Drains		0.0		· · · · · · · · · · · · · · · · · · ·	<u> </u>			Í
Ventilation Drops		0.0						
	. 1				7			
Drains Ventilation Drops	No. No.		Inch Dia. Inch Dia.		Total ft ³ Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.25	0.5	2				0.25	
Equip. Release	0.1	0.25	1	2	1	1	· 0.1	·
Pack/Load waste	ł							
Pack/Load waste Decon/Remed.					1	1	0.1	
	0.1	0.25	1		i	L		1

								•		
									· .	
	:		· .							
								,		
		-	_		•					
•	Building	221	Ro	om or Area		A	146			
	Use				· · ·					
-	USe									
	Radionuclides, Ex	tent of Cor	taminatio	n	·	Sealed F	e-55 only	. [
	Area Classificatio		3]	, ,					
	# Floors above Ba # Floors below Ro		<u> </u>	4						
	# Ploors below Ro		<u> </u>	%	ft2		T	1		
				needing	needing				с.•	
	· · · · · · · · · · · · · · · · · · ·	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
	Floor Area, ft ²	200			0	· · · · ·	200			
	Wall Area, ft ²	600			0		600			
	Ceiling Area, ft ²	200	L	<u>I</u> .	0	<u> </u>	200	l		
				Fraction	Fraction	Fraction	Fraction	Fraction	·	
	Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete		
	Glove Boxes Hoods			 						
	Benches/Tables/D	esks								
	Casework/Cabinet		200						· · · ·	
	Reefers, Large Eq	uipment							×	
	Misc. Equip./Labw Hot Cells	are	300							
;	Storage Tanks		<u> </u>	<u> </u>						
	Other	• .	· · · · · · · · · · · · · · · · · · ·		· · · · ·					
	Sinks					,				
	Drains Ventilation Drops		0.0		· · ·					
	Ventilation Drops	1	0.0	I	<u> </u>			L	ļ	
	Drains	No.		Inch Dia.		Total ft ³	0.0			
	Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0			
	Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
	Characterize	0.1	0.25	1		Okileu	Unskilleu	0.1		
	Equip. Release	0.1	0.25	1				0.1		
	Pack/Load waste	0.1	0.25		2	1	1	0.1		
	Decon/Remed. Final Survey	0.1	0.25	1				0.1		
	rinal Survey	0.1	0.25	I			· · ·	0.1		
	# Lab Samples to I	oe collected	ł	0						
	L									
		, et								
								`		
i										
				· ·			•			
				• •		,				

Building	221] Roo	om or Area		Α	\$58		
Use			Lov	v level cou	nting]
Radionuclides, Ext	tent of Cor	tamination			14. Sealed	Am-241, Kr		1.
Area Classification		1	• }		-14, Jealeu	7111-241, 11	-00	
# Floors above Bas		· · · · · · · · · · · · · · · · · · ·						
# Floors below Ro								
			%	ft2	T	T]	
÷			needing	needing		ſ		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	•	
Floor Area, ft ²	200	200	0	0) .	
Wall Area, ft ²	600	600	0	0]	
Ceiling Area, ft ²	200	200	0	0]	
Componen	nte	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes	11.5	Total Its		DAN	INICIAL	Leau		ז ו
Hoods								1
Benches/Tables/De	esks							1
Casework/Cabinets		200	0			· · · · · · · · · · · · · · · · · · ·		1 . 1
Reefers, Large Equ		300	0			ł		1 1
Misc. Equip./Labwa		200	0			1		1
Hot Cells								
Storage Tanks								
Other								
Sinks					·	·		
Drains		0.0		····				
Ventilation Drops	l	0.0						
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
· · · · · · · · · · · · · · · · · · ·			L			L		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	1	2	8				1	
bilaidotolimo	0.5	1	4				0.5	
Equip. Release	0.4	0.25		2	2	2	0.1	
Equip. Release Pack/Load waste	0.1	0.20				-		
Equip. Release Pack/Load waste Decon/Remed. Final Survey	0.1	1	4				0.5	

Building	221	Ro	om or Area		B2	1-23		
Üse								1
Radionuclides, Ex	tent of Cor	ntaminatio	n	1	Seale	d Kr-85		İ.
Area Classificatior		3]					
# Floors above Ba		ζ						
# Floors below Ro	of					·		
			%	ft2				
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	900		ļ	0		900		
Wall Area, ft ²	1440			0		1440		
Ceiling Area, ft ²	900			0	<u> </u>	900		
•	4-	T	Fraction	Fraction	Fraction			
Componer	າເຣ	Total ft3	RW	DAW	Metal	Lead	Concrete	1
Glove Boxes		60	0		<u> </u>			
Benches/Tables/D	ocko	00				[·	
Casework/Cabinet:		300	0		ļ	<u> </u>		
Reefers, Large Equ		700	0	···				
Misc. Equip./Labwa		200	0		<u> </u> -	<u> </u>		
Hot Cells								
Storage Tanks		60	0					
Other			<u> </u>			<u> </u>		
Sinks		20	0			<u> </u>		
Drains		0.0	0		,			
Ventilation Drops		0.0	0	•	·			
. .	1		1 .		1 3			
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	1	2	4				1	
Equip. Release	0.25	0.5	2		<u> </u>		0.25	
Pack/Load waste	0.25	0.5		2	2	2	0.25	
Decon/Remed.			<u>`</u>					
Final Survey	0.25	0.5	2	L		l I	0.25	
# Lab Samples to b	e collecter	d	0					
	1. 7 . 185,	<u></u>						

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	· .							•		х Х.
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	Building	222	De.		· · · · · ·					1
	Dunaing		j Ro	om or Area						
	. Use				``		4			
	. 036						· · · · · · · · · · · · · · · · · · ·		`	
•										
	Radionuclides, Ext	tent of Cor	taminatior	1				•		
	Area Classification			1						
	# Floors above Ba			1						
	# Floors below Ro			Í						
			• .	%	ft2] .		
				needing	needing				•	
		Total	Class 1	Remed.	Remed.	Class 2	Class 3			
	Floor Area, ft ²	0	0		0		. 0			
	Wall Area, ft ²	0	0		0		0			
	Ceiling Area, ft ²	0			0		0			
•								4	۰.	
				Fraction				ft ³		
	Componen	ts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete		
	Glove Boxes		0.		0					
	Hoods		0							
	Benches/Tables/De		0	0						
•	Casework/Cabinets		0	0						
	Reefers, Large Equ		0	0						
	Misc. Equip./Labwa	are	0					· · ·		
	Hot Cells	,	0			· · ·				
	Storage Tanks Other		0					······		
	Sinks		0							
•	Drains		0					'		
	Ventilation Drops		0							1
	· • • • • • • • • • • • • • • • • • • •			· · · · · · · · · · · · · · · · · · ·	•		L	<u> </u>		· · ·
	Drains	No.		Inch Dia.		Total ft ³	0.0			
	Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0			,
	, ·	1		• •		. '		•	· ·	
	Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
	Characterize	4	8	16	· 0	0	0	4		
		~	0	0	0	. 0	0	• 0		e.
	Equip. Release	0					<u>ہ</u>	· 0		
	Pack/Load waste	0	0	0.	0	0	0	-		
	Pack/Load waste Decon/Remed.	-	0	0	0	0	0	0		
	Pack/Load waste	0	-					-		
	Pack/Load waste Decon/Remed. Final Survey	0 7	0 14	0 28	0	0	0	-		
	Pack/Load waste Decon/Remed.	0 7	0 14	0	0	0	0	-		·
	Pack/Load waste Decon/Remed. Final Survey	0 7	0 14	0 28	0	0	0	-		
	Pack/Load waste Decon/Remed. Final Survey	0 7	0 14	0 28	0	0	0	-		
	Pack/Load waste Decon/Remed. Final Survey	0 7	0 14	0 28	0	0	0	-		
	Pack/Load waste Decon/Remed. Final Survey	0 7	0 14	0 28	0	0	0	-		
	Pack/Load waste Decon/Remed. Final Survey	0 7	0 14	0 28	0	0	0	-		
	Pack/Load waste Decon/Remed. Final Survey	0 7	0 14	0 28	0	0	0	-		·
	Pack/Load waste Decon/Remed. Final Survey	0 7	0 14	0 28	0	0	0	-		·
	Pack/Load waste Decon/Remed. Final Survey	0 7	0 14	0 28	0	0	0	-		·
	Pack/Load waste Decon/Remed. Final Survey	0 7	0 14	0 28	0	0	0	-		•

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Building	222] Ro	om or Area	A-206	, 110, 116.	122, 128, 1	32, 148
		J					
Use		Formerly ra	adiologial la	bs; previous	ly released	, now office	S
						·	
Radionuclides, Ex	tent of Cor	ntaminatio	n		All nu	uclides	
Area Classification	1	2]	<u> </u>			
# Floors above Ba							
# Floors below Ro	of	•			.	· · ·	
l l		1	%	ft2		1	
	T . 4 . 1		needing	needing	0		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ² Wall Area, ft ²			<u> </u>	0			
Ceiling Area, ft ²		· · · · ·		0		<u> </u>	
Centrig Area, It						L	1
			Fraction	Fraction	Fraction	Fraction	Fraction
Componen	its	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes	i					r	
Hoods		* .					
Benches/Tables/De							
Casework/Cabinets							
Reefers, Large Equ							
Misc. Equip./Labwa	are	·	ļ		·		
Hot Cells Storage Tenks			<u> </u>	<u> </u>			
Storage Tanks Other							
Sinks							· · · · · · · · · · · · · · · · · · ·
Drains							
Ventilation Drops							
•	L. L. L. L. L. L. L. L. L. L. L. L. L. L					· · · · · · · · · · · · · · · · · · ·	 ,
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
<u>.</u>	-						
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	4	8	16				4
quip. Release							
Pack/Load waste			· · · · ·				<u> </u>
			16			L	4
inal Survey	4	8	1 1 1 1				4

A: #	Use adionuclides, Ex				_					
A: #						· · · ·]	
A: #							<u>.</u>		1	
	rea Classificatior]			<u> </u>		J	
17	Floors above Ba									
Ë-	Floors below Ro	ot		%	ft2		<u>r</u>	[
		Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3			
FI	oor Area, ft ²	4400			0		3500			
w	all Area, ft ²	7680			0		6180			
C	eiling Area, ft ²	4400	0		0		3500			· ·
				Fraction				ft ³		
	Componen	nts	Total ft3	RW		ft ³ Metal	ft ³ Lead	Concrete		
	love Boxes oods		0		0					
	enches/Tables/De	esks	920	0						
	asework/Cabinet		550	, 0						ſ
	eefers, Large Equ isc. Equip./Labwa		2850 1005	0						
	ot Cells	are	0			+				
St	orage Tanks		0							
	ther nks		0							
	nks ains		0		i					
Ve	entilation Drops	l	0							
	ſ									
Dr	ains	No.		Inch Dia.		Total ft ³	0.0			
Ve	entilation Drops	No.		Inch Dia.		Total ft ³	0.0			
Pe	erson-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	-	
Ch	naracterize	4.25	8.5	26	0	0	~ 0	4.25		
	uip. Release ck/Load waste	1.9			0	0	0	1.9		
	con/Remed.	1.05 0	2.25 0	0 0	8 0	11 0	11 0	1.05 0	,	
	nal Survey	1.3	2.75		0	0	0	1.3		
	_ab Samples to b	o colloctor	4	1						
# L	an Samples to p			i						
									<u></u>	•
			;							
	•					*				

Building		Ro	om or Area	4	D	4 E 4	. 1	
	¢				D	151		
	·							
			·····					
Radionuclides, Ex			n T	L	Sealed Co	-57, Sn-119		
Area Classificatio		3	4					Ì
# Floors above Ba # Floors below Ro			4					
# FIGUIS DEIDW RC		<u> </u>	%	ft2	T	1	l	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	500			0		500		
Wall Area, ft ²	1100			0		1100		
Ceiling Area, ft ²	500			0		500		
Compone Glove Boxes	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Hoods Benches/Tables/D	locke	150	0		<u> </u>			
Casework/Cabine		100	0					
Reefers, Large Eq		500	0					
Misc. Equip./Labv		600	0					
	ł							
Hot Cells								
Storage Tanks								
Storage Tanks Other								
Storage Tanks Other Sinks								
Storage Tanks Other Sinks Drains								
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops								
Storage Tanks Other Sinks Drains	No.[Inch Dia.		Total ft ³	0.0		
Storage Tanks Other Sinks Drains Ventilation Drops Drains	No. No.		Inch Dia. Inch Dia.		Total ft ³ Total ft ³	0.0		
Storage Tanks Other Sinks Drains Ventilation Drops		Supvsr		Shipper			Clerical	
Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize	No.[<u>Mgr</u> 0.5	Supvsr 1	Inch Dia. HP Tech 4	Shipper	Total ft ³	0.0	Clerical 0.5	
Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No. <u>Mgr</u> 0.5 0.25	Supvsr 1 0.5	Inch Dia. HP Tech		Total ft ³ Skilled	0.0 Unskilled	0.5 0.25	
Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	No.[<u>Mgr</u> 0.5	Supvsr 1	Inch Dia. HP Tech 4	Shipper 2	Total ft ³	0.0	0.5	
Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No. <u>Mgr</u> 0.5 0.25	Supvsr 1 0.5	Inch Dia. HP Tech 4		Total ft ³ Skilled	0.0 Unskilled	0.5 0.25	

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Building	223] Ro	om or Area	l	B	221	
Use			X	-ray Diffrac	tion		
Radionuclides, Ex	tent of Cor	taminatio	n	r	Seale	d Fe-55	
Area Classificatio		3	ï	L	Ocale		·
# Floors above Ba			4				
# Floors below Ro			1				
<u>~ 110010 2010 110</u>	<u> </u>		%	ft2		,	1
			needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	400			0		400	
Wall Area, ft ²	1000			0		1000	
Ceiling Area, ft ²	400			0		400	,
			Fraction	Fraction	Fraction	Fraction	Fraction
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes							
Hoods							
Benches/Tables/D		200	0				
Casework/Cabinet		150	0				
Reefers, Large Eq		800	0				
Misc. Equip./Labw	are	150	0				
Hot Cells							
Storage Tanks			ļ	ļ	ļ		
Other Sinks							
Drains		0.0	1				
Ventilation Drops		0.0					
ventilation brops		0.0	J	L	<u></u>	· · · · · · · · · · · · · · · · · · ·	
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.	•	Total ft ³	0.0	
ventilation brops			Inter pia.			0.0	I
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	0.25	0.5	2				0.25
Equip. Release	0.25	0.5	2				0.25
Pack/Load waste	0.25	0.5		2	2	2	0.25
							0.1
Decon/Remed. Final Survey	0.1	0.25	1				

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Building	223	Ro	om or Area		A	132	
Use			MS	SEL Micros			
	·	<u> </u>					
Radionuclides, Ex	tent of Cor	taminatio	n		Seale	d Fe-55	
Area Classificatio		3]			······	
# Floors above Ba	sement]				
# Floors below Ro	of]				-
			%	ft2			
			needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	800			0		800	
Wall Area, ft ²	1200		·	0		1200	
Ceiling Area, ft ²	800			0		800	
					_	.	
-			Fraction	Fraction	Fraction	Fraction	Fraction
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes		<u> </u>	<u> </u>	ļ	<u> </u>	<u> </u>	
Hoods		400		<u> </u>	<u> </u>	· · ·	
Benches/Tables/D		120	0		 	ļ	
Casework/Cabinet		100	0		+	 i	
Reefers, Large Eq		<u>300</u> 80	0			 	
Misc. Equip./Labw Hot Cells	are	00	<u> </u>				·
Storage Tanks							
Other					┦		
Sinks							
Drains		0.0	-		<u>}</u>		
Ventilation Drops		0.0					
Ventilation Drop5	l				L		
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
ventilation brops	10.[0.0	·
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	1	2	4				1
Equip. Release	0.4	0.75	3				0.4
Pack/Load waste	0.1	0.25		2	2	2	0.1
Decon/Remed.							
Final Survey	0.25	0.5	2				0.25
	oe collected	i	0				

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Benches/Tables/Desks	Building	223	Ro	om or Area		B3	13		
Formerly sealed, unseald U Formerly sealed, unseald U # Floors above Basement 2 # Floors above Basement 7 # Floors below Roof 7 ft2 needing 0 needing needing Class 2 Class 3 Floor Area, ft ² 900 0 900 900 Wall Area, ft ² 1500 0 900 Wall Area, ft ² 900 0 900 Give Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Hoods	العم								
Area Classification 2 # Floors above Basement	USE								· · · ·
# Floors above Basement # Floors below Roof # Floors below Roof Total Class 1 Remed. Class 2 Class 1 Remed. Remed. Class 2 Class 1 0 Wall Area, ft ² 900 O 900 Ceiling Area, ft ² 900 O 900 Ceiling Area, ft ² 900 Components Total ft3 RW DAW Metal Lead Concrete Concrete Glove Boxes			taminatio	<u>n</u>	Fo	ormerly seal	ed, unseald	U	·
# Floors below Roof % ft2 needing needing Remed. ft2 class 2 class 3 Floor Area, ft ² 900 0 900 Wall Area, ft ² 1500 0 1500 Ceiling Area, ft ² 900 0 900 Ceiling Area, ft ² 900 0 900 Ceiling Area, ft ² 900 0 900 Components Fraction Fraction Fraction Glove Boxes Total ft3 RW DAW Metal Lead Glove Boxes Image: Concrete Image: Concrete Image: Concrete Image: Concrete Glove Boxes Image: Concrete Image: Concrete Image: Concrete Image: Concrete Benches/Tables/Desks Image: Concrete Image: Concrete Image: Concrete Image: Concrete Storage Tanks Image: Concrete Image: Concrete Image: Concrete Image: Concrete Storage Tanks Image: Concrete Image: Concrete Image: Concrete Image: Concrete Drains No. Inch Dia. <			2						
Total Class 1 Remeding Reme				4 •					ĺ
Total Class 1 needing Remed. needing Remed. Class 2 Class 3 Floor Area, ft ² 900 0 900 0 900 Wall Area, ft ² 1500 0 1500 0 Ceiling Area, ft ² 900 0 900 900 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes Image: Concrete	# Floors Delow Ro	OT		%	ft2	· · · · · · · · · · · · · · · · · · ·		1	
Floor Area, ft ² 900 0 900 Wall Area, ft ² 1500 0 1500 Ceiling Area, ft ² 900 0 900 Ceiling Area, ft ² 900 0 900 Ceiling Area, ft ² 900 0 900 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes				1		•			
Wall Area, ft ² 1500 0 1500 Ceiling Area, ft ² 900 0 900 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Fraction		and the second se		Remed.	Remed.		Class 3		
Ceiling Area, ft ² 900 0 900 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	Floor Area, ft ²								
Components Total ft3 Fraction	Wall Area, ft ²								
ComponentsTotal ft3RWDAWMetalLeadConcreteGlove Boxes	Ceiling Area, ft ²	900			0	900			· .
ComponentsTotal ft3RWDAWMetalLeadConcreteGlove Boxes				Fraction	Eraction	Fraction	Fraction	Fraction	
Glove Boxes	Componer	nts	Total ft3						
Hoods Image: Conservation of the system			Total no			linetai	Loud		
Casework/Cabinets	Hoods								
Reefers, Large Equipment									
Misc. Equip./Labware								,	
Hot Cells Image Tanks Image Tanks Image Tanks Other Image Tanks Image Tanks Image Tanks Other Image Tanks Image Tanks Image Tanks Drains 0.0 Image Tanks Image Tanks Drains 0.0 Image Tanks Image Tanks Drains 0.0 Image Tanks Image Tanks Drains No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 1 2 8 1 1 0.25 Peack/Load waste 0.25 0.5 1 1 0.25 Decon/Remed. Image Tanks Image Tanks Image Tanks Image Tanks Final Survey 0.5 1 4 Image Tanks Image Tanks									
Storage Tanks		are					· · · ·		ľ
Other Image: Constraint of the state	•								
Drains0.0Image: Constraint of the state of the st	Other								
Ventilation Drops 0.0 Inch Dia. Total ft ³ 0.0 Drains No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 1 2 8 1 1 Equip. Release 0.5 Pack/Load waste 0.25 0.5 1 1 0.25 Decon/Remed. 0.5 Final Survey 0.5 1 4 0.5	Sinks								
DrainsNo.Inch Dia.Total ft³0.0Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize12811Equip. Release0.5140.5Pack/Load waste0.250.5110.25Decon/Remed.0.5Final Survey0.5140.5	Drains								
Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize12811Equip. Release0.5140.5Pack/Load waste0.250.5110.25Decon/Remed.0.5Final Survey0.5140.5	Ventilation Drops		0.0						
Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize12811Equip. Release0.5140.5Pack/Load waste0.250.5110.25Decon/Remed.0.5Final Survey0.5140.5	Ducino	No [lunah Dia [Total #3	0.0	1	
Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize12811Equip. Release0.5140.5Pack/Load waste0.250.5110.25Decon/Remed				4 4					1
Characterize 1 2 8 1 Equip. Release 0.5 1 4 0.5 Pack/Load waste 0.25 0.5 1 1 0.25 Decon/Remed.	ventilation brops						0.0		
Equip. Release 0.5 1 4 0.5 Pack/Load waste 0.25 0.5 1 1 0.25 Decon/Remed.	Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Pack/Load waste 0.25 0.5 1 1 0.25 Decon/Remed.	Characterize								
Decon/Remed. 0.5 1 4 0.5				4					
Final Survey 0.5 1 4 0.5		0.25	0.5					0.25	
		0.5	1	4				0.5	Í
# Lab Samples to be collected 1			•						
	# Lab Samples to t	e collected	1	1					
									•
	N S								
								1	

Use Stucture Destructon Methods Radionuclides, Extent of Contamination Formerly unsealed Co-57 Area Classification Stucture Destructon Methods Formerly unsealed Co-57 Area Class 1 Formerly unsealed Co-57 Meeding needing needing needing needing needing needing needing needing and needing and needing and needing and and and and and and and and and and	DILIMITION	223	Ro	om or Area	1	Δ	150		
Formerly unsealed Co-57 Formerly unsealed Co-57 Area Classification 3 # Floors above Basement 9% ft2 meeding needing needing Class 2 Class 3 Floor Area, ft ² 900 0 900 Wall Area, ft ² 900 0 900 Wall Area, ft ² 900 0 900 Ceiling Area, ft ² 900 0 900 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 700 0 900 0 900 Benches/Tables/Desks 300 0 1 1 200 0 1 <th1< th=""> <th1< th=""><th></th><th></th><th></th><th></th><th></th><th>•</th><th></th><th></th><th></th></th1<></th1<>						•			
Area Classification 3 # Floors above Basement	Use			Stucture	Destructor	n Methods			J
# Floors above Basement # Floors below Roof Total Class 1 Remed. Remed. Remed. Class 2 Ploor Area, ft ² 900 Wall Area, ft ² 1440 Ceiling Area, ft ² 900 Wall Area, ft ² 1440 Ceiling Area, ft ² 900 Components Fraction Fraction Fraction Fraction Fraction Components Total ft3 RW DAW Metal Lead Concrete Solution Glove Boxes 300 Hoods 300 Benches/Tables/Desks 300 Casework/Cabinets 200 Refers, Large Equipment 500 Storage Tanks				n	L	Formerly ur	sealed Co-5	57	. .
# Floors below Roof % ft2 needing needing Remed. reading Remed. Class 2 Class 3 Floor Area, ft ² 900 0 900 Wall Area, ft ² 1440 0 1440 Ceiling Area, ft ² 900 0 900 Wall Area, ft ² 900 0 900 Ceiling Area, ft ² 900 0 900 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 900 0 900 900 900 900 900 Benches/Tables/Desks 300 0 900 </td <td></td> <td></td> <td>3</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td>			3	4					
Total Class 1 Remed. ft2 needing Remed. Class 2 Class 3 Floor Area, ft ² 900 0 900 Wall Area, ft ² 1440 0 1440 Ceiling Area, ft ² 900 0 900 Wall Area, ft ² 1440 0 1440 Ceiling Area, ft ² 900 0 900 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Inch fi3 RW DAW Metal Lead Concrete Benches/Tables/Desks 300 0 Inch Inch ft ³ 0.0 Inch Inch Inch				4				· · ·	
Total Class 1 Remed. Remed. Class 2 Class 3 900 Wall Area, ft ² 900 0 0 900 1440 0 1440 Ceiling Area, ft ² 900 0 0 900 1440 0 1440 Ceiling Area, ft ² 900 0 0 900 900 900 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes								1	
Floor Area, ft ² 900 0 900 Wall Area, ft ² 1440 0 1440 Ceiling Area, ft ² 900 0 900 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes		Total	Class 1			1	Class 3		
Wall Area, ft ² 1440 0 1440 Ceiling Area, ft ² 900 0 900 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes 300 0 1440 1440 1440 Benches/Tables/Desks 300 0 1440 1440 1440 Benches/Tables/Desks 300 0 1440 1440 1440 1440 Benches/Tables/Desks 300 0 1440 1440 1440 1440 1440 Benches/Tables/Desks 300 0 1440 1440 1440 1440 Benches/Tables/Desks 300 0 1440 1440 1440 1440 Storage Tanks 200 0 1440 1440 1440 1440 Orains 0.0 Inch Dia. Total ft ³ 0.0 0.0 <t< td=""><td>Floor Area, ft²</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Floor Area, ft ²								
Components Glove Boxes HoodsTotal ft3RWDAWMetalLeadConcreteGlove Boxes Hoods Benches/Tables/Desks Casework/Cabinets Reefers, Large Equipment Misc. Equip./Labware Hot Cells3000	Wall Area, ft ²	·····			0		1440		
ComponentsTotal ft3RWDAWMetalLeadConcreteGlove Boxes	Ceiling Area, ft ²	900			0		900		•
Glove Boxes	Compone	nts	Total ft3					. `	
Benches/Tables/Desks 300 0	Glove Boxes								ļ
Casework/Cabinets 200 0	Hoods								-
Reefers, Large Equipment 500 0				1	ļ				
Misc. Equip./Labware 75 0									
Storage Tanks						1			*
Other Image: Constraint of the state	Hot Cells								
Sinks Image: Constraint of the state									
Drains0.0Image: Constraint of the state of the st			· · ·	<u> </u>					
DrainsNo.Inch Dia.Total ft³0.0/entilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.5140.5Equip. Release0.250.520.25Pack/Load waste0.10.25220.1	Drains		0.0	<u>├──</u> ──					
Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.5140.50.5Equip. Release0.250.520.25Pack/Load waste0.10.25220.1Decon/Remed.0000	Ventilation Drops	ĺ	0.0		_				
Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.5140.50.5Equip. Release0.250.520.25Pack/Load waste0.10.25220.1Decon/Remed.0000	Drains	No		Inch Dia		Total ft ³			
Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.5140.5Equip. Release0.250.520.25Pack/Load waste0.10.25220.1Decon/Remed.0000	Ventilation Drops	•							
Characterize 0.5 1 4 0.5 Equip. Release 0.25 0.5 2 0.25 Pack/Load waste 0.1 0.25 2 2 0.1 Decon/Remed. 0 0 0 0 0 0	Porson hours	Mar	Sunver	UD Took	Shinese	Chilled	Unchilled	Clorical	
Equip. Release 0.25 0.5 2 0.25 Pack/Load waste 0.1 0.25 2 2 0.1 Decon/Remed. 0 0 0 0 0 0 0					Snipper	Skilled	Unskilled		
Decon/Remed.	Equip. Release		0.5						
	Pack/Load waste	0.1	0.25			2	2	0.1	
		0.4	0.05						•
	-inal Survey	0.1	0.25	1	· · ·	I		0.1	

	Building	223	Ro	om or Area		A	232] ·
	Use			X-	ray Diffract	ion]	
	Radionuclides, Ex	tent of Con	taminatio	n	1	Seale	d Fe-55		[
	Area Classification # Floors above Ba	n Isement	3				f		1	
	# Floors below Ro		:	%	ft2		· · ·			
۲		Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3			i
	Floor Area, ft ²	900	010351	Nemeu.	0	01255 2	900			
	Wall Area, ft ²	1440		1-	0		1440			
	Ceiling Area, ft ²	900	•		0		900			
,	Componer	nts	Total ft3	Fraction RW	Fraction	Fraction Metal	Fraction Lead	Fraction Concrete		
	Glove Boxes	[Total no		DAT	Inicial		Condicto	1.	
	Hoods									
	Benches/Tables/D		150	0		•				
	Casework/Cabinet									
	Reefers, Large Eq		750	0						
	Misc. Equip./Labw	are	100	0						
	Hot Cells									
	Storage Tanks									
	Other	L								
	Sinks									
	Drains		0.0							
	Ventilation Drops	. [0.0							
	Drains	No.		Inch Dia.		Total ft ³	0.0			
	Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0			
	Damage hours	Maria	C		Oh in man	Okillad		<u>Clasical</u>		
	Person-hours Characterize	Mgr 1	Supvsr 2	HP Tech	Shipper	Skilled	Unskilled	Clerical 1		
	Equip. Release	0.25	0.5	4 2				0.25		
	Pack/Load waste	0.25	0.25		2	2	2	0.25		
	Decon/Remed.	0.1	0.20	<u> </u>	۷.	<u> </u>			~	
	Final Survey	0.1	0.25	1	····			0.1		
	# Lab Samples to t	be collected	l	0						

Building	224	Ro	om <mark>or Are</mark> a				
Use	•			·····			
,							
					·		
Radionuclides, Ex		tamination	1				
Area Classificatio # Floors above Ba		·····					
# Floors below Ro							
# 1 10013 Delow Ro			%	ft2	T		1
			needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	3065	840		0	1	1525	1
Wall Area, ft ²	5800	1500		0		2800	
Ceiling Area, ft ²	3065	840		0		1525	4
					•		•
			Fraction				ft ³
Compone	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete
Glove Boxes		0		0			
Hoods		80					
Benches/Tables/D		870	0				
Casework/Cabinet		1140 900	0	4	 	<u> </u>	· · · · · · ·
Reefers, Large Eq Misc. Equip./Labw		<u>900</u> 475	0		<u> </u>		
Hot Cells	are						
Storage Tanks		4					
Other		0					
Sinks		94					
Drains	[0					
Ventilation Drops		0					
1	N T				Total ft ³		
Draina	No. No.		Inch Dia.			0.0	
Drains			Inch Dia.		Total ft ³	0.0	
Drains Ventilation Drops	NO.[Shipper	Skilled	Unskilled	Clerical
Ventilation Drops Person-hours	Mgr	Supvsr	HP Tech			0	3.55
Ventilation Drops Person-hours Characterize	Mgr 8	16	32	0			
Ventilation Drops Person-hours Characterize Equip. Release	Mgr	16 8.5	32 21	· 0 0	0	0	2.25
Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	Mgr 8 4.25 1	16 8.5 2	32 21 0	0003	0 8	0 7	1
Ventilation Drops Person-hours Characterize Equip. Release	Mgr 8 4.25	16 8.5	32 21	· 0 0	0	0 7 0	

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Building 224 Room or Area B225 Use		,								
Use None Class 1 None None Total Class 1 Network Class 3 Class 4 O Class 4 Class 5 Fraction Fraction Fraction Fraction Components Total ft3 RW DA Benches/Tables/Desks Casework/Cableets Casework/Caluets										
Use None Class 1 None None Total Class 1 Network Class 3 Class 4 O Class 4 Class 5 Fraction Fraction Fraction Fraction Components Total ft3 RW DA Benches/Tables/Desks Casework/Cableets Casework/Caluets	· .									
Use None Class 1 None None Total Class 1 Network Class 3 Class 4 O Class 4 Class 5 Fraction Fraction Fraction Fraction Components Total ft3 RW DA Benches/Tables/Desks Casework/Cableets Casework/Caluets										
Use None Class 1 None None Total Class 1 Network Class 3 Class 4 O Class 4 Class 5 Fraction Fraction Fraction Fraction Components Total ft3 RW DA Benches/Tables/Desks Casework/Cableets Casework/Caluets								. ÷		
Use None Class 1 None None Total Class 1 Network Class 3 Class 4 O Class 4 Class 5 Fraction Fraction Fraction Fraction Components Total ft3 RW DA Benches/Tables/Desks Casework/Cableets Casework/Caluets	Building	224	Ro	om or Area		B2	25			Т
None None None Total f3 Revend. Class 2 Class 3 Class 1 Class 2 Class 2 Class 1 Class 2 Class 2 Class 2 Class 1 Revended Concrete Glove Boxes Total f3 Revended Concrete Glove Boxes <td>Danamg</td> <td>224</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>l</td> <td></td>	Danamg	224							l	
Area Classification 3 # Floors above Basement	Use	1					· · ·			
Area Classification 3 # Floors above Basement		· .			·····				!	
Area Classification 3 # Floors above Basement	Radionuclides, Ext	ent of Con	taminatior	۰ ·		No	one			
# Floors below Roof % ft2 needing Remed. ft2 Remed. Class 2 Class 3 Floor Area, ft2 625 0 625 Wall Area, ft2 1200 0 1200 Ceiling Area, ft2 625 0 625 Wall Area, ft2 625 0 625 Ceiling Area, ft2 625 0 625 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Benches/Tables/Desks 300 0	Area Classification) [] '					•	1
Total Class 1 Remed. ft2 needing needing class 2 Class 3 Floor Area, ft ² 625 0 625 Wall Area, ft ² 1200 0 1200 Ceiling Area, ft ² 625 0 625 Wall Area, ft ² 625 0 625 Components Fraction Fraction Fraction Components Total ft3 RW DAW Metal Lead Concrete Concrete 600 625 Hoods 300 0 1 1 1 Benches/Tables/Desks 300 0 1 1 1 Casework/Cabinets 300 0 1 1 1 1 Reefers, Large Equipment 400 0 1 1 1 1 Storage Tanks 4 0 1 1 1 1 Other 1 1 1 1 1 1 1				4						
Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 625 0 625 Wall Area, ft ² 1200 0 1200 Ceiling Area, ft ² 625 0 625 Components Fraction Fraction Fraction Fraction Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 300 0	# FIGORS DEIOW ROC	JT	·····	%	ft2					
Floor Area, ft ² 625 0 625 Wall Area, ft ² 1200 0 1200 Ceiling Area, ft ² 625 0 625 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes 300 0 1 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>·</td><td></td><td></td></t<>								·		
Wall Area, ft ² 1200 0 1200 Ceiling Area, ft ² 625 0 625 Fraction Fraction Fraction Fraction Fraction Fraction Components Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes			Class 1	Remed.		Class 2				1
Ceiling Area, ft ² 625 0 625 Fraction Fraction Fraction Fraction Fraction Fraction Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Hoods 300 0	Floor Area, ft									•
Components Glove BoxesTotal ft3Fraction RWFraction DAWFraction MetalFraction LeadFraction ConcreteGlove BoxesHoodsBenches/Tables/DesksCasework/CabinetsReefers, Large Equipment Misc. Equip./LabwareHot CellsStorage TanksOtherSinksDrainsVentilation DropsNo.Inch Dia.Total ft3OptimizerPerson-hoursMgrSupysrHP TechShilledOtharacterize1240.250.5220.25 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>										
Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	Centing Area, it	025]					025		,	
Glove Boxes	,									
Hoods Image: Conservation of the second	Componen	its ſ	Total ft3	RW	DAW	Metal	Lead	Concrete	I	
Benches/Tables/Desks 300 0										
Reefers, Large Equipment 400 0	Benches/Tables/De									
Misc. Equip./Labware 75 0								. <u></u>		
Hot Cells 4 0 -	Misc. Equip /Labwa	iipment are								
Other Sinks Drains Ventilation Drops200Drains Ventilation Drops200Drains Ventilation DropsNo.Inch Dia.Total ft³0.0Drains Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hours 	Hot Cells									<u>.</u>
Sinks Drains Ventilation Drops200			4	0						
Drains Ventilation DropsNo.Inch Dia.Total ft³0.0Drains Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hours CharacterizeMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize12411Equip. Release0.5140.50.5Pack/Load waste0.250.5220.25Decon/Remed.00000			20	0						
DrainsNo.Inch Dia.Total ft³0.0Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize12411Equip. Release0.5140.5Pack/Load waste0.250.5220.25Decon/Remed. </td <td></td> <td></td> <td>20</td> <td></td> <td></td> <td></td> <td> ·</td> <td></td> <td></td> <td>· ·</td>			20				·			· ·
Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize12411Equip. Release0.5140.5Pack/Load waste0.250.5220.25Decon/Remed.0000	Ventilation Drops	Ī		·		(· · · · ·			
Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize12411Equip. Release0.5140.5Pack/Load waste0.250.5220.25Decon/Remed.0000	Draina	N- [
Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize12411Equip. Release0.5140.5Pack/Load waste0.250.5220.25Decon/Remed.0000										·
Characterize 1 2 4 1 Equip. Release 0.5 1 4 0.5 Pack/Load waste 0.25 0.5 2 2 0.25 Decon/Remed. 0 0 0 0 0	Vollardion Dropo	No.L		luiou pia: T			0.0			
Equip. Release 0.5 1 4 0.5 Pack/Load waste 0.25 0.5 2 2 0.25 Decon/Remed. <					Shipper	Skilled	Unskilled			1
Pack/Load waste 0.25 0.5 2 2 0.25 Decon/Remed. </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>/</td> <td>-</td> <td></td> <td></td>							/	-		
Decon/Remed.						2	2			
Final Survey 0.25 0.5 2 0.25	Decon/Remed.									· ,
		0.25	0.5	2				0.25		
		e collected		1						
	# Lab Samples to b	e collected	· · ·	1						
		e collected	I	1				· · · · · · · · · · · · · · · · · · ·		
		e collecteo		1				· · · · · ·		
		e collectec	I	1	•					
		e collecteo	I	1						
		e collected	I	<u> 1 </u>				· · · · · · · · · · · · · · · · · · ·		
		e collected	I	1	 					
		e collected	I	<u>1</u>			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
		e collected	I	1	· · · ·					
		e collected	I	1	· · ·			· · · · · · · · · · · · · · · · · · ·		
		e collected	I	1	· ·		•			

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Duilding		l n.				205	<u> </u>	r
Building	224	j Ro	om or Area		B,	365		1
Use								ן
								1
Radionuclides, Ext	ent of Con	Itaminatio	n [.]		Forme	rly Kr-85		1
Area Classification		3]					•
# Floors above Bas	sement]					
# Floors below Roc	of							
			%	ft2	}		1	
	Tatal	Class 4	needing	needing	01 0	010 0		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	<u> </u>		Į	0	┢┈───	600	1	
Wall Area, ft ²	900		<u> </u>	0	<u> </u>	900	1	
Ceiling Area, ft ²	600		<u> </u>	0	L	600	l	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componen	ts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes								
Hoods	с. 1				<u> </u>	<u> </u>		
	ske	250	0					
Benches/Tables/De	.ono							
Casework/Cabinets	;	350	0					
Casework/Cabinets Reefers, Large Equ	ipment	350 500	0					
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa	ipment	350	0					
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells	ipment	350 500	0					
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks	ipment	350 500	0					
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks Other	ipment	350 500	0					
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks Other Sinks	ipment	350 500 80	0					
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks Other Sinks Drains	ipment	350 500 80 0.0	0					
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks Other Sinks	ipment	350 500 80	0					
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops	ipment ire	350 500 80 0.0			Total ft ³	0.0		
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains	ipment ire No.	350 500 80 0.0 0.0	0 0 0		Total ft ³	0.0		
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops	ipment ire	350 500 80 0.0 0.0			Total ft ³ Total ft ³	0.0		
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops	ipment ire No.	350 500 80 0.0 0.0 0.0 Supvsr	0 0 0 Inch Dia. Inch Dia.	Shipper			Clerical	
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize	ipment ire No. No. 1	350 500 80 0.0 0.0 0.0 Supvsr 2	0 0 0 Inch Dia. Inch Dia. HP Tech 4	Shipper	Total ft ³	0.0	1	
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	ipment ire No. No. <u>Mgr</u> 1 0.5	350 500 80 0.0 0.0 0.0 5upvsr 2 1	0 0 0 Inch Dia. Inch Dia.	Shipper	Total ft ³ Skilled	0.0 Unskilled	1 0.5	
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	ipment ire No. No. 1	350 500 80 0.0 0.0 0.0 Supvsr 2	0 0 0 Inch Dia. Inch Dia. HP Tech 4	Shipper	Total ft ³	0.0	1	
Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	ipment ire No. No. <u>Mgr</u> 1 0.5	350 500 80 0.0 0.0 0.0 5upvsr 2 1	0 0 0 Inch Dia. Inch Dia. HP Tech 4	Shipper	Total ft ³ Skilled	0.0 Unskilled	1 0.5	

Building	224	Ro	om or Area		A2	264	. C]
Use			Aeroso	I Measurem	nent Lab]	
Radionuclides, Ex		tamination	<u>1</u>	l	Kr-85, Sea	led Am-241] .	
Area Classificatio		2							
# Floors above Ba	sement						• -		
# Floors below Ro	of								
			% needing	ft2 needing				1	
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	1.		
Floor Area, ft ²	200			0	200				
Wall Area, ft ²	600			0	- 600	:	,		
Ceiling Area, ft ²	200			0	200				
			Fraction	Fraction	Fraction	Fraction	Fraction		
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	1	, ·
Glove Boxes									
Hoods		80 120	0						
Benches/Tables/D Casework/Cabinet		120	0				· · · · ·		
		100	0						
Reefers, Large Eq Misc. Equip./Labw		100	0						
Hot Cells	ale	100							
Storage Tanks	•				· · · · ·				
Other	,		· · · ·						
Sinks	ł	20	0						
Drains		0.0							
Ventilation Drops		0.0							
	L	0.0			L			I	
Drains	No.	:	Inch Dia.		Total ft ³	0.0			
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		• •	
r -	֥ L				• •		· ·		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Characterize	0.5	1	2				0.5		
Equip. Release	0.5	1	2				0.5		
Pack/Load waste	0.25	0.5		2	1	1	0.25		· .
Decon/Remed.									
Final Survey	0.5	1	2				0.5		
# Lab Samples to I	be collected	k	1						

Building 228 Room or Area B363 Usc Fire Emulator Lab Radionuclides, Extent of Contamination Kr-85 Area Classification Romed for the ending for				,							
Use Fire Emulator Lab Radionuclides, Extent of Contamination Area Classification 2 # Floors above Basement 2 # Floors above Basement 2 # Floors below Roof % ft2 No Remed. Class 2 Class 3 Floor Area, ft2 500 0 500 Wall Area, ft2 900 0 900 Ceiling Area, ft2 900 0 900 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Hoods Benches/Tables/Desks 100 0 1 <th1< th=""> <th1< th=""> 1 1<th></th><th></th><th></th><th>·</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th1<></th1<>				·							
Use Fire Emulator Lab Radionuclides, Extent of Contamination Area Classification 2 # Floors above Basement 2 # Floors below Roof 9% ft2 needing needing Class 2 Class 3 Benchart Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 900 0 900 0 900 Ceiling Area, ft ² 900 0 900 Class 2 Class 3 Glove Boxes Total ft3 RW DAW Metal Lead Concrete Hoods Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Hoods 100 0 1 1 0 0 1 Benches/Tables/Desks 100 0 1 1 1 0 1 Storage Tanks 0.0 1 1 1 0.0 1 1 1 0.0						i	•				
Use Fire Emulator Lab Radionuclides, Extent of Contamination Kr-85 Area Classification 2 # Floors above Basement 2 # Floors below Roof 9% ft2 needing needing Class 2 Class 3 Floor Area, ft ² 500 0 500 0 500 Wall Area, ft ² 900 0 900 0 500 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Hoods 120 0		*									
Use Fire Emulator Lab Radionuclides, Extent of Contamination Kr-85 Area Classification 2 4 Floors above Basement 4 Floors above Basement 4 Floors above Basement 2 4 Floors above Basement 4 Floors above Basement 2 4 Floor Area, ft ² 500 500 500 Wall Area, ft ² 900 0 900 0 500		Building	224	l Ro	om or Area	· · · · · · · · · · · · · · · · · · ·	В	363		<u> </u>	1
Kr-85 Kr-85 Area Classification 2 # Floors above Basement 2 # Floors below Roof % ft2 needing Remed. Class 2 Class 3 Floor Area, ft ² 500 0 500 900 Components Total ft3 Remed. Praction Fraction Fraction Fraction Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes 100 0 100 100 100 100 100 100 Reefers, Large Equipment 100 0 100 100 100 100 Storage Tanks 0.0 Inch Dia. Total ft3 0.0 100 100 100 Drains No. Inch Dia. Total ft3 0.0 100 100 100 100 Drains No. Inch Dia. Total ft3 0.0 100 100											1
Area Classification 2 # Floors above Basement		Use			Fir	e Emulator	Lab				
# Floors above Basement # Floors below Roof Total Class 1 Remed. Remed. Remed. Class 2 Vall Area, ft ² 500 O 500 Wall Area, ft ² 900 Components Total ft3 RW DAW Metal Lead Components Total ft3 RW DAW Metal Lead Components Total ft3 RW DAW Metal Lead Concrete Concrete Glove Boxes 100 Hoods 120 Benches/Tables/Desks 120 Casework/Cabinets 120 Reefers, Large Equipment 100 Misc. 50 Other Sinks Sinks 50 Drains No. Inch Dia. Total ft ³ O.0 0.0 Person-hours Mgr Supvsr HP Tech Shinks 0.5	Radi	onuclides, Ex	tent of Cor	taminatio	n		Kr	-85			
# Floors below Roof % ft2 needing Remed. Class 2 Class 3 Floor Area, ft ² 500 0 500 Wall Area, ft ² 900 0 900 Ceiling Area, ft ² 900 0 900 Ceiling Area, ft ² 900 0 900 Ceiling Area, ft ² 500 0 500 Components Total ft3 RW Fraction Fraction Components Total ft3 RW DAW Metal Lead Glove Boxes 100 0				2	1 :						
Total Class 1 ft2 needing Remed. Class 2 Class 3 Floor Area, ft ² 500 0 0 500 Wall Area, ft ² 900 0 900 0 Ceiling Area, ft ² 500 0 500 900 Ceiling Area, ft ² 500 0 500 900 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 100 0 100 1					4						
Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 500 0 500 0 500 Wall Area, ft ² 900 0 900 0 900 Ceiling Area, ft ² 500 0 500 0 500 Ceiling Area, ft ² 500 0 500 0 500 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 100 0 -] ·		
Floor Area, ft ² 500 0 500 Wall Area, ft ² 900 0 900 Ceiling Area, ft ² 500 0 500 Ceiling Area, ft ² 500 0 500 Ceiling Area, ft ² 500 0 500 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 100 0 1			Tatal	Class 1			Class 2	Class/2		x	
Wall Area, ft ² 900 0 900 Ceiling Area, ft ² 500 0 500 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Inches/Tables/Desks Inchesk Inches/Tables/Desks <t< td=""><td>Floo</td><td>r Area, ft²</td><td></td><td></td><td>Remea.</td><td></td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td>•</td><td></td></t<>	Floo	r Area, ft ²			Remea.			· · · · · · · · · · · · · · · · · · ·		•	
Ceiling Area, ft ² 500 0 500 Fraction Fractor Fraction Fractor Fraction Fractor Fraction Fractor Fraction Fractor Frador Fractor Fractor Fractor Frador Fractor	Wall	Area, ft ²			<u> </u>						
Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes							·]		
Glove Boxes		Compone	nte	Total ft3							
Benches/Tables/Desks 100 0 1 1 Casework/Cabinets 120 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 0 1 1 1 1 0 0 1		e Boxes					HELGI	Loau		ĺ	
Casework/Cabinets 120 0				122							
Reefers, Large Equipment 100 0 100 100 Misc. Equip./Labware 100 0 100 100 Hot Cells 100 0 100 100 Storage Tanks 100 100 100 100 Other 100 100 100 100 Sinks 50 0 100 100 Drains 0.0 100 100 100 Ventilation Drops 0.0 100 100 100 Drains No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 1 2 4 1 1 0.25 Pack/Load waste 0.25 0.5 1 1 0.25 Decon/Remed. 1 1 0.5 1 1 Final Survey 0.5 1 2 0.5 1 <									· · · · ·		
Misc. Equip./Labware 100 0				120	<u>├──</u> ──						
Storage TanksImage TanksOtherImage TanksSinks50Drains0.0Ventilation Drops0.0DrainsNo.Inch Dia.Total ft³O.0Inch Dia.Total ft³0.0Ventilation DropsNo.Inch Dia.Total ft³OtherInch Dia.Total ft³0.0Ventilation DropsNo.Inch Dia.Total ft³OtherInch Dia.Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize124Equip. Release0.50.51Pack/Load waste0.250.5110.25Decon/Remed.Image DataFinal Survey0.512Image DataImage Data<	Misc	. Equip./Labw		100	0]
Other Sinks500					 	i			l		
Sinks Drains Ventilation Drops500											
Ventilation Drops0.0DrainsNo.Inch Dia.Total ft³0.0Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledCharacterize1241Equip. Release0.5120.5Pack/Load waste0.250.5110.25Decon/Remed.0.5120.5Final Survey0.5120.5	Sinks	5	<i>-</i>		0						-
DrainsNo.Inch Dia.Total ft³0.0Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledCharacterize1241Equip. Release0.5120.5Pack/Load waste0.250.5110.25Decon/Remed.0.5Final Survey0.5120.5											
Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize12411Equip. Release0.5120.5Pack/Load waste0.250.5110.25Decon/Remed	Venu	ation brops		0.0					l		
Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize1241Equip. Release0.5120.5Pack/Load waste0.250.5110.25Decon/Remed			No.			· · · · · · · · · · · · · · · · · · ·		and the second second second second second second second second second second second second second second second			
Characterize 1 2 4 1 Equip. Release 0.5 1 2 0.5 Pack/Load waste 0.25 0.5 1 1 0.25 Decon/Remed.	Venti	lation Drops	No.		Inch Dia.		Total ft ³	0.0			•
Characterize 1 2 4 1 Equip. Release 0.5 1 2 0.5 Pack/Load waste 0.25 0.5 1 1 0.25 Decon/Remed.	Perso	on-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Pack/Load waste 0.25 0.5 1 1 0.25 Decon/Remed.				· · · · · · · · · · · · · · · · · · ·							
Decon/Remed.					2	1					
Final Survey 0.5 1 2 0.5			0.20	0.0					0.20		
# Lab Samples to be collected 1			0.5	1	2				0.5		
	# Lab	Samples to b	be collecter	E	1						
	L	<u></u>				<u></u>					L
					•						
					-			. ,			
	•										
	· ·										

Building	224	Ro	om or Area		A	363		
Use		•		Office		•		
036				Onice				
Radionuclides, Ex	tent of Con	tamination	1	1	Formerly S	ealed Kr-85		
Area Classification		3						
# Floors above Ba								\$
# Floors below Ro	of	.=		-	1	· · ·		
			% needing	ft2 needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	300	01055 1	Kenieu.	0	010352	300	1	•
Wall Area, ft ²	700			0	+	700		
Ceiling Area, ft ²	300			0		300		
Sound Alea, It			L		<u> </u>	. 000		
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes		-						
Hoods							•	
Benches/Tables/D		100	0					
Casework/Cabinet		50	0	•				
Reefers, Large Eq					L			
Misc. Equip./Labw	are	20	0		ļ			
Hot Cells								
Storage Tanks								
Other								
Sinks		0.0						
Drains Ventilation Drops		0.0						
ventilation brops	l	0.0			1		1	
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.	:	Inch Dia.		Total ft ³	0.0		
				· · ·				
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.5	1	2	_			0.05	
Equip. Release	0.25	0.5	1				0.25	
Pack/Load waste		/						
Decon/Remed.								÷
Final Survey	0.25	0.5	1				0.25	
# Lab Samples to b	oe collected	1	0					

•

Building	224] Ro	om or Area		В	154		
	[· - ····		· · · · <u></u> · · · · · ·					
Use								
Radionuclides, Ex	tent of Cor	ntamination	า	1	Unse	aled Th	ļ	
Area Classification	n	1]					
# Floors above Ba]					
# Floors below Ro	of		0/				1	
			%	ft2				
	Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3	}	
Floor Area, ft ²	840				1		1	
Wall Area, ft ²	1500		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	1	· ·	1	
Ceiling Area, ft ²	840		0	0				
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes					<u> </u>			
Hoods Benches/Tables/D	ocke							
Casework/Cabinet		220	0					
Reefers, Large Equ			<u> </u>		╆┈───	+	<u> </u>	
Misc. Equip./Labw		100	0	ł	1	1		
Hot Cells								
Storage Tanks					<u> </u>			j
Other Sinks		4	0		<u> </u>		·	
Drains		0.0	0					
Ventilation Drops		0.0	0					
	Ì	0.0	<u> </u>	L,,	L	I	L	
Drains	No.	2	Inch Dia.	2	Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.]Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	Ì
Characterize	4	8	16					
	2	4	8					
Equip. Release					2	2		
Pack/Load waste			1					1
	2	4	8					

Building	226] Roo	om or Area] ·]
Use	•			· · · · ·				٦ · [
			1					
Badianualidaa Es	dant of Co.							
Radionuclides, Ex Area Classificatio								J .
# Floors above Ba								
# Floors below Ro		•						
	1	1	%	ft2]	
			needing	needing		1	[Í
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	2300	0		0		1200		
Wall Area, ft ²	3200	0		0		1700]	(r_{1},r_{2})
Ceiling Area, ft ²	2300	0		0		1200]	
<u> </u>							•	
			Fraction				ft ³	
Compone	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete	
Glove Boxes		0		0]
Hoods		175]]
Benches/Tables/D		500	0					
Casework/Cabine		750	0					4
Reefers, Large Eq		600	0					4
Misc. Equip./Labw Hot Cells	/are	200						
Storage Tanks		75						
Other		- /3			<u> </u>			
Sinks		60						1
Drains		0					· · ·	1 1
Ventilation Drops		0						1 1
		I	·	L	1	_I	L	4
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.	· .	Total ft ³	0.0		
• *			L			•	I	
	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled] [
Person-hours	2.25		9	0			2.25	
Characterize	2.5		10	0			2.5	
Characterize Equip. Release				4	4	4	0.75	
Characterize Equip. Release Pack/Load waste	0.75		1	4				
Characterize Equip. Release			1 0 5	4 0 0	C) 0	0 1.25	

1

•

Radionuclides, Ex		taminatio	<u>n</u>		Sealed	Ni-63 only		
Area Classificatio # Floors above Ba # Floors below Ro	sement	3						
	Total	Class 1	% needing Remed.	ft2 needing Remed.	Class 2	Class 3		
Floor Area, ft ²	1200			0		1200		
Wall Area, ft ²	1700			0		1700		
Ceiling Area, ft ²	1200			0		1200		
Compone Glove Boxes	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Hoods					┠			
Benches/Tables/D	esks	300	0					
Casework/Cabinet	s	400	0.					
Reefers, Large Eq	uipment	500	0					
Misc. Equip./Labw	are							
Hot Cells			L	·				
Storage Tanks		75	0	ļ	ļ			
Other Sinks		20	0			 _	·	
Drains					 			
Ventilation Drops						<u>├</u>		
-			·		·	·		
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.[Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	ļ
Characterize	0.25	0.5	1				0.25	
Equip. Release	0.5	1	2				0.5	
Pack/Load waste	0.25	0.5	1	2	2	2	0.25	
Decon/Remed.				·				1
Final Survey	0.25	0.5	1		l		0.25	
# Lab Samples to I	oe collectec	f	0	Ì				

X

Building	226] Ro	om or Area		B2	225		
Use	· · · · · · · · · · · · · · · · · · ·		Mi	crostructure	e lab		· · · · · · · · · · · · · · · · · · ·	· .
	L			!				
Radionuclides, Ex			n		Sealed	I AmBe		
Area Classificatio		2						
# Floors above Ba			4					
# Floors below Ro	pof		%	ft2	<u> </u>	F	1	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	1100		L Nemeu.	0	1100			*
	1500		+	ł	1500		1 . · · ·	
Wall Area, ft ²				0				
Ceiling Area, ft ²	1100		<u> </u>	0	1100		J	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes					1			1
Hoods		175	0					
Benches/Tables/D	esks	200	0					
Casework/Cabinet	ts	350	0					
Reefers, Large Eq	uipment	100	0					
Misc. Equip./Labw	vare	200	0					
Hot Cells								
Storage Tanks							· · ·	
Other								
Sinks		40	0					
Drains		0.0						
Ventilation Drops		0.0	Ľ					
Drains	No.		Inch Dia.	,	Total ft ³	0.0		
Ventilation Drops	No.	•	Inch Dia.		Total ft ³	0.0		
ventuation props	NO.					0.0		Í
	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Person-hours	2	4	8				2	
		4	8		·		2	
Characterize	2					2	0.5	
Person-hours Characterize Equip. Release Pack/Load waste	2 0.5	1		2	2	Ζ	0.0	I
Characterize Equip. Release				2	2	2	0.0	

1

Radionuclides, Ex	tont of Cor	tominotion	ì			· · · · · · · · · · · · · · · · · · ·]
Area Classification			;					3
# Floors above Bas			4	•				
# Floors below Ro		<u>//</u>						
			%	ft2	T			
	1		needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	8533	1688		0		6445		
Wall Area, ft ²	15970			0		11950		
Ceiling Area, ft ²	8533	1688		0		6445		
					.	· · · · · · · · · · · · · · · · · · ·		
			Fraction				ft ³	
Componen	its	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete	
Glove Boxes		60		0				
Hoods		430						
Benches/Tables/De		2180 2280	0					1
	asework/Cabinets		0					
	Reefers, Large Equipment		0					
Misc. Equip./Labwa	are	1390						
Hot Cells		0						
Storage Tanks	r -	20						
Other		0						
Sinks Drains		155						
		0.277778						
Ventilation Drops	L	0						
Drains	No.		Inch Dia.		Total ft ³	0.0		1. A. A.
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	10.[0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	16	32	64	0	0	0	16	
Equip. Release	10.5	21	42	. 0	0	0	10.5	
Pack/Load waste	2.85	5.75	0.5	11	16	16	2.85	
Decon/Remed.	0.5	0	· 0	0	0	0	0.5	
Final Survey	8.25	16.5	33	0	0	0	8.25	
	e collected	1	4					

Building	227	Ro	om or Area		<u> </u>	126		J
Use			Gas	Chromatog	raphy			,
				····				1
adionuclides, Ext		taminatio	<u>1</u>		Sealed N	Ni-63 only		
ea Classification		3					•	-
Floors above Bas			-		,			
Floors below Ro			%	ft2	<u>,</u>			
		· .	needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
loor Area, ft ²	1200			· 0		1200		* ¹
/all Area, ft ²	2000		 	0		2000		
eiling Area, ft ²	1200		· · ·	0		1200	ļ	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componen	its	Total ft3	RW	DAW	Metal	Lead	Concrete	
ove Boxes							· · · · · · · · · · · ·	
ods nches/Tables/De	, ,	120	0					
sework/Cabinet		1000	0					
efers, Large Equ		700	0	·				
sc. Equip./Labwa		100	0					:
t Cells								
orage Tanks		20	0					
ner Iks		30	0					
ains								:
ntilation Drops								
			1					
ains	No.		Inch Dia.		Total ft ³	0.0		
ntilation Drops	No.		Inch Dia.		Total ft ³	0.0		
rson-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
aracterize	1	2	4				1	·
uip. Release ick/Load waste	0.5 0.5	1	2	2	2	[.] 2	0.5 0.5	
con/Remed.	0.0	T		۷.	<u> </u>	<u> </u>	0.0	а.
nal Survey	0.5	1	2				0.5	
ab Samples to b	e collected	1	0		:			
				····	• • • • • • • • • • • • • • • • • • • •			· · · · · · · · · · · · · · · · · · ·
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Building	227] Ro	om or Area		B	147			1
Use	•		Instru	ment Devel	opment]	
Radionuclides, Ex	rtent of Cor	ntaminatio	n	[Sealed	H-3 only		1	
Area Classificatio		3	j		000.00	<u> </u>		J .]
# Floors above Ba			1						
# Floors below Ro			1						
			% needing	ft2 needing					
E 1 1 1 1 1	Total	Class 1	Remed.	Remed.	Class 2	Class 3			ļ
Floor Area, ft ²	375			0		375			· ·
Wall Area, ft ²	900			0		900			
Ceiling Area, ft ²	375	L	l	0	· ·	375			
Compone	nte	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete		
Glove Boxes	1113	10(21113		DAN	Wietai	Leau	Concrete		
Hoods						 			
Benches/Tables/D	esks	300	0	-···					
Casework/Cabinet	ts	100	0	1					
Reefers, Large Eq	uipment	200	0				· · · · · · · · · · · · · · · · · · ·		
Misc. Equip./Labw	are								ł
Hot Cells							•		
Storage Tanks								•	Į
Other									
Sinks Drains		0.0				·			
Ventilation Drops		0.0		·					
ventilation brops	l	0.0	I		<u> </u>	L			
Drains	No.		Inch Dia.		Total ft ³	0.0			
	No.		Inch Dia.		Total ft ³	0.0			
Ventilation Drops									
Ventilation Drops	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Person-hours		1	2				0.5		
Person-hours Characterize	0.5		1				0.25		
Person-hours Characterize Equip. Release	0.5 0.25	0.5	· · · · · · · · · · · · · · · · · · ·	4	1	1	0.25		
Person-hours Characterize Equip. Release Pack/Load waste	0.5	0.5		1					
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed.	0.5 0.25 0.25	0.5							
Person-hours Characterize Equip. Release Pack/Load waste	0.5 0.25		1				0.25		

				ŕ				
Build	ding 22	./] Ro	oom or Area		Ba	326		
	Use		Inorgani	c Chemical	Metrology] [
Radionuclides	Extent of Co	ontaminatio	n	1	Formerly un	sealed U23	33	
Area Classific	ation	2	Ĵ		, ,			* ·
# Floors abov								
# Floors belov			%	ft2	T .		1	
			needing	needing				
Eleor Area #2	Total 40	Class 1	Remed.	Remed.	Class 2 400	Class 3	-	
Floor Area, ft ² Wall Area, ft ²	80		<u> </u>	0	800		-	
Ceiling Area, f				0	400		`	
Comp	onents	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes	Unents	Totarnis			Metal	Leau		1 ľ
Hoods								
Benches/Table		400	0					
Casework/Cab Reefers, Large				· · · · · · · · · · · · · · · · · · ·		<u> </u>	<u></u>	
Misc. Equip./L								
Hot Cells							1	
Storage Tanks	1 · · · · ·							
Other								
Sinks Drains		0.0	<u> </u>			٩		
Ventilation Dro	ops	0.0	<u>+</u>			<u> </u>		
		· · · · · · · · · · · · · · · · · · ·	·	r	1			
Drains	No		Inch Dia.	· · · ·	Total ft ³	0.0	4	
Ventilation Dro	ops No		Inch Dia.		Total ft ³	0.0	J	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled		
Characterize Equip. Release	2	4	8	ļ			2 0.5	
Pack/Load was			.2		1	1	0.5	
Decon/Remed.		,	<u> </u>					
Final Survey	1	2	4				1	
	to be collect	ed	1	1				
# Lab Samples								
# Lab Samples			•				•	ч.
# Lab Samples								
# Lab Samples								
# Lab Samples								· · ·
# Lab Samples		н н			·			· •

Building	227	I Rod	om or Area			141		
4] 1.0.						
Use								
Radionuclides, Ex	tent of Cor	tamination			H-3.	C-14	Į	
Area Classificatio		1						
# Floors above Ba	sement	1			•			
# Floors below Ro	of	2						
		-	%	ft2				
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	4	
Floor Area, ft ²	200			0	L		4	
Wall Area, ft ²	720			0	 		·.	
Ceiling Area, ft ²	200	200	0	0	l		J	. · · ·
			Fraction	Fraction	Fraction	Fraction	Fraction	
Compone	nte	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes	1113				Inicial	Leau		
Hoods	I	100	0.1		1		<u> </u>	
Benches/Tables/D	esks	120	0					
Casework/Cabine		80	0		<u> </u>		t{	
Reefers, Large Eq		150	0					
Misc. Equip./Labw		80	0					
Hot Cells								
						·	/	
Storage Tanks				······				
Storage Tanks Other								
Storage Tanks Other Sinks	,	25	0	·····				
Storage Tanks Other Sinks Drains		0.1	0					
Storage Tanks Other Sinks				· · · · · · · · · · · · · · · · · · ·				
Storage Tanks Other Sinks Drains Ventilation Drops	No	0.1 0.0	0	2	Total ft ³	0.1		
Storage Tanks Other Sinks Drains Ventilation Drops Drains	No. No.	0.1 0.0	0 Inch Dia.	2	Total ft ³	0.1		
Storage Tanks Other Sinks Drains Ventilation Drops	No. No.	0.1 0.0	0	2	Total ft ³ Total ft ³	0.1		
Storage Tanks Other Sinks Drains Ventilation Drops Drains	No.	0.1 0.0	0 Inch Dia. Inch Dia.	2 Shipper			Clerical	
Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops		0.1 0.0	0 Inch Dia. Inch Dia. HP Tech 2		Total ft ³	0.0	Clerical 0.5	
Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No. Mgr	0.1 0.0 1 Supvsr	0 Inch Dia. Inch Dia. HP Tech 2 2		Total ft ³ Skilled	0.0		
Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	No. Mgr 0.5	0.1 0.0 1 Supvsr 1	0 Inch Dia. Inch Dia. HP Tech 2		Total ft ³	0.0	0.5	
Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No. Mgr 0.5 0.5	0.1 0.0 1 Supvsr 1 1	0 Inch Dia. Inch Dia. HP Tech 2 2	Shipper	Total ft ³ Skilled	0.0 Unskilled	0.5 0.5	

Building	227	Ro	om or Area		B	143	,	
Use		······		·.·		•		1.
		<u> </u>						1 ⁻
Radionuclides, Ex		taminatio	n		Sealed P	o-210 only		
Area Classificatio	· ·	3						
# Floors above Ba								
# Floors below Ro	of				1			
			%	ft2				
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	150			0		150		
Wall Area, ft ²	600			0		600		
Ceiling Area, ft ²	150			0		150		
				F wa c4!	F ac - 4!	F va c41		
		Tatal 60	Fraction	Fraction	Fraction	Fraction	Fraction	
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	I
Glove Boxes		· · · · · ·	 				· · · · · ·	
Hoods Damakas (Taklas (D								
Benches/Tables/D		80	0		 			
Casework/Cabinet		80	0					
Reefers, Large Eq		200	0		ļ	ļ		
Misc. Equip./Labw	are	20	0					
Hot Cells								
Storage Tanks Other								
Sinks		20	0.		<u> </u>			
Drains		0.0	<u> </u>		<u> </u>			
Ventilation Drops		0.0						
ventilation Drops	1	0.0	I		L	L		
Drains .	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
		<i></i>		L	J			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.5	. 1	2				0.5	
Equip. Release	0.25	0.5	1				0.25	
Pack/Load waste	0.25	0.5		2	1	1	0.25	
Decon/Remed.								
Final Survey	0.25	0.5	1				0.25	
# Lab Samples to I	be collected	ł	0					

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Building	227	Ro	om or Area		B	243		
Use								
Radionuclides, Ex	tent of Cor	tamination	n	}	H-3, P-	32, S-35	1	
Area Classification	ר	1],					l l
# Floors above Ba	sement	1]					1
# Floors below Ro	of							
			% needing	ft2 needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	1200				ļ	·		
Wall Area, ft ²	1600			0	I	ļ		
Ceiling Area, ft ²	1200	1200	0	0		l		
Componer	uts .	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes			T					Į
Hoods		80	0.5	0.1	0.9			
Benches/Tables/Desks		300	0		t			Į
Casework/Cabinets		250	0					
Reefers, Large Equipment		350	0		1			
Wisc. Equip./Labware		300	0		<u> </u>			ſ
Hot Cells		·						
Storage Tanks				,				
Other								
Sinks		40	0					
Drains		0.1	0				· ·	
Ventilation Drops	l	0.0	0				`	
			1 r		1			
Drains	No.		Inch Dia.	2	Total ft ³	0.1	•	
Ventilation Drops	No.	1	Inch Dia.	6	Total ft ³	0.0	·	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize		2	4				1	
Equip. Release	2	4	8				2	
Pack/Load waste	0.25	0.5		1	2	2	0.25	
Decon/Remed.								
Final Survey	1	2	4		L	I	1	j
Lab Samples to b	e collecter	1	1					

Building	227	Ro	om or Area		B	153		
Use				Magnet La	b			
Radionuclides, Ex	tent of Cor	taminatio	n	ſ	N	one	1	
Area Classificatio	n	3]					
# Floors above Ba			4					
# Floors below Ro			%	ft2	T	<u> </u>		
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	300			0		300		
Wall Area, ft ²	1000			0	·	1000		
Ceiling Area, ft ²	300			0	I	300		
			Fraction	Fraction	Fraction	Fraction	Fraction	
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes								
Hoods	a a lua				ļ	· · ·		
Benches/Tables/D Casework/Cabine		80 200	0					
Reefers, Large Equipment		80	0					
Misc. Equip./Labw		50	0					
Hot Cells								
Storage Tanks Other								
Sinks								
Drains		0.0						
Ventilation Drops		0.0						
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
renandion brops					Juotai it			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
		•	2		 			
			<u> </u>		2	2		
Decon/Remed.	0.0	•			<u> </u>	-		
Final Survey	0.25	0.5	1				0.25	
Characterize Equip. Release Pack/Load waste Decon/Remed.	0.5 0.5 0.5 0.25	1 1 1 0.5	2 2		2	2	0.5 0.5 0.5	

Radionuclides, Ex	tont of Car	tominatio	- · ·	1	Socied D	o-210 only		1
Area Classificatio]	L	Sealed P	0-210 0hiy]
# Floors above Ba			1					
# Floors below Ro			1					
	<u> </u>		%	ft2	1	T		
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	420			0		420		_
Wall Area, ft ²	1150			0		1150		
Ceiling Area, ft ²	420			0		420		
	<u></u>	-					•	
-				Fraction			Fraction	
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	ו
Glove Boxes Hoods		20				ļ		4
Hoods Benches/Tables/D	oska	<u> </u>	0			<u> </u>		ł
Benches/Tables/D Casework/Cabinet		200	0	· · · · · · · · · · · · · · · · · · ·		<u> </u>		4
		400	0					1
Reefers, Large Equipment /isc. Equip./Labware		100	0	<u> </u>		{		
Hot Cells	are	100						
Storage Tanks	1							
Other								
Sinks		20	0	· · · · · · · · · · · · · · · · · · ·				
Drains		0.0						
Ventilation Drops		0.0						
		····	· · · · · · · · · · · · · · · · · · ·			·		'
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	1 1	2	4		Uninga	Siloimou	1	
Equip. Release	0.5	1	2				0.5	
Pack/Load waste	0.5	1		2	2	2	0.5	
Decon/Remed.	0.5						0.5	
Final Survey	0.25	0.5	1				0.25	

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Building	227	Ro	om or Area		B	311	
Use			Inorganic	Chemical	Metrology		
Radionuclides, Ex		taminatio	<u>n</u>		Sealed Kr	-85. Po-210	
Area Classificatio	n _.	3					
# Floors above Ba	sement						
# Floors below Ro	of				-		
	Total	Class 1	% needing Remed.	ft2 needing Remed.	Class 2	Class 3	
		<u>Cid55 i</u>	Remeu.	0	010352	1000	
Floor Area, ft ²	1000		<u> </u>			2100	
Wall Area, ft ²	2100			0			
Ceiling Area, ft ²	1000		L	0		1000	
Componer	nts ,	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes							•
Hoods		•					
Benches/Tables/Desks		100	0				
Casework/Cabinets		100	0		ļ		
Reefers, Large Eq		40	0				·····
Misc. Equip./Labw	are	40	0				
Hot Cells	-		 				
Storage Tanks Other							
Sinks							
Drains	ł	0.0					
Ventilation Drops		0.0					
Tenthation Drope	L		J		L		
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
Volumento Di Opo			1]	0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	1	2	4	· · · ·			1
Equip. Release	0.5	1	2				0.5
Pack/Load waste	0.5	1		2	1	1	0.5
Decon/Remed.							
Decon/Remea.			2				0.5

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Building	227	Ro	om or Area		B	333			
Use									
Radionuclides, Ex	tent of Con	taminatior	1	1	U233				
Area Classification		1	j .				ابر		
# Floors above Ba	sement	. <u> </u>	1						
# Floors below Ro	of								
		·	%	ft2					
			needing	needing	1				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²	288	288	·····		ļ				
Wall Area, ft ²	900	900							
Ceiling Area, ft ²	288	288	0	0					
0	4-	T-4-1 640	Fraction	Fraction			Fraction		
Componer Glove Boxes	115	Total ft3	RW	DAW	Metal	Lead	Concrete		
Hoods		100	0	<u> </u>	<u> </u>				
Benches/Tables/D	esks	100							
	sework/Cabinets		0						
Reefers, Large Eq	L	120				<u> </u>			
Misc. Equip./Labw		100	0		1				
Hot Cells	. [
Storage Tanks	[•	
Other				,					
Sinks	1	10	0						
Drains	ļ	0.0							
Ventilation Drops	Ĺ	0.0			<u> </u>]		
Drains	No.		Inch Dia.	·	Total ft ³	0.0			
	NO.	······································	Inch Dia.		Total ft ³	0.0			
Ventilation Drops	NO.[men Dia.	L		0.0			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Characterize	4	8	16				4	i	
Equip. Release	2	4	8				2		
Pack/Load waste					2	2			
	T		8					ł	
Decon/Remed. Final Survey	2	4					2	1	

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Building	227] Ro	om or Area		A	316	
Use		·		Office			
Radionuclides, Ex			n T	I	Formerly se	aled H-3 on	ly
Area Classificatio # Floors above Ba		3	4				:
# Floors above Ba # Floors below Ro			4				
# FIGUIS DEIGW RU		· · · · ·	%	ft2	1	I	1
	÷		needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	1200		Tterneu.	0	01033 2	1200	
Wall Area, ft ²	1200			0		1200	
				0			
Ceiling Area, ft ²	1200		<u> </u>	U	<u> </u>	1200	l
Componer	nte	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes	119	TULATILS			metai	L.eau	
Hoods						<u> </u>	
Benches/Tables/D	oeke				· · ·		
Casework/Cabinet		100	0				· · ·
Reefers, Large Eq		200					
Misc. Equip./Labw		100	0			· · ·	
Hot Cells	aro	100					
Storage Tanks					1		
Other							
Sinks							
Drains		0.0					
Ventilation Drops		0.0			l		
					L	•	J
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
territidation brops	110.				1.0.0.11		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	2	4	8				2
Equip. Release	1 ·	2	4				1
Pack/Load waste							
Decon/Remed.							
	1	2	4				1

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	227	Ro	om or Area		В	111	
Use						·····	· · · · · · · · · · · · · · · · · · ·
Radionuclides, Ex Area Classificatio		3	n T	S	ealed INI-63	and Kr-85 c	niy
# Floors above Ba			-				
# Floors below Ro			-{				
#1 IOOIS Delow RC			%	ft2	1	1	1
	1		needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	1800		1	0	1	1800	
Wall Area, ft ²	2400		†	0	1	2400	
Ceiling Area, ft ²	1800		1	0	1	1800	
				·	·L		I
			Fraction	Fraction	Fraction	Fraction	Fraction
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes		60					
Hoods							
Benches/Tables/D		600	0		L		
Casework/Cabine			L		ļ	L	·
Reefers, Large Eq			L			ļ	
Misc. Equip./Labw	are	500	0		<u> </u>		
Hot Cells Storage Tanks					<u> </u>		
Other					<u> </u>	<u> </u>	
Sinks		10	0	·			
	ł	0.0				[
Drains		0.0			<u> </u>		
			L	L	<u>ا</u> ـــــــ	د	
Drains Ventilation Drops	L						
	No.	· · · · · · · · · · · · · · · · · · ·	Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.[No.[Inch Dia. Inch Dia.		Total ft ³ Total ft ³	0.0	
Ventilation Drops Drains Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops Drains Ventilation Drops Person-hours	No.	Supvsr	Inch Dia. HP Tech	Shipper			Clerical
Ventilation Drops Drains Ventilation Drops Person-hours Characterize	No. Mgr 2	4	Inch Dia. HP Tech 8	Shipper	Total ft ³	0.0	2
Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No.		Inch Dia. HP Tech	Shipper	Total ft ³	0.0	
Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	No. Mgr 2	4	Inch Dia. HP Tech 8	Shipper	Total ft ³	0.0	2
Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No. Mgr 2	4	Inch Dia. HP Tech 8	Shipper	Total ft ³	0.0	2

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Building 245 Room or Area A Wing Use										
Use					ъ.	·				
Use									•	
Image: Section of Contamination Area Classification # Fioors above Basement # Floors bolow Roof 76 floor Area, ft ² 24425 Floor Area, ft ² 24425 Store Basement 88 Floor Area, ft ² 24425 Store Basement 7900 Wall Area, ft ² 24425 Ceiling Area, ft ² 24425 Store Boxes 125 Components Total ft 3 Rev ft ² DAW ft ³ Metal Glove Boxes 125 Benches/Tables/Desks 23996 Casework/Cabinets 2500 Reefers, Large Equipment 14085 Misc 20090 Other 11080 Storage Tanks 500 Other 11025 Drains No. Ventilation Drops No. Drains No. Ventilation Drops 110ch Dia. Drains No. Ventilation Drops 110ch Dia. Drains	Ì									
Use						د				
Use										
Use Radionuclides, Extent of Contamination Area Classification # Fioors balow Roof # Fioors balow Roof 1 # Fioor Area, ft ² 24425 Store Baces 1 Wail Area, ft ² 24425 5140 0 5100 14295 Components Total ft3 Reverse 1 125 27.5 0 27.5 0 27.5 0 27.5 0 1 125 0 126 27.5 0 1 0 1 126 0 127.5 0 128 0 0 1 128 0 12996 0 1200		,								
Use			-							-
Radionuclides, Extent of Contamination Area Classification # Floors above Basement # Floors below Roof $\frac{1}{Floors bolow Roof}$ $\frac{1}{9}$ $\frac{1}{1000}$ $\frac{1}{1000}$ $\frac{1}{1000}$ $\frac{1}{1000}$ $\frac{1}{1000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{100000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{100000}$ $\frac{1}{100000}$ $\frac{1}{100000}$ $\frac{1}{100000}$ $\frac{1}{100000}$ $\frac{1}{100000}$ $\frac{1}{1000000}$ $\frac{1}{10000000000000000000000000000000000$	Buildi	ng 245	i Roc	om or Area		<u> </u>	Ving		ļ	
Radionuclides, Extent of Contamination Area Classification # Floors above Basement # Floors below Roof $\frac{1}{Floors bolow Roof}$ $\frac{1}{9}$ $\frac{1}{1000}$ $\frac{1}{1000}$ $\frac{1}{1000}$ $\frac{1}{1000}$ $\frac{1}{1000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{100000}$ $\frac{1}{10000}$ $\frac{1}{10000}$ $\frac{1}{100000}$ $\frac{1}{100000}$ $\frac{1}{100000}$ $\frac{1}{100000}$ $\frac{1}{100000}$ $\frac{1}{100000}$ $\frac{1}{1000000}$ $\frac{1}{10000000000000000000000000000000000$		r			4				1	
Area Classification # Floors below Roof # Floors below Roof % ft2 Image: Total Class 1 Reeding Reeding Remed. Class 2 Class 3 Floor Area, ft2 24425 5140 88 5590 14295 Wall Area, ft2 35102 7900 0 10800 17202 Ceiling Area, ft2 24425 5140 0 5590 14295 Components Total ft3 Reefors, Large Equipment 6250 0	l n	se							I	
Area Classification # Floors below Roof # Floors below Roof % ft2 Image: Total Class 1 Reeding Reeding Remed. Class 2 Class 3 Floor Area, ft2 24425 5140 88 5590 14295 Wall Area, ft2 35102 7900 0 10800 17202 Ceiling Area, ft2 24425 5140 0 5590 14295 Components Total ft3 Reefors, Large Equipment 6250 0					r	·			1	
Area Classification # Floors below Roof # Floors below Roof % ft2 Image: Total Class 1 Reeding Reeding Remed. Class 2 Class 3 Floor Area, ft2 24425 5140 88 5590 14295 Wall Area, ft2 35102 7900 0 10800 17202 Ceiling Area, ft2 24425 5140 0 5590 14295 Components Total ft3 Reefors, Large Equipment 6250 0										
# Floors above Basement % ft2 Image: Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 24425 5140 0 10800 17202 Ceiling Area, ft ² 24425 5140 0 5590 14295 Wall Area, ft ² 24425 5140 0 5590 14295 Ceiling Area, ft ² 24425 5140 0 5590 14295 Components Total ft3 RW ft ³ DAW ft ³ Metal ft ² Lead Concrete Glove Boxes 125 27.5			tamination	1					i	
# Floors below Roof 7			ļ	4						
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$						• .				
Total Class 1 needing Remed. Class 2 Class 3 Floor Area, ft ² 24425 5140 88 5590 14295 Wall Area, ft ² 35102 7300 0 10800 17202 Ceiling Area, ft ² 24425 5140 0 5590 14295 Components Total ft3 RW ft ³ DAW ft ³ Metal ft ³ Lead Concrete Glove Boxes 125 27.5	# FIDDIS DEIDW		 	%	ft2	r		1	•	
Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 24425 5140 88 5590 14295 Wail Area, ft ² 35102 7900 0 10800 17202 Ceiling Area, ft ² 24425 5140 0 5590 14295 Ceiling Area, ft ² 24425 5140 0 5590 14295 Ceiling Area, ft ² 24425 5140 0 5590 14295 Ceiling Area, ft ² 24425 5140 0 5590 14295 Components Total ft3 RW ft ³ Metal ft ³ Lead Concrete Benches/Tables/Desks 3996 0		•				· ·				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Total	Clase 1	-		Class 2	Class 3			
Wall Area, ft ² 35102 7900 0 10800 17202 Ceiling Area, ft ² 24425 5140 0 5590 14295 Fraction ft ³ Omponents Total ft3 RW ft ³ Metal ft ³ Components Total ft3 RW ft ³ Metal ft ³ Glove Boxes 125 27.5 ft ³ Hoods 3996 0 — Benches/Tables/Desks 6250 0 — Casework/Cabinets 6250 0 — Reefers, Large Equipment 20690 0 — Misc. Equip./Labware 14085 — Hot Cells 500 — Storage Tanks 500 — Other 4705 — Jprains 1.527778 — Ventilation Drops No. Inch Dia. Total ft ³ 0.0 — Person				<u>.</u>				- · .		
Ceiling Area, ft ² 24425 5140 0 5590 14295 Fraction ft ³ Components Total ft3 RW ft ³ Metal ft ³ Glove Boxes ft ³ Hoods 0 ft ³ Benches/Tables/Desks G250 0 Casework/Cabinets G250 0 Reefers, Large Equipment 20690 0 Misc. Equip./Labware 14085 Hot Cells 500 Storage Tanks 500 Other 4705 Total ft ³ 0.0 Orains No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>										
Fraction ft ³ Components Total ft3 RW ft ³ DAW ft ³ Metal ft ³ Lead Concrete Giove Boxes 125 27.5 1	wall Area, π							-		
Components Total ft3 RW ft³ DAW ft³ DAW ft³ Metal ft³ Lead Concrete Glove Boxes 125 27.5	Ceiling Area, ft	24425	5140	ļ	0	5590	14295].		
Components Total ft3 RW ft³ DAW ft³ DAW ft³ Metal ft³ Lead Concrete Glove Boxes 125 27.5							,	r.3	•	r i
Glove Boxes 125 27.5			T = 1 = 1 (10)		61 ³ D A 144	c13 p	er3			
Hoods 0 - - - Benches/Tables/Desks 3996 0 - - - Casework/Cabinets 6250 0 - - - - Reefers, Large Equipment 20690 0 - - - - - Misc. Equip/Labware 14085 - - - - - - Hot Cells 500 - - - - - - - Storage Tanks 500 - <t< td=""><td></td><td>ients</td><td></td><td>RW</td><td></td><td>ft[°] Metal</td><td>ft" Lead</td><td>Concrete</td><td></td><td></td></t<>		ients		RW		ft [°] Metal	ft" Lead	Concrete		
Benches/Tables/Desks Casework/Cabinets Reefers, Large Equipment Misc. Equip./Labware Hot Cells 3996 0 1 Misc. Equip./Labware Hot Cells 14085 1 1 1 Storage Tanks 500 1 1 1 Other 4705 1 1 1 Sinks 43 1 1 1 Drains 1.527778 1 1 1 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 55.5 111 222 0 0 45.7 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 55.5 111 222 0 0 0 45.7 Pack/Load waste 7 14 7 15 32.5 31.5 7 Drains 29		•			27.5					
Casework/Cabinets 6250 0 1 1 Reefers, Large Equipment 20690 0 1 1 Misc. Equip./Labware 14085 1 1 1 Hot Cells 0 1 1 1 1 Storage Tanks 500 1 1 1 1 Other 4705 1 1 1 1 1 Sinks 43 1 1 1 1 1 1 Drains 1.527778 1 1 1 1 1 1 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 1 1 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 55.5 111 222 0 0 0 45.7 Equip. Release 46.5 93 186 0 0 0 45.7 Pack/Load		Deeks		0						
Reefers, Large Equipment 20690 0										j.
Misc. Equip./Labware 14085										
Hot Cells 0 - - - Storage Tanks 500 - - - Other 4705 - - - Sinks 43 - - - - Drains 1.527778 - - - - Ventilation Drops 43.05556 - - - - Drains No. Inch Dia. Total ft ³ 0.0 - Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 55.5 111 222 0 0 54.7 Equip. Release 46.5 93 186 0 0 54.7 Pack/Load waste 7 14 7 15 32.5 31.5 7 Decon/Remed. 2 4 4 0 8 2 Final Survey 29 58 114 0 0 0										1
Storage Tanks 500 Image: constraint of the state		JWare								
Other 4705										
Sinks 43					<u>`</u>		· ·			
Drains 1.527778 Image: Constraint of the state o										
Ventilation Drops43.05556DrainsNo.Inch Dia.Total ft³0.0Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize55.511122200054.7Equip. Release46.59318600045.7Pack/Load waste71471532.531.57Decon/Remed.2440882Final Survey295811400028.6										
DrainsNo.Inch Dia.Total ft³0.0Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize55.511122200054.7Equip. Release46.59318600045.7Pack/Load waste71471532.531.57Decon/Remed.2440882Final Survey295811400028.6	Ventilation Drop	S								
Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize55.511122200054.7Equip. Release46.59318600045.7Pack/Load waste71471532.531.57Decon/Remed.2440882Final Survey295811400028.6					•					
Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize55.511122200054.7Equip. Release46.59318600045.7Pack/Load waste71471532.531.57Decon/Remed.2440882Final Survey295811400028.6								_		
Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize55.511122200054.7Equip. Release46.59318600045.7Pack/Load waste71471532.531.57Decon/Remed.2440882Final Survey295811400028.6	Drains	No.		Inch Dia.		Total ft ³	0.0	· ·		
Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 55.5 111 222 0 0 0 54.7 Equip. Release 46.5 93 186 0 0 0 45.7 Pack/Load waste 7 14 7 15 32.5 31.5 7 Decon/Remed. 2 4 4 0 8 8 2 Final Survey 29 58 114 0 0 0 28.6	Ventilation Drop	s No.		Inch Dia.		Total ft ³	0.0			
Characterize 55.5 111 222 0 0 0 54.7 Equip. Release 46.5 93 186 0 0 0 45.7 Pack/Load waste 7 14 7 15 32.5 31.5 7 Decon/Remed. 2 4 4 0 8 8 2 Final Survey 29 58 114 0 0 0 28.6								•		
Equip. Release46.59318600045.7Pack/Load waste71471532.531.57Decon/Remed.2440882Final Survey295811400028.6	Person-hours	Mgr	Supvsr		Shipper	Skilled	Unskilled	Clerical		, i
Pack/Load waste 7 14 7 15 32.5 31.5 7 Decon/Remed. 2 4 4 0 8 8 2 Final Survey 29 58 114 0 0 28.6		55.5	111	222	. 0	0		54.7		· .
Decon/Remed. 2 4 4 0 8 8 2 Final Survey 29 58 114 0 0 0 28.6								45.7		
Final Survey 29 58 114 0 0 0 28.6										
# Lab Samples to be collected 17	Final Survey	29	58	114	0	0	0	28.6		
# Lab Samples to be collected 1/				47						
	# Lab Samples t	D DE COllecte	α.	17						
			<u>.</u>							I
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Building Use			om or Area	L				l I
USe						·		
Radionuclides, Ext	tent of Co	ntaminatio	ń					
Area Classification]				÷.	
# Floors above Bas		<u> </u>	4					
# Floors below Roo	<u></u>		%	ft2	· · · ·	1	1	
		1	needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²				0	1-		1	
Wall Area, ft ²		· · · · ·	1	0	1	1	1	
Ceiling Area, ft ²				0	1	1	1	
		-		,	<u> </u>	<u> </u>	4	
		_	Fraction	Fraction		Fraction	Fraction	
Componen	ts	Total ft3	<u>RW</u>	DAW	Metal	Lead	Concrete	
Glove Boxes					·	<u> </u>		
Hoods Benches/Tables/De	oko					<u> </u>		
Casework/Cabinets			<u> </u>			· · ·	├ {	
Reefers, Large Equ						<u> </u>		
Misc. Equip./Labwa						<u> </u>		
Hot Cells								
Storage Tanks								
Other	•	<u>.</u>	L		·			
Sinks								·
Drains Ventilation Drops		0.0						
ventilation Drops		0.0	·		<u> </u>		L	
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.	······································	Total ft ³	0.0		,
· • · · · · · · · · · · · · · · · · · ·		·]			!
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize								
Equip. Release				·				
Pack/Load waste		<u></u>				L		
Decon/Remed.			·					
Final Survey		L	L		L	L		
# Lab Samples to b	e collecte	d						
		-						

Building	245] Bo	om or Area		Δ	005	
Duntang]		L			
Use							
Radionuclides, Ex	tent of Cor	ntaminatior	1		TRU.	U, Beta	
Area Classificatio		1	1			-1	
# Floors above Ba		0					
# Floors below Ro	of	6	•				
		,	%	ft2			1
			needing	needing			
-	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	320	320	0.1	32	•		
Wall Area, ft ²	480	480		0			
Ceiling Area, ft ²	320	320		. 0			1
	-4-	T-4-1 #2	Fraction	Fraction	Fraction	Fraction	Fraction
Compone Glove Boxes	nts	Total ft3	RW	DAW	Metal	Lead	Concrete
Hoods						<u> </u>	
Benches/Tables/D	esks	180	0.1	0.2	0.8		· · · · · · · · · · · · · · · · · · ·
Casework/Cabinet		250	0.1	0.2	0.8		
Reefers, Large Eq		6000	0.1	0.05	0.95	<u> </u>	
Misc. Equip./Labw		400	0.2	0.2	0.8		
Hot Cells						· ·	
Storage Tanks						1	
Other		2200	0,1				1
Sinks		20	0.1		1		
Drains		0.0					
Ventilation Drops		0.0					
			,				
Drains	No.	11.11 stan	Inch Dia.	2	Total ft ³	0.0	· .
Ventilation Drops	No.		Inch Dia.]Total ft ³	0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	4	8	16		· ·		4
Equip. Release	8	16	32		L		8
	1 1	2		2	2	2	1
Pack/Load waste		2			4	4	1
Pack/Load waste Decon/Remed Final Survey	2	4	8				2

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				· ·					
Building	245	Ro	om or Area		A0	06-1			7
							_		
. Use]	
				•					
Radionuclides, Ex			ŋ	L	Seale	d Sr-90		J	1
Area Classificatio		3	4						
# Floors above Ba		0	4						1
# Floors below Ro		3	%	ft2	1	<u></u>	3		
			needing	needing					
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²	204	010331	itemeu.	0	010332	204	1	• · · ·	
Wall Area, ft ²	522			0	<u> </u>	522		•	
Vvali Area, it				0			-	•	
Ceiling Area, ft ²	204		l	0	l	204	5		1
			Fraction	Fraction	Fraction	Fraction	Fraction		
Componer Glove Boxes	nts (Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	1	
	nts	Total ft3]	
Glove Boxes		10	RW						
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet	esks s		RW						
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ	esks s uipment	10	RW						
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw	esks s uipment	10	RW						
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells	esks s uipment	10	RW						
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks	esks s uipment	10	RW						
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other	esks s uipment	10 70	RW 0						
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks	esks s uipment	10 70 2	RW						
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains	esks s uipment	10 70 2 0.0	RW 0						
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks	esks s uipment	10 70 2	RW 0						
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops	esks s uipment are	10 70 2 0.0 0.0	RW 0 0						
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains	esks s uipment are No.	10 70 2 0.0 0.0	RW 0 0 0		Metal	Lead			
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops	esks s uipment are	10 70 2 0.0 0.0	RW 0 0						
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains	esks s uipment are No. No.	10 70 2 0.0 0.0 1	RW 0 0 0	DAW	Metal	Lead			
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains	esks s uipment are No.	10 70 2 0.0 0.0	RW 0 0 0 0 0 Inch Dia. Inch Dia. Inch Dia.		Metal	Lead			
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	esks s uipment are No. No. <u>Mgr</u> 1 0.5	10 70 70 2 0.0 0.0 1 5upvsr 2 1	RW 0 0 0 0 0 1 nch Dia. Inch Dia.	DAW	Metal	Lead	Concrete Clerical		
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	esks s uipment are No. No. Mgr	10 70 70 2 0.0 0.0 1 5upvsr 2	RW 0 0 0 0 0 Inch Dia. Inch Dia. Inch Dia.	DAW	Metal	Lead	Clerical		
Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	esks s uipment are No. No. <u>Mgr</u> 1 0.5	10 70 70 2 0.0 0.0 1 5upvsr 2 1	RW 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DAW	Metal	Lead	Concrete Clerical		

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Use Radionuclides, Extent of Contamination Area Classification # Floors above Basement # Floors below Roof Total Class 1 Remed. Remed. Class 2 Class 3 Wall Area, ft ² 0 Ceiling Area, ft ² 0 Components Total ft3 Remed. Fraction Fraction State	Radionuclides, Extent of Contamination Area Classification # Floors above Basement # Floors above Basement # Floors below Roof Total Class 1 Reending Reemed. Class 2 Class 3 Floor Area, ft ² 0 Ceiling Area, ft ² 0 Ceiling Area, ft ² 0 Components Total ft3 Rev DAW Metal Lead Concrete Concrete Glove Boxes Image: Concrete Hoods Image: Concrete Benches/Tables/Desks Image: Concrete Casework/Cabinets Image: Concrete No. Image: Concrete Storage Tanks Image: Concrete Other Image: Concrete Sinks Image: Concrete Drains No. Inch Dia. Total ft ³ O.0 Image: Concrete Drains No. Ventilation Drops Inch Dia. Drains No. Inch Dia. Total ft ³	Building	·] . Ro	om or Area					ſ
Radionuclides, Extent of Contamination Area Classification # Floors above Basement # Floors above Basement # Floors above Basement # Floors above Basement # Floors below Roof Total Class 1 Remed. Class 2 Class 3 Wall Area, ft ² 0 0 Ceiling Area, ft ² 0 0 Components Total ft3 RW DAW Glove Boxes 0 0 0 Hoods 0 0 0 0 Gove Boxes 0 0 0 0 Glove Boxes 0 0.5 0 0 Glove Boxes 0.5 0 0 0 Benches/Tables/Desks 0.5 0 0 0 Casework/Cabinets 0.5 0 0 0 0 Storage Takls 0 0.5 0 0 0 0 Other 0.5 0 0.0 0 0 0 0 0 Drains No.<	Radionuclides, Extent of Contamination Area Classification # Floors above Basement # Floors above Basement # Floors below Roof Total Class 1 Reending Reemed. Class 2 Class 3 Floor Area, ft ² 0 Ceiling Area, ft ² 0 Ceiling Area, ft ² 0 Components Total ft3 Rev DAW Metal Lead Concrete Concrete Glove Boxes Image: Concrete Hoods Image: Concrete Benches/Tables/Desks Image: Concrete Casework/Cabinets Image: Concrete No. Image: Concrete Storage Tanks Image: Concrete Other Image: Concrete Sinks Image: Concrete Drains No. Inch Dia. Total ft ³ O.0 Image: Concrete Drains No. Ventilation Drops Inch Dia. Drains No. Inch Dia. Total ft ³									
Area Classification # Floors above Basement # Floors above Basement rotal Class 1 needing needing Remed. Class 2 Class 3 Floor Area, ft ² 0 0	Area Classification	Use								
Area Classification # Floors above Basement # Floors above Basement rotal Class 1 needing needing Remed. Class 2 Class 3 Floor Area, ft ² 0 0	Area Classification	Radionuclides. Ex	tent of Cor	ntaminatio	n	1				
# Floors below Roof 7 reading needing nee	# Floors below Roof % ft2 needing Remed. ft2 Remed. Class 2 Class 3 Floor Area, ft ² 0 0 0 0 0 Wall Area, ft ² 0 0 0 0 0 Ceiling Area, ft ² 0 0 0 0 0 Ceiling Area, ft ² 0 0 0 0 0 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 0 0 0 0 0 0 0 Hoods 0 0 0 0 0 0 0 0 Benches/Tables/Desks 0				7					ł
Total Class 1 % ft2 needing Remed. Class 2 Class 3 Floor Area, ft ² 0 0 0 Wall Area, ft ² 0 0 0 Ceiling Area, ft ² 0 0 0 Components Total ft3 RW DAW Metal Lead Components Total ft3 RW DAW Metal Lead Glove Boxes 0 0 0 0 Hoods Benches/Tables/Desks 0 0 0 Casework/Cabinets 0.5 0 0 Reefers, Large Equipment 0.5 0 0 Misc. Equip./Labware 0.5 0 0 Hot Cells 0 0 0 Storage Tanks 0 0 0 Orains No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Claracterize 0 0 0 0 0	Total Class 1 Remed. ft2 needing needing Floor Area, ft ² 0 0 Wall Area, ft ² 0 0 Ceiling Area, ft ² 0 0 Ceiling Area, ft ² 0 0 Components Total ft3 RW DAW Glove Boxes 0 0 Hoods 1 1 Benches/Tables/Desks 1 1 Casework/Cabinets 0.5 1 Reefers, Large Equipment 0.5 1 Misc. Equip./Labware 0.5 1 Hot Cells 1 1 Storage Tanks 1 1 Other 1 1 Sinks 1 1 Drains No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled 1 Pack/Load waste 1 1 Pack/Load waste 1 1	# Floors above Ba	sement		1					
Total Class 1 needing Remed. Remed. Class 2 Class 3 Floor Area, ft ² 0 0 0 Wall Area, ft ² 0 0 0 Ceiling Area, ft ² 0 0 0 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Image: Class 2 Class 2 Class 3 Class 2 Class 3 Hoods Total ft3 RW DAW Metal Lead Concrete Glove Boxes Image: Class 3 Hoods Image: Class 3 Benches/Tables/Desks Image: Class 3 Image: Class 3 Image: Class 3 Image: Class 3 Casework/Cabinets Image: Class 3 Image: Class 3 Image: Class 3 Image: Class 3 Reefers, Large Equipment Image: Class 3 Image: Class 3 Image: Class 3 Image: Class 3 Not Cells Image: Class 3 Other Image: Class 3 Image: Class 3 Image: Class 3 Image: Class 3 Image: C	Total Class 1 needing Remed. Remed. Class 2 Class 3 Floor Area, ft ² 0 0 0 0 Wall Area, ft ² 0 0 0 Ceiling Area, ft ² 0 0 0 Ceiling Area, ft ² 0 0 0 Ceiling Area, ft ² 0 0 0 Components Total ft3 RW DAW Metal Glove Boxes 0 0 0 0 Hoods 0 0 0 0 Benches/Tables/Desks 0 0 0 Casework/Cabinets 0 0 0 Reefers, Large Equipment 0 0 0 Misc. Equip./Labware 0.5 0 0 Hot Cells 0 0 0 0 Storage Tanks 0 0 0 0 Other 0 0 0 0 0 Sinks 0 0 0 0 0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Pack/Load waste 0 0 <td># Floors below Ro</td> <td>of</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td>	# Floors below Ro	of						_	
Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 0 0 0 0 0 Wall Area, ft ² 0 0 0 0 0 Ceiling Area, ft ² 0 0 0 0 0 Ceiling Area, ft ² 0 0 0 0 0 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 0 0 0 0 Wall Area, ft ² 0 0 0 0 Ceiling Area, ft ² 0 0 0 0 Ceiling Area, ft ² 0 0 0 0 Components Fraction Fraction Fraction Fraction Fraction Concrete Glove Boxes 1 1 1 1 Hoods 1 1 1 1 1 Benches/Tables/Desks 1 1 1 1 1 Casework/Cabinets 1 1 1 1 1 1 Reefers, Large Equipment 1 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
Floor Area, ft ² 0 0 Wall Area, ft ² 0 0 Ceiling Area, ft ² 0 0 Ceiling Area, ft ² 0 0 Components Total ft3 RW DAW Glove Boxes	Floor Area, ft ² 0 0 Wall Area, ft ² 0 0 Ceiling Area, ft ² 0 0 Ceiling Area, ft ² 0 0 Ceiling Area, ft ² 0 0 Ceiling Area, ft ² 0 0 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes					-				
Wall Area, ft ² 0 Ceiling Area, ft ² 0 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Hoods Benches/Tables/Desks Casework/Cabinets Reefers, Large Equipment Misc. Equip./Labware Hot Cells Storage Tanks Other Other Drains No. Inch Dia. Total ft ³ O.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clarical Equip. Release Pack/Load waste Decon/Remed, Final Survey	Wall Area, ft ² 0 Ceiling Area, ft ² 0 Ceiling Area, ft ² 0 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Date Fraction Fr		Total	Class 1	Remed.	ŧ	Class 2	Class 3		
Ceiling Area, ft ² 0 Components Total ft3 RW DAW Fraction	Ceiling Area, ft ² 0 Components Total ft3 Refers, Large Equipment 0.5 Misc. Equip./Labware 0.5 Hot Cells 0.5 Storage Tanks 0.5 Other 0.5 Sinks 0.5 Drains 0.0 Ventilation Drops Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Pack/Load waste 0.5 0.0 Inch Dia. Total ft ³ 0.0 Pack/Load waste 0.1 0.0 Pack/Load waste 0.1 0.1 Inch Dia. 0.1 0.0 Pack/Load waste 0.1 0.1 Drains 0.1 0.1 <	Floor Area, ft		· .			<u> </u>			
Components Total ft3 RW DAW Fraction Lead Concrete Bonches/Tables/Desks	Components Total ft3 RW DAW Fraction Concrete Glove Boxes				ļ		ļ	ļ		
Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	ComponentsTotal ft3RWDAWMetalLeadConcreteGlove BoxesHoodsBenches/Tables/DesksCasework/CabinetsReefers, Large EquipmentMisc. Equip./LabwareHot CellsStorage TanksOtherSinksDrainsVentilation DropsDrainsNo.Inch Dia.Total ft30.0Person-hoursMgrSupvsrHP TechShilledUnskilledClaracterizeDecon/Remed.Inch DiaDecon/Remed.Inch DiaInch Dia <td>Ceiling Area, ft²</td> <td></td> <td>L</td> <td></td> <td>0</td> <td></td> <td>1</td> <td></td> <td></td>	Ceiling Area, ft ²		L		0		1		
Glove Boxes	Glove Boxes	Compone	ate	Total ft3						
Hoods	Hoods		113	10141113			I			
Benches/Tables/Desks	Benches/Tables/Desks									
Reefers, Large Equipment 0.5 Misc. Equip./Labware 0.5 Hot Cells 0.5 Storage Tanks 0 Other 0.5 Sinks 0 Drains 0.0 Ventilation Drops 0.0 Drains 0.0 Ventilation Drops 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 0 0.0 Pack/Load waste 0 0 Decon/Remed. 0 0	Reefers, Large Equipment 0.5 0.5 Misc. Equip./Labware 0.5 0.5 Hot Cells 0.5 0.5 Storage Tanks 0.1 0.5 Other 0.5 0.5 Sinks 0.5 0.5 Drains 0.0 0.0 Ventilation Drops No. Inch Dia. Total ft ³ Ventilation Drops No. Inch Dia. Total ft ³ Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Equip. Release 0.0 0.0 Pack/Load waste 0.0 0.0 Decon/Remed. 0.0 0.0		esks		1					
Misc. Equip./Labware 0.5 Hot Cells 1 Storage Tanks 1 Other 1 Sinks 1 Drains 1 Ventilation Drops 1 Drains 1 Ventilation Drops 1 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Equip. Release 1 Pack/Load waste 1 Decon/Remed. 1	Misc. Equip./Labware 0.5 Hot Cells 0.5 Storage Tanks 0.5 Other 0.5 Sinks 0.5 Drains 0.5 Ventilation Drops 0.5 Drains 0.0 Inch Dia. Total ft ³ 0.0 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Equip. Release 0 Pack/Load waste 0 Decon/Remed. 0 Final Survey 0									
Hot Cells	Hot Cells	Reefers, Large Eq	uipment							
Storage Tanks	Storage Tanks		are			0.5				
Other Image: Sinks Image: Sinks Image: Sinks Drains No. Inch Dia. Image: Sinks Image: Sinks Drains No. Inch Dia. Image: Sinks Image: Sinks Image: Sinks Drains No. Inch Dia. Image: Sinks Image: Sinks Image: Sinks Image: Sinks Drains No. Inch Dia. Image: Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Image: Supvsr HP Tech Shipper Skilled Unskilled Clerical Equip. Release Image: Supvsr Image:	Other Image: Sinks Image: Sinks Image: Sinks Drains Image: Sinks Image: Sinks Image: Sinks Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Drains No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Image: Supvsr HP Tech Shipper Skilled Image: Supvsr Image: Supvsr Pack/Load waste Image: Supvsr Image: Supvsr Image: Supvsr Image: Supvsr Image: Supvsr Image: Supvsr Final Survey Image: Supvsr Image: Supvsr Image: Supvsr Image: Supvsr Image: Supvsr				ļ					
Sinks	Sinks Inch Dia. Inch Dia. Inch Dia. Drains No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia Pack/Load waste Inch Dia Decon/Remed. Inch Dia Inch Dia Inch Dia Inch Dia Inch Dia Inch Dia Skilled									
Drains Image: Second secon	Drains Inch Dia. Total ft ³ 0.0 Drains No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia Inch Dia Inch Dia Inch Dia Inch Dia Pack/Load waste Inch Dia Inch Dia Inch Dia Inch Dia Inch Dia Decon/Remed. Inch Dia Inch Dia Inch Dia Inch Dia Inch Dia Final Survey Inch Dia Inch Dia Inch Dia Inch Dia Inch Dia									
Ventilation Drops Inch Dia. Total ft ³ 0.0 Drains No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Equip. Release Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Pack/Load waste Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Decon/Remed. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. The second Pack/Load waste Inch Dia. Inch Dia. Inch Dia. Inch Dia. Final Survey Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia.	Ventilation Drops Inch Dia. Total ft ³ 0.0 Drains No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Pack/Load waste Inch Dia Inch Dia. Inch Dia. Inch Dia. Inch Dia. Decon/Remed. Inch Dia Inch Dia Inch Dia. Inch Dia. Inch Dia. Final Survey Inch Dia Inch Dia. Inch Dia. Inch Dia. Inch Dia.									
Drains No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Equip. Release Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Pack/Load waste Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Decon/Remed. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Final Survey Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia.	Drains No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Equip. Release Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Pack/Load waste Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Decon/Remed. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia. Final Survey Inch Dia. Inch Dia. Inch Dia. Inch Dia. Inch Dia.									
Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia Inch Di	Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Image: State	Ventilation Drops			<u>1</u> ,					
Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Inch Dia Inch Di	Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Image: State	Drains	No.		linch Dia.		Total ft ³	0.0		
Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Image: Stress of the stress of	Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize Image: State of the stateo				-		-	· · · · · · · · · · · · · · · · · · ·		
Characterize	Characterize						1			
Equip. Release	Equip. Release	Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Pack/Load waste	Pack/Load waste									
Decon/Remed.	Decon/Remed.					<u> </u>				
Final Survey	Final Survey				ļ					
# Lab Samples to be collected	# Lab Samples to be collected	Final Survey								
		# Lab Samples to I	be collected	d						

Building	245	Roo	om or Area		A	01		
Use		· · · · · · · · · · · · · · · · · · ·		Storage				
		· · · · · · · · ·						
Radionuclides, Ex					Beta-gan	nma, Sr-90		
Area Classification # Floors above Ba		<u> </u>						
# Floors below Ro		3						
			%	ft2]	
			needing	needing	ļ			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	600	600		0		600	4	
Wall Area, ft ²	800	800		0		800		
Ceiling Area, ft ²	600	600	0	0	J	600	J	
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	1
Glove Boxes								
Hoods								
Benches/Tables/D		200	0		· · · · · · · · · · · · · · · · · · ·	ļ		
Casework/Cabinet Reefers, Large Equ		800	0			 		
Reefers, Large Equ Misc. Equip./Labwa		1000	0		<u> </u>	<u>├</u>		
Hot Cells		1000			<u> </u>	<u> </u>		
Storage Tanks	1							
Other]							
Sinks								
Drains		0.0						
/entilation Drops	Ĺ	0.0]	1		l	li		
Drains	No.	0	Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0		
								1
Person-hours	<u>Mgr</u> 1.5	Supvsr 3	HP Tech 6	Shipper	Skilled	Unskilled	Clerical	
Characterize Equip. Release	1.5	3	6				1.5 1.5	
Pack/Load waste	0.25	0.5			1	1	0.25	
Decon/Remed.								
Final Survey	0.75	1.5	3				0.75	
# Lab Samples to b	e collected	· [1					
								•
1								
				~				

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Building	245	Ro	om or Area		A02	2/A04	
Use				SURF Lat)		
Radionuclides, Ex	tent of Cor	taminatior	1	I	Sr	-90	1
Area Classificatio		1	1			······································	
# Floors above Ba	sement	1	1				
# Floors below Ro	of	2					
			%	ft2			
			needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	2000	2000	0	-0			
Wall Area, ft ²	1440	1440	0	0]
Ceiling Area, ft ²	2000	2000	0	0			
			Fraction	Fraction	Fraction	Fraction	Fraction
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes							1
Hoods					<u> </u>		<u> </u>
Benches/Tables/D	esks	1200	0				
Casework/Cabinet	s	2800	0				
Reefers, Large Eq	uipment	·····					
Misc. Equip./Labw	are	7000	0 -				
Hot Cells							
Storage Tanks							
Other							
Sinks							
Drains		0.0					
Ventilation Drops	l	0.0					
. .	r				- 3		
Drains	No.	0	Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	4	8	16				4
Equip. Release	4	8	16				4
Pack/Load waste	0.5	1		2	2	2	0.5
Decon/Remed.		•					
Final Survey	2	4	8				2
# Lab Samples to b		ii	1				<u>_</u>

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Building	245	Ro	om or Area		A	.06]		
Use				Storage]		
Radionuclides, Ex			n T		Seale	d Sr-90			ł	
Area Classificatio		3	· ·	•					e e	
# Floors above Ba		0	4							
# Floors below Ro	of	2	- 0/	ft2	r		1			
	Į į		%			l				
j –			needing	needing					1	
	Total	Class 1	Remed.	Remed.	Class 2	Class 3				
Floor Area, ft ²	2400			0	<u> </u>	2400				
Wall Area, ft ²	2000		L	0	Ļ	2000				
Ceiling Area, ft ²	2400			0		2400				
							m		Į	
			Fraction	Fraction	Fraction	Fraction	Fraction			
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete			
Glove Boxes		50	0.5	0.9	0.1	 			1	
Hoods		000						u .	[
Benches/Tables/D		800	0							
Casework/Cabinet		800	0		<u> </u>					
Reefers, Large Eq		1200	0			·			1	
Misc. Equip./Labw Hot Cells	are	1000	0							
Storage Tanks										
Other			<u> </u>							
Sinks		<u> </u>	┠─────┤	,						
Drains		0.0								
Ventilation Drops		0.0	<u> </u>							
ventilation brops	L	0.0	<u>1t</u>							
Drains	No.		Inch Dia.		Total ft ³	0.0				
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0				
		0								
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical			
Characterize	4	8	16				4			
Equip. Release	4	8	16				4			
Pack/Load waste	0.5	1		2	2	2	0.5			
Decon/Remed.									[
Final Survey	2	4	8				2			
# Lab Samples to I	pe collected	1	0					· ·		ſ

Building	245	Ro	om or Area		A	.09		
Use			EUV Op	otic & Diagn	ostic Lab	<u> </u>		
			i.					
Radionuclides, Ex			n T		None	listed		
Area Classification		3						
# Floors above Ba		0	4					
# Floors below Ro		2	%	ft2		<u> </u>	, 1	
				1				
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	1	
Floor Area, ft ²	5100		L	0	<u> </u>	5100	1	
Wall Area, ft ²	6000			0		6000		
Ceiling Area, ft ²	5100			0		5100		
0	-4-	Tatal 42	Fraction	Fraction	Fraction	Fraction	Fraction	
Componer Glove Boxes	115	Total ft3	RW	DAW	Metal	Lead	Concrete	÷
Glove Boxes Hoods					<u> </u>			
Benches/Tables/D	ocke	500	<u> </u>	0		i		
Casework/Cabinet		500		0	<u> </u>			
Reefers, Large Eq		1000		0		·		
Misc. Equip./Labw		200		0			· · ·	
Hot Cells	are	200	l	0				
Storage Tanks	· · ·							
Other								
Sinks		20		0	· · · ·	· · ·		-
Drains		0.0		0				
Ventilation Drops		0.0						
Ventilation Drops	. I	0.0	1					
Drains	No.	1 .	Inch Dia.	2	Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		,
·····								
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	8	16	32				8	
Equip. Release	2	4	8				2	
Pack/Load waste	0.5 、	1			2	2	0.5	
Decon/Remed.								
Final Survey	4	8	16				4	
# Lab Samples to b	oe collected	1	1					

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Radionuclides, Ex		taminatior	1		Beta-gan	nma, Sr-90			1
Area Classificatio		1							
# Floors above Ba		0						i	ł
# Floors below Ro	of	2					7		
			%	ft2					
	Tatal	Class 4	needing	needing	0	0			l
F1	Total	Class 1	Remed.	Remed.	Class 2	Class 3	4		
Floor Area, ft ²	1860			0	<u> </u>	↓	}		
Wall Area, ft ²	3900			0		ļ	4		
Ceiling Area, ft ²	1860	1860	0	0	L	<u>i </u>	J		
			Fraction	Fraction	Fraction	Fraction	Fraction		
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete		
Glove Boxes		50	0	UNIT	iniciai	Leau		ι I	
Hoods					<u> </u>	<u> </u>		1	
Benches/Tables/D	esks	216	0						ļ.
Casework/Cabinet	S					<u> </u>	· · ·		
Reefers, Large Equ	uipment	3000	0			1			
Misc. Equip./Labwa	are								
Hot Cells									
Storage Tanks									
Other				······································					
Sinks					ļ				
Drains		0.0			ļ				
Ventilation Drops	L	0.0			l				
Drains	No.	0	Inch Dia.		Total ft ³	0.0		1	
	No.		Inch Dia.		Total ft ³	0.0			
/entilation Drops	NO.[inch Dia.	<u> </u>	η ι οται π	0.0			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Characterize	4	8	16				4		
Equip. Release	4	8	16				4		
Pack/Load waste	0.5	1			2	2.	0.5		
Decon/Remed.									
inal Survey	2	4	8				2		
il ab Canadaa ia b		, r							
t Lab Samples to b	e collected	• L							

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· ·			,						
Building	245	Ro	om or Area		A10 East	Basement	•		1
]	••	•	7110 2400	Buoomon		l	
Use		•	lon	izing Dosin	netry				
Radionuclides, Ex			1		Sealed	Sources			
Area Classification		2	4						
# Floors above Ba # Floors below Ro		3	-					•	Í
THE FLOORS DEIOW KO			%	ft2]		
			needing	needing					
ļ	Total	Class 1	Remed.	Remed.	Class 2	Class 3			Į.
Floor Area, ft ²	350			0	350]		1
Wall Area, ft ²	800			0	800]		ľ
Ceiling Area, ft ²	350			0	350				1
							-		I
		-	Fraction	Fraction	Fraction	Fraction	Fraction		
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete		I
Glove Boxes Hoods			 		,				l
Benches/Tables/D	esks	. 10	0		<u> </u>				
Casework/Cabinet		<u> </u>			1				
Reefers, Large Eq		80	0						
Misc. Equip./Labw	are	20	0						I
Hot Cells			ļ		<u> </u>		L		[
Storage Tanks Other		10	0						
Sinks		10							
Drains		0.0							
Ventilation Drops	• • • •	0.0							
۔ ر	-					·			
Drains	No.		Inch Dia.		Total ft ³	0.0			
Ventilation Drops	No.	0	Inch Dia.	· · · · · · · · · · · · · · · · · · ·	Total ft ³	0.0			
	<u>1</u>			01.1		11		·	
Person-hours Characterize	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled		1	
Equip. Release	1	2	4				0.2		
Pack/Load waste		۷		· · · ·	0.5	0.5	0.2		
Decon/Remed.					0.0	0.0	·		
Final Survey	0.5	. 1	2		· · · · · · · · · · · · · · · · · · ·		0.1		
			·····	····	·		·		
# Lab Samples to b	e collected	t t	1				•		

Building	245] Ro	om or Area	I	A	011	·	J	
Use	•		Ca	alibration Re	bom	· · · · · · · · · · · · · · · · · · ·	······	ר	
				· · · · · · · · · · · · · · · · · · ·				-	}
Radionuclides, Ex			n T		<u>Cs-137</u>	Irradiators		J	
Area Classificatio		3	4						N.
# Floors above Ba	-	1	4						
# Floors below Ro		1	%	ft2			1		
						1	· ·		
			needing	needing					1
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²	975			0	<u> </u>	975			1
Wall Area, ft ²	1560		<u> </u>	0		1560	4		
Ceiling Area, ft ²	975	L	L	0	<u> </u>	975			
			Fraction	Fraction	Fraction	Fraction	Fraction		
Compone	nte	Total ft3	RW	DAW	Metal	Lead	Concrete		· ·
Glove Boxes				DAN			Concrete	1	
Hoods			┼────	<u> </u>	<u>├</u> ────	┢		1	1
Benches/Tables/D	esks	130	0		<u> </u>	<u> </u>		1	ł
Casework/Cabinet	-	100	<u>├</u> ──		<u> </u>	<u> </u>		ł	1
Reefers, Large Eq	-	110	0		<u>├</u>	<u> </u>		1	
Misc. Equip./Labw		65	0		<u> </u>			1]
Hot Cells									
Storage Tanks								{	}
Other		400	.0						
Sinks				· · · · · · · · ·					1
Drains		1:3	0				· · ·		
Ventilation Drops		0.0					,		1
•	-				· ·	·	·····	1	
Drains	No.	1	Inch Dia.	6	Total ft ³	1.3			
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0			1 · · ·
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	Į	
Characterize	1.5	3	6	Cillbhol	JANNED	Unokineu	1.5		
Equip. Release	1	2	4				1	Į	
Pack/Load waste	0.5	1	2	4	4	4	0.5		
Decon/Remed.				· · · · · · · · · · · · · · · · · · ·					{
Final Survey	0.75	1.5	3				0.75		
# Lab Samples to I			0						

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Building	245	Ro	om or Area		<u> </u>	012		
			Dediese	K		<u> </u>	<u>.</u>	ı
Use			Radioac	tive Materia	al Storage		·]
Radionuclides, Ex	tent of Con	taminatior	h		Cs-137 R	Ra-Be, I-125		1
Area Classificatio		1	j		00 101,10	<u>u bo, i izo</u>	•	1
# Floors above Ba		1					•	
# Floors below Ro		2	1					
<u></u>			%	ft2			1	
			needing	needing		ł		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	160	160	0.1	16]	
Wall Area, ft ²	560	560		0]	
Ceiling Area, ft ²	160	160		10			1	
					, ·.		-	
	· .		Fraction	Fraction	Fraction	Fraction	Fraction	
Componei	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	_
Glove Boxes		25	1		1			
Hoods								
Benches/Tables/D	esks							
Casework/Cabinet	s							
Reefers, Large Eq	uipment							i i
Misc. Equip./Labw	are						·	1
Hot Cells								
Storage Tanks	[~	
Other								
Sinks								1
Drains		0.0						
Ventilation Drops		0.0						
Drains	No.	0	Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0		
	-		-					
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	1	2	4				1,	
Equip. Release	1	2	4				1	
Pack/Load waste	0.25	0.5			1	1	0.25	•
Decon/Remed.								
Final Survey	1	2	4				1	
	114	, [,] ,						
# Lab Samples to b		<mark>،</mark> ۲	1					
				•				
3							•	

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	245	j Ro	om or Area	L	A017	'-A018	
Use	,			·	. .		
Radionuclides, Ex	tent of Cor	Itaminatio	n	F	U. 5	Sr-90	·
Area Classificatio		1	İ	L			
# Floors above Ba			f .				
# Floors below Ro			1				
	<u></u>		%	ft2	T	I	1
			needing	needing			· ·
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	[
Floor Area, ft ²	3800			0	3800		
Wall Area, ft ²	6500		<u> </u>	0	6500	v	
Ceiling Area, ft ²	3800		<u> </u>	0	3800		
<u> </u>			<u> </u>	<u>`</u>		<u> </u>	1
Compone	nte	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes			1		I	Loud	
Hoods				V	<u> </u>		
Benches/Tables/D	esks	500	0		1	<u>}</u>	
Casework/Cabinet		800	Ō	<u>_</u>	[{	
Reefers, Large Eq		5000	0				
Misc. Equip./Labw		1000	Ō				
Hot Cells					<u>├</u> ───	,	
Storage Tanks	· · · · • •				<u> </u>		
Other					[
Sinks	ł	<u> </u>					······································
Drains	ļ	0.0					
Ventilation Drops	1	0.0					
•			····				
Drains	No.	0	Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0	
	, warer l	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical 16
	Mgr 16		<u> </u>	i	f		10
Characterize	16	32	64	i	·		
Characterize Equip. Release	<u>16</u> 10	<u>32</u> 20	<u>64</u> 40				10
Characterize Equip. Release Pack/Load waste	16	32			4	4	
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	<u>16</u> 10	<u>32</u> 20				4	10

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Building	245	Ro	om or Area		A0)19	
Use			Dosi	metry Calib	oration		
							J
Radionuclides, Ex			n T				
Area Classificatio		3	4				
# Floors above Ba		0	4				
# Floors below Ro		3	0/	ft2			3
			%				
	T-4-1		needing	needing		01 0	
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	1440		 	0	1440		
Wall Area, ft ²	3500			0	3500		1
Ceiling Area, ft ²	1440	:		0 -	1440		J
I.			Fraction	Fraction	Fraction	Fraction	Fraction
Componei	nts	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes							
Hoods							
Benches/Tables/D	esks	150	0				
Casework/Cabinet	S	150	0	•			
Reefers, Large Eq	uipment	300	0		1 1		
Misc. Equip./Labw		200	0				
Hot Cells							
Storage Tanks							
Other		20	0				
Sinks							
Drains		0.0					
Ventilation Drops		40.8	0				
	-						
Drains	No.	0	Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.[2	Inch Dia.	14	Total ft ³	40.8	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	2	4	8	31110401		Unonnou	2
Equip. Release	2.5	5	10				2.5
Pack/Load waste	0.5	1			2	2	0.5
Decon/Remed.	0.0	•					
Final Survey	1	2	4				1
# Lab Samples to b	be collected	1		•	· · · · · · · · · · · · · · · · · · ·		

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Building	245	Bo	om or Area	r	A	020			7
-								1	l ·
Use				Storage					
Radionuclides, Ex			n		Seale	d Sr-90]	}
Area Classification # Floors above Ba		3	4					• .	. .
# Floors below Ro		2	1					•	l
			% needing	ft2 needing]
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²	1296			0		1296			
Wall Area, ft ²	4320		<u> </u>	0		4320			
Ceiling Area, ft ²	1296		<u> </u>	0	I	1296			
			Fraction	Fraction	Fraction	Fraction	Fraction		
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete		
Glove Boxes Hoods					<u> </u>	 			
Benches/Tables/D	esks		+	· · · ·	1				1
Casework/Cabinet		5							
Reefers, Large Eq Misc. Equip./Labw		200	 _		·				
Hot Cells	ale	200	╂						
Storage Tanks									
Other Sinks			0	·					
Sinks Drains		0.3	0						
Ventilation Drops		2.2	0	· · · · · · · · · · · · · · · · · · ·					
	(1						
Drains Ventilation Drops	No. No.	2	Inch Dia. Inch Dia.	2 4	Total ft ³ Total ft ³	0.3			
ventilation brops	NO.1					<u> </u>			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Characterize	<u>1.5</u> 1	2	6 4				1.5		
Equip. Release Pack/Load waste	0.25	0.5	4	····	1	1	0.25		
Decon/Remed.	0.20							· 1	
Final Survey	1	2	4				1		
HI oh Complete An I	oe collected	t	0			·			

Building	245	Ro	om or Area		<u>A</u>	141	<u> </u>
Use			Sp	allation So	urce		
Dedionuolidos Ex		tominatio	-	1	CE.	252	
Radionuclides, Ex Area Classificatio		1	ו 		CF	-252	<u> </u>
# Floors above Ba		0	1				
# Floors below Ro		3	1				•
			%	ft2	1		1
			needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	200	200	0.2	40			1
Wall Area, ft ²	720	720		0			1
Ceiling Area, ft ²	200	200		0			۰ ۱
Compone	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	- Fraction Concrete
Glove Boxes			·				
Hoods							L
Benches/Tables/D			· · · · · · · · · · · · · · · · · · ·	·		ļ	
Casework/Cabinet	-	1000	•		<u> </u>		
Reefers, Large Eq		1000	1		1		
Misc. Equip./Labw	are				1		
lot Cells							
Storage Tanks Other		75	. 1				
Sinks		75	· •			1	
Drains		0.0					
Ventilation Drops		0.0					
	L	0.0			I		
Drains	No.	0	Inch Dia.		Total ft ³	0.0	1
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0	
						0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	2	4	8				2
Equip. Release	1	2	4				1
Pack/Load waste	0.5	1	2	2	. 4	4	0.5
Decon/Remed.	1	2	4		4	4	1
Final Survey	1	2	4				1
# Lab Samples to b	e collected	I [3				·
							j.

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Building	245	Ro	om or Area	r	A	145	
Banang	L			L			
Use			First f	loor Loadin	ig Dock		
Radionuclides, Ex	tent of Con	taminatio	n		N	one	
Area Classificatio	n	3]				
# Floors above Ba		1		Wait on Tr	rimble		
# Floors below Ro	of	1					•
· ·			% needing	ft2 needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	3720			0		3720	
Wall Area, ft ²	2000			0		2000	
Ceiling Area, ft ²	3720			0		3720]
Compone	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction
Glove Boxes							
Hoods							P
Benches/Tables/D		100	0				
Casework/Cabinet		75	0	L	 	ļ	
Reefers, Large Eq		3000	0		 	┣	
Misc. Equip./Labw	are	3000	0		<u> </u>		
Hot Cells Storage Tanks	ł	500	0		┝────		
Storage Tanks Other	}	2000	0.1			0.5	0.5
Sinks	ł	2000	0.1	<u> </u>	 	0.0	0.5
Drains	ŀ	0.0					
Ventilation Drops		0.0	· · · ·		<u> </u>		
r -	L				<u> </u>	_	
Drains	No.	0	Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0	
					-		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	4	8	16				4
Equip. Release	5	10	20				5
Pack/Load waste	0.5	1	2	2	4	4	0.5
Decon/Remed.			0	<u> </u>			
Final Survey	2	4	8		L		2
# Lab Samples to I	be collected		1				

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Use Radionuclides, Ex Area Classification # Floors above Ba # Floors below Ro Floor Area, ft ² Wall Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Componer Glove Boxes Hoods Benches/Tables/De Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells	tent of Cor n sement	Class 1	% needing		······································		· .
Area Classification # Floors above Ba # Floors below Ro Floor Area, ft ² Wall Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Componer Glove Boxes Hoods Benches/Tables/Do Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks	n sement of Total 17584 56744	Class 1	%	ft2	 		· · ·
Area Classification # Floors above Ba # Floors below Ro Floor Area, ft ² Wall Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Componer Glove Boxes Hoods Benches/Tables/Du Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks	n sement of Total 17584 56744	Class 1	%	ft2	 		· .
# Floors above Ba # Floors below Ro Floor Area, ft ² Wall Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Componer Glove Boxes Hoods Benches/Tables/Dd Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks	sement of Total 17584 56744			ft2	· · · · ·		<u> </u>
# Floors below Ro Floor Area, ft ² Wall Area, ft ² Ceiling Area, ft ² Ceiling Area, ft ² Componer Glove Boxes Hoods Benches/Tables/Do Casework/Cabinets Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks	of Total 17584 56744			ft2			
Floor Area, ft ² Wall Area, ft ² Ceiling Area, ft ² Componer Glove Boxes Hoods Benches/Tables/Do Casework/Cabinet Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks	Total 17584 56744			ft2			
Wall Area, ft ² Ceiling Area, ft ² Componer Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks	17584 56744			ft2			
Wall Area, ft ² Ceiling Area, ft ² Componer Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks	17584 56744		needing				
Wall Area, ft ² Ceiling Area, ft ² Componer Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks	17584 56744			needing			
Wall Area, ft ² Ceiling Area, ft ² Componer Glove Boxes Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks	56744	0001	Remed.	Remed.	Class 2	Class 3	
Ceiling Area, ft ² Componer Glove Boxes Hoods Benches/Tables/Do Casework/Cabinet Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks		9804		346	1000	6780	
Componer Glove Boxes Hoods Benches/Tables/Do Casework/Cabinet Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks	18344	31514		605.2	3250	21780	
Glove Boxes Hoods Benches/Tables/Do Casework/Cabinet Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks		9804		250	1000	7540	
Glove Boxes Hoods Benches/Tables/Do Casework/Cabinet Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks							. 3
Glove Boxes Hoods Benches/Tables/Do Casework/Cabinet Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks			Fraction		- 3		ft ³
Hoods Benches/Tables/Do Casework/Cabinet Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete
Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks		90		31.5	13.5	0	0
Casework/Cabinet Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks		440		0	270	0	0
Reefers, Large Equ Misc. Equip./Labwa Hot Cells Storage Tanks		2811		68.8	146.7	0	0
Misc. Equip./Labwa Hot Cells Storage Tanks		4238		78	101.8	0	0
Hot Cells Storage Tanks		4890		177.5	181.5	0	0
Storage Tanks	are	2905		104.1	87.4	0	0
		0		0	0	0	0
B ()		1620		0	360	0	0
Other		1545		0	27	5.2	10
Sinks		163		1.275	30.475	0	0
Drains		1.666667		0.006944	0.076389	0	0
Ventilation Drops		436.25		6.25	6.25	0	0 ·
	•				3		·
Drains	No.		Inch Dia.		Total ft ³	1.666667	
Ventilation Drops	No.	21	Inch Dia.		Total ft ³	436.25	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	117	234	468	0	4	4	117
Equip. Release	97	194	392	0	2	. 2	97
Pack/Load waste	16.5	33	29	52	74	74	16.5
Decon/Remed.	2	4	8	0	12	12	2
Final Survey	56.5	113	224	0	0	0	56.6
# Lab Samples to b	e collected	ı [41				

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Building	245] Ro	om or Area	<u> </u>	В	51		
Use			Equi	pment setu	ip lab]
								1
Radionuclides, Ex	tent of Con	tamination	,	Unsle	aed U: Sea	led U, TRU,	Co-60	ł
Area Classificatio		1	Ì	011010				1
# Floors above Ba	sement	0	1					
Floors below Ro	of	3					_	
	Total	Class 1	% needing Remed.	ft2 needing Remed.	Class 2	Class 3		
Floor Area, ft ²	200	200		0				
Wall Area, ft ²	900			0	ļ			
Ceiling Area, ft ²	200			. <u>0</u>]	
Compone Glove Boxes	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	1
Hoods								
Benches/Tables/D	esks							
Casework/Cabinet		130	0					
Reefers, Large Eq		100	0					
/lisc. Equip./Labw lot Cells	are	100	0					
Storage Tanks		<u> </u>						
Other								
Sinks	l							
Drains	[
entilation Drops	Į			-			<u>-</u>	
Drains	No.		Inch Dia.	<u> </u>	Total ft ³	0.0		
Ventilation Drops	NO. No.		Inch Dia.		Total ft ³	0.0		
ventilation brops	NO.L	0		·	Totarn	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
haracterize	4	8	16				4	
quip. Release	4	8	16				4	
ack/Load waste	0.5	1	2	2	2	2	0.5	
econ/Remed.	2	4	8					
inal Survey	2	4	ŏ.				2	
					-			

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Building 245 Room or Area B52 Use Heat Absolute UV Radiometry Radionuclides, Extent of Contamination None Area Classification 3 # Floors above Basement 0 # Floors below Roof 3 # Floors helow Roof 3 # Floor Area, ft ² 200 0 200 Components Total ft3 Glove Boxes 100 0 Hoods 100 0 Benches/Tables/Desks 100 0 Casework/Cabinets 84 0 1 Korage Tanks 100 0 0.0 Drains No. 0 Inch Dia. Total ft ³ 0.0 Drains No. 0 Inch Dia.	Building	245	Po	om or Area			52		
None Total Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 200 Wall Area, ft ² 200 Total ft3 RW DAW Metal Lead Glove Boxes Hoods Benches/Tables/Desks Casework/Cabinets Remed. Fraction Fraction Fraction Storage Tanks One Orains No.		240	Ro				52]
Area Classification 3 # Floors above Basement 0 # Floors below Roof 3 # Floors below Roof 3 # Floors below Roof 3 Ploor Area, ft ² 200 Wall Area, ft ² 960 Ceiling Area, ft ² 200 Wall Area, ft ² 200 Components Total ft3 Rewed. Fraction Components Total ft3 Rewed. Fraction Glove Boxes 100 Hoods 100 Benches/Tables/Desks 84 Casework/Cabinets 84 Reefers, Large Equipment 30 Misc. Equip./Labware	Use			Heat Abs	solute UV R	adiometry			J
# Floors above Basement 0 # Floors below Roof 3 Yeliors below Roof 3 Floor Area, ft ² 200 Wall Area, ft ² 960 Ceiling Area, ft ² 900 Components Fraction Fraction Components Total ft3 RW DAW Metal Lead Glove Boxes				1		No	one		J
# Floors below Roof 3 % ft2 needing needing needing needing Remed. ft2 class 2 class 3 Floor Area, ft ² 200 0 200 Wall Area, ft ² 960 0 200 Ceiling Area, ft ² 200 0 200 Ceiling Area, ft ² 200 0 200 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Hoods Benches/Tables/Desks 100 0				4					
TotalClass 1needing Remed.Reding Remed.Class 2Class 3Floor Area, ft22000200Wall Area, ft29600960Ceiling Area, ft22000200ComponentsTotal ft3RWDAWMetalLeadComponentsTotal ft3RWDAWMetalLeadConcreteGlove BoxesTotal ft3RWDAWMetalLeadConcreteHoods100011111Benches/Tables/Desks10001111Casework/Cabinets8401111Reefers, Large Equipment Misc. Equip./Labware300111Hot CellsSinks111111Sinks1111111DrainsNo.0Inch Dia.Total ft30.00.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize1241111111Pack/Load waste111111111Final Survey0.51210.5120.5						•			
Floor Area, ft ² 200 0 200 Wall Area, ft ² 960 0 960 Ceiling Area, ft ² 200 0 200 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes		Total	Class 1	needing	needing	Class 2	Class 3		
Wall Area, ft ² 960 0 960 Ceiling Area, ft ² 200 0 200 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Image: Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Image: Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Image: Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Image: Components Total ft3 Image: Components Image: Co	Floor Area, ft ²			Kemeu.	1	01855 2			
Components Total ft3 Fraction	Wall Area, ft ²			· · · · · · · · · · · · · · · · · · ·					
ComponentsTotal ft3RWDAWMetalLeadConcreteGlove Boxes	Ceiling Area, ft ²	200			0		200		
Glove Boxes	Component	s	Total ft3						
Benches/Tables/Desks 100 0	Glove Boxes	· · · · ·							
Reefers, Large Equipment 30 0		sks	100	0					
Misc. Equip./Labware									
Hot Cells			30	0					
Other Image: Sinks Image: Sinks Image: Sinks Image: Sinks Drains Ventilation Drops No. Image: Sinks Image: Sinks Image: Sinks Drains No. 0 Inch Dia. Total ft ³ 0.0 Drains No. 0 Inch Dia. Total ft ³ 0.0 Ventilation Drops No. 0 Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 1 2 4 Image: Sinks	Hot Cells					×			
Sinks Image: Sinks Image: Sinks Image: Sinks Drains No. Image: Sinks Image: Sinks Ventilation Drops No. Image: Sinks Image: Sinks Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 1 2 4 1 Equip. Release Image: Sinks Image: Sinks Image: Sinks Image: Sinks Pack/Load waste Image: Sinks Image: Sinks Image: Sinks Image: Sinks Decon/Remed. Image: Sinks Image: Sinks Image: Sinks Image: Sinks Image: Sinks Image: Sinks Image: Sinks Image: Sinks Image: Sinks Image: Sinks Decon/Remed. Image: Sinks Image: Sinks Image: Sinks Image: Sinks Image: Sinks <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<>									
Ventilation Drops No. 0 Inch Dia. Total ft ³ 0.0 Drains No. 0 Inch Dia. Total ft ³ 0.0 Ventilation Drops No. 0 Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 1 2 4 1 1 Equip. Release 1 2 4 1 1 Pack/Load waste 1 1 1 1 Decon/Remed. 1 2 0.5 1 2	Sinks								
DrainsNo.0Inch Dia.Total ft³0.0Ventilation DropsNo.0Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize12411Equip. Release1Pack/Load waste </td <td></td> <td></td> <td></td> <td>·</td> <td></td> <td></td> <td></td> <td></td> <td></td>				·					
Ventilation Drops No. 0 Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 1 2 4 1 1 Equip. Release 9 1 1 1 1 Pack/Load waste 9 1 2 1 1 Final Survey 0.5 1 2 0.5 0.5									
Characterize 1 2 4 1 Equip. Release 1 2 4 1 Pack/Load waste 1 2 4 1 Decon/Remed. 1 2 0.5 1 2 0.5									
Equip. Release			Supvsr		Shipper	Skilled	Unskilled		
Pack/Load waste		1	2	4				1	
Final Survey 0.5 1 2 0.5	Pack/Load waste					· · · · · · · · · · · · · · · · · · ·			
		0.5	1	2			•	0.5	
# Lab Samples to be collected 1		· · · ·		-				0.0	
	# Lab Samples to be	e collected	1 	1					
	• • .								
	:	-							

Building	245] Ro	om or Area	1	В	001	······	_
Use			RA	M Storage	Area		· <u> </u>]
Radionuclides, Ext	tent of Cor	ntaminatio	n	I	Beta-gam	nma, Th-232		1
Area Classification	ı	[1]	L	v	······ · · -		
# Floors above Bas # Floors below Ro		0	4					
# FIGUIS DEIGW RO			%	ft2	1		1	
			needing	needing				
51 6 6 7	Total	Class 1	Remed.	Remed.	Class 2	Class 3	-	
Floor Area, ft ² Wall Area, ft ²	552			· · · · ·	. <u> </u>	<u> </u>	-	
Ceiling Area, ft ²	1400 552			0		<u> </u>	1	í
ooming ruda, it	002	L002	1	L	1	_I	L	
Componen	ts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes Hoods		40	0.5					
Benches/Tables/De	sks	250	0.5		1			
Casework/Cabinets		400	0		<u> </u>	<u> </u>		
Reefers, Large Equ								
Misc. Equip./Labwa Hot Cells	are	300	0			<u> </u>		
Storage Tanks		100	1		1			
Other		3	0					
Sinks		3	0					
Drains Ventilation Drops		0.0	0		·	· · · · · · · · · · · · · · · · · · ·		
Ventilation Drops	l	102.1	U U		1	L	L	
Drains	No.	1	Inch Dia.	14	Total ft ³	0.0		
Ventilation Drops	No.	5	Inch Dia.	14	Total ft ³	102.1		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	4	8	16				4	
Equip. Release Pack/Load waste	<u>8</u> 0.5	<u>16</u> 1	32 1		2	2	<u> </u>	
Decon/Remed.	0.5		1	2	2	2	0.5	i
Final Survey	2	4	8				2	
# Lab Samples to b	e collected	t	1				. .	
		;						

Building	245	. Ro	om or Area	1	E	802	······································	
Use]
Radionuclides, Ex Area Classificatio		tamination	n]		Beta-gan	nma, Sr-90		J
# Floors above Ba		1	1		۰.			
# Floors below Ro	of	2					_	
			%	ft2				
	-		needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	4	
Floor Area, ft ²	200					<u> </u>		
Wall Area, ft ²	1080	· · · · · · · · · · · · · · · · · · ·				ļ	· ·	•
Ceiling Area, ft ²	200	200	0	0	L	<u> </u>	J	
Company	-		Fraction	Fraction DAW	Fraction	Fraction	Fraction Concrete	,
Compone Glove Boxes	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	ľ
Hoods		<u> </u>			<u> </u>	<u> </u>		
Benches/Tables/D	esks	150	0.05	0.5	0.5		· · · · · · · · · · · · · · · · · · ·	
Casework/Cabinet		80	0.05	0.5	0.5			
Reefers, Large Eq		100	0.05	0.5	0.5			
Misc. Equip./Labw		· · · · · · · · · · · · · · · · · · ·						•
Hot Cells	[•
Storage Tanks	1				ļ. 			
Other Sinks			0.05	0.5	0.5			
Drains		<u> 20 </u> 0.1	0.05	0.5	0.5			
Ventilation Drops		0.0			<u> </u>			
	· 1		<u> </u>	· · · ·	J	J		ļ
Drains	No.	1	Inch Dia.	2	Total ft ³	0.1		
Ventilation Drops	No.	•	Inch Dia.		Total ft ³	0.0		
	· · · · ·				J		۱ 	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled		
Characterize	1	2	4		· · · · · · · · · · · · · · · · · · ·		1	
	1	2	4				1	
Equip. Release					2	2		
Pack/Load waste					1			
	0.5	1	2		· · · · · ·		0.6	

· · · ·

Building	245	Ro	om or Area		В	03		
Use			_					1
Dediepuelidee Ev		4			Doto nome			1
Radionuclides, Ex Area Classification		1			Bela-gamr	na, U, Sr-90	·	1
# Floors above Ba		1						
# Floors below Ro	01	2	%	ft2	1	<u> </u>	1	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	200							
Wall Area, ft ²	1080							
Ceiling Area, ft ²	200	200	0	0	<u> </u>	<u> </u>	1	
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes	[]
Hoods								
Benches/Tables/D Casework/Cabinet		120 200	0.05	0.5	0.5			
Reefers, Large Equ		200	0.05	0.5	0.5	· · · ·		
Misc. Equip./Labw		150	0.05	0.5	0.5			
Hot Cells								
Storage Tanks Other				-	ļ			
Sinks	ŀ	25	0.05	0.5	0.5			
Drains	ł	0.0	0.00	0.0	0.0			
Ventilation Drops		0.0						
Drains	No.	1	_	·	Total ft ³	0.0		
Ventilation Drops	No.		∠ Inch Dia.	·····	Total ft ³	0.0		
]			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled		
Characterize Equip. Release	1	2	4	<u> </u>			1	
Pack/Load waste	0.5	1	2	2	2	2	0.5	
Decon/Remed.		· · · · · · · · · · · · · · · · · · ·						
Final Survey	1	2	4				1	
# Lab Samples to b	e collected		1					
					1			
						•		

Radionuclides, Ex	tent of Con	taminatio	1 .		Beta-gan	nma, S r -90	
Area Classification		1] .		¥		
# Floors above Ba		1]				
# Floors below Ro	of	2					· .
•			%	ft2			
	Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3	
Floor Area, ft ²	625	625			CidSS Z	Class J	1. S. S. S. S. S. S. S. S. S. S. S. S. S.
Wall Area, ft ²	1400						
Ceiling Area, ft ²	625	625					· ·
Gening Area, it	025	020	<u> </u>	. 0	. · ·	L	
			Fraction	Fraction	Fraction	Fraction	Fraction
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes							
Hoods							
Benches/Tables/D	esks	276	0.25	0.25	0.75	,	
Casework/Cabinet	s	120	0.05	0.25	0.75		
Reefers, Large Eq	uipment	200	0.5	0.5	0.5		
Misc. Equip./Labw		50	0.75	0.5	0.5		
Hot Cells					1		
Storage Tanks					1		
Other					,		
Sinks	· ·	20	0.25		1		
Drains		0.1					
Ventilation Drops		0.0	•				
:	_						
Drains	No.	· 1	Inch Dia.	2	Total ft ³	0.1	
Ventilation Drops	No.	1. 4	Inch Dia.	•	Total ft ³	0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	2	4	· 8			· · · ·	- 2.
Equip. Release	4	8	16		•		4
Pack/Load waste	0.5	1		2	2	2	0.5
Decon/Remed.							
Final Survey	1	2	4				1
# Lab Samples to b	e collected		1		-		

Building	245] Ro	om or Area		В	08	<u>_</u>	
Use			Brachyth	erapy Calib	pration Lab]
Radionuclides, Ex Area Classificatio		tamination	1	ןז	rRU, Beta-g	amma, lodi	ne	l
			4					
# Floors above Ba		1	4.					
# Floors below Ro		1	%	ft2	 	I	1 .	
			needing	needing				•
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	375			0	Cid55 Z	01855 3		
Wall Area, ft ²		· · · · · · · · · · · · · · · · · · ·				·	ł	
	2000			0	<u> </u>	·	·	
Ceiling Area, ft ²	375	375	0	0	<u>l</u>	<u> </u>	J	
Componer	nte	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes	113			DAW	metal	Leau	Concrete	
Hoods					<u> </u>			
Benches/Tables/D	eske	25	0.2		1			
Casework/Cabinet		85	0.4	4	+	<u> </u>		ĺ
Reefers, Large Eq					<u> </u>	<u> </u>		
Misc. Equip./Labw		100	- 0.15	0.5	0.5			ļ
Hot Cells				0.0	<u> </u>			
Storage Tanks		40				<u> </u>		
Other		100	0.3		0.9	0.1		I
Sinks								
Drains		0.1						
Ventilation Drops		0.0			<u> </u>			
······································		•			.		d	
Drains	No.	1	Inch Dia.	2	Total ft ³	0.1		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		,
						. 0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	8	16	32				8	
Equip. Release	8	16	32				8	
Pack/Load waste	0.5	. 1		2	.2	2	0.5	
Decon/Remed.								·
Final Survey	3	6	12				3	
Decon/Remed. Final Survey # Lab Samples to b			12				3	

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Building	245	Ro	om or Area		B	011	<u> </u>	<u> </u>	٦
				•		·····		-	
Use]		420	V Control	Room	······	·]	
Radionuclides, Ex	tent of Con	taminatio	n	I	Beta-gan	nma, Sr-90		I.	
Area Classificatio	n	3]		<u> </u>			1	
# Floors above Ba		1]		J				
# Floors below Ro	of	1	%	ft2	1	· · · · ·	1		
			needing	needing					
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²	187			0		187			
Wall Area, ft ²	600			0		600		•	
Ceiling Area, ft ²	187			0		187]		
Compone	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete		
Glove Boxes									
Hoods Benches/Tables/D	acké			· · · · · ·				4	
Casework/Cabinet		<u>3</u> 30	0		<u>}</u>				
Reefers, Large Eq		30	0						
Misc. Equip./Labw		510	0					· ·	
Hot Cells									
Storage Tanks Other		60 10	0					ł	
Sinks		10	0						
Drains		0.0	0						L
Ventilation Drops	ĺ	20.0	0						ŀ
			7 /		13		I		ľ
Drains	No.		Inch Dia.		Total ft ³	0.0			
Ventilation Drops	No.	1	Inch Dia.	24	Total ft ³	20.0			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	1	
Characterize	2	4	8				2		
Equip. Release	4	8	16				<u> </u>		
Pack/Load waste Decon/Remed.					2	2			
Final Survey	1	2	4	·			1		l
	A				· .	· · ·			
# Lab Samples to I	be collected	i	0						
							x		
•									
					•				
,									
	,								

Building 245 Room or Area B013 Use X-ray X-ray Radionuclides, Extent of Contamination 3 Sealed Am-241 Area Classification 3 ************************************	Use X-ray Sealed Am-241 Total Class 1 Remeding needing Remed. Class 2 Class 3 Total Class 1 Remed. Class 2 Class 3 Protal Class 1 Remed. Class 2 Class 3 1050 0 300 Total ft3 RW DAW Metal Lead Concrete Image: colspan="2">Image: colspan="2" Image: colspan="2" Image: colspan="2" Image: colspan="2" <th col<="" th=""><th>Use X-ray Radionuclides, Extent of Contamination Sealed Am-241 Sealed Am-241 Sealed Am-241 # Floors above Basement # Floors below Roof % ft2 needing # Floors below Roof % ft2 needing needing # Floor Area, ft² 300 0 300 Wall Area, ft² 1050 0 1050 Class 2 Class 3 Floor Area, ft² 300 0 300 Wall Area, ft² 1050 0 1050 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes 1000 0 1000 1000 1000 1000 1000 1000 Storage Tanks 0.0 0.0 1000 1000 1000 1000 1000 0.0 0.0</th><th>Use X-ray Radionuclides, Extent of Contamination Sealed Am-241 Area Classification Sealed Am-241 Area Classification 3 # Floors above Basement ft2 # Floors below Roof ft2 Total Class 1 Remed. Class 2 Class 3 Floor Area, ft² 300 0 300 Class 1 Remed. Class 2 Class 3 Floor Area, ft² 300 0 300 Wall Area, ft² 1050 0 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes 1000 O Concrete Storage Tanks <th col<="" th=""><th>Use X-ray Radionuclides, Extent of Contamination urea Classification 3 Floors above Basement 3 Floors below Roof 1 Image: State of Contamination urea Classification 3 Floors below Roof 1 Image: State of Contamination urea Classification 3 Floors below Roof 1 Image: State of Contamination urea Class 1 Remed. Remed. Class 2 Class 1 Remed. Remed. Class 2 Class 3 Ioor Area, ft² 300 0 300 Vall Area, ft² 1050 0 1050 State of State of Concrete urea for a state of the</th><th>Use X-ray Radionuclides, Extent of Contamination Area Classification 3 # Floors above Basement 3 # Floors above Basement 9% ft2 needing # Floors above Basement 9% ft2 needing Wall Area, ft² 300 0 300 Class 1 Remed. Class 2 Class 3 Floor Area, ft² 300 0 300 Wall Area, ft² 1050 0 1050 Ceiling Area, ft² 300 0 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 40 0 5<th>Building</th><th></th><th></th><th></th><th>F</th><th></th><th></th><th></th></th></th></th></th>	<th>Use X-ray Radionuclides, Extent of Contamination Sealed Am-241 Sealed Am-241 Sealed Am-241 # Floors above Basement # Floors below Roof % ft2 needing # Floors below Roof % ft2 needing needing # Floor Area, ft² 300 0 300 Wall Area, ft² 1050 0 1050 Class 2 Class 3 Floor Area, ft² 300 0 300 Wall Area, ft² 1050 0 1050 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes 1000 0 1000 1000 1000 1000 1000 1000 Storage Tanks 0.0 0.0 1000 1000 1000 1000 1000 0.0 0.0</th> <th>Use X-ray Radionuclides, Extent of Contamination Sealed Am-241 Area Classification Sealed Am-241 Area Classification 3 # Floors above Basement ft2 # Floors below Roof ft2 Total Class 1 Remed. Class 2 Class 3 Floor Area, ft² 300 0 300 Class 1 Remed. Class 2 Class 3 Floor Area, ft² 300 0 300 Wall Area, ft² 1050 0 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes 1000 O Concrete Storage Tanks <th col<="" th=""><th>Use X-ray Radionuclides, Extent of Contamination urea Classification 3 Floors above Basement 3 Floors below Roof 1 Image: State of Contamination urea Classification 3 Floors below Roof 1 Image: State of Contamination urea Classification 3 Floors below Roof 1 Image: State of Contamination urea Class 1 Remed. Remed. Class 2 Class 1 Remed. Remed. Class 2 Class 3 Ioor Area, ft² 300 0 300 Vall Area, ft² 1050 0 1050 State of State of Concrete urea for a state of the</th><th>Use X-ray Radionuclides, Extent of Contamination Area Classification 3 # Floors above Basement 3 # Floors above Basement 9% ft2 needing # Floors above Basement 9% ft2 needing Wall Area, ft² 300 0 300 Class 1 Remed. Class 2 Class 3 Floor Area, ft² 300 0 300 Wall Area, ft² 1050 0 1050 Ceiling Area, ft² 300 0 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 40 0 5<th>Building</th><th></th><th></th><th></th><th>F</th><th></th><th></th><th></th></th></th></th>	Use X-ray Radionuclides, Extent of Contamination Sealed Am-241 Sealed Am-241 Sealed Am-241 # Floors above Basement # Floors below Roof % ft2 needing # Floors below Roof % ft2 needing needing # Floor Area, ft ² 300 0 300 Wall Area, ft ² 1050 0 1050 Class 2 Class 3 Floor Area, ft ² 300 0 300 Wall Area, ft ² 1050 0 1050 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes 1000 0 1000 1000 1000 1000 1000 1000 Storage Tanks 0.0 0.0 1000 1000 1000 1000 1000 0.0 0.0	Use X-ray Radionuclides, Extent of Contamination Sealed Am-241 Area Classification Sealed Am-241 Area Classification 3 # Floors above Basement ft2 # Floors below Roof ft2 Total Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 300 0 300 Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 300 0 300 Wall Area, ft ² 1050 0 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes 1000 O Concrete Storage Tanks <th col<="" th=""><th>Use X-ray Radionuclides, Extent of Contamination urea Classification 3 Floors above Basement 3 Floors below Roof 1 Image: State of Contamination urea Classification 3 Floors below Roof 1 Image: State of Contamination urea Classification 3 Floors below Roof 1 Image: State of Contamination urea Class 1 Remed. Remed. Class 2 Class 1 Remed. Remed. Class 2 Class 3 Ioor Area, ft² 300 0 300 Vall Area, ft² 1050 0 1050 State of State of Concrete urea for a state of the</th><th>Use X-ray Radionuclides, Extent of Contamination Area Classification 3 # Floors above Basement 3 # Floors above Basement 9% ft2 needing # Floors above Basement 9% ft2 needing Wall Area, ft² 300 0 300 Class 1 Remed. Class 2 Class 3 Floor Area, ft² 300 0 300 Wall Area, ft² 1050 0 1050 Ceiling Area, ft² 300 0 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 40 0 5<th>Building</th><th></th><th></th><th></th><th>F</th><th></th><th></th><th></th></th></th>	<th>Use X-ray Radionuclides, Extent of Contamination urea Classification 3 Floors above Basement 3 Floors below Roof 1 Image: State of Contamination urea Classification 3 Floors below Roof 1 Image: State of Contamination urea Classification 3 Floors below Roof 1 Image: State of Contamination urea Class 1 Remed. Remed. Class 2 Class 1 Remed. Remed. Class 2 Class 3 Ioor Area, ft² 300 0 300 Vall Area, ft² 1050 0 1050 State of State of Concrete urea for a state of the</th> <th>Use X-ray Radionuclides, Extent of Contamination Area Classification 3 # Floors above Basement 3 # Floors above Basement 9% ft2 needing # Floors above Basement 9% ft2 needing Wall Area, ft² 300 0 300 Class 1 Remed. Class 2 Class 3 Floor Area, ft² 300 0 300 Wall Area, ft² 1050 0 1050 Ceiling Area, ft² 300 0 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 40 0 5<th>Building</th><th></th><th></th><th></th><th>F</th><th></th><th></th><th></th></th>	Use X-ray Radionuclides, Extent of Contamination urea Classification 3 Floors above Basement 3 Floors below Roof 1 Image: State of Contamination urea Classification 3 Floors below Roof 1 Image: State of Contamination urea Classification 3 Floors below Roof 1 Image: State of Contamination urea Class 1 Remed. Remed. Class 2 Class 1 Remed. Remed. Class 2 Class 3 Ioor Area, ft ² 300 0 300 Vall Area, ft ² 1050 0 1050 State of State of Concrete urea for a state of the	Use X-ray Radionuclides, Extent of Contamination Area Classification 3 # Floors above Basement 3 # Floors above Basement 9% ft2 needing # Floors above Basement 9% ft2 needing Wall Area, ft ² 300 0 300 Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 300 0 300 Wall Area, ft ² 1050 0 1050 Ceiling Area, ft ² 300 0 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 40 0 5 <th>Building</th> <th></th> <th></th> <th></th> <th>F</th> <th></th> <th></th> <th></th>	Building				F			
Sealed Am-241 Sealed Am-241 Area Classification 3 # Floors above Basement	es, Extent of Contamination cation 3 ve Basement 9 w Roof 1 Total Class 1 Remed. Preding 1 reeding 1 ree	Sealed Am-241 Sealed Am-241 Area Classification 3 # Floors above Basement % ft2 # Floors below Roof % ft2 Total Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 300 0 300 Wall Area, ft ² 1050 0 1050 Ceiling Area, ft ² 300 0 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes 1000 0 1000 1000 1000 1000 1000 Misc. Equip./Labware 1000 0 1000	Radionuclides, Extent of Contamination Sealed Am-241 Area Classification 3 # Floors below Roof	Sealed Am-241 Sealed Am-241	Sealed Am-241 Sealed Am-241 Sealed Am-241 Area Classification 3 # Floors above Basement 4 # Floors below Roof % ft2 Total Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 300 0 300 Wall Area, ft ² 1050 0 300 Wall Area, ft ² 1050 0 300 Components Fraction Fractin Fraction Fractin Fraction Fraction Fraction Fraction Fractin Fr	Bullung	245	ј ко	om or Area		B()13	····		
Area Classification 3 # Floors above Basement	cation 3 ve Basement	Area Classification 3 # Floors above Basement	Area Classification 3 # Floors above Basement	Arrea Classification 3 Floors above Basement Floors above Basement Floors below Roof % Total Class 1 Remed. Remed. Remed. Class 2 Class 4 0 Vall Area, ft2 300 Vall Area, ft2 1050 1000 0 Vall Area, ft2 300 Vall Area, ft2 300 Vall Area, ft2 300 Selling Area, ft2 300 Components Total ft3 RW DAW Metal Lead Concrete	Area Classification 3 # Floors above Basement	Use				X-ray					
Area Classification 3 # Floors above Basement	cation 3 ve Basement	Area Classification 3 # Floors above Basement	Area Classification 3 # Floors above Basement	Arrea Classification 3 Floors above Basement Floors above Basement Floors below Roof % Total Class 1 Remed. Remed. Remed. Class 2 Class 4 0 Vall Area, ft2 300 Vall Area, ft2 1050 1000 0 Vall Area, ft2 300 Vall Area, ft2 300 Vall Area, ft2 300 Selling Area, ft2 300 Components Total ft3 RW DAW Metal Lead Concrete	Area Classification 3 # Floors above Basement	Radionuclides, Ex	tent of Co	ntaminatio	n)	Sealed	Am-241			
# Floors below Roof % ft2 needing Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 300 0 300 Wall Area, ft ² 1050 0 1050 Ceiling Area, ft ² 300 0 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	Image: system of sy	# Floors below Roof % ft2 needing Remed. Class 2 Class 3 Floor Area, ft ² 300 0 300 Wall Area, ft ² 1050 0 1050 Ceiling Area, ft ² 300 0 300 Wall Area, ft ² 1050 0 300 Components Total ft3 RW DAW Fraction Fraction Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	# Floors below Roof % ft2 needing Remed. Class 2 Class 3 Floor Area, ft ² 300 0 300 Wall Area, ft ² 1050 0 1050 Ceiling Area, ft ² 300 0 300 Wall Area, ft ² 1050 0 300 Ceiling Area, ft ² 300 0 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	Floors below Roof Total Class 1 Remed. Remed. Class 2 Class 3 Noor Area, ft ² 300 0 300 Vall Area, ft ² 1050 0 10050 seiling Area, ft ² 300 0 300 Vall Area, ft ² 300 0 300 Vall Area, ft ² 300 0 300 Seiling Area, ft ² 300 0 300 Components Total ft ³ RW DAW Metal Lead Concrete Slove Boxes	# Floors below Roof 70tal Class 1 9% ft2 needing Remed. Reading Remed. Class 2 Class 3 Floor Area, ft ² 300 0 0 300 Wall Area, ft ² 1050 0 1050 Ceiling Area, ft ² 300 0 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Fraction Fraction Fraction Fraction Fraction Fraction Fraction Benches/Tables/Desks 40 0 1 1 1 1 1 Storage Tanks 1000 0 1 1 1 1 1 Orther 100 0 1				1	L					
TotalClass 1%ft2 needing Remed.Class 2Class 3Floor Area, ft230000300Wall Area, ft2105001050Ceiling Area, ft23000300ComponentsTotal ft3RWDAWMetalComponentsTotal ft3RWDAWMetalGlove Boxes	TotalClass 1%ft2 needing needing Remed.Class 2Class 32300003001050001050ft23000300ft23000300ft230001050ft23000300ft23000300ft23000300ft23000300ft3RWDAWMetalLeadponentsTotal ft3RWDAWMetalLeadConcreteibinets	Total Class 1 % ft2 needing Remed. needing Class 2 Class 3 Floor Area, ft ² 300 0 300 Wall Area, ft ² 1050 0 1050 Ceiling Area, ft ² 300 0 300 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	Total Class 1 Remeding Remed. Remed. Class 2 Class 3 Floor Area, ft ² 300 0 300 Wall Area, ft ² 1050 0 1050 Ceiling Area, ft ² 300 0 300 Components Total ft3 RW DAW Metal Components Total ft3 RW DAW Metal Components Total ft3 RW DAW Metal Glove Boxes	Total Class 1 Remed. ft2 needing Remed. Class 2 Class 3 'loor Area, ft ² 300 0 300 Vall Area, ft ² 1050 0 1050 vall Area, ft ² 300 0 300 components Total ft3 RW DAW Metal Lead Concrete solve Boxes	Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 300 0 0 300 Wall Area, ft ² 1050 0 1050 Ceiling Area, ft ² 300 0 300 Wall Area, ft ² 300 0 300 Components Total ft3 RW 0 300 Components Total ft3 RW DAW Metal Lead Glove Boxes 40 0 - - - Hoods - - - - - Benches/Tables/Desks 40 0 - - - Reefers, Large Equipment 1000 0 - - - Misc. Equip./Labware 1000 0 - - - - Hot Cells - - - - - - - Storage Tanks - - - - - -	# Floors above Ba	sement		1 .						
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Person-hours Mar Sunver HP Tech Shinner Skilled Unskilled Clerical	100 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			erson-hours Mar Supyer HP Tech Shinner Skilled Unskilled Clerical	Characterize 2 4 8 2 Equip. Release 4 8 16 1 1 4 Pack/Load waste 0.5 1 2 2 2 0.5	Person-hours	Mar	Supver	HP Tech	Shinner	Skillod	Inskilled	Clerical		
	100 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Person-hours Mar Sunver HP Tech Shinner Skilled Unskilled Clerical	Person-hours Mar Sunver HP Tech Shinner Skilled Unskilled Clerical I		Equip. Release 4 8 16 1 1 4 Pack/Load waste 0.5 1 2 2 2 0.5					Sinpper	Okileu	Uliskilled			
	100 0 0.0			haractorize 2 1 1 8 1 1 2 1	Pack/Load waste 0.5 1 2 2 0.5						1	1			
	100 0 0 0 0 0.0 0.0 0 0 0 0.0 0.0 0 0 0 0.0 0 0 0 0 rops No. 0 Inch Dia. Total ft ³ 0.0 rops No. 0 Inch Dia. Total ft ³ 0.0 s Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical 2 4 8 2 2 2 2	Characterize 2 4 8 2	Characterize 2 4 8 2							2					
Equip. Release 4 8 16 1 1 4	100 0	Characterize 2 4 8 2 Equip. Release 4 8 16 1 1 4	Characterize 2 4 8 2 Equip. Release 4 8 16 1 1 4	quip. Release 4 8 16 1 1 4				<u> </u>		-					
Equip. Release 4 8 16 1 1 4 Pack/Load waste 0.5 1 2 2 2 0.5	Image: 100 0 Image: 100 0 Image: 100 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 rops No. 0 Inch Dia. Total ft ³ 0.0 0.0 sec Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical 2 4 8 2 2 2 0.5 sec 4 8 16 1 1 4 aste 0.5 1 2 2 0.5	Characterize 2 4 8 2 Equip. Release 4 8 16 1 1 4 Pack/Load waste 0.5 1 2 2 0.5 0.5	Characterize 2 4 8 2 Equip. Release 4 8 16 1 1 4 Pack/Load waste 0.5 1 2 2 0.5	quip. Release 4 8 16 1 1 4 ack/Load waste 0.5 1 2 2 2 0.5	Final Survey 1 2 4 1	Decon/Remed									
		Inther 100 0 inks 0.0 0 rains 0.0 0 entilation Drops 0.0 0 rains No. 0 Inch Dia.	Inther 100 0 inks 0.0 0 rains 0.0 0 entilation Drops 0.0 0 rains No. 0 Inch Dia.	Image: state	Inther1000Inchinks0.0InchInchInchrains0.0InchInchInchentilation DropsNo.0InchInchrainsNo.0InchInchentilation DropsNo.0InchInchentilation DropsNo.0InchInchentilation DropsNo.0InchDia.erson-hoursMgrSupvsrHPTechharacterize2482quip. Release48161ack/Load waste0.51220.5			<u> </u>							
		Sinks 0.0 Drains 0.0 Ventilation Drops 0.0 Drains No. 0 Inch Dia. Total ft ³ 0.0	Sinks 0.0 Drains 0.0 Ventilation Drops 0.0 Drains No. 0 Inch Dia. Total ft ³ 0.0	inks 0.0 rains 0.0 entilation Drops 0.0 rains No. 0 Inch Dia. Total ft ³ 0.0 entilation Drops No. 0 Inch Dia. Total ft ³ 0.0	Sinks 0.0 1 1 1 Drains 0.0 0.0 0.0 0.0 0.0 Ventilation Drops No. 0 Inch Dia. Total ft ³ 0.0 Orains No. 0 Inch Dia. Total ft ³ 0.0 Ventilation Drops No. 0 Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 2 4 8 2 2 2 2 Equip. Release 4 8 16 1 1 4 Pack/Load waste 0.5 1 2 2 0.5 0.5					·					
		Sinks 0.0 0.0 Drains 0.0 0.0 Ventilation Drops 0.0 0.0 Drains No. 0 Inch Dia. Total ft ³	Sinks 0.0 0.0 Orains 0.0 0.0 Ventilation Drops 0.0 0.0 Drains No. 0 Inch Dia. Total ft ³	inks 0.0 rains 0.0 entilation Drops 0.0 rains No. 0 Inch Dia. Total ft ³ 0.0 entilation Drops No. 0 Inch Dia. Total ft ³ 0.0	Sinks Drains0.01Orains0.01Ventilation Drops0.0DrainsNo.0Inch Dia.Total ft³Ventilation DropsNo.OInch Dia.Total ft³0.0Ventilation DropsNo.OInch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize2248111Pack/Load waste0.512220.5			100		·					
Other 100 0		Drains 0.0 Ventilation Drops 0.0 Drains No. 0 Inch Dia. Total ft ³	Drains 0.0 Ventilation Drops 0.0 Drains No. 0 Inch Dia. Total ft ³ 0.0	Image: orgen constraints 0.0 entilation Drops 0.0 rains No. onentilation Drops No. 0 Inch Dia. Total ft ³ 0.0 0.0 Inch Dia. Total ft ³ 0.0	Drains0.0Inch Dia.Total ft³0.0Ventilation DropsNo.0Inch Dia.Total ft³0.0DrainsNo.0Inch Dia.Total ft³0.0Ventilation DropsNo.0Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize2482222Equip. Release4816114Pack/Load waste0.512220.5	Other		100	0						
		Drains 0.0 Ventilation Drops 0.0 Drains No. 0 Inch Dia. Total ft ³	Drains 0.0 Ventilation Drops 0.0 Drains No. 0 Inch Dia. Total ft ³ 0.0	Image: orgen constraints 0.0 entilation Drops 0.0 rains No. onentilation Drops No. 0 Inch Dia. Total ft ³ 0.0 0.0 Inch Dia. Total ft ³ 0.0	Drains0.0Image: Constraint of the state of the st			100	0						
Sinks		Ventilation Drops 0.0 Drains No. 0 Inch Dia. Total ft ³	Ventilation Drops 0.0 Drains No. 0 Inch Dia. Total ft ³ One	entilation Drops 0.0 rains No. 0 Inch Dia. Total ft ³ 0.0 entilation Drops No. 0 Inch Dia. Total ft ³ 0.0	Ventilation Drops0.0Inch Dia.Total ft³0.0DrainsNo.0Inch Dia.Total ft³0.0Ventilation DropsNo.0Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize2482222Equip. Release4816114Pack/Load waste0.512220.5	Sinks									
		Ventilation Drops 0.0 Drains No. 0 Inch Dia. Total ft ³	Ventilation Drops 0.0 Drains No. 0 Inch Dia. Total ft ³ One	entilation Drops 0.0 rains No. 0 Inch Dia. Total ft ³ 0.0 entilation Drops No. 0 Inch Dia. Total ft ³ 0.0	Ventilation Drops0.0Inch Dia.Total ft³0.0DrainsNo.0Inch Dia.Total ft³0.0Ventilation DropsNo.0Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize2482222Equip. Release4816114Pack/Load waste0.512220.5										
	100 0	Drains No. 0 Inch Dia. Total ft ³ 0.0	Drains No. 0 Inch Dia. Total ft ³ 0.0	rainsNo.0Inch Dia.Total ft³0.0entilation DropsNo.0Inch Dia.Total ft³0.0	DrainsNo.0Inch Dia.Total ft³0.0Ventilation DropsNo.0Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize24822Equip. Release48114Pack/Load waste0.51220.5			0.0							
Ventilation Drops 0.0	100 0	Drains No. 0 Inch Dia. Total ft ³ 0.0	Drains No. 0 Inch Dia. Total ft ³ 0.0	rainsNo.0Inch Dia.Total ft³0.0entilation DropsNo.0Inch Dia.Total ft³0.0	DrainsNo.0Inch Dia.Total ft³0.0Ventilation DropsNo.0Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize24822Equip. Release4816114Pack/Load waste0.51220.5	Ventilation Drops		0.0							
	0.0			entilation Drops No. 0 Inch Dia. Total ft ³ 0.0	Ventilation DropsNo.0Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize24822Equip. Release4816114Pack/Load waste0.51220.5	•			· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·				
	0.0	Ventilation Drops No. 0 Inch Dia. Total ft ³ 0.0	/entilation Drops No. 0 Inch Dia. Total ft ³ 0.0		Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize24822Equip. Release48114Pack/Load waste0.51220.5		No.	0	• •						
	100 0 0.0 0 0.0 0	ventilation Urops No. 0 Inch Dia. Total ft 0.0	/entilation Urops No. U Inch Dia. Total ft U.0.		Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize2482Equip. Release4816114Pack/Load waste0.51220.5				• •						
Ventilation Drops No. 0 Inch Dia. Total ft 0.0	100 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			· · · · · · · · · · · · · · · · · · ·	Characterize 2 4 8 2 Equip. Release 4 8 16 1 1 4 Pack/Load waste 0.5 1 2 2 0.5	Ventilation Drops	No.	0	Inch Dia.		Total ft	0.0			
	100 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	erson-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical	erson-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical		ack/Load waste 0.5 1 2 2 0.5	haracterize	2	4	8				2		
	100 0 0.0			haracterize 2 4 8 1 1 2 1	Pack/Load waste 0.5 1 2 2 0.5						1	1			
	100 0 0 0 0 0.0 0.0 0 0 0 0.0 0.0 0 0 0 0.0 0 0 0 0 rops No. 0 Inch Dia. Total ft ³ 0.0 rops No. 0 Inch Dia. Total ft ³ 0.0 s Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical 2 4 8 2 2 2 2	Characterize 2 4 8 2	Characterize 2 4 8 2						iŭ	2					
Equip. Release 4 8 16 1 1 4	100 0	Characterize 2 4 8 2 Equip. Release 4 8 16 1 1 4	Characterize 2 4 8 2 Equip. Release 4 8 16 1 1 4	quip. Release 4 8 16 1 1 4	Decon/Remea.	aUNLUAU WASIE	0.0		┝─────┤	۷	<u> </u>	<u> </u>	0.5		
Equip. Release 4 8 16 1 1 4 Pack/Load waste 0.5 1 2 2 2 0.5	100 0 0 0 0 0.0 0.0 0 0 0 0.0 0.0 0 0 0 0.0 0.0 0 0 0 rops No. 0 Inch Dia. Total ft ³ 0.0 se Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical 2 4 8 2 2 2 0.5 se 4 8 16 1 1 4 aste 0.5 1 2 2 0.5	Characterize 2 4 8 2 Equip. Release 4 8 16 1 1 4 Pack/Load waste 0.5 1 2 2 2 0.5	Characterize 2 4 8 2 Equip. Release 4 8 16 1 1 4 Pack/Load waste 0.5 1 2 2 0.5	quip. Release 4 8 16 1 1 4 ack/Load waste 0.5 1 2 2 2 0.5											
Equip. Release 4 8 16 1 1 4 Pack/Load waste 0.5 1 2 2 2 0.5	100 0 0 0 0 0.0 0.0 0 0 0 0.0 0.0 0 0 0 0.0 0.0 0 0 0 rops No. 0 Inch Dia. Total ft ³ 0.0 se Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical 2 4 8 2 2 2 0.5 se 4 8 16 1 1 4 aste 0.5 1 2 2 0.5	Characterize 2 4 8 2 Equip. Release 4 8 16 1 1 4 Pack/Load waste 0.5 1 2 2 0.5 0.5	Characterize 2 4 8 2 Equip. Release 4 8 16 1 1 4 Pack/Load waste 0.5 1 2 2 0.5	quip. Release 4 8 16 1 1 4 ack/Load waste 0.5 1 2 2 2 0.5		Decon/Remed									

Building 245 Room or Area B014 Use Gamma Calibration Radionuclides, Extent of Contamination None Area Classification 3 # Floors above Basement meeding ft2 # Floors below Roof needing needing Total Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 800 0 800	
Radionuclides, Extent of Contamination None Area Classification 3 # Floors above Basement 4 # Floors below Roof % ft2 needing Total Class 1 Remed. Class 2 Class 3	
Area Classification 3 # Floors above Basement — # Floors below Roof — Total Class 1 Remed. Class 2 Class 3	
Area Classification 3 # Floors above Basement	
# Floors below Roof	
% ft2 needing needing Total Class 1 Remed. Remed. Class 2 Class 3	
Total Class 1 Remed. Remed. Class 2 Class 3	
Total Class 1 Remed. Remed. Class 2 Class 3	
Floor Area, ft ² 800 0 800	
Wall Area, ft ² 3060 0 3060	
Ceiling Area, ft² 800 0 800	·
Fraction Fraction Fraction Fraction Fraction Fraction Fraction Glove Boxes	
Hoods	
Benches/Tables/Desks	
Casework/Cabinets	
Reefers, Large Equipment500Misc. Equip./Labware400	
Hot Cells	
Storage Tanks	
Other 200 0	
Sinks 0.0 0	
Ventilation Drops 0.0 0	
DrainsNo.Inch Dia.Total ft³0.0Ventilation DropsNo.2Inch Dia.4Total ft³0.0	
Ventilation Drops No. 2 Inch Dia. 4 Total ft ³ 0.0	
Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical	
Characterize 1.5 3 6 1.5	
Equip. Release 1 2 4 1 Pack/Load waste 0.5 1 2 2 0.5	
Decon/Remed.	
Final Survey 1 2 4 1	
# Lab Samples to be collected 1	

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Building	245] Ro	om or Area		В	015		<u> </u>
Use	ı		Horizon	tal Beam c	alibration]
Radionuclides, Ex	ctent of Cor	ntaminatio	1	Se	aled Co-60.	unsealed C	o-57	Į
Area Classificatio		1] '	·	<u> </u>			4
# Floors above Ba	asement		1 .					
# Floors below Ro	oof		1					
			%	ft2	<u> </u>	T]	
	1		needing	needing]	
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	600			0		1		
Wall Area, ft ²	1500			0	<u> </u>			
Ceiling Area, ft ²	600			0		t		
coming ration, it	000	000			I	L	J	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes			1		1	T		
Hoods								
Benches/Tables/D)esks	50	0					
Casework/Cabinet		100	0					
Reefers, Large Eq		200	0					
Misc. Equip./Labw								
Hot Cells								
Storage Tanks								
Other		250	0					
Sinks								
Drains		0.0						
Ventilation Drops		0.0						
Drains	No.	0	Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0		
			L		• 			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
	2	4	8				2	
Characterize		2	4				1	
Characterize Equip. Release	1							
Characterize Equip. Release Pack/Load waste	1 0.5	1		2	2	2	0.5	
Characterize Equip. Release			4	2	2	2	1	

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	g	•				· · ·		
Building	245	j Ro	om or Area		B	017		
Use				X-ray				l
Radionuclides, Ex	tent of Cor	ntaminatio	n	Sealed	l beta-gamr	na, unseale	d Co-57	I
Area Classification		3						
# Floors above Ba # Floors below Ro								
# FIODIS DEIOW RO			%	ft2	T	<u> </u>]	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		*
Floor Area, ft ²	360		1	0		360		
Wall Area, ft ²	1000			0		1000		
Ceiling Area, ft ²	360		1	0		360		
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componei	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes							· · · · · · · · · · · · · · · · · · ·	1
Hoods	!	00						
Benches/Tables/D Casework/Cabinet		20	0					
Reefers, Large Eq		100	0					
Misc. Equip./Labw		10	0					
Hot Cells		· ·						
Storage Tanks			ļ		ļ			
Other Sinks								
Drains		0.0						
Ventilation Drops		0.0			21			
			1	[1 9			
Drains	No.	0	Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	2	4	8				2	
Equip. Release	2	4	8				2	
Pack/Load waste Decon/Remed.	0.25	0.5			1	1	0.25	
Final Survey	1	2	4				1	
rilla Julvev i							-	

Use	L			X-ray			
Radionuclides, Ex		ntaminatio	n		Sealed	1 Cs-137	
Area Classification		3					-
# Floors above Ba			_				
# Floors below Ro	of			<u> </u>	T		1
				ft2 needing			
	Total	Class 1	needing Remed.	Remed.	Class 2	Class 3	
Elect Area 62	Total		Remeu.			Cia55 3	1
Floor Area, ft ²			┟────	0			
Wall Area, ft ²			<u> </u>	0	<u> </u>		
Ceiling Area, ft ²	I	L		0	L	<u> </u>	1
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes						1	
Hoods					<u> </u>		
Benches/Tables/D	esks	100	0				
Casework/Cabinet		20	0				
Reefers, Large Eq							
Misc. Equip./Labw	are	40	0			ļ	
Hot Cells	I					ļ	
Storage Tanks			┟────				
Other Sinks			<u> </u>		<u> </u>	<u> </u>	
Drains		0.0					
Ventilation Drops		0.0					
ronalanon propo		0.0	4	·	L	I	
Drains	No.	0	Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0	
•							X
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	1	2	4				1
Equip. Release	0.25	0.5					0.25
Pack/Load waste	0.5	1		2	2	2	0.5
Decon/Remed.	<u></u>		<u> </u>				
Final Survey	0.5	1	2				0.5
# Lab Samples to b	oe collecte	t	1				

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Pack/Load waste Decon/Remed.	0.5	1		2	2	2	0.5	
Equip. Release	0.5	1	2		<u>-</u>		0.5	
Characterize	1	2	4				1	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical]
Ventilation Drops	No.	0	Inch Dia.]Total ft ³	0.0		
Drains	No.	0	Inch Dia.		Total ft ³	0.0		
Ventilation Drops		0.0						J
Drains		0.0]
Sinks		-		· ·······				1
Other		5	0		1			1
Storage Tanks						<u> </u>		1
Hot Cells					<u> </u>		· · · · · ·	ſ
Nisc. Equip./Labw		20	- <u> </u>					1
Reefers, Large Eq		20	0		<u> </u>			1
Benches/Tables/D Casework/Cabinet		10	0				· · · · · · · · · · · · · · · · · · ·	1 ' ' '
Hoods Benches/Tables/D	ocko							4
Glove Boxes			· ·			ļ		4
Componer	nts	Total ft3	RW	DAW -	Metal	Lead	Concrete	1
			Fraction	Fraction	Fraction	Fraction	Fraction	
Ceiling Area, ft ²			L	0				
Wall Area, ft ²				0				
Floor Area, ft ²				0				
	Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3		
# Floors below Ro	ot		%	ft2	T	· ·	L .	
# Floors above Ba			4					
Area Classification	า	3]			l.		_
Radionuclides, Ex		taminatio	<u>n</u>	Se	aled Co-60	, Cs-137, Sr	-90	J
Use			S	ealed sourc	ces]
	245		om or Area			021		1

Building 245 Room or Area B023 Use Setup Lab Radionuclides, Extent of Contamination TRU, Beta-gamma, low energy Area Classification 1 # Floors above Basement 0 # Floors below Roof 2 Image: Class 1 Class 1 Remed. Remed. Remed. Class 2 Class 1 Class 2 Class 1 28.8 Vall Area, ft ² 288 Vall Area, ft ² 1000 Components Total ft3 Fraction Fraction Components Total ft3 Rewed. 1 Glove Boxes 1 Hoods 80 Benches/Tables/Desks 80 Casework/Cabinets 80 Reefers, Large Equipment 50 Misc. Equip./Labware 50 Hot Cells 1 Sinks 2 Drains No. Orans No. Inch Dia. 2 Total ft ³ 0.0								
Use Setup Lab TRU, Beta-gamma, low energy Area Classification 1 # Floors above Basement 0 # Floors below Roof 2 Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 288 0.1 28.8 Wail Area, ft ² 1000 1000 0 Celling Area, ft ² 288 0 1 Fraction Fraction Fraction Fraction Fraction Fraction Components Fraction Fractin Fraction Fraction Fractin Fraction Fracti								
TRU, Beta-gamma, Iow energy TRU, Beta-gamma, Iow energy TRU, Beta-gamma, Iow energy # Floors above Basement 0 # Floors below Roof 2 # Floors below Roof 2 # Floor Area, ft ² 288 288 0.1 28.8 Wall Area, ft ² 288 288 0.1 28.8 Wall Area, ft ² 288 288 0 1 Components Total ft3 Remed. Class 3 Glove Boxes Hoods Benches/Desks 80 0.05 1 Lead Concrete Glove Boxes 80 0.05 1 Concrete Concrete Hoods 80 0.05 1 Concrete Benches/Tables/Desks 80 0.05 1 Concrete Hot Cells Storage Tanks 0.0 1 1 1 Other 4 0.1 1 1 1 1 Drains No. 1 Inch Dia. 2 Total ft ³	Building	245	Ro	om or Area		В	023	
TRU, Beta-gamma, low energy TRU, Beta-gamma, low energy TRU, Beta-gamma, low energy TRU, Beta-gamma, low energy TRU, Beta-gamma, low energy # Floors below Roof Total Class 1 Remed. Class 2 Total Class 1 Remed. Class 2 Floor Area, ft ² 288 288 0 Class 1 Remed. Class 2 Class 3 Value Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 288 0 0 Components Total ft3 Remed. Fraction Fraction Fraction Glove Boxes Metal Lead Concrete Glove Boxes Metal Lead Concrete Benches/Tables/Desks 80 0.05 1 <t< td=""><td>Use</td><td></td><td></td><td></td><td>Setup Lat</td><td>)</td><td></td><td></td></t<>	Use				Setup Lat)		
Area Classification 1 # Floors above Basement 0 # Floors above Basement 0 # Floors below Roof 2 Total Class 1 Remeding needing needing needing Remed. Class 2 Class 1 Remed. Vall Area, ft ² 288 288 0 Components Total ft3 Remet. Fraction Fraction Scope Fraction Components Total ft3 Rew DAW Metal Lead Concrete Concrete Glove Boxes 80 Hoods 80 Benches/Tables/Desks 80 Casework/Cabinets 80 Reefers, Large Equipment 1 Misc. Equip./Labware 0.0 Hot Cells								
# Floors above Basement 0 # Floors below Roof 2 Total Class 1 Reeding needing needing needing Remed. Class 2 Class 1 28.8 Wall Area, ft ² 288 Vall Area, ft ² 288 Vall Area, ft ² 288 Vall Area, ft ² 288 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Hoods				<u>ן</u>		U, Beta-gar	nma, low en	ergy
# Floors below Roof 2 Total Class 1 Remed. Reading Remed. Class 2 Class 3 Floor Area, ft ² 288 288 0.1 28.8 0 Wall Area, ft ² 1000 1000 0 0 0 Ceiling Area, ft ² 288 288 0 0 0 Ceiling Area, ft ² 288 288 0 0 0 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 80 0.05 1 0 0 Hoods 80 0.05 1 0 0 Benches/Tables/Desks 80 0.05 1 0 0 Reefers, Large Equipment 80 0.05 1 0 0 Misc. Equip./Labware 4 0.1 1 1 0 Hot Ceils 2 0.1 1 1 1 Storage Tanks 0.0 0.1 1 1 1 Other 4 0.1 1 <			-					
Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 288 288 0.1 28.8				1				
Total Class 1 needing Remed. needing Remed. Class 2 Class 3 Floor Area, ft ² 288 288 0.1 28.8	". 10010 Molott ((0	<u></u>	<u>~</u>	%	ft2	1	1	ו
Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 288 288 0.1 28.8								
Floor Area, ft ² 288 288 0.1 28.8 1 Wall Area, ft ² 1000 1000 0 1 1 Ceiling Area, ft ² 288 288 0 1 1 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 1		Total	Class 1			Class 2	Class 3	
Wall Area, ft ² 1000 1000 0 Ceiling Area, ft ² 288 288 0 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes 80 0.05 1	Floor Area, ft ²		288	0.1		1		1
Ceiling Area, ft22882880Components Glove Boxes Hoods Benches/Tables/Desks Casework/Cabinets Reefers, Large Equipment Misc. Equip./Labware 	Wall Area, ft ²	1000	1000	1	1			1.
ComponentsTotal ft3RWDAWFractionFractionFractionFractionFractionGlove BoxesHoodsBenches/Tables/DesksCasework/CabinetsReefers, Large EquipmentMisc. Equip./LabwareHot CellsStorage TanksOtherSinksDrainsNo.DrainsNo.Image: No.Image: No.<	Ceiling Area, ft ²							1.
Components Glove Boxes HoodsTotal ft3RWDAWMetalLeadConcreteBenches/Tables/Desks Casework/Cabinets Reefers, Large Equipment Misc. Equip./Labware Hot Cells Storage Tanks800.051							•	
Glove BoxesHoodsBenches/Tables/DesksBenches/Tables/DesksCasework/CabinetsReefers, Large EquipmentMisc. Equip./LabwareHot CellsStorage TanksOtherQuarterOtherSinksDrainsNo.DrainsNo.Inch Dia.QuarterNo.Inch Dia.QuarterNo.Inch Dia.QuarterNo.						Fraction	Fraction	Fraction
Hoods Image: Constraint of the system Image: Constree system Image: Constraint of the syst		nts	Total ft3	RW	DAW	Metal	Lead	Concrete
Benches/Tables/Desks 80 0.05 1 1 Casework/Cabinets 80 0.05 1 1 1 Reefers, Large Equipment 50 0.05 1 1 1 Misc. Equip./Labware 50 0.05 1 1 1 Hot Cells 50 0.05 1 1 1 Storage Tanks 4 0.1 1 1 1 Other 4 0.1 1 1 1 1 Sinks 0.0 0.1 1 1 1 1 1 Drains 0.0 0.1 1						ļ		
Casework/Cabinets 80 0.05 1 1 Reefers, Large Equipment 50 0.05 1 1 Misc. Equip./Labware 50 0.05 1 1 Hot Cells 50 0.05 1 1 Storage Tanks 1 1 1 Other 4 0.1 1 1 Sinks 2 0.1 1 1 Drains 0.0 0.1 1 1 Ventilation Drops 0.0 1 1 1 Drains No. 1 1 1 1 Ventilation Drops No. 1 Inch Dia. 2 1 0.0						<u> </u>	<u> </u>	
Reefers, Large Equipment Misc. Equip./Labware500.051Hot Cells500.051						+		
Misc. Equip./Labware 50 0.05 1			80	0.05				
Hot CellsStorage TanksOtherOtherSinks20.11Drains0.00.110.00.1110.00.1110.0 <t< td=""><td></td><td></td><td>50</td><td>0.05</td><td>1</td><td><u> </u></td><td></td><td></td></t<>			50	0.05	1	<u> </u>		
Storage Tanks40.11Other40.11Sinks20.11Drains0.00.11Ventilation Drops0.01DrainsNo.1Inch Dia.2Total ft ³ O.00.0		are		0.00	'	<u> </u>		
Other 4 0.1 1 Sinks 2 0.1 1 Drains 0.0 0.1 1 Ventilation Drops 0.0 0.1 1 Drains No. 1 Inch Dia. 2 Total ft ³ 0.0 Ventilation Drops No. 1 Inch Dia. 2 Total ft ³ 0.0								
Drains 0.0 0.1 1 Ventilation Drops 0.0 0.0 1 Drains No. 1 Inch Dia. 2 Total ft ³ 0.0 Ventilation Drops No. 1 Inch Dia. 2 Total ft ³ 0.0			4	0.1		· · · · ·	1	
Ventilation Drops 0.0 0.0 Drains No. 1 Inch Dia. 2 Total ft ³ 0.0 Ventilation Drops No. 1 Inch Dia. 2 Total ft ³ 0.0						1		
Drains No. 1 Inch Dia. 2 Total ft ³ 0.0 Ventilation Drops No. Inch Dia. Total ft ³ 0.0		[0.1		1		
Ventilation Drops No. Inch Dia. Total ft ³ 0.0	Ventilation Drops	[0.0					
Ventilation Drops No. Inch Dia. Total ft ³ 0.0		No.[1	Inch Dia.	2	Total ft ³	0.0	
Person hours Mary Sunyary HD Tech Chinney Skilled Unskilled Christel	Drains	NO I				jiotain	0.0	1
	Drains	NO.[Shipper	Skilled	Unskilled	Clerical
	Drains	Mgr	Supvsr	HP Tech				
	Drains Ventilation Drops Person-hours Characterize	Mgr 8	16	32			l	
	Drains Ventilation Drops Person-hours Characterize Equip. Release	Mgr 8 8	16 16	32 32				8
Decon/Remed. Final Survey 3 6 12 3	Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	Mgr 8	16 16	32	2	2	2	

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Use Radionuclides, Exten Area Classification # Floors above Basen # Floors below Roof			De	tector Stor					
Area Classification # Floors above Basen		to mination			age	• • • • • • • • •			1
Area Classification # Floors above Basen		tamination	1		Cf-252 sea	aled source			
# Floors above Basen	nont	1] '				• •	I	
	nent i		1						
			1						
			%	ft2	1		1		
			needing	needing	· ·		· ·		
1 1.	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
					01235 2	01235 5			
Floor Area, ft ²	20	20		2	· · · · · · ·		\$		
Wall Area, ft ²	252	52		5.2					
Ceiling Area, ft ²	20	20		0					
Components	. •	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete		
Glove Boxes	Г	Total Its		DAW	Wielai	Leau			
Hoods					ļ		<u>├</u>		1
Benches/Tables/Desk	_			· · · · ·	· .				
	.5								1
Casework/Cabinets		60	0						
Reefers, Large Equipr		450							
Misc. Equip./Labware	ļ	150	0						i
Hot Cells	L					· · · · · · · · · · · · · · · · · · ·			
Storage Tanks	ļ							· ·	
Other	L	10	1				1		
Sinks									
Drains 🕔	. L	0.0							
Ventilation Drops		0.0							
	_								· ·
Drains	No.	0	Inch Dia.		Total ft ³	0.0			· · · ·
Ventilation Drops	No.[0	Inch Dia.		Total ft ³	0.0			
	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Characterize	2	4	8		4	4	2		
	0.5	1	2				0.5		
Pack/Load waste	1	2	4	2	. 8	8 ·	1		
Decon/Remed.									
Final Survey	1	2	4				1		

Counting lab Radionuclides, Extent of Contamination Area Classification 1 # Floors above Basement 0 # Floors below Roof 3 Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 400 400 0 0 Wall Area, ft ² 1200 1200 0 0 Ceiling Area, ft ² 400 400 0 0 1 Fraction Fraction Fraction Fraction Fraction Fraction Fraction Fraction Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 90 0.5 1
Area Classification1# Floors above Basement0# Floors below Roof3TotalClass 1ReedingneedingRemed.Class 2Class 2Class 3Floor Area, ft2400400000Wall Area, ft2120012000Ceiling Area, ft2400400000Ceiling Area, ft2400400000ComponentsTotal ft3RWDAWMetalLeadConcreteGlove BoxesHoods900.5900.5150025002500Misc. Equip./Labware40040050
Floors above Basement 0 # Floors below Roof 3 Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 400 400 0 Wall Area, ft ² 1200 0 0 Wall Area, ft ² 400 400 0 0 Ceiling Area, ft ² 400 400 0 0 Ceiling Area, ft ² 400 400 0 0 Components Total ft3 RW DAW Metal Lead Glove Boxes 90 0.5 1 1 1 Hoods 90 0.5 1 1 1 Benches/Tables/Desks 50 0 1 1 1 Reefers, Large Equipment 250 0 1 1 1 Misc. Equip./Labware 40 0 1 1 1 1 Storage Tanks 1 1 1 1 1 1 1 1 1 1 1 1 1 </th
Floors below Roof3TotalClass 1Remeding needing needingClass 2Class 3Floor Area, ft2400400000Wall Area, ft212001200000Ceiling Area, ft2400400000ComponentsTotal ft3RWDAWMetalLeadGlove Boxes
TotalClass 1needing Remed.needing Remed.Class 2Class 3Floor Area, ft2400400000Wall Area, ft212001200000Ceiling Area, ft2400400000ComponentsTotal ft3RWDAWMetalLeadComponentsTotal ft3RWDAWMetalLeadGlove Boxes900.51
TotalClass 1Remed.Remed.Class 2Class 3Floor Area, ft240040000
Wall Area, ft21200120000Ceiling Area, ft240040000ComponentsTotal ft3RWFractionFractionFractionComponentsTotal ft3RWDAWMetalLeadConcreteGlove Boxes900.511Hoods900.511Benches/Tables/Desks50011Casework/Cabinets150011Reefers, Large Equipment250011Misc. Equip./Labware40011Hot Cells111Storage Tanks111
Ceiling Area, ft240040000ComponentsTotal ft3RWDAWMetalLeadGlove Boxes
ComponentsTotal ft3Fraction RWFraction DAWFraction MetalFraction LeadFraction ConcreteGlove Boxes900.51
Glove Boxes900.51Hoods900.51Benches/Tables/Desks500Casework/Cabinets1500Reefers, Large Equipment2500Misc. Equip./Labware400Hot Cells1Storage Tanks1
Benches/Tables/Desks500Casework/Cabinets1500Reefers, Large Equipment2500Misc. Equip./Labware400Hot Cells
Casework/Cabinets1500Reefers, Large Equipment2500Misc. Equip./Labware400Hot Cells
Reefers, Large Equipment2500Misc. Equip./Labware400Hot Cells
Hot Cells Storage Tanks
Storage Tanks
Sinks 3 0 Drains 0.0 0 '
Orans 0.0 0 Ventilation Drops 83.3 0
DrainsNo.1Inch Dia.2Total ft30.0Ventilàtion DropsNo.2Inch Dia.20Total ft383.3
Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical
Characterize 4 8 16 4 Equip. Release 4 8 16 4
Pack/Load waste 0.5 1 2 2 2 0.5
Decon/Remed.
Final Survey 2 4 8 2
Lab Samples to be collected 1

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Building	245	Bo	om or Area		· P	349			٦
Zunaina		1 10		1				1	
Use	•			SRM Storag	ge			l	
Radionuclides, E	xtent of Cor	taminatior	1		All Radi	onuclides	,	I	
Area Classificatio	on	1]	•				1	
# Floors above B		0	ļ	,		,			
# Floors below R		3	%	ft2		T	1		
			needing	needing		1			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²	160	160	0	0					
Wall Area, ft ²	672		*	· · · · · · · · · · · · · · · · · · ·					
Ceiling Area, ft ²	160	160	0	0]		
			Fraction	Fraction	Fraction	Fraction	Fraction		
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete		
Glove Boxes									
Hoods		60	0.5		1				
Benches/Tables/		100		· · · · · ·					•
Casework/Cabine		100	0						
Reefers, Large Ec Misc. Equip./Labv		50	0						
Hot Cells	Vaic				,				
Storage Tanks					1	1			
Other				•		i i			
Sinks		24	0						
Drains		0.0	0		· ·		-		
Ventilation Drops		41.7	0						
Drains	No.	1	Inch Dia.	2	Total ft ³	0.0	1		
Ventilation Drops		1	Inch Dia.	20	Total ft ³	41.7	1		
_	•				-			,	
Person-hours Characterize	Mgr 4	Supvsr 8	HP Tech 16	Shipper	Skilled	Unskilled	Clerical 4	1	
Equip. Release	4 4	8	16		-	,	4	1	· ·
Pack/Load waste	0.5	1	2	2	2	2	0.5	1	
Decon/Remed.									
Final Survey	2	4	8				2		ľ
# Lab Complex to	he celle -t-								. .
# Lab Samples to	ne collecte	u	1	l					

Use Accelerator Support Radionuclides, Extent of Contamination Area Classification 3 1 # Floors above Basement 1 1 # Floors bove Basement 1 1 # Floor Area, ft ² 400 0 400 Wall Area, ft ² 2000 0 2000 Ceiling Area, ft ² 400 0 400 Wall Area, ft ² 2000 0 2000 Ceiling Area, ft ² 400 0 400 Glove Boxes Total ft3 RW DAW Metal Lead Concrete Hoods 67 0	Radionuclides, Extent of Contamination Area Classification Sealed sources # Floors above Basement 1 1 # Floors below Roof 1 % ft2 needing needing Remed. Class 2 Class 3 Floor Area, ft ² 400 0 400 0 400 Wall Area, ft ² 2000 0 2000 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 15 0 Concrete 15 0 Concrete Hoods 67 0	Building		l Ro	om or Area	۱ <u>۲</u>	B(029		1	
Area Classification 3 # Floors above Basement 1 # Floors below Roof 1 Market Stress 1 Floor Area, ft ² 400 Wall Area, ft ² 2000 Ceiling Area, ft ² 400 Wall Area, ft ² 2000 Components Fraction Fraction Fraction Components Total ft3 RW DAW Metal Lead Components Total ft3 RW DAW Metal Lead Components Total ft3 RW DAW Metal Lead Concrete Concrete Glove Boxes 15 Hoods 15 Benches/Tables/Desks 15 Casework/Cabinets 67 Refers, Large Equipment 30 Misc. Equip./Labware 75 Hot Cells 1 Storage Tanks 0.1 Other 75 Sinks 5 Drains No. <th>Area Classification 3 # Floors above Basement 1 # Floors above Basement 1 # Floors below Roof 1 Image: Class 1 Remed. Class 2 Class 3 Floor Area, ft² 400 Wall Area, ft² 2000 Ceiling Area, ft² 2000 Components Fraction Fraction Components Total ft3 Remed. Class 2 Components Total ft3 Benches/Tables/Desks 15 Casework/Cabinets 67 Reefers, Large Equipment 30 Miss 5 Storage Tanks 75 Other 75 Sinks 5 Drains No. Person-hours Mgr Supyrs HP Tech Stipper Skilled Unskilled 2 Person-hours Mgr Supyrs HP Tech Shipper Skilled Unskilled Clerical A 2</th> <th>Use</th> <th></th> <th></th> <th>Acc</th> <th>elerator Su</th> <th>pport</th> <th></th> <th></th> <th>]</th> <th></th>	Area Classification 3 # Floors above Basement 1 # Floors above Basement 1 # Floors below Roof 1 Image: Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 400 Wall Area, ft ² 2000 Ceiling Area, ft ² 2000 Components Fraction Fraction Components Total ft3 Remed. Class 2 Components Total ft3 Benches/Tables/Desks 15 Casework/Cabinets 67 Reefers, Large Equipment 30 Miss 5 Storage Tanks 75 Other 75 Sinks 5 Drains No. Person-hours Mgr Supyrs HP Tech Stipper Skilled Unskilled 2 Person-hours Mgr Supyrs HP Tech Shipper Skilled Unskilled Clerical A 2	Use			Acc	elerator Su	pport]	
# Floors above Basement 1 # Floors below Roof 1 # Floors below Roof 1 # Floors below Roof 1 Wall Area, ft ² 400 0 400 Wall Area, ft ² 2000 0 2000 Celling Area, ft ² 400 0 400 Celling Area, ft ² 400 0 400 Celling Area, ft ² 400 0 400 Components Total ft3 Rw DAW Metal Lead Concrete Glove Boxes 15 0	# Floors above Basement 1 # Floors below Roof 1 Total Class 1 Remed. Class 2 Floor Area, ft ² 400 Wall Area, ft ² 2000 Ceiling Area, ft ² 400 Components Total ft3 Remed. 0 Components Total ft3 Remed. 0 Components Total ft3 Remed. Lead Glove Boxes				n -		Sealed	sources		J	
# Floors below Roof 1 % ft2 needing needing Remed. ft2 Class 2 Class 3 Floor Area, ft ² 400 0 400 Wall Area, ft ² 2000 0 2000 Ceiling Area, ft ² 400 0 400 Components Total ft3 RW DAW Metal Lead Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 15 0	# Floors below Roof 1 % ft2 needing needing Remed. Class 2 Class 3 Floor Area, ft ² 400 0 400 Wall Area, ft ² 2000 0 400 Wall Area, ft ² 2000 0 400 Ceiling Area, ft ² 400 0 400 Components Fraction Fraction Fraction Fraction Components Total ft3 RW DAW Metal Lead Glove Boxes 15 0				-	•					
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Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 400 0 400 Wall Area, ft ² 2000 0 2000 Ceiling Area, ft ² 400 0 400 Ceiling Area, ft ² 400 0 400 Ceiling Area, ft ² 400 0 400 Components Total ft ³ RW DAW Metal Lead Concrete Glove Boxes	Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 400 0 400 Wall Area, ft ² 2000 0 2000 Ceiling Area, ft ² 400 0 400 Components Fraction Fraction Fraction Fraction Components Total ft3 RW DAW Metal Lead Glove Boxes										
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Wall Area, ft ² 2000 0 2000 Ceiling Area, ft ² 400 0 400 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	Wall Area, ft ² 2000 0 2000 Ceiling Area, ft ² 400 0 400 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	Floor Area ft ²		A CONTRACTOR OF A CONTRACTOR OFTA CONT	- Romoa.	· · · · · · · · · · · · · · · · · · ·	01233 2				
Ceiling Area, ft ² 400 0 400 Fraction Fractor Fraction Fractor Fraction Fractor Fract	Ceiling Area, ft ² 400 0 400 Fraction Fraction Fraction Fraction Fraction Fraction Metal Lead Concrete Glove Boxes DAW Metal Lead Concrete Hoods 15 0 1 1 1 1 Benches/Tables/Desks 15 0 1 1 1 1 Casework/Cabinets 67 0 1 1 1 1 1 1 Reefers, Large Equipment 30 0 1	Wall Area ff ²			<u> </u>						
Components Glove Boxes HoodsTotal ft3RW RWFraction DAWFraction MetalFraction LeadFraction ConcreteBenches/Tables/Desks150	Components Glove BoxesTotal ft3Fraction RWFraction DAWFraction MetalFraction LeadFraction ConcreteGlove Boxes1111111Hoods15011111Benches/Tables/Desks1501111Casework/Cabinets6701111Reefers, Large Equipment3001111Misc. Equip./Labware7501111Hot Cells5011111Storage Tanks0.1011111Other75011111Drains0.1011111Ventilation DropsNo.1Inch Dia.2Total ft30.1DrainsNo.1Inch Dia.2132Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize361232211Drains2482221Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize361232211Drains248						t	+			
ComponentsTotal ft3RWDAWMetalLeadConcreteGlove Boxes	Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	Conny Area, it	1	I	.	<u> </u>	I	1	· ·		
Glove Boxes	Glove Boxes			•		Fraction	Fraction	Fraction	Fraction		
Hoods 15 0 1 Benches/Tables/Desks 15 0 1 Casework/Cabinets 67 0 1 Reefers, Large Equipment 30 0 1 Misc. Equip./Labware 75 0 1 Hot Cells 5 0 1 1 Storage Tanks 75 0 1 1 Other 75 0 1 1 Sinks 5 0 1 1 Drains 0.1 0 1 1 Ventilation Drops No. 1 Inch Dia. 2 Total ft ³ 0.1 Ventilation Drops No. 2 Inch Dia. 18 Total ft ³ 2.5 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 3 6 12 3 3 2 2 2 1 Decon/Remed. 1 2 2 2 1 1 1 1 </td <td>Hoods 15 0 1 Benches/Tables/Desks 67 0 1 Casework/Cabinets 67 0 1 Reefers, Large Equipment 30 0 1 Misc. Equip./Labware 75 0 1 Hot Cells 5 0 1 1 Storage Tanks 75 0 1 1 Other 75 0 1 1 Sinks 5 0 1 1 Drains 0.1 0 1 1 Ventilation Drops No. 1 Inch Dia. 2 Total ft³ 0.1 Ventilation Drops No. 2 Inch Dia. 18 Total ft³ 2.5 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 3 6 12 3 3 3 3 3 Pack/Load waste 1 2 2 2 1 1 1 Decon/Remed. <</td> <td></td> <td>nts</td> <td>Total ft3</td> <td>RW</td> <td>DAW</td> <td>Metal</td> <td>Lead</td> <td>Concrete</td> <td>_</td> <td></td>	Hoods 15 0 1 Benches/Tables/Desks 67 0 1 Casework/Cabinets 67 0 1 Reefers, Large Equipment 30 0 1 Misc. Equip./Labware 75 0 1 Hot Cells 5 0 1 1 Storage Tanks 75 0 1 1 Other 75 0 1 1 Sinks 5 0 1 1 Drains 0.1 0 1 1 Ventilation Drops No. 1 Inch Dia. 2 Total ft ³ 0.1 Ventilation Drops No. 2 Inch Dia. 18 Total ft ³ 2.5 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 3 6 12 3 3 3 3 3 Pack/Load waste 1 2 2 2 1 1 1 Decon/Remed. <		nts	Total ft3	RW	DAW	Metal	Lead	Concrete	_	
Benches/Tables/Desks 15 0	Benches/Tables/Desks 15 0				 	<u> </u>	ļ				
Casework/Cabinets 67 0	Casework/Cabinets 67 0					·		L	· · · · · · · · · · · · · · · · · · ·		
Reefers, Large Equipment 30 0	Reefers, Large Equipment 30 0					·			·· · · · · · · · · · · · · · · · · · ·	4	
Misc. Equip./Labware750	Misc. Equip./Labware Hot Cells750				1				· · · · · · · · · · · · · · · · · · ·	4	
Hot Cells Storage TanksImage: Constraint of the state	Hot Cells Storage TanksImage: Constraint of the constra					<u> </u>		ļ		4.	
Storage Tanks7501Other75011Sinks5011Drains0.1011Ventilation Drops22.501DrainsNo.1Inch Dia.2Total ft³0.1118Ventilation DropsNo.2Inch Dia.Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize3612Pack/Load waste122Pack/Load waste124Final Survey124	Storage Tanks7501Other75011Sinks5011Drains0.1011Ventilation Drops22.501DrainsNo.1Inch Dia.2Total ft³0.122.5Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize36123Equip. Release2482Pack/Load waste1222Inal Survey1241			- 13	U		<u>├</u>				
Other 75 0	Other 75 0		· •		<u> </u>					{ .	
Sinks Drains50-Ventilation Drops0.10-Drains Ventilation DropsNo.1Inch Dia.2Drains Ventilation DropsNo.1Inch Dia.2Person-hours CharacterizeMgr 3Supvsr 6HP Tech 12Shipper 3Skilled 2Unskilled 3Person-hours CharacterizeMgr 3Supvsr 6HP Tech 12Shipper 3Skilled 2Unskilled 3Person-hours CharacterizeMgr 3Supvsr 6HP Tech 3Shipper 2Skilled 3Unskilled 3Pack/Load waste Final Survey1241	Sinks50-Drains0.10Ventilation Drops22.50-DrainsNo.1Inch Dia.2Total ft³0.10.1Ventilation DropsNo.2Inch Dia.Ventilation DropsNo.2Inch Dia.18Total ft³22.5Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize36123Equip. Release2482Pack/Load waste1222Inal Survey1241			75	0						
Ventilation Drops22.50DrainsNo.1Inch Dia.2Total ft³0.1Ventilation DropsNo.2Inch Dia.18Total ft³22.5Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize3612323Equip. Release248221Pack/Load waste12221Decon/Remed.12411	Ventilation Drops22.50DrainsNo.1Inch Dia.2Total ft³0.1Ventilation DropsNo.2Inch Dia.18Total ft³22.5Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize361233Equip. Release24822Pack/Load waste12221Decon/Remed									1	
DrainsNo.1Inch Dia.2Total ft³0.1Ventilation DropsNo.2Inch Dia.18Total ft³22.5Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize361233Equip. Release24822Pack/Load waste12221Decon/Remed1	DrainsNo.1Inch Dia.2Total ft³0.1Ventilation DropsNo.2Inch Dia.18Total ft³22.5Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize361233Equip. Release248222Pack/Load waste12221Decon/Remed	Drains		0.1	0						
Ventilation DropsNo.2Inch Dia.18Total ft³22.5Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize36123Equip. Release2482Pack/Load waste1222Decon/Remed.1Final Survey1241	Ventilation DropsNo.2Inch Dia.18Total ft³22.5Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize36123Equip. Release2482Pack/Load waste1222Decon/Remed.1Final Survey1241	Ventilation Drops		22.5	0	,	L			}	
Ventilation DropsNo.2Inch Dia.18Total ft³22.5Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize36123Equip. Release2482Pack/Load waste1222Decon/Remed.1Final Survey1241	Ventilation DropsNo.2Inch Dia.18Total ft³22.5Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize36123Equip. Release2482Pack/Load waste1222Decon/Remed.1Final Survey1241	Drains	No	1	Inch Dia	2	Total ft ³				
Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize36123Equip. Release2482Pack/Load waste1222Decon/RemedFinal Survey124	Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize36123Equip. Release2482Pack/Load waste1222Decon/RemedFinal Survey124			2	4						
Characterize 3 6 12 3 Equip. Release 2 4 8 2 2 Pack/Load waste 1 2 2 2 1 Decon/Remed.	Characterize 3 6 12 3 Equip. Release 2 4 8 2 Pack/Load waste 1 2 2 2 Decon/Remed.	· · · · · · · · · · · · · · · · · · ·									
Equip. Release 2 4 8 2 2 Pack/Load waste 1 2 2 2 1 Decon/Remed.	Equip. Release 2 4 8 2 Pack/Load waste 1 2 2 2 1 Decon/Remed.					Shipper	Skilled	Unskilled			
Pack/Load waste 1 2 2 1 Decon/Remed.	Pack/Load waste 1 2 2 1 Decon/Remed.									1	
Decon/Remed. Final Survey 1	Decon/Remed. Final Survey 1	Equip. Release			8						
Final Survey 1 2 4 1	Final Survey 1 2 4 1		1	2			2	2	1		
# Lab Samples to be collected 1	# Lab Samples to be collected 1	Final Survey		<u> </u>	. 4						
		# Lab Samples to b	oe collecter	d '	1						
									i daman i d		
					,				•		

Building	245	Ro	om or Area		B	033	·	
Use			X	-ray standa	rds			1
	L							1
Radionuclides, Ex			<u>n</u>	I	Pu, Sř-90 se	aled source	S	l .
Area Classification		· 3					Υ.	•
# Floors above Ba			4					•
# Floors below Ro	of		%	ft2			·. 1 ·	
			needing	πz needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	2000	,		0		2000		·
Wall Area, ft ²	2700			0	•	2700		
Ceiling Area, ft ²	2000		·	.0		2000		
·			Fraction	Fraction	Fraction	Fraction	Fraction	• '
Compone	nte	Total ft3	RW	DAW	Metal	Lead	Concrete	÷
Glove Boxes		10101110				LCUU	Concrete	l ···
Hoods	ŕ	•			·			
Benches/Tables/D	esks	600	0					
Casework/Cabinet	S	600	0					
Reefers, Large Eq	uipment	1000	. 0					
Misc. Equip./Labw		. 50	0					
Hot Cells								
Storage Tanks								
Other		500	0					
Sinks		,						
Drains	, i	0.0		`		· ·		
Ventilation Drops	. Į	0.0						
· ·	r		1		12			
Drains	No.	0	Inch Dia.	· · · · · · · · · · · · · · · · · · ·	Total ft ³	0.0		
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	. 8	16	32				8	
Equip. Release	4	8	16				4	•
Pack/Load waste	0.5	1	2		2	2	0.5	
Decon/Remed.			•	-				
Final Survey	2	4	8		. •		2	
# Lab Samples to I	be collected	1	0		· · · · · · · · · · · · · · · · · · ·			

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					,			•	
Building	245] Ro	om or Area	1	B	034			1
Use			<u>C0 60 vo</u>		ation room			י ר	
USe	L		C0-00 Ve		ation room]	
Radionuclides, Ex			n		C0-60 se	aled source]	
Area Classificatio		3						· · ·	
# Floors above Ba		0	-		•				
# Floors below Ro		3	0/	42	· _ · · · · · · · · · · · · · · · · · ·		1		
			needing	ft2 needing					
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	· .		1
Floor Area, ft ²	266		Tenleu.		UIDSS Z	266	•		
Wall Area, ft ²			<u> </u>	0	<u> </u>				
Colling Area, ft	1500		<u>├</u>	0	<u> </u>	1500	ł		l
Ceiling Area, ft ²	266		<u> </u>	0	1	266	1	•	
		.:	Fraction	Fraction	Fraction	Fraction	Fraction		
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete]
Glove Boxes		i otar no			Inotal			1	
Hoods			<u> </u>	X					1
Benches/Tables/D	esks				·				
Casework/Cabinet	S.								•
Reefers, Large Eq	uipment	200	0		1.				1 ·
Misc. Equip./Labw									
Hot Cells			1						
Hot Cells Storage Tanks									•
Hot Cells Storage Tanks Other		50	0						
Hot Cells Storage Tanks Other Sinks			0						
Hot Cells Storage Tanks Other Sinks Drains		0.0	0	· · · · · · · · · · · · · · · · · · ·				-	
Hot Cells Storage Tanks Other Sinks			0						
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops	N 1	0.0		· · · · · ·					
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains	No.	0.0	Inch Dia.	· · · · · · · · · · · · · · · · · · ·	Total ft ³	0.0		-	
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops	No. No.	0.0			Total ft ³ Total ft ³	0.0		7	
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours	No.	0.0	Inch Dia. Inch Dia. HP Tech	Shipper			Clerical		
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize	No. Mgr 0.5	0.0 0.0 Supvsr 1	Inch Dia. Inch Dia. HP Tech 2	Shipper	Total ft ³	0.0	0.5		
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No. Mgr 0.5 0.5	0.0 0.0 Supvsr 1 1	Inch Dia. Inch Dia. HP Tech		Total ft ³ Skilled	0.0 Unskilled	0.5		
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	No. Mgr 0.5	0.0 0.0 Supvsr 1	Inch Dia. Inch Dia. HP Tech 2	Shipper 2	Total ft ³	0.0	0.5		
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed.	No. Mgr 0.5 0.5 0.5	0.0 0.0 Supvsr 1 1 1 1	Inch Dia. Inch Dia. HP Tech 2 2		Total ft ³ Skilled	0.0 Unskilled	0.5 0.5 0.5		
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	No. Mgr 0.5 0.5	0.0 0.0 Supvsr 1 1	Inch Dia. Inch Dia. HP Tech 2		Total ft ³ Skilled	0.0 Unskilled	0.5		
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed.	No. Mgr 0.5 0.5 0.5 0.5	0.0 0.0 Supvsr 1 1 1 1	Inch Dia. Inch Dia. HP Tech 2 2		Total ft ³ Skilled	0.0 Unskilled	0.5 0.5 0.5		

Radionuclides, Ext			n T		N	one]
Area Classification # Floors above Bas		3	4		,			
# Floors below Ro			4					
# 1 10013 Delow 1(0)			%	ft2	1	,	1	
			needing	needing				•
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	300			0		300		
Wall Area, ft ²	1000			0		1000		
Ceiling Area, ft ²	300			0		300		
			F	P	F			
Componen	40	Total ft3	Fraction RW	Fraction DAW	Fraction Metal		Fraction Concrete	
Componen Gløve Boxes	115	TOLATILS			IVIELAI	Lead	Concrete	1
Hoods			<u> </u>					1
Benches/Tables/De	esks	80	0			,		1
Casework/Cabinet	5							1
Reefers, Large Equ	upment	50	0					1
Misc. Equip./Labwa	are	80	0					
Hot Cells						-		
Storage Tanks			<u> </u>					1
Other Sinks								
Drains		0.0				-		
Ventilation Drops		0.0						
	1				. I.	لسي الم	, <u>, , , , , , , , , , , , , , , , , , </u>	1
Drains	No.	· · ·	Inch Dia.		Total ft ³	0.0		•••
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
					_		·	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	1	2	4				1	
Equip. Release Pack/Load waste					<u> </u>	·		
Decon/Remed.								
	0.5	1	2				0.5	

Use Co/Cs Vertical Calibration Radionuclides, Extent of Contamination Area Classification 3 Co-60, Cs-137 sealed sources # Floors above Basement 1 Co-60, Cs-137 sealed sources # Floors below Roof 1 Kemed. Class 2 Class 3 # Floors below Roof 1 Kemed. Class 2 Class 3 Floor Area, ft ² 266 0 2266 Wall Area, ft ² 266 0 2266 Wall Area, ft ² 266 0 2266 Components Fraction Fraction Fraction Fraction Fraction Fraction Components Glove Boxes 1 RW DAW Metal Lead Concrete Glove Boxes 1000 0 1000 100 1000 1000 1000 10000	Building	245	Ro	om or Area		B	036		<u></u>	1
Co-60, Cs-137 sealed sources Co-60, Cs-137 sealed sources Area Classification 3 # Floors above Basement 1 # Floors below Roof 1 # Floor Area, ft ² 266 0 266 Calling Area, ft ² 266 0 286 Glove Boxes 10 0 1360 Concrete Benches/Tables/Desks 10 0			· · · · · · · · · · · · · · · · · · ·]	
Area Classification 3 # Floors above Basement 1 # Floors below Roof 0 Storage Tables/Desks 0 Glove Boxes 10 Hoods 1 Benches/Tables/Desks 10 00 0 Storage Tanks 1000 00 1000 1000 1 Storage Tanks 1000 0.0 1 Storage Tanks 0.0 0.0 1 Drains No. 0.0 1 1000 1 1000 1 1000 1 1000 1 1000 1 1000 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>а 1 ·</th><th>1 .</th></t<>									а 1 ·	1 .
# Floors below Roof 1 Your Selection Total Class 1 Remed. Remed. Remed. Class 2 Class 3 Floor Area, ft ² 266 0 266 Wall Area, ft ² 1360 0 1360 Ceiling Area, ft ² 266 0 266 Wall Area, ft ² 266 0 266 Components Fraction Fraction Fraction Components Total ft3 RW DAW Metal Lead Glove Boxes 10 0 1 1 1 1 Hoods 16 0 1 1 1 1 1 Glove Boxes 16 0 1 <]		-60, CS-137	sealed sou	rces	1	1
Total Class 1 % ft2 needing Remed. Class 2 Class 3 Floor Area, ft ² 266 0 2266 Wall Area, ft ² 1360 0 1360 Ceiling Area, ft ² 266 0 266 Wall Area, ft ² 266 0 266 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 10 0 1				-						
Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 266 0 266 Wall Area, ft ² 1360 0 1360 Ceiling Area, ft ² 266 0 266 Wall Area, ft ² 266 0 266 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	IOUIS DEIOW ROO			%	ft2	I	Ι			
Floor Area, ft ² 266 0 266 Wall Area, ft ² 1360 0 1360 Ceiling Area, ft ² 266 0 266 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes		T			-					1
Wall Area, ft ² 1360 0 1360 Ceiling Area, ft ² 266 0 266 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes 10 0	or Area ft ²			Remed.		Class 2				
Ceiling Area, ft ² 266 0 266 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Image: Concrete state s	li Area, ft ²			<u> </u>						
Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	ling Area, ft ²		· · · · · · · · · · · · · · · · · · ·							
Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes				Fraction	Fraction	Fraction	Fraction	Fraction		
Hoods		ts	Total ft3							
Benches/Tables/Desks 10 0				ļ	L					
Reefers, Large Equipment 1000 0		esks	10	0						
Misc. Equip./Labware 15 0 1 Hot Cells 15 0 1 Storage Tanks 200 0 1 Other 200 0 1 1 Sinks 0.0 1 1 1 1 Drains 0.0 0 1 1 1 1 Ventilation Drops No. 0 Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 0.5 1 2 0.5 0.5 0.5 0.5 Pack/Load waste 0.5 1 2 2 0.5 0.5 Decon/Remed. 0.5 0.5 0.5 0.5		1								
Hot Cells										
Storage Tanks 200 0 1 1 Other 200 0 1 1 Sinks 0.0 1 1 1 Drains 0.0 1 1 1 Ventilation Drops 0.0 1 1 1 Drains No. 0 Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 0.5 1 2 0.5 0.5 1 2 0.5 Equip. Release 0.5 1 2 2 0.5 1 Decon/Remed. 1 2 0.5 1 2 0.5		are	15	0						
Other2000Image: constraint of the state				<u> </u>					l.	
Sinks 0.0 0.0 0.0 Drains 0.0 0.0 0.0 Ventilation Drops 0.0 Inch Dia. Total ft ³ 0.0 Drains No. 0 Inch Dia. Total ft ³ 0.0 Ventilation Drops No. 0 Inch Dia. Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 0.5 1 2 0.5 0.5 2 0.5 Equip. Release 0.5 1 2 2 0.5 2 0.5 Pack/Load waste 0.5 1 2 2 0.5 1 2 0.5 Decon/Remed.			200	0			· · · · · · · · · · · · · · · · · · ·			1
Ventilation Drops0.0DrainsNo.0Inch Dia.Total ft³0.0Ventilation DropsNo.0Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.5120.50.5Equip. Release0.51220.5Pack/Load waste0.51220.5Decon/Remed.0.5120.5Final Survey0.5120.5										
DrainsNo.0Inch Dia.Total ft³0.0Ventilation DropsNo.0Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.5120.5Equip. Release0.5120.5Pack/Load waste0.51220.5Decon/Remed.0.5Final Survey0.5120.5										[
Ventilation DropsNo.0Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.5120.5Equip. Release0.5120.5Pack/Load waste0.5122Decon/RemedFinal Survey0.5120.5	tilation Drops	Į	0.0	. <u></u>	j]		
Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.5120.5Equip. Release0.5120.5Pack/Load waste0.5122Decon/Remed.0.5120.5Final Survey0.5120.5	ins	No.[0	Inch Dia.			0.0			1
Characterize 0.5 1 2 0.5 Equip. Release 0.5 1 2 0.5 Pack/Load waste 0.5 1 2 2 2 0.5 Decon/Remed.	tilation Drops	No.	0	Inch Dia.		Total ft ³	0.0			
Equip. Release 0.5 1 2 0.5 Pack/Load waste 0.5 1 2 2 2 0.5 Decon/Remed.			Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Pack/Load waste 0.5 1 2 2 2 0.5 Decon/Remed.										
Decon/Remed. 0.5 1 2 0.5				2						
Final Survey 0.5 1 2 0.5		0.5							•	1
# Lab Samples to be collected 0		0.5	1	2				0.5	•	
	h Samples to b	e collecter								Į
	o Samples to b	e conected								
		<u>, ''''''''''''''''''''''''''''''''''''</u>		<u>,</u>						•
<i>,</i>				<i>y</i>						
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			-	·					-
Building	245	l Ro	om or Area		B	041	·····]	
Use				RAM Storag				7	
					<u> </u>			1	
Radionuclides, Ex		taminatio]	L	TR	U, U		. ·	
Area Classification		1							
# Floors above Ba		0	. I						
# Floors below Ro	of	2					1]
			%	ft2					
	_		needing	needing			1		1
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	4	•	
Floor Area, ft ²	12	12					{		· ·
Wall Area, ft ²	280	280			ļ	<u> </u>			
Ceiling Area, ft ²	12	12	0	0			ļ	· .	
			Fraction	Fraction	Fraction	Fraction	Fraction		· ·
Componer	ate	Total ft3	RW	DAW	Metal	Lead	Concrete		
Glove Boxes	11.5	10(2) 10		DAW	Ivietai	Leau	Concrete	1	
Hoods	i					+		1	
Benches/Tables/D	esks					<u> </u>		4	
Casework/Cabinet		10	0.1		1		·	Į	
Reefers, Large Eq				· · · · · · · · · · · · · · · · · · ·		<u> </u>			
Misc. Equip./Labw					<u> </u>		[1	
Hot Cells					<u> </u>			1	
Storage Tanks						1		1	
Other]	
Sinks	-								
Drains		0.0							
Ventilation Drops		0.0	L <u></u>					1	
	1	. <u> </u>	I I	······	1 3		1		1
Drains	No.		Inch Dia.		Total ft ³	0.0			
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	1	
Characterize	1	2	4		UNINGU	Shakingu	1		
Equip. Release	0.5	1	2				0.5		1
Pack/Load waste	0.25	0.5		1	1	1	0.25		
Decon/Remed.									
Decon/Remed. Final Survey	0.5	1	2				0.5		
# Lab Samples to b	pe collected	1	1						

Building	245	Ro	om or Area		В	043		<u></u>]
Use			Dosir	metry proc	essing]	
Radionuclides, Ex	tent of Con	tamination	· · ·		Beta-	gamma		t	
Area Classification		1	י ן			<u> </u>		1	
# Floors above Ba	sement		1						1
# Floors below Ro	of		1						1
			%	ft2	T		[
			needing	needing	1				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			1
Floor Area, ft ²	300	300	0	0					
Wall Area, ft ²	1280	1280	0	0	T T	1			1
Ceiling Area, ft ²	300	300		0	1		, , , , , , , , , , , , , , , , , , ,		
6	4-	T-4-1 642	Fraction	Fraction	Fraction	Fraction	Fraction		
Componen	Its T	Total ft3	RW	DAW	Metal	Lead	Concrete	1	1
Glove Boxes Hoods	ŀ							l	1
Benches/Tables/De	anka i	90	0						
Casework/Cabinets	L	120	0						1
Reefers, Large Equ	L	120							
Misc. Equip./Labwa		215	0		<u> </u>			х.	
Hot Cells		210	Ŭ						
Storage Tanks	1	20	0			<u> </u>			
Other	ŀ	2	0			<u> </u>			
Sinks	ľ					· · · · ·			
Drains	ľ	0.0		*					
Ventilation Drops		0.0						I	
Drains	No.		Inch Dia.	<u> </u>	Total ft ³	0.0			
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Characterize	1	2	4	·····			1		
Equip. Release	1	2	4				1		ļ
Pack/Load waste	0.25	0.5			1	1	0.25		1
Decon/Remed.	T								1 · · ·
Final Survey		2	2.				1		

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Building Use	245		om or Area		D	044	· · · · · · · · · · · · · · · · · · ·	
Use] <u>R</u> ot				044	·	
	ə[F	RAM Storag	je			
Radionuclides, E		tamination			U, TRU, E	leta-gamma		
Area Classificatio # Floors above Ba		1						•
# Floors above Ba				1				
	T		%	ft2		1	l	
			needing	needing				
Floor Area, ft ²	Total 1000	Class 1 1000	Remed. 0	Remed.	Class 2	Class 3		
Wall Area, ft ²	1950		0	0				•
Ceiling Area, ft ²	1000		0	0				
			Fraction	Fraction	Fraction	Fraction	Fraction	
Compone Glove Boxes	ints	Total ft3	RW	DAW	Metal	Lead	Concrete	
Hoods								
Benches/Tables/I		18	0					
Casework/Cabine				· · · · · · · · · · · · · · · · · · ·				
Reefers, Large Eq		25	0					
Misc. Equip./Labv Hot Cells	Vale	20						
Storage Tanks								
Other								
Sinks								
Drains		0.0	•	· · · · · · · · · · · · · · · · · · ·				
Ventilation Drons		0.0	í			L		
/entilation Drops	I							
Ventilation Drops Drains	No.[0	Inch Dia.		Total ft ³	0.0		
	No.		Inch Dia. Inch Dia.		Total ft ³ Total ft ³	0.0 0.0		
Drains	No.			Shipper			Clerical	
Drains /entilation Drops Person-hours Characterize	No. No. Mgr 4	0 Supvsr 8	Inch Dia. HP Tech 16		Total ft ³	0.0	4	
Drains /entilation Drops Person-hours Characterize Equip. Release	No. No.	0 Supvsr	Inch Dia.		Total ft ³	0.0		
Drains /entilation Drops Person-hours Characterize Equip. Release Pack/Load waste	No. No. Mgr 4	0 Supvsr 8	Inch Dia. HP Tech 16		Total ft ³	0.0	4	
Drains /entilation Drops Person-hours Characterize Equip. Release	No. No. Mgr 4	0 Supvsr 8	Inch Dia. HP Tech 16		Total ft ³	0.0	4	· · ·

	245	Ro	om or Area		В	045		
Use	,		Liq	uid waste ta	anks]
Dedienvelidee Er	tont of Cor	4	-	1		All		-
Radionuclides, Ex Area Classificatio		2	1			<u>All</u>		
# Floors above Ba		3]					
# Floors below Ro	of	1						
			% needing	ft2				
	Total	Class 1	Remed.	needing Remed.	Class 2	Class 3		
Floor Area, ft ²	1000		Tromou.	0	1000			
Wall Area, ft ²	3250		†	0	3250		1	
Ceiling Area, ft ²	1000		1	0	1000		1	
		••••••					•	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Compone Glove Boxes	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	r
Hoods						<u> </u>		1
Benches/Tables/D	esks							1
Casework/Cabinet			· · · · · · · · · · · · · · · · · · ·					1
Reefers, Large Eq	uipment					i]
Reefers, Large Eq Misc. Equip./Labw		· · ·						
Misc. Equip./Labw Hot Cells								
Misc. Equip./Labw Hot Cells Storage Tanks		1300	0.2		1			
Misc. Equip./Labw Hot Cells Storage Tanks Other		1300	0.2		1			
Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks					1			
Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains		1300 0.8 0.0	0.2		1			
Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks		0.8	0					
Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains		0.8 0.0 2	0 Inch Dia.	2	Total ft ³	0.8		
Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops	rare	0.8 0.0	0	2		0.8		
Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours	No. No. Mgr	0.8 0.0 2 0 Supvsr	0 Inch Dia. Inch Dia. HP Tech	2 Shipper	Total ft ³		Clerical	
Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize	No. No. Mgr 4	0.8 0.0 2 0 Supvsr 8	0 Inch Dia. Inch Dia. HP Tech 16	······································	Total ft ³ Total ft ³ Skilled	0.0 Unskilled	4	
Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No. No. No. 4 6	0.8 0.0 2 0 Supvsr 8 12	0 Inch Dia. Inch Dia. HP Tech 16 24	Shipper	Total ft ³ Total ft ³ Skilled	0.0 Unskilled	<u>4</u> 6	
Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	No. No. Mgr 4	0.8 0.0 2 0 Supvsr 8	0 Inch Dia. Inch Dia. HP Tech 16	······································	Total ft ³ Total ft ³ Skilled	0.0 Unskilled	4	
Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No. No. No. 4 6	0.8 0.0 2 0 Supvsr 8 12	0 Inch Dia. Inch Dia. HP Tech 16 24	Shipper	Total ft ³ Total ft ³ Skilled	0.0 Unskilled	<u>4</u> 6	

all reading to

Building	245	Ro	om or Area	1 Floor	B Wing Wo	mens Locke	er room	
Use			.	Locker roo				
	L		, ,					I.
Radionuclides, Ex	tent of Con	tamination	ı	ľ	No	one	ļ	
Area Classification		3	Ì					
# Floors above Ba			1	·	-			
# Floors below Ro			1	· ·				
			%	ft2	T			
			needing	needing	1.			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	168			0		168	,	
Wall Area, ft ²	630			0	Γ	630		
Ceiling Area, ft ²	168			0		168		
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componer	nts ,	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes		· · · · · · · · · · · · · · · · · · ·			L			
Hoods								
Benches/Tables/D	/	·····						
Casework/Cabinet								
Reefers, Large Eq				·				
Misc. Equip./Labw	are		·		ļ			
Hot Cells					L		·	
Storage Tanks	. I							
Other	. I	·			· · · ·			
Sinks					ļ			
Drains	ļ	0.0			L			
Ventilation Drops	Ļ	0.0			1			
Draina	No.[Inch Dia.		Total ft ³			
Drains	H					0.0		
Ventilation Drops	No.[Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.5	1	2	Cubber	OKING	Unakineu	0.5	
Equip. Release		·						
Pack/Load waste								
Decon/Remed.	î				· · ·			
Final Survey	0.5	1	2				0.5	
# Lab Samples to t		1	0				· · · · · · · · · · · · · · · · · · ·	

Use		Ro	om or Area	L	<u>P</u>	11		
			Gamma	a ray meas	urement			
Dedienveliden Ev	tant of Cor						00	• •
Radionuclides, Ex Area Classification		3	;	3	ealeu Dela-	gamma, Sr-	.90	
# Floors above Ba			1					
# Floors below Ro	of						• · ·	
2			%	ft2				
	Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3		
Floor Area, ft ²	525			0	01035 2	UI233 J		
Wall Area, ft ²	1500			0			1	
Ceiling Area, ft ²	525			0				
			•·				1	
		.	Fraction	Fraction	Fraction	Fraction	Fraction	
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes Hoods					<u> </u>	<u> </u>		
Benches/Tables/D	esks	140	0					
Casework/Cabinet		195	0					
Reefers, Large Eq	uipment							
Misc. Equip./Labw	are	215	0					
Hot Cells		·						
Storage Tanks Other						·		
Sinks		·	· · · ·		· · ·			
Drains		0.0	0					
Ventilation Drops		0.0						
Drains	No.		Inch Dia.	2	Total ft ³	0.0		•
Ventilation Drops	No.		Inch Dia.	<u>∠</u>	Total ft ³	0.0		
rennanon propa								
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize		2	4					
Equip. Release Pack/Load waste	1 0.25	2 0.5	4		1	1	0.25	
Decon/Remed.	0.25	0.5					0.20	-
Final Survey	0.5	1	2				0.5	
· · · · · · · · · · · · · · · · · · ·								
# Lab Samples to b	e collected	i [1		,			
				•				

Building	245	Ro	om or Area		В	15		
Use			Indus	strial Radio	graphy			
Radionuclides, Ex		taminatio	n		Sealed	ssources		
Area Classification		3]					
# Floors above Ba	sement			10 A				
# Floors below Ro	of						_	
			%	ft2				
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	500			0		500		
Wall Area, ft ²	2000			0		2000	· · ·	
Ceiling Area, ft ²	500			0		500		
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes			[1
Hoods					<u> </u>			
Benches/Tables/D	esks	······	1					
Casework/Cabinet	s						·	
Reefers, Large Equ	uipment							
Misc. Equip./Labw	are							
Hot Cells								•
Storage Tanks								
Other								
Sinks	ĺ		_					
Drains		0.0	[
Ventilation Drops	ĺ	0.0			I		· ·	
			,		1 -		-	
Drains	No.	<u></u>	Inch Dia.		Total ft ³	0.0	l 	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
			-		•			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	1.5	3	6	·			1.5	
Equip. Release	1	2	4				1	
Pack/Load waste							-	
Decon/Remed.			·		L			
Final Survey	1	2	4			·	1	
# Lab Samples to b	e collected	t	0		1			

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Building	245	Ro-	om or Area	r		21		r
Usi	•[N	eutron calib	ration and o	detector test	ing		ſ
Radionuclides, E		tamination	1 .	Sealed	beta-gamm	a; unsealed	U, Sr-90]
Area Classification # Floors above B		1		,				
# Floors below R								
	<u> </u>		%	ft2	T	· · · · · · · · · · · · · · · · · · ·]	
			needing	needing	}			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3]	
Floor Area, ft ²	375			0	<u> </u>			
Wall Area, ft ²	1440			0.	<u> </u>	L		
Ceiling Area, ft ²	375	375	00	0	<u> </u>	l	J	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Compone	ents	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes								
Hoods								-
Benches/Tables/		160	0					
Casework/Cabine		120	0					
Reefers, Large Ec								
Misc. Equip./Labv	vare	100	0		<u> </u>			
Hot Cells Storage Tanks			· · · · · · · · · · · · · · · · · · ·					
Other		·	<u> </u>		<u> </u>	<u> </u>		
Sinks				· · · · · · · · · · · · · · · · · · ·				
Drains		0.0						
Ventilation Drops		0.0		· · · · · · · · · · · · · · · · · · ·				
			I <u>.</u> . I					
	1		Inch Dia.		Total ft ³	0.0		
Drains	No.				.			
			Inch Dia.	· · · · · · · · · · · ·	Total ft ³	0.0		
Drains Ventilation Drops Person-hours		Supvsr	Inch Dia. HP Tech	Shipper	Total ft ³ Skilled	0.0 Unskilled	Clerical	
Drains Ventilation Drops Person-hours Characterize	No. Mgr 4	Supvsr 8	Inch Dia. HP Tech 16	Shipper			4	
Drains Ventilation Drops Person-hours Characterize Equip. Release	No. <u>Mgr</u> 4 1	Supvsr 8 2	Inch Dia. HP Tech		Skilled	Unskilled	<u>4</u> 1	
Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	No. Mgr 4	Supvsr 8	Inch Dia. HP Tech 16	Shipper 4			4	
Drains Ventilation Drops Person-hours Characterize Equip. Release	No. <u>Mgr</u> 4 1	Supvsr 8 2	Inch Dia. HP Tech 16		Skilled	Unskilled	<u>4</u> 1	

Building	245	Ro	om or Area		В	23			7
Use			C	alibration I	ab]	
Radionuclides, Exte	ent of Con	tamination	1	Unsea	aled beta-ga	mma; seale	ed TRU	I	
Area Classification # Floors above Bas	ement	<u> </u>		,					
# Floors below Roo		1	1						
			%	ft2]		
	Tatal	Clean 1	needing	needing Remed.		01 2			
Floor Area, ft ²	Total 2500	Class 1 2500	Remed. 0.1	250	Class 2	Class 3	4		
Wall Area, ft ²	6000	<u>2500</u> 6000	1	600		······	}		
Ceiling Area, ft ²	2500	2500		250			- ·		
Cening Area, it	2000	2000	0.1	200	I				
			Fraction	Fraction	Fraction	Fraction	Fraction		
Component	S	Total ft3	RW	DAW	Metal	Lead	Concrete		
Glove Boxes	· [
Hoods									
Benches/Tables/Des		50	1	0.5	0.5			•	
Casework/Cabinets		80	1	0.5	0.5				
Reefers, Large Equi	pment	250	1	0.5	0.5				
Misc. Equip./Labwa Hot Cells	re	70	1	0.5	0.5	· · · · · · · · · · · · · · · · · · ·	·		
Storage Tanks				-					
Other	ł								
Sinks	ŀ								
Drains	t	0.0				· · · · ·			
Ventilation Drops	ľ	0.0			·				
	Г		<u>.</u> . 1] 3		1		
Drains	No.		Inch Dia.		Total ft ³	0.0			
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Characterize	8	16	32				8		
Equip. Release	2	4	. 8	· · · · ·			2		
Pack/Load waste	0.5	1	2	2	2	2	0.5		
Decon/Remed. Final Survey	4	2 8	<u>4</u> 16		8	8	1 4		I
rinai Survey	<u>4</u>	<u> </u>	10				4		1
# Lab Samples to be	collected	ı [2						
					· · · · · · · · · · · · · · · · · · ·				J
						· .			
	•						:		
		· .							
				•					

Building	245	j Ro	om or Area	L	B	24	
Use							
Radionuclides, Ex	tent of Cor	ntaminatio	n	Seale	ed AmBe, S	r-90, Beta-g	amma
Area Classification	n	3]				
# Floors above Ba	sement		1				
# Floors below Ro	of		1		1		
			%	ft2			1
		1	needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	400			0	L	400	4
Wall Area, ft ²	1200		L	0	· · · · · · · · · · · · · · · · · · ·	1200	
Ceiling Area, ft ²	400			0		400	
			_				
_			Fraction	Fraction	Fraction	Fraction	Fraction
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes			<u> </u>		ļ		L
Hoods	_			·	ļ		
Benches/Tables/Desks		30	0 '				
Casework/Cabinet		90	0		·		
Reefers, Large Equ			ļ			<u> </u>	
Misc. Equip./Labwa	are	20	0				
Hot Cells					L	L	Ļ
Storage Tanks					!	L	L
Other	1						
Sinks	:						
Drains		' 0.0					
Ventilation Drops		0.0					
	· ·		, ı		1 .	i	I
Drains	No.	0	Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	2	4	8				2
Equip. Release	0.5	1	2				0.5
Pack/Load waste	11	2		4	4	4	1
			{				
Decon/Remed. Final Survey	1	2	4				1

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Radionuclides, Ex Area Classification # Floors above Ba # Floors below Ro	n Isement			L	IK	<u>U, U</u>	<u></u>	1	
	Total	Class 1	% needing Remed.	ft2 needing Remed.	Class 2	Class 3			
Floor Area, ft ²	600	600	0	0					
Wall Area, ft ²	4000					ļ			
Ceiling Area, ft ²	600	600	0	0	L	L	1		
Componei	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete		
Glove Boxes									1
Hoods								i i	
Benches/Tables/D		100	0.5	0.3	0.7	 		l	1
Casework/Cabinet		50	0.1	·	1			l	
Reefers, Large Eq Misc. Equip./Labw		40 40	0.1	0.4	0.6			i	
Hot Cells	ai C				0.0		·	i i	1
Storage Tanks			[<u> </u>	[1
Other							,		
Sinks								1	
Drains		0.1	0.5		1				
Ventilation Drops		0.0			l				1
Drains	No.	1	Inch Dia.	2	Total ft ³	0.1			
Ventilation Drops	No.		Inch Dia.	<u> </u>	Total ft ³	0.0	i.		l
									1
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		1
Characterize	8	16	32				8		ł
Equip. Release Pack/Load waste	4	8	16 2		<u> </u>	4	4 0.5		
Decon/Remed.	0.0		<u></u>	2	4		0.0		
Final Survey	4	8	16				4		
# Lab Samples to b	La constante de la constante de la constante de la constante de la constante de la constante de la constante de		1						

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Nuclide		Primary		Nuclide		Primary
Name	Curies	Storage (Bldg/Room)		Name	Curies	Storage (Bldg/Room)
CS137	9.68E-06	245/B132		PO210	3.14E-06	227/B123
CS137	9.68E-06	245/B132		PO210	3.14E-06	227/B123
CS137	9.68E-06	245/B132		PO210	3.14E-06	227/B123
CS137	9.68E-06	245/B132		PO210	3.14E-06	227/B123
PO210	3.14E-06	227/B123		CO60	2.57E-06	245/C11
PO210	3.14E-06	227/B143		CF252	2.55E-06	245/B143
PO210	3.14E-06	227/B143		CF252	2.35E-06	245/B143
PO210	3.14E-06	227/B143		PU238	2.24E-06	245/B131
PO210	3.14E-06	227/B143		TH228	2.02E-06	245/C11
PO210	3.14E-06	227/B143		TH228	1.96E-06	245/C11
CO60	3.00E-06	245/B132		CO57	1.96E-06	245/C11
RA226	2.92E-06	245/B47	and the second	CO57	1.96E-06	245/C11
CO57	2.89E-06	245/C11	244 244 2	CO57	1.96E-06	245/C11
CO57	2.89E-06	245/C11		TH228	1.96E-06	245/C11
CO57	2.89E-06	245/C11		CO57	1.96E-06	245/C11
CS137	2.86E-06	245/B50		CO57	1.96E-06	245/C11
CS137	2.86E-06	245/B50		CO57	1.96E-06	245/C11
CS137	2.86E-06	245/B50		CO57	1.96E-06	245/C11
CS137	2.86E-06	245/B50		TH228	1.92E-06	245/C11
CO57	2.86E-06	245/C11		MBYP	1.76E-06	245/C10
CO57	2.86E-06	245/C11		CO60	1.61E-06	245/B132
CO57	2.86E-06	245/C11		CF252	1.46E-06	245/B143
CO57	2.86E-06	245/C11		CO57	1.33E-06	245/C11
CO60	2.78E-06	245/B132		H3 .	1.21E-06	245/E107
MBYP	2.78E-06	245/C10		PB210	1.07E-06	245/B46
CD109	2.63E-06	245/B044		CO57	1.07E-06	245/C11
CO60	2.57E-06	245/C11		UF6	1.03E-06	245/B041
CO60	2.57E-06	245/C11				

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Building	245	Ro	om or Area		B	48	
Use			Rad	liochemistr	y Lab		
	2						
Radionuclides, Ex			1		All radio	nuclides	
Area Classificatio		1	4	•			
# Floors above Ba			-				
# Floors below Ro			%	ft2	1	1	ר
1			needing	needing			}
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	240	240		0			1
Wall Area, ft ²	700	700		0	1		1
Ceiling Area, ft ²	240	240		0		1	f
	0		`	· · · ·	1	<u>I</u>	J
			Fraction	Fraction	Fraction	Fraction	Fraction
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes		90	0.5	0.7	0.3		
Hoods		100	1		1		
Benches/Tables/D		000					
Casework/Cabinet		360	0.05	0.2	0.8	ļ	
Reefers, Large Eq		100	0.1	0.0	0.1	l	
Misc. Equip./Labw Hot Cells	ait	100	<u> </u>	0.9	0.1		L
Storage Tanks							
Other	ł			· · · · ·	<u> </u>		
Sinks		24	1		1		
Drains	. [0.0	1	0.5	0.5		
Ventilation Drops	[0.0	0.1		1		
	,				1		· ·
Drains	No.	1	Inch Dia.	2	Total ft ³	0.0	
Ventilation Drops	No.	4	Inch Dia.	10	Total ft ³	0.0	
Dereen have	Maria	C	UD Task	Chiere -	01-111-1	lleek tite ti	01
Person-hours Characterize	Mgr 4	Supvsr 8	HP Tech 16	Shipper	Skilled	Unskilled	Clerical 4
Equip. Release	4	8	16		· ·		44
Pack/Load waste	0.5	0	2	2	2	2	0.5
Decon/Remed.		-		۲	<u> </u>	<u> </u>	0.0
Final Survey	2	4	8				2
# Lab Samples to I	be collected	1	1	· · · · · · · · · · · · · · · · · · ·			

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Building	245	Ro	om or Area		В	47		
Use	[lon char	nber measi	urements		<u> </u>]
Radionuclides, Ex	tent of Con	taminatior	1	TRU, U,	Sr-90, beta	I-gamma, lo	w energy	1
Area Classification		1]					
# Floors above Ba		0						
# Floors below Ro	of	3		610	T		1	
			% needing	ft2 needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	232	232	and the second s	0	UIU33 E	010350	1	· .
Wall Area, ft ²	900	900		0				
Ceiling Area, ft ²	232	232		0	<u> </u>			
ooning / irou, it					L	.		
C			Fraction RW	Fraction DAW	Fraction Metal	Fraction	Fraction	
Componer Glove Boxes	ינג [Total ft3	KVV	DAW		Lead	Concrete	1
Hoods		· · · · · · · · · · · · · · · · · · ·						
Benches/Tables/De	esks	36	0				· · · ·	
Casework/Cabinet		196	0.05	0.5	0.5			· ·
Reefers, Large Equ								
Misc. Equip./Labwa	are	100	0.05		1			
Hot Cells Storage Tanks				· · · · · · · · · · · · · · · · · · ·			<u>.</u>	
Other	ł	36	0.05			1		
Sinks	ľ				·			
Drains		0.0		·····				
Ventilation Drops	[0.0						
Drains	No.	0	 		Total ft ³		l	
Ventilation Drops	NO. No.	0	Inch Dia. Inch Dia.	·	Total ft ³	<u>0.0</u> 0.0		
ventilation brops	NO.[U		<u> </u>		0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	4	8	16				4	
Equip. Release Pack/Load waste	4 0.5	8	<u> 16</u> 2	2	2	2	4 5	
Decon/Remed.	0.5	1.		<u> </u>	<u> </u>	۷	0.0	
Final Survey	2	4	8				2	
f				<u></u>	نىى			
# Lab Samples to b	e collected	I .	1					
								·

Building	245	Ro	om or Area		В	30	
Use			Docur	nent storag			
036			Docal	nent storag			
Radionuclides, Ex	tent of Cor	tamination	n		No	one	
Area Classification	n	3]	•			
# Floors above Ba		0]				,
# Floors below Ro	of	3			<u></u>		
			%	ft2			
	T . (.)	0	needing	needing			
E 1	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	135		╂────	0	+	135	
Wall Area, ft ²	1050		<u> </u>	. 0	┥_────	1050	
Ceiling Area, ft ²	135	L	L	0	<u> </u>	135	l
			Fraction	Fraction	Fraction	Fraction	Fraction
Compose	-to	Total #2	RW				
Componer Glove Boxes	แร	Total ft3		DAW	Metal	Lead	Concrete
Hoods			<u> </u>	├ ────	╆╍───	{	
Benches/Tables/D	esks		<u>├</u> ────	<u> </u>	<u>+</u>		
Casework/Cabinets		300	0		<u> </u>		
Reefers, Large Equipment				├─────	╋────		
Misc. Equip./Labw			t	<u> </u>	 	· · · · ·	
Hot Cells	-		<u> </u>	└─────	1	i	
Storage Tanks					<u> </u>		
Other							
Other							
Sinks Drains		0.0		·			
Sinks Drains		0.0					
Sinks Drains Ventilation Drops		0.0					
Sinks	No.[0.0	Inch Dia.		Total ft ³	0.0	
Sinks Drains Ventilation Drops Drains	No.	0.0	Inch Dia. Inch Dia.		Total ft ³ Total ft ³	0.0	
Sinks Drains Ventilation Drops Drains Ventilation Drops	No.	0.0 0 0	Inch Dia.		Total ft ³	0.0	
Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours	No.	0.0 0 0 Supvsr	Inch Dia. HP Tech	Shipper			Clerical
Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize	No. Mgr 0.5	0.0 0 0 Supvsr 1	Inch Dia. HP Tech 2	Shipper	Total ft ³	0.0	0.5
Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No.	0.0 0 0 Supvsr	Inch Dia. HP Tech	Shipper	Total ft ³	0.0	
Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	No. Mgr 0.5	0.0 0 0 Supvsr 1	Inch Dia. HP Tech 2	Shipper	Total ft ³	0.0	0.5
Sinks Drains Ventilation Drops	No. Mgr 0.5	0.0 0 0 Supvsr 1	Inch Dia. HP Tech 2	Shipper	Total ft ³	0.0	0.5

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Building	245] Ro	om or Area		В	37]
Use			Maguu	una Quatama	Catur			7	
USe	·		vacut	um Systems	selup				
Radionuclides, Ex	tent of Cor	ntaminatio	n ·	Co	o-60, Sr-90	sealed sour	ces	· ·	
Area Classificatio		3]	L				· ·	
# Floors above Ba	sement	0]					1	
# Floors below Ro	of	3							
			%	ft2					
	Tetal	Class d	needing	needing				÷	1
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			1
Floor Area, ft ²	200	L		0		200	1		
Wall Area, ft ²	840			0	<u> </u>	840			1
Ceiling Area, ft ²	200	L	L	0	L	200	l		1
			Fraction	Fraction	Fraction	Fraction	Fraction		
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete		
Glove Boxes								1	· ·
Hoods		·			1	1		1	I
Benches/Tables/D	esks	80	0	Ì		1		1	
Casework/Cabinet		120	0]	
Reefers, Large Eq		200	0						
Misc. Equip./Labw	are	50	0				•		
Hot Cells		465		· ·			 		
Storage Tanks		100	0					1	
Other Sinks		20	0					4	
Drains		0.0	0					1	1
Ventilation Drops		0.0			· · · · · ·			1 [·]	
Terrandon Dropa	L	0.0	1	1	1	1			
Drains	No.	1	Inch Dia.	.2	Total ft ³	0.0			
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		۰.	· ·
-	L						,		1
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	н 	i .
Characterize	1	2	4				1.		1
Equip. Release	1	2	4	-	·		1		1
Pack/Load waste	0.25	0.5			1	1、	0.25		1
Decon/Remed.	0.05	0.5					0.05		1
Final Survey	0.25	0.5	1	· ·			0.25		
# Lab Samples to t	oe collecter	4	1						
		•							i
									1

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Building	245	Ro	om or Area		· E	340		
Use			Wo	men's Rest	room	·		
								1
Radionuclides, Exi Area Classification		taminatio 3	n T		<u>N</u>	one		
# Floors above Bas		0	1					
# Floors below Ro	of	3			.			
			% needing	ft2 needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	70			0		70		i
Wall Area, ft ²	340			0	<u> </u>	340		
Ceiling Area, ft ²	70			0		70		
	,		F	-	F	F		
Componen	nte	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes		10101110						
Hoods								
Benches/Tables/De		18	0		L			
Casework/Cabinets Reefers, Large Equ		40	0		ļ			,
Misc. Equip./Labwa				·				
Hot Cells								
Storage Tanks								
Other			· · · · ·					
Sinks Drains	•	<u>10</u> 0.0	0					
Ventilation Drops	ŀ	0.0						
·	L		· · · · · · · · · · · · · · · · · · ·	· ·	· ·	ار ا		
Drains	No.	1	Inch Dia.	2	Total ft ³	0.0		· · · ·
Ventilation Drops	No.	0	Inch Dia.	· · · · · · · · · · · · · · · · · · ·	Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.25	0.5	1				0.25	
Equip. Release								
Pack/Load waste					·			
Decon/Remed. Final Survey	0.25	0.5	1			├──── }	0.25	
That Survey						LI		
# Lab Samples to b	e collected	l	1					
			•					
۰. ۱								

Building	245] Ro	om or Area		B	41	
Use		· · · · · · · · · · · · · · · · · · ·	M	en's Restro	om		
Radionuclides, Ex	tent of Cor	taminatio		1	N	one	
Area Classificatio		3	i				
# Floors above Ba		0	ł				
# Floors below Ro		3	-				
			% needing	ft2 needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	100			0		100	
Wall Area, ft ²	320			0		320	
Ceiling Area, ft ²	100			0		100	•
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes		1			T		
Hoods							
Benches/Tables/D	esks				1		
Casework/Cabinet	s	15	0				
Reefers, Large Equ	uipment						
Misc. Equip./Labw	are						
Hot Cells							•
Storage Tanks							
Other							
Sinks		3	0				
Drains		0.0	0				
Ventilation Drops	l	0.0					
Drains	No.	3	Inch Dia.	2	Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.	<u> </u>	Total ft ³	0.0	
- sinda on propa				· .].0.011	0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	Mgr 0.25	Supvsr 0.5	HP Tech 1	Shipper	Skilled	Unskilled	Clerical 0.25
Characterize Equip. Release				Shipper	Skilled	Unskilled	
Characterize Equip. Release Pack/Load waste				Shipper	Skilled	Unskilled	
Characterize Equip. Release				Shipper	Skilled	Unskilled	

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Building	245	Ro	om or Area	J	В	342	
Use			С	leaning clos	set		
Radionuclides, Ex			<u>n</u> .	L	N	one]
Area Classification		3					
# Floors above Ba		0]				
# Floors below Ro	of	3					_
· ·	['	Ē	%	ft2		Γ	1
	1 1	1	needing	needing		'	1
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	1
Floor Area, ft ²	64		<u> </u>	0		64	I
Wall Area, ft ²	450		<u> </u>	0		450	I
Ceiling Area, ft ²	64	I		0		64	I
			Fraction	Fraction	Fraction	Fraction	Fraction
Componer	its	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes		<u>ا</u> ــــــــــــــــــــــــــــــــــــ	↓′	↓ '	↓ '	↓	·
Hoods	. /	J'		└──── ′	 '	↓ /	I
Benches/Tables/D		، '		└─── ′	↓ '	↓	——————————————————————————————————————
Casework/Cabinet		ہ ۔۔۔۔۔'	↓	└────'	↓ '	L]	·
Reefers, Large Equ		<u>ا'</u>	L	I'	<u> </u>	L]	l
Misc. Equip./Labwa	are	40	0	L'	<u>لــــــا</u>		·
Hot Cells		<u>ا</u> ــــــــــــــــــــــــــــــــــــ		L'	L'		
Storage Tanks	ļ	·/	ـ	<u>ا'</u>	[/		
Other	·	·'	L	L!	['	L	l
Sinks		l		l	[]		
Drains	,	0.0		l	[]	ĪI	
Ventilation Drops	1	0.0	Ē]				
· · ·	·		I		1	<u> </u>	
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	0.25	0.5	1				0.25
Equip. Release			rt	· +	·t	·	
			· · · · · · · · · · · · · · · · · · ·		rt	· · · · · · · · · · · · · · · · · · ·	
Pack/Load waste		+	<u> </u>		·t		
Pack/Load waste Decon/Remed.							

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		1 –	_					
Building	245	j Ro	om or Area		В	43		
Use			C	leaning clo	set			
Radionuclides, Ext	ent of Cor	ntaminatio	n	1	No	one	1	
Area Classification	1	3]			1.	· ·	
# Floors above Bas # Floors below Roo		0	4					
# 1 IOUIS DEIOW ROC	<i></i>		%	ft2		4		
	Tatal		needing	needing	01 0			
Floor Area, ft ²	Total 64	Class 1	Remed.	Remed.	Class 2	Class 3 64		
Wall Area, ft ²	480		1	0	1	480		
Ceiling Area, ft ²	64			0		64		
Componen	ts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes					Inotal	Loud		
Hoods Benches/Tables/De	- I							
Casework/Cabinets			1					
Reefers, Large Equ	ipment							
Misc. Equip./Labwa Hot Cells	ire	40	0		·			
Storage Tanks								
Other		· ·						
Sinks Drains		0.0	<u> </u>					
Ventilation Drops		0.0						
Drains	No.		Inch Dia.		Total ft ³			
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0 0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled ,	Unskilled	Clerical	
Characterize	0.25	0.5	1	Sinpper	Skilleu (Uliskilleu	0.25	
Equip. Release								
Pack/Load waste Decon/Remed.								
Final Survey	0.25	0.5	1				0.25	
# Lab Samples to b	e collected	ł	1					
<u></u>				· · ·			· · · ·	

				(
				,		•		
Building	245	Ro	om or Area		8	44		
J				L				-
Use	· · · · · · · · · · · · · · · · · · ·	——————————————————————————————————————	PLC Validat	ion & Radio	pactive labe	ling		1
*	<u> </u>							1
Radionuclides, Ex	tent of Con	Itaminatior	1	· ·	TRU, U, B	eta-gamma		1
Area Classificatio		1						-
# Floors above Ba	sement	0						
# Floors below Ro	of	3					_	
	·	· · · · · · · · · · · · · · · · · · ·	%	ft2			}	
			needing	needing	•			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	1	
Floor Area, ft ²	100	100	0.1	10				
Wall Area, ft ²	480	480		0			1	
Ceiling Area, ft ²	100	100		0				
		· · · · · · · · · · · · · · · · · · ·		A				
•			Fraction	Fraction	Fraction	Fraction	Fraction	
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes	[]
Hoods		60	0.5		. 1]
Benches/Tables/D								ļ
Casework/Cabinet		210	0.2	0.5	0.5			
Reefers, Large Eq		40	0		1			[
Misc. Equip./Labw	are	60	0.5	0.8	0.2			1
Hot Cells					L			4
Storage Tanks	ļ							1
Other								
Sinks		1	0					
Drains	· · · •	0.0	0					
Ventilation Drops	. · · [41.7	0		<u> </u>			1
	. Г				.		I	
Drains	No.		Inch Dia.	2	Total ft ³	0.0		
Ventilation Drops	No.	1	Inch Dia.	20	Total ft ³	41.7	,	
	All a set			01.1	0.20	1 los a 1-211 - 1	Olevite - 1	1
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	4	8	16				4	
Equip. Release	4	8	16			0	4	
Pack/Load waste	0.5	1	2	2	2	2	0.5	l
Decon/Remed.	0.5	<u> </u>	<u>2</u> 8		2		0.5 2	
Final Survey	2	4	ð					
# Lob Complex 4- 4	na anlinat	, r						
# Lab Samples to I	De CONECIEC	• <u> </u>	. 1					•
								_

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Building] Ro	om or Area	L	E	46		
Use								١
Radionuclides, Ex	tent of Cor	ntaminatior	า	TRU, U,	Sr-90, beta	a-gamma, lo	w energy	
Area Classificatio		1]					
# Floors above Ba		1	4		ę			
# Floors below Ro		3	%	ft2	1		1	
			needing	needing				-
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	300			0				
Wall Area, ft ²	700			0				
Ceiling Area, ft ²	300	300		0				
Compone	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes Hoods		90	0.5		1			
Benches/Tables/D	esks	120	0.3	0.2	0.8			
Casework/Cabinet			0.2	0.2	0.0			
Reefers, Large Eq								
Misc. Equip./Labw	are	20	0.5	0.2	0.8			İ
Hot Cells								
Storage Tanks								
Other Sinks		3	0.1	0.5	0.5			•
onks Drains		0.1	0.1	0.5	0.5			
Ventilation Drops		125.0	0.1	0.5	0.5			
	1							
Drains	No.	1	Inch Dia.	. 2 .	Total ft ³	0.1		
Ventilation Drops	No.	3	Inch Dia.	20	Total ft ³	125.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	4	8	16				4	
Equip. Release	4	8	16				4	
Pack/Load waste	0.5	1	2	2	2	2	0.5	
Decon/Remed. Final Survey	0.5 2	<u>1</u> 4	2 8		2	2	0.5 2	
rinal Survey	Ζ	4	0					
# Lab Samples to t	pe collected	t l	1					
						·		

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Radionuclides, Ext Area Classification	1			L		• •		
# Floors above Bas # Floors below Roo								·
			%	ft2	•			
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	9495	5481		1090	480	3534		
Wall Area, ft ²	28181	16242		112	1400	10539		1
Ceiling Area, ft ²	9495	5481		0	480	3534		
			—				- 3	
C	4-	Total 42	Fraction	ft ³ DAW	ft ³ Metal	ft ³ Lead	ft ³ Concrete	
Componen Glove Boxes	IS	Total ft3 30	RW	π ⁻ DAW	π metal	π Lead	Concrete	1
Hoods		175						
Benches/Tables/De	esks	539	0			. <u></u> ,		
Casework/Cabinets	S I	1285	0					
Reefers, Large Equ	lipment	2025	0					
Misc. Equip./Labwa	are	424						
Hot Cells		27						
Storage Tanks		1000				·		
Other Sinks		78 35						
onks Drains		4.027778						
Ventilation Drops		46.38889						
	L					· · · · · · · · · · · · · · · · · · ·		
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		ļ
Person-hours	Mgr	Supvsr	HP Tech [Shipper	Skilled	Unskilled	Clerical	
Characterize	78.5	157	314	Snipper 0	O Skilled		78.5	
Equip. Release	31.75	63.5	129	0	_ 0	0	29.75	l
Pack/Load waste	3.05	6.25	10.5	13.5	26	26	3.05	
Decon/Remed.	2.75	5.5	11	4	. 20	20	2.35	
Final Survey	49.75	100.3	199	0	0	0	49.75	ŧ
il als Commission i l			DE					
Lab Samples to b	e collected	1	25					
х.	. *							
								i i

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Use Office Radionuclides, Extent of Contamination Formerly sealed DU Area Classification 3 # Floors above Basement	
Area Classification 3 # Floors above Basement	
Area Classification 3 # Floors above Basement	
# Floors above Basement	
# Floors below Roof	
% ft2	
needing needing	
TotalClass 1Remed.Remed.Class 2Class 3Floor Area, ft²2000200	
Wall Area, ft ² 720 0 720	
Ceiling Area, ft² 200 0 200	
Fraction Fraction Fraction Fraction Fraction Fraction Components Total ft3 RW DAW Metal Lead Concrete	
Glove Boxes Hoods	
Benches/Tables/Desks 120 0	
	р
Reefers, Large Equipment . Misc. Equip./Labware 150	
Hot Cells Storage Tanks	
Other	
Sinks Drains	
Ventilation Drops	
Drains No. Inch Dia. Total ft ³ 0.0	
Ventilation Drops No. Inch Dia. Total ft ³ 0.0	
Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical	
Characterize 0.5 1 2 0.5 Equip. Release 0.5 0.5 0.5	
Pack/Load waste	
Decon/Remed.	1

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Use								
Radionuclides, Ex	tent of Con	taminatio	•		C	p-60	······································	
Area Classification		1			0(
# Floors above Ba	sement		j					
# Floors below Ro	of							
			%	ft2				
,		0	needing	needing		0		
Flags A . 61 ²	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	200	200		0				
Wall Area, ft ² Ceiling Area, ft ²	720	720		0				
Celling Area, π	200	200	0	0	L			
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes								
Hoods								
Benches/Tables/De		150	0					
Casework/Cabinet		40	0					
Reefers, Large Equ								
Misc. Equip./Labwa Hot Cells	are					,		
Storage Tanks								
Other								
Sinks								
Drains								
Ventilation Drops	[
	r		. r		1 2			
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supysr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	1	2	4	2		<u></u>	1	
Equip. Release	0.25	0.5	1				0.25	
Pack/Load waste								
Decon/Remed.								
Final Survey	0.5	1	2				0.5	
# Lab Samples to b	e collected		1	Å.				

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		•		i	×			
Building	245	Ro	om or Area		B	123		
Use	[X-	ray Tube T	est			
Radionuclides, Ex Area Classificatio		tamination	1	S	ealed and u	unsealed TF	<u>ุรบ</u>	
# Floors above Ba		1						
# Floors below Ro		2					-	
			%	ft2			,	
	Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3	<u>`</u>	
Floor Area, ft ²	2500			500			1	
Wall Area, ft ²	6000			0]	
Ceiling Area, ft ²	2500	2500		0]	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes								
Hoods Benches/Tables/D		80	0.1	0.5	0.5			
Casework/Cabinet		140	0.1	0.5	0.5			
Reefers, Large Equ		400	0.1	0.5	0.5		· ·	
Misc. Equip./Labw	are	120	1	0.5	0.5			
Hot Cells Storage Tanks		1000	0.1		··· 1			
Other		1	0.1			1		
Sinks								
Drains		.0.0	0				-	
Ventilation Drops	l	10.0	0				L]	
Drains	No.	0	Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.	4	Inch Dia.	6	Total ft ³	10.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	16	32	64				16	
Equip. Release	16	32	64				16	
Pack/Load waste Decon/Remed.	0.5 0.5	<u>1</u> 1	2	2	4	4	0.5 0.5	
Final Survey	<u> </u>	16	32				0.5	
# Lab Samples to b	e collected) t	2	. •				
								•
	-							
				-				

							5	
						1		
Building	245	Ro.	om or Area		B	125		İ.
Dunung	L243			L	U	120	· · · · · · · · · ·	
Use	۱ <u>۲</u>			Setup Lab				7 [
030	·L					,,,,,,,,		Ţ
dionuclides, Ex	tent of Con	taminatior			Sealed	d Ra-Be		1 .
a Classificatio		1			000.00		<u></u>	1
loors above Ba		·						
loors below Ro								
			%	ft2		Γ	1	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
or Area, ft ²	120	120		0			1	
ll Area, ft ²	880	880	0	0				
ling Area, ft ²	120	120	0	0				
	L			•	I	L	1	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
ve Boxes	[1
ods	ľ							1
nches/Tables/D	esks	20	0					1
sework/Cabinet	s	45	0					1
fers, Large Eq	uipment 🛛	625	0					1
c. Equip./Labw								
t Cells	ſ							
orage Tanks	[
her						·		
nks	[-						
ains	Ĺ	0.0						
ntilation Drops	Į	0.0						
	-							•
ains	No.		Inch Dia.		Total ft ³	0.0		
ntilation Drops	No.	0	Inch Dia.		Total ft ³	0.0		
	•							1
son-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
aracterize	1	2	4				1	
ip. Release	1	2	4				1	
k/Load waste								
con/Remed.								
al Survey	0.5	2	· 2				0.5	
b Samples to t	be collected	۱ (1					

		•			مو				
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						бъ.,			
				•					
Building	1 046			;	·	404		-	7
Building	245	у ко	om or Area			131			
Use	[R	AM Receiv	ina		,	1 :	
							•		
Radionuclides, Ex			n ,	' Tł	i, Beta-gam	ima, low en	ergy		
Area Classificatio		2							
# Floors above Ba		1 2	4					•	
# Floors below Ro			%	ft2	· · · ·	T	1 ·		
			needing	needing					
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²	480			. 0	480				, i
Wall Area, ft ²	1400		1	0	1400		1	. 1	
Ceiling Area, ft ²	480			. 0	480		1		1
							-		
	- 4 -	T .4 1 86	Fraction	Fraction	Fraction	Fraction			
Componei Glove Boxes	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	י ר	
Hoods		25	0.1			· · · · · · · · · · · · · · · · · · ·	· · · ·		
Benches/Tables/D	esks	70	0.1			· · · ·			
Casework/Cabinet	S	4	0			,			
Reefers, Large Eq]	
Misc. Equip./Labw	are				-]	
Hot Cells	,					ļ		4	· ·
Storage Tanks Other		4	0						
Sinks			0		· ·		<u> </u>	ł	
Drains		0.0	0					1	
Ventilation Drops		0.8	0					1·	
-						<u></u>		•	
Drains	No.		Inch Dia.		Total ft ³	0.0			
Ventilation Drops	No.	3	Inch Dia.	2	Total ft ³	0.8].	5	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	ا · ۱	
Characterize	4	8	16	Subbei	United	- Stiskingu	4	1 1	
Equip. Release	1	2	4				1		
Pack/Load waste] .]	
Decon/Remed.									
Final Survey	2	4	8		·	<u>.</u>	2	ŕ.	
# Lab Samples to b	na collecto	Ч							
π Lab Samples to t		u							
							·	· · · · ·	l
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	•								
		. .							
Build	ing 245	រៀ Roc	om or Area	L	B1	132			
1				·					1
- I	Jse		<u> </u>	RAM Storag	je		·		
						•			1
Radionuclides,		ntamination	1	All: TRL	J, U, Beta-ga	amma, Low	E, Sr-90		
Area Classifica		1							
# Floors above	Basement	1].						
# Floors below	Roof	2					_		
			%	ft2 ···] .		
			needing	needing			ł		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²				280		· ·	1		
Wall Area, ft ²	1050				┨─────		i		
					<u> </u>				
Ceiling Area, ft	2 280	280	0	0.	L	L	j		
							– 41		
			Fraction	Fraction	Fraction	Fraction	Fraction		
Compo	nents	Total ft3	RW	DAW	Metal	Lead	Concrete		
Glove Boxes					ļ				
Hoods				J			l		
Benches/Table					ļ	· · · · · ·	I		
Casework/Cabi									
Reefers, Large					L		·		1
Misc. Equip./La	lbware				ļ				
Hot Cells				l				· .	
Storage Tanks			Ì						
Other		20	1			1			
Sinks									
Drains		0.0							
Ventilation Dro	ps ·	0.3	1		1				
Drains	· No.		Inch Dia.		Total ft ³	0.0			
Ventilation Dro			Inch Dia.	2	Total ft ³	0.3			
		· · ·	· •		· ·		· · · · · · · · · · · · · · · · · · ·		· ·
		Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Person-hours	Mar								ļ
Person-hours Characterize	Mgr 4		16						
Characterize	4	8	16				4		
Characterize Equip. Release	4	8	16	1	1	1	4		
Characterize Equip. Release Pack/Load was	4 te 0.25	8 0.5		1	1	1	<u>4</u> 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed.	4 te 0.25 0.25	8 0.5 0.5	1		<u>1</u> 4	1	4 0.25 0.25		
Characterize Equip. Release Pack/Load was	4 te 0.25	8 0.5		1			<u>4</u> 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed.	4 te 0.25 0.25 2	8 0.5 0.5 4	1	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		
Characterize Equip. Release Pack/Load was Decon/Remed. Final Survey	4 te 0.25 0.25 2	8 0.5 0.5 4	1 8	1			4 0.25 0.25		

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Building	245	Boy	om or Area			133		·	-
Building	243			L	D	100			
Use			R	AM Receivi	ing				
	h			_					
Radionuclides, Ex			ļ	L	Beta-gam	ima, U, Th			
Area Classification		1							
# Floors above Ba # Floors below Ro		1	ł						
# FIOOIS DEIOW RO		1	%	ft2	1	· · · · · ·	1		•
			needing	needing					
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²	160		0	0					
Wall Area, ft ²	952						1.		
Ceiling Area, ft ²	160		the second second second second second second second second second second second second second second second s	0			1		
			•				-		•
			Fraction	Fraction	Fraction	Fraction	Fraction		
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	•	
Glove Boxes Hoods		15	0.5		1				
Benches/Tables/D	esks	30	0.5						
Casework/Cabinet		48	0		<u> </u>				
Reefers, Large Equ									
	Misc. Equip./Labware		0						
Hot Cells									
Storage Tanks]	
Other		5	0						
Sinks Drains		4 0.3	0						
Ventilation Drops		0.0	0						
	ļ	0.0			1		<u> </u>		
Drains	No.	2	Inch Dia.	2	Total ft ³	0.3			
Ventilation Drops	No.		Inch Dia.	****	Total ft ³	0.0		·	
						······································			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled			
Characterize	3	6 2	<u>12</u> 4				3		
Equip. Release Pack/Load waste	1 	0.5	4		1	1	0.25		
Decon/Remed.	0.20	0.5					0.23	· .	
Final Survey	·1	2	4				1		
									•
# Lab Samples to b	pe collected	1 (1						
	····								•
·		•							
				•		1			
								•	
		•							

Building	245	Ro	om or Area		В	140		
Use	,		High D	ose Calibra	ation Lab			
Radionuclides, Ex	tent of Cor	taminatio	n		Sealed Co-6	0 source on	ily.	
Area Classificatio		3].					
# Floors above Ba		1						
# Floors below Ro	of	2	0/				1	
			% needing	ft2 needing		а. С		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	1400	01033 1	Keineu.	0	010332	1400		
Wall Area, ft ²	2800			0		2800		
Ceiling Area, ft ²	1400		1	0	+	1400		
Vennig Alea, IL	1 1400	L	1	LV		1 1400	I	
Compone	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes					1			
Hoods						1		
Benches/Tables/D								
Casework/Cabine								
Reefers, Large Eq		1000	0					
Misc. Equip./Labw	vare	30	0					
Hot Cells Storage Tanks								
Other								
Sinks		3	0					
Drains		0.1	0					
Ventilation Drops		.1.9	0			<u> </u>		
	r		1		۔ م	·		
Drains	No.	1	Inch Dia.	2	Total ft ³	0.1		
Ventilation Drops	No.	7	Inch Dia.	2	Total ft ³	1.9		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	1.5	3	6				1.5	
Equip. Release	0.5	1	4			· .	0.5	
Pack/Load waste	0.5	1	2	2	4	- 4	0.5	
Decon/Remed.	0.75	4.0				`	0.75	
Final Survey	0.75	1.3	3				0.75	
								-

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Building	245] Ro	om or Area		В	141	·	<u></u>
Use			Neutr	on Calibrati	on Lab]
Radionuclides, Ext	tent of Cor	tamination		l Seale	d AmBe P	uBe, RaBe,	Cf-252	-
Area Classification	ו	1	j.		<u>u</u>	400,1400,		1
# Floors above Bas # Floors below Ro		1 2	_					
#110013 Delow Red			%	ft2	, · · ·	Ţ.	1 .	
	Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3		
Floor Area, ft ²	250				<u> </u>		- ·	
Wall Area, ft ² Ceiling Area, ft ²	1120 250	1120 250			<u> </u>		-	•
Componen		Total ft3	Fraction	Fraction	Fraction	Fraction	Fraction	
Glove Boxes	115	Total Its	RW	DAW	Metal	Lead	Concrete	1
Hoods								
Benches/Tables/De Casework/Cabinets		<u>3</u> 5	0.25	0.5	0.5	<u> </u>		
Reefers, Large Equ			0.25	0.0	0.0	<u> </u>		
Misc. Equip./Labwa	are	4	0	0.75	0.05			
Hot Cells Storage Tanks		12	1	0.75	0.25			
Other								
Sinks Drains		2	0					
Ventilation Drops	ſ	0.1	0	· · ·				
	r		ے		ـــــــــــــــــــــــــــــــــــــ	······································	د ۱	
Drains Ventilation Drops	No. No.		Inch Dia. Inch Dia.	2.	Total ft ³ Total ft ³	0.1		
ventilation brops	NO.[Total It	0.0]	•
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled		
Characterize Equip. Release	4	8	<u>16</u> 4		<u> </u>		4	
Pack/Load waste	0.5	1	2	2	4	4	0.5	
Decon/Remed.	0.5	1	2		4	4	0.5	
Final Survey	2	4	8			<u> </u>	2	
# Lab Samples to b	e collected	J · [2					
					·			

Building	245] Ro	om or Area		B142	& B143	
Use				RAM Storag			
,	· ·	· · · · · · · · · · · · · · · · · · ·					
Radionuclides, Ex			n	Se	ealed source	es - all nucli	des
Area Classification		3					
# Floors above Ba		1	<u> </u> .			,	
# Floors below Ro	of	2			·····		
	•		%	ft2		ŀ	
	Tatal		needing	needing	0	0	
Flage Auge 6 ²	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	720			0	<u> </u>	720	
Wall Area, ft ²	1400		<u> </u>	0		1400	
Ceiling Area, ft ²	720	·	1	0		720	
Componei	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes			<u> </u>				
Hoods		۰ ·					
Benches/Tables/D	esks	,	1		1		4.6
Casework/Cabinet	s	40	0				
Reefers, Large Eq	uipment						
Misc. Equip./Labw	are						
Hot Cells							
Storage Tanks							
Other		6	0				
Sinks							
Drains	•	0.0					
Ventilation Drops		0.8	0				<u> </u>
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.	3	Inch Dia.	2	Total ft ³	0.8	
ventilation brops	NO.[<u> </u>		0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	2.5	5	10				2.5
Equip. Release	1	2	4				1
Pack/Load waste	0.5	1	2	4	4	4	0.5
Decon/Remed.							
Final Survey	0.5	1	2				0.5
# Lab Samples to b	oe collected	t	0				

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Building	245	Dec	om or Area	r		145	, .	
Building	245	ROC	on of Area		D	140]
Use			So	urce calibra	ation			1
								1
Radionuclides, Ex	tent of Con	tamination	1	TRU, I	Ra, Beta-ga	mma, Sr-90	, Low E	1
Area Classificatio		1					,	4
# Floors above Ba	sement	1						
# Floors below Ro	of	2					-	
,			%	ft2				
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	-	
Floor Area, ft ²	288	288	0.5					
Wall Area, ft ²	1120	1120	0					
Ceiling Area, ft ²	288	288	0	0			J .	•
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componer	nte	Total ft3	RW	DAW	Metal	Lead	Concrete	
	п.э Г			DAN	Metal		I	ר
INNOVE BOXES								
Glove Boxes Hoods	ŀ							-
Hoods	esks	3						
		3 2	0.5	0.5	0.5			
Hoods Benches/Tables/D	s		0.5	0.5	0.5			
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw	s uipment		0.5	0.5	0.5		· ·	
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells	s uipment	2	0.5	0.5	0.5		·	
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks	s uipment	2 10	0.5	0.5	0.5			
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other	s uipment	2	0.5	0.5	0.5			
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks	s uipment	2 10 4	0.5	0.5	0.5			
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains	s uipment	2 10 4 0.0	0.5	0.5	0.5			
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks	s uipment	2 10 4	0.5	0.5	0.5			
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops	s uipment are	2 10 4 0.0 0.6		0.5				
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains	s uipment are No.	2 10 4 0.0 0.6	Inch Dia.		Total ft ³	0.0		
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops	s uipment are	2 10 4 0.0 0.6		0.5		0.0		
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops	s uipment are No. No.	2 10 4 0.0 0.6 2	Inch Dia.	2	Total ft ³ Total ft ³	0.6	Clerical	
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains	s uipment are No.	2 10 4 0.0 0.6	Inch Dia.		Total ft ³		Clerical	
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours	s uipment are No. No.	2 10 4 0.0 0.6 2 Supvsr	Inch Dia. Inch Dia.	2	Total ft ³ Total ft ³	0.6		
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	s uipment are No. No. <u>Mgr</u> 6	2 10 4 0.0 0.6 2 Supvsr 12 2 0.5	Inch Dia. Inch Dia. Inch Dia. HP Tech 24 4 1	2	Total ft ³ Total ft ³ Skilled	0.6 Unskilled	6	
Hoods Benches/Tables/D Casework/Cabinet Reefers, Large Equ Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	s uipment are No. No. <u>Mgr</u> 6 1	2 10 4 0.0 0.6 2 Supvsr 12 2	Inch Dia. Inch Dia. Inch Dia. HP Tech 24 4	2 Shipper	Total ft ³ Total ft ³ Total ft ³	0.6 Unskilled	6 1	

Building	245] Ro	om or Area		1st Floor B-	wing Hallwa	y
Use				Hallway			
Radionuclides, Ex	tent of Cor	taminatio	า	Potent	iallv all radi	onuclides fro	om labs
Area Classificatio	n	3]				
# Floors above Ba # Floors below Ro		1	1				
	T		%	ft2			
	Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3	
Floor Area, ft ²	216	the second second second second second second second second second second second second second second second s	- Tterneu.	0	01033 2	216	
Wall Area, ft ²	864			0		864	
Ceiling Area, ft ²	216	 		0		216	
Compone	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes							
Hoods Benches/Tables/D	eskš						
Casework/Cabinet							
Reefers, Large Eq							
Visc. Equip./Labw Hot Cells	are						
Storage Tanks							
Other							
Sinks							
Drains /entilation Drops		0.0					
ventilation brops	, I	0.0	L			لــــــــــــــــــــــــــــــــــــ	
Drains	No.		Inch Dia.		Total ft ³	0.0	
/entilation Drops	No.		Inch Dia.		Total ft ³	0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	 	Oupvar		Unipper	JKIIIEU	Uliskilleu	Olencal
Equip. Release						-	
Pack/Load waste							
Decon/Remed. Final Survey	2	4	8				2
Lab Samples to I	<u> </u>	t t	0				
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1				ŕ					
		_							_
Building	245	Ro	om or Area		B	146			
Use	····			Packaging				-	
						0.00			
Radionuclides, Ext Area Classification		tamination	ו 	L IRU, I	Ra, Beta-ga	mma, Sr-90	, Low E		
# Floors above Bas	sement	1						· .	
# Floors below Ro	of	1		- 40 ·			1	•	
		- "	% needing	ft2 needing					
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²	273	273	0	0					
Wall Area, ft ²	1100	1100		1 ··· ··	ļ,				[
Ceiling Area, ft ²	273	273	0	0					
	· .		Fraction	Fraction	Fraction	Fraction	Fraction	•	1
Componen	its	Total ft3	RW	DAW	Metal	Lead	Concrete		1
Glove Boxes Hoods									
Benches/Tables/De	esks	30	0						
Casework/Cabinets	5	60	0						
Reefers, Large Equ		40		, ,					
Misc. Equip./Labwa Hot Cells	are .	10	0						
Storage Tanks	ł	······							·
Other									
Sinks Drains		0.0					·		
Ventilation Drops	-	0.0		H					
	-						J		
Drains	No.		Inch Dia.		Total ft ³	0.0		2	
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0			ĺ
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Characterize	6	12	24				6		
Equip. Release	1	2	4				.1		1
Pack/Load waste Decon/Remed.									
Final Survey	3	6	12		· · · · · · · · · · · · · · · · · · ·		3		
	11 4	. T							
# Lab Samples to b	e conected	·. [1						
	· · · · · · · · · · · · · · · · · · ·	······································					•		s ⁻
			ξ.						
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•					ſ				
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								ţ	

Building	245	Ro	om or Area		В	147	
Use			F	lectrical Ro			<u> </u>
036	L						
Radionuclides, Ex	tent of Con	taminatio	n	L	/ N e	one	
Area Classification		3					
# Floors above Ba	sement	1					
# Floors below Ro	of	2					_
			%	ft2			
	}		needing	needing		{	
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	84		·	0		84	
Wall Area, ft ²	560			0		560	
Ceiling Area, ft ²	84			0		84	
							-
and the second second			Fraction	Fraction	Fraction	Fraction	Fraction
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes							, in the second s
Hoods							
Benches/Tables/D							
Casework/Cabinet							
Reefers, Large Equ							
Misc. Equip./Labw	are						
Hot Cells							
Storage Tanks					ļ		
Other					L		
Sinks							
Drains		0.0			ļ		
Ventilation Drops		0.0					
	r		, ı				I
Drains	No.		Inch Dia.	·	Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
			·		-		·
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize					L		
Equip. Release							
Pack/Load waste		- <u></u>					
Decon/Remed.				·			
Final Survey	0.5	1	2				0.5
# Lab Samples to b	e collected	ł	0				

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Building	245	Ro	om or Area		. B*	149	
Use	F		Te	lephone Ro			
030	<u>L</u>	<u> </u>			<u> </u>	· · ·	
Radionuclides, Ex	tent of Con	taminatior	n		. No	one]
Area Classificatio	n [3	1				
# Floors above Ba		1	1				
# Floors below Ro	of	2	1				_
	[]		%	ft2	Ţ		l
		· ·	needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	j
Floor Area, ft ²	84			0		84	
Wall Area, ft ²	560		I	0	[560	
Ceiling Area, ft ²	84			0		84	
Componer	nte	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes	 ۲		T		Γ		<u> </u>
Hoods	1		ł		ł	<u> </u>	
Benches/Tables/D	esks				[
Casework/Cabinet	s [
Reefers, Large Equ							
Misc. Equip./Labw	are						
Hot Cells							
Storage Tanks				Γ			
	4				•		
Other	ŀ						
Other Sinks							
Other Sinks Drains		0.0	· · · · · · · · · · · · · · · · · · ·				
Other Sinks	, , ,	0.0					
Other Sinks Drains Ventilation Drops	No						
Other Sinks Drains Ventilation Drops Drains	No.		Inch Dia.		Total ft ³	0.0	
Other Sinks Drains Ventilation Drops	No. No.		Inch Dia. Inch Dia.		Total ft ³ Total ft ³	0.0	
Other Sinks Drains Ventilation Drops Drains				Shipper			Clerical
Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize	No.	0.0	Inch Dia.	Shipper	Total ft ³	0.0	Clerical
Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No.	0.0	Inch Dia.	Shipper	Total ft ³	0.0	Clerical
Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	No.	0.0	Inch Dia.	Shipper	Total ft ³	0.0	Clerical
Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No.	0.0	Inch Dia.	Shipper	Total ft ³	0.0	Clerical

Building	245] Ro	om or Area		В	150] .
Use			Ме	n's locker r	room]
Radionuclides, Ex	tent of Cor	taminatio	n	ł	Ν	one		1.
Area Classificatio		3	Ï	L				1
# Floors above Ba		. 1	1					
# Floors below Ro		2	1	L.				
			%	ft2				
			needing	needing		f		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	280			0		280		
Wall Area, ft ²	1120			Ö		1120		
Ceiling Area, ft ²	280			0		280		
Compone	nte	, Total ft3	Fraction RW	Fraction	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes	11.5	TULATILS			wieldi	Leau	Concrete	
Hoods			· · · ·					
Benches/Tables/D	esks							
Casework/Cabinet								
Reefers, Large Eq								
Misc. Equip./Labw								
Hot Cells								
Storage Tanks								
Other								
Sinks		4	ļ					
Drains		0.3						
Ventilation Drops	l	0.0				l		
Drains	No.	2	Inch Dia.	2	Total ft ³	0.3		
Ventilation Drops	No.	۷	Inch Dia.	۷	Total ft ³	0.0		
ventuation props	NO.[······		L		0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
	1	2	4				1	
Characterize								
Characterize Equip. Release								
Characterize Equip. Release Pack/Load waste					l			
Characterize Equip. Release	0.5	1	2				0.5	

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Building	245] Ro	om or Area		B	152			
Use	ſ <u></u>		R	adiochemis	stry	<u> </u>	······································]	а. А.
Dedienveliden Ev	tent of Cor							-	: · · ·
Radionuclides, Ex				IRU, I	Ra, Beta-ga	mma, Sr-90	, LOW E	J	1
Area Classification		1							
# Floors above Ba		1							
# Floors below Ro	of	1	L				۰ ^۲		ا ب
· ·	ł	}	%	ft2	1	1			
			needing	needing			1		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	ļ		
Floor Area, ft ²	480	480	0.1	48					
Wall Area, ft ²	1100	1100		0.			•		
Ceiling Area, ft ²	480	480		0				· .	
Compose	- 4	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction	Fraction Concrete		
Componer Glove Boxes	່	Total no		DAW	Ivietai	Lead	Concrete		
Hoods		60	0.5		1				
Benches/Tables/D	eeke	20	0.5		<u> </u>	<u> </u>			<i>,</i> .
Casework/Cabinet		250			{	<u> </u>			
		200	0	,	<u> </u>				
Reefers, Large Equ		30							
Misc. Equip./Labw Hot Cells	are	30 .	0		<u> </u>				
					ļ	<u> </u>			
Storage Tanks					 				
Other		10	0						
Sinks		8	0.1				·		
Drains	,	1.1	0						
Ventilation Drops	ĺ	1.1	0.1		1	Ĺ	·		•
- ·			I		1		L		
Drains	No.		Inch Dia.	2	Total ft ³	1.1			
Ventilation Drops	No.	8	Inch Dia.	2	Total ft ³	1.1			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Characterize	8	16	32				8		
Equip. Release	4	8	16		· · ·		4		
Pack/Load waste	0.1	0.25	0.5	0.5	2	2	0.1		:
Decon/Remed.	0.5	1	2		2	2	0.5		·
Final Survey	6	12	24	······································			6		
# Lab Samples to b	e collected	ı [1						

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Use	L			Restroom				
Radionuclides, Ex			n		N	one		
Area Classification		3	1					
# Floors above Ba		1	1					
# Floors below Ro	of	2	L				1	
			%	ft2				
		. .	needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	84			0		84		
Wall Area, ft ²	315	· · · · · · · · · · · · · · · · · · ·		0		315		
Ceiling Area, ft ²	84		I	0		84		
Componer	nte.	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes	113				Mietai			
Hoods								
Benches/Tables/D	ecks	·····						
Casework/Cabinet			 					
Reefers, Large Equ			 	·	<u> </u>			
Misc. Equip./Labwa			 					
Hot Cells								
Storage Tanks					t			
Other								
Sinks	Ì							
Drains		0.0						
Ventilation Drops		0.0						•
	-							
Drains	No.		Inch Dia.		Total ft ³	0.0		
/entilation Drops	No.		Inch Dia.		Total ft ³	0.0		
·			· ·	· · · · · · · · · · · · · · · · · · ·	• 			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize					·			
Equip. Release								
Pack/Load waste	·							
Decon/Remed. Final Survey	·					·		
	0.5	1	2				0.5	

Building Use Radionuclides, Ext Area Classification # Floors above Bas # Floors below Roo Floor Area, ft ²	sement of <u>Total</u> 70		%	on-rad stora	ige	155 one		
Use Radionuclides, Ext Area Classification # Floors above Bas # Floors below Roo	ent of Con sement of Total 70	itamination 3 1 1	N/	on-rad stora	ige			
Use Radionuclides, Ext Area Classification # Floors above Bas # Floors below Roo	ent of Con sement of Total 70	itamination 3 1 1	N/	on-rad stora	ige			
Use Radionuclides, Ext Area Classification # Floors above Bas # Floors below Roo	ent of Con sement of Total 70	itamination 3 1 1	N/	on-rad stora	ige			
Radionuclides, Ext Area Classification # Floors above Bas # Floors below Roo	sement of <u>Total</u> 70	3 1 1	%			one	·	
Area Classification # Floors above Bas # Floors below Roo	sement of <u>Total</u> 70	3 1 1	%	· .	N	one		
Area Classification # Floors above Bas # Floors below Roo	sement of <u>Total</u> 70	3 1 1	%	• •				
# Floors below Roo	of Total 70	1						
	Total 70	Class 1						
Floor Area, ft ²	. 70	Class 1	I maadima	ft2 needing		· · ·		-
Floor Area, ft ²	. 70		needing Remed.	Remed.	Class 2	Class 3		
				0	[70	•	
Wall Area, ft ²	280			0		280		·
Ceiling Area, ft ²	70		<u>i</u>	0	L	70		
Component	ts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes Hoods			[
Benches/Tables/De								
Casework/Cabinets		6	<u>, 0</u>					
Reefers, Large Equ Misc. Equip./Labwa								
Hot Cells		· · · · ·						
Storage Tanks Other		8	0					
Sinks								
Drains Ventilation Drops		0.0						
Ventilation Drops	l	0.0			L		J	
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	÷.,	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize Equip. Release					· · · · · · · · · · · · · · · · · · ·			
Pack/Load waste		• • • • ·						
Decon/Remed.	0.05	0.5					0.05	· · · ·
Final Survey	0.25	0.5	1			LI	0.25	
# Lab Samples to be	e collected	t ,	0					
		<u></u>						
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Building	245	Ro	om or Area		Hal	lway	
Use			Adjacen	t to B-152,	156, 157		
Radionuclides, Ex	tent of Con	Itaminatio	n	None	(all nuclides	in adjacent	rooms)
Area Classificatio	n	3	7				
# Floors above Ba	sement	1	.]				
# Floors below Ro	of	1					-
			%	ft2			Į
			needing	needing	1	1	ł
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	396			0	1	396	
Wall Area, ft ²	1920			0		1920	
Ceiling Area, ft ²	396			0		396	
							-
		•	Fraction	Fraction	Fraction	Fraction	Fraction
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes	1		L		l		
Hoods					<u> </u>		
Benches/Tables/D				·			
Casework/Cabinet	L				ļ		
Reefers, Large Equ					<u> </u>		·
Misc. Equip./Labw	are						·
Hot Cells					· · · · · ·		
Storage Tanks Other	ł				<u> </u>		
Sinks					<u></u>		
Drains	ŀ	0.0				·	
Ventilation Drops	ŀ	0.0			h		
ventilation Drops	L	0.0	LI		l		
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
		<u> </u>		- <u></u>			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize							
Equip. Release							
Pack/Load waste							
Decon/Remed.							
Final Survey	1	2	4				1

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Building		·	om or Area	adiochemis		156		
		· · ·					l	
Radionuclides, E Area Classificatio		tamination	י ד	TRU,	Ra, Beta-ga	mma, Sr-90	, Low E	
# Floors above B		1	-					
# Floors below R		1						1
	<u> </u>		%	ft2			1	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	480				L			
Wall Area, ft ²	1100			0		-		
Ceiling Area, ft ²	480	480		0		*		
Compone	onte	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes	in t5				Wetai			
Hoods		45	0.5		1			
Benches/Tables/I	Desks	10		·····				
Casework/Cabine		275						
Reefers, Large Ec								
Misc. Equip./Labv	vare	25						
Hot Cells		15	0.5	0.75		0.25		
Storage Tanks		00			ļ			
Other Sinks		<u>20</u> 10						
Drains		1.0			<u> </u>			
Ventilation Drops		20.0	0.1		1			
Dusias	Na	7	Inch Dia.		Total ft ³			
Drains	No.			2 12		1.0		1
Ventilation Drops	No.	4	Inch Dia.		Total ft ³	20.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	8	16	32				8	
Equip. Release	2	4	8				1	1
Pack/Load waste	0.1	0.25	0.5	0.5	2	2	0.1	
Decon/Remed.	0.25	0.5	1		2	2	0.05	
Final Survey	6	12	24				6	
#Lab Comulas to	be collected	t t	1		,			

Building	245] Ro	om or Area	۱ <u>ــــــــــــــــــــــــــــــــــــ</u>	B	157		
Use			S	RM Produc	tion	· · · · · · · · · · · · · · · · · · ·		
Radionuclides, Ex Area Classification		taminatio	n T	TRU,	Ra, Beta-ga	ımma, Sr-90	, Low E	
# Floors above Ba	sement		1					
# Floors below Ro	Total	1 Class 1	% needing Remed.	ft2 needing Remed.	Class 2	Class 3		
Floor Area, ft ²	450		0.1				1	
Wall Area, ft ²	1100	1100		0	1			
Ceiling Area, ft ²	450			0				i
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes		30	1	T	1			
Hoods		30	1		1			
Benches/Tables/D		3	0.1	0.5	0.5			
Casework/Cabinet		250	0.1	0.5	0.5		i	
Reefers, Large Equ								
Nisc. Equip./Labw	are	5	0.1	0.5	0.5	L	· · ·	
Hot Cells				<u> </u>	<u> </u>	<u> </u>		
Storage Tanks Other								
Sinks		4	0.1		1	<u> </u>		
Drains		1.1	0.1		1			
/entilation Drops		10.0	0.1		1	<u>├</u>		
•				· ·		L		
Drains	No.	2	Inch Dia.	4	Total ft ³	1.1		
Ventilation Drops	No.	2	Inch Dia.	12	Total ft ³	10.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	8	16	32				8	
Equip. Release	2	4	8			· · · ·	1	
Pack/Load waste	0.1	0.25	0.5	0.5	2	2	0.1	
Decon/Remed.	0.25 6	0.5	1		2	2	0.05	
inal Survey	0	12	24	·		L 1	6	
# Lab Samples to b	e collected	ł	1					

		_						
Building	245	Ro	om or Area		В	009		,
Use	»		Formerly lab	; released	, now non-ra	ad]
Radionuclides, E	xtent of Co	ntaminatio	n [.]	Seal	ed and unse	aled Beta-g	amma	l
Area Classificatio		3	1 .			¥		
# Floors above Ba	asement		1					
# Floors below Ro	oof		1					
			%	ft2]	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	P	
Floor Area, ft ²				0		ı		· · ·
Wall Area, ft ²				0				
Ceiling Area, ft ²	1			0				
Compone Glove Boxes	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Hoods								
Benches/Tables/D)esks				1			
Casework/Cabine	ts				1 .			
Reefers, Large Eq	juipment							
Misc. Equip./Labv	vare							
Hot Cells								
Storage Tanks					Ļ			
Other					ļ			
Sinks					ļ			
Drains		0.0	ļ					
Ventilation Drops		0.0						
Draina	Na	<u> </u>	Inch Dia.		Total ft ³	00		
Drains	No.		-	· · · · · · · · · · · · · · · · · · ·		0.0		
Ventilation Drops	No.		Inch Dia.]Total ft ³	0.0		· · ·
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled		
Characterize	<u>1</u> .	2	4				1	
Equip. Release								· ·
Pack/Load waste			↓ ↓		ļ		,	,
Decon/Remed.		ļ]			
Final Survey	1 1	2	4		· ·		1	

	,							
Use Formerly lab; released, now non-rad Radionuclides, Extent of Contamination Formerly sealed Cf-252 Area Classification 1 Formerly sealed Cf-252 # Floors above Basement 1 1 # Floors above Basement 1 1 # Floors below Roof % ft2 needing Mail Area, ft ² 0 1 1 Wall Area, ft ² 0 1 1 Wall Area, ft ² 0 1 1 Components Total ft3 RW DAW Metal Lead Concre Glove Boxes 1								
Use Formerly lab; released, now non-rad Radionuclides, Extent of Contamination Area Classification 1 # Floors above Basement 7 # Floors below Roof % ft2 Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 0 0 0 0 0 Wall Area, ft ² 0 0 0 0 0 Gelling Area, ft ² 0 0 0 0 0 Glove Boxes Total ft3 RW DAW Metal Lead Concres Glove Boxes								
Use Formerly lab; released, now non-rad Radionuclides, Extent of Contamination Area Classification 1 # Floors above Basement 6 # Floors below Roof 7 Total Class 1 Remed. Remed. Remed. Class 2 Class 3 Floor Area, ft ² 0								
Use Formerly lab; released, now non-rad Radionuclides, Extent of Contamination Area Classification 1 # Floors above Basement 7 # Floors below Roof % ft2 Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 0 0 0 0 0 Wall Area, ft ² 0 0 0 0 0 0 Gove Boxes Total ft3 RW DAW Metal Lead Concres Glove Boxes Casework/Cabinets Casework/Cabinets Casework/Cabinets Casework/Cabinets Casework/Cabinets Reefers, Large Equipment 0.0 0.0 0.0 0.0 0.0 Drains 0.0 Inch Dia. Total ft ³ 0.0 0.0 Drains No. Inch Dia. Total ft ³ 0.0 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clericica Pack/Load waste 0 0 0 0								
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	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
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	Т		Fraction	Fraction	Fraction	Fraction	Fraction	
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
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Use Area Classification # Floors above Basement # Floors below Roof <u>Total total Class 1 Remed. Remed. Class 2 Class 3</u> <u>Floor Area, ft² 7019 3065 Components <u>Fraction total 7019 3065 Components <u>Fraction total 7019 3065</u> Glove Boxes <u>1000 4000 3000 3000 100860</u> Not Edstain Area, the total 7019 3065 <u>1000 4000 3000 3000 3000 100860</u> Slove Boxes <u>Total ft 7 RW ft 7 Metal ft 7 Lead Concrete 300 100860</u> Glove Boxes <u>300 10000000000000000000000</u></u></u>	Building	245	Ro	om or Area		CV	Ving		
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E 1	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
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Use Contact Shop Radionuclides, Extent of Contamination None Area Classification O Area classification O # Floors above Basement # Floors below Roof None Total Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 1500 0 1500 Components Total ft3 Remed. Class 2 Class 3 Glove Boxes Total ft3 RW DAW Metal Lead Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 Metal Concrete Total ft3<	Building	245	Ro	om <mark>or Ar</mark> ea			:06		
Area Classification 3 # Floors above Basement - # Floors below Roof - Total Class 1 Remed. Class 2 Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 1500 Wall Area, ft ² 4320 Ceiling Area, ft ² 1500 Components Total ft3 RW DAW Metal Lead Concrete - Hoods 1 Benches/Tables/Desks 200 Casework/Cabinets 450 Reefers, Large Equipment 650 Misc. Equip./Labware 200 Hot Cells - Storage Tanks - Other - Orains No. Janch Dia. - Drains No. Ventilation Drops No. Janch Dia. - Person-hours Mgr Supysr HP Tech Shipper Skilled Outor -	Use		<u> </u>	(Contact Sho	op ,		<u> </u>]
Area Classification 3 # Floors above Basement - # Floors below Roof - Total Class 1 Remed. Class 2 Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 1500 Wall Area, ft ² 4320 Ceiling Area, ft ² 1500 Components Total ft3 RW DAW Metal Lead Concrete - Hoods 1 Benches/Tables/Desks 200 Casework/Cabinets 450 Reefers, Large Equipment 650 Misc. Equip./Labware 200 Hot Cells - Storage Tanks - Other - Orains No. Janch Dia. - Drains No. Ventilation Drops No. Janch Dia. - Person-hours Mgr Supysr HP Tech Shipper Skilled Outor -	Padionuolidae Ex	tent of Cor	tominotio	-	(N	000		1
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Total Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 1500 0 1500 Wall Area, ft ² 4320 0 4320 Ceiling Area, ft ² 1500 0 1500 Ceiling Area, ft ² 1500 0 1500 Ceiling Area, ft ² 1500 0 1500 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 1 0	# Floors above Ba	sement		1					•
Total Class 1 needing Remed. needing Remed. Class 2 Class 3 Floor Area, ft ² 1500 0 1500 Wall Area, ft ² 4320 0 4320 Ceiling Area, ft ² 1500 0 1500 Ceiling Area, ft ² 1500 0 1500 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 1 0	# Floors below Ro	of T		0/	H2		1	1	
Total Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 1500 0 1500 Wall Area, ft ² 4320 0 4320 Ceiling Area, ft ² 1500 0 1500 Ceiling Area, ft ² 1500 0 1500 Ceiling Area, ft ² 1500 0 1500 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 1 0									
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Components Glove Boxes HoodsTotal ft3RWDAWFraction MetalFraction LeadFraction ConcreteBenches/Tables/Desks10									
Components Glove Boxes HoodsTotal ft3RWDAWMetalLeadConcreteGlove Boxes Hoods10Benches/Tables/Desks Casework/Cabinets2000Benches/Tables/Desks Casework/Cabinets4500Reefers, Large Equipment Misc. Equip./Labware Hot Cells6500Storage Tanks Other SinksDrains Ventilation DropsNo.Inch Dia.Total ft30.0Person-hours CharacterizeMgrSupvsrHP TechShipperSkilledUnskilledClericalPack/Load waste Decon/Remed1	Cening Area, π	1500		1	0		1500	l	
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Hoods 1 0	Glove Boxes	nts	l otal ft3			Metal	Lead	Concrete	1
Benches/Tables/Desks 200 0			1	0		· · ·			
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Hot Cells						ļ			
Storage Tanks		are	200	0	•	ļ			
Other Image: Sinks Image: Sinks Image: Sinks Image: Sinks Drains No. Inch Dia. Image: Sinks Image: Sinks Ventilation Drops No. Inch Dia. Image: Total ft ³ 0.0 Drains No. Inch Dia. Image: Total ft ³ 0.0 Ventilation Drops No. 3 Inch Dia. 20 Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 1 2 4 1 1 Equip. Release Image: Supvsr HP Tech Shipper Skilled Unskilled Clerical Pack/Load waste Image: Supvsr <									
Sinks									
Ventilation Drops No. Inch Dia. Total ft ³ 0.0 Drains No. Inch Dia. Total ft ³ 0.0 Ventilation Drops No. 3 Inch Dia. 20 Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 1 2 4 1 1 Equip. Release Pack/Load waste Decon/Remed.	Sinks								
DrainsNo.Inch Dia.Total ft³0.0Ventilation DropsNo.3Inch Dia.20Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize12411Equip. Release1Pack/Load waste </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
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Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 1 2 4 1 1 Equip. Release 1 2 4 1 Pack/Load waste 1 1 1 Decon/Remed. 1 1 1	Drains	No.		Inch Dia.		Total ft ³	0.0		
Characterize 1 2 4 1 Equip. Release	Ventilation Drops	No.	3	Inch Dia.	20	Total ft ³	0.0		
Characterize 1 2 4 1 Equip. Release	Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Pack/Load waste	Characterize								
Decon/Remed.						ļ			
		15	2	6		a		1.5	
	Final Survey	1.0		0		l		1.5	

Ĺ	Building	245	Ro	om or Area		C	006]
	Use				SRM Storag	je			1	
Ra	idionuclides, Ex	tent of Con	taminatio		.		onuclides		-	
Ar	ea Classificatio	n	1]		7117001			1	
	Floors above Ba			-						[
· #	Floors below Ro			%	ft2		1	1		}
		Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3			
FI	oor Area, ft ²	400	400		0					
W	all Area, ft ²	1120	1120		0					
Ce	eiling Area, ft ²	400	400	l	0		<u> </u>	ł		l
	Componer	nts .	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete		. ·
GI	ove Boxes	[10141110							
	ods					•				, i
	nches/Tables/D									
	sework/Cabinet		200 36	0		<u> </u>	<u> </u>			
	efers, Large Equ sc. Equip./Labw									
	ot Cells					<u> </u>				
	orage Tanks		- <u></u> .	(/			·			
Ot	her		100	0						
	nks									
	ains		······						•	
ve	ntilation Drops	L		L		l		L		•
Dra	ains	No.		Inch Dia.		Total ft ³	0.0			
Ve	ntilation Drops	No.		Inch Dia.		Total ft ³	0.0			
Pe	rson-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Ch	aracterize	4	. 8	16				4		
	uip. Release	4.5	8	16				4.5		
	ck/Load waste	0.1	1	· · · · ·		2	2	0.1		
	con/Remed. al Survey	2	4	8				2		
F.		^	·			L	J			
# L	ab Samples to b	e collected	I	1						

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	£							•
Building	245	l Ro	om or Area	, <u> </u>		210		r
Bunding] 1.0		·I		//0		l.
Use			Environn	nental Radio	ochemistry			
Radionuclides, Ex		· · · · · · · · · · · · · · · · · · ·	ļ	L	Beta-gan	nma, Low E		
Area Classification		1	4		•			
# Floors above Bas # Floors below Ro		2	{					
# FIGOIS DEIOW RO		2	%	ft2	1	<u> </u>	٦	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	800				1	1	1	
Wall Area, ft ²	1800			0	1	· · ·	1	i.
Ceiling Area, ft ²	800			0	1		1	
					<u>. </u>	<u> </u>	4	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componen	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes		30	1	·	1		·	
Hoods		60	0.5	<u> </u>	1			
Benches/Tables/De		312	0.1	1	0.75			
Casework/Cabinets		250	0.1	0.25	0.75			
Reefers, Large Equ Misc. Equip./Labwa		200 300	0.1	0.25	0.75	<u> </u>		
Hot Cells	are	300	0.1	0.25	0.75	<u> </u>		
Storage Tanks				· ·	<u>.</u>			
Other								
Sinks		20	1		1			
Drains	[0.3	1		1			
Ventilation Drops	l	27.8	0					
During							I	
Drains	No.	and the second second second second second second second second second second second second second second second	Inch Dia.	2	Total ft ³	0.3		
Ventilation Drops	No.	1	Inch Dia.	20	Total ft ³	27.8	l	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	4	8	16			<u>S.e.unou</u>	4	
Equip. Release	4	8	16				4	
Pack/Load waste	0.25	0.5	1	2	2	2	0.25	
Decon/Remed.	0.5	1	2		4	4	0.5	
Final Survey	1.5	3	6				1.5	
		. г						
# Lab Samples to b	e collected	ן ג	1			7		
L						/		
		1				·		
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Gas Counting TRU, U, Ra, Sr-90, Beta-gamma, Low E Area Classification 1 # Floors below Roof 1 Wall Area, ft ² 200 200 0 0 Class 1 Remed. Class 2 Class 3 Gover Basement 1 Components Fraction Fractin Fraction Fractin Fraction Fraction Fraction Fraction Fractin Fra	Building	245] Roo	om or Area		С	11		
Area Classification 1 # Floors above Basement	Use			0	Bas Countir	ng			
# Floors below Roof 76 ft2 needing needing ft2 needing Floor Area, ft ² 200 200 0 0 Wall Area, ft ² 200 200 0 0 Glore Area, ft ² 200 200 0 0 Call Area, ft ² 200 200 0 0 Ceiling Area, ft ² 200 200 0 0 Ceiling Area, ft ² 200 200 0 0 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 16 0					TRU, U,	Ra, Sr-90,	Beta-gamm	a, Low E	
Total Class 1 % needing Remed. ft2 needing Remed. Class 2 Class 3 Floor Area, ft ² 200 200 0 0 0 0 Wall Area, ft ² 900 900 0 0 0 0 Ceiling Area, ft ² 200 200 0 0 0 0 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Inch fl3 RW DAW Metal Lead Concrete Benches/Tables/Desks 16 0									
Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 200 200 0 0									
Floor Area, ft ² 200 200 0 0 1 Wall Area, ft ² 900 900 0 0 1 Geiling Area, ft ² 200 200 0 0 1 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes 16 0 1 1 1 1 1 Benches/Tables/Desks 16 0 1 1 1 1 1 Casework/Cabinets 132 0 1 1 1 1 1 Storage Tanks 10 0 1 1 1 1 1 Other 30 0 1 1 1 1 1 Strage Tanks No. 1 Inch Dia. 2 Total ft3 0.0 Drains No. 1 Inch Dia. 2 Total ft3 0.0 Drains No. 1 Inch Dia. 2 Total ft3 0.0 Person-hours Mgr Supvsr HP Tech		Total	Class 1		-	Class 2	Class 3		
Wall Area, ft ² 900 900 0 0 0 Ceiling Area, ft ² 200 200 0 0 0 Ceiling Area, ft ² 200 200 0 0 0 Ceiling Area, ft ² 200 200 0 0 0 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Inchalft3 RW DAW Metal Lead Concrete Glove Boxes Inchalft3 RW DAW Metal Lead Concrete Glove Boxes Inchalft3 RW DAW Metal Lead Concrete Glove Boxes Inchalt3 Inch Inchalt3 Inchalt3 </th <th>Floor Area, ft²</th> <th></th> <th></th> <th></th> <th></th> <th>010002</th> <th>0.0000</th> <th></th> <th></th>	Floor Area, ft ²					010002	0.0000		
ComponentsTotal ft3Fraction RWFraction DAWFraction MetalFraction LeadFraction ConcreteGlove Boxes HoodsBenches/Tables/DesksCasework/CabinetsCasework/CabinetsRefers, Large EquipmentMisc. Equip./Labware Hot CellsStorage TanksDrainsDrainsNo.1Inch Dia.20000000000000000000000000000000000000010202030404050506070708090900000000000000000000000000001111111111111111111111111111 <t< th=""><th>Nall Area, ft²</th><th>900</th><th>900</th><th>0</th><th>0</th><th></th><th></th><th></th><th></th></t<>	Nall Area, ft ²	900	900	0	0				
ComponentsTotal ft3RWDAWMetalLeadConcreteGlove BoxesHoodsBenches/Tables/DesksCasework/CabinetsReefers, Large EquipmentMisc. Equip./LabwareHot CellsStorage TanksOtherSinksDrainsNo.1Inch Dia.2000.000.01111111111111111111111111111111<	Ceiling Area, ft ²	200	200	0	0]	
Glove Boxes	Componer	its	Total ft3						
Benches/Tables/Desks 16 0	Glove Boxes								
Casework/Cabinets 132 0									
Reefers, Large Equipment 50 0 1 Misc. Equip./Labware 50 0 1 Hot Cells 30 0 1 Storage Tanks 20 0 1 Other 30 0 1 1 Sinks 20 0 1 1 Drains 0.0 0 1 1 Ventilation Drops No. 1 Inch Dia. 2 Total ft ³ 0.0 Person-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical Characterize 8 16 4 4 4 Pack/Load waste 1 1 1 1 1 1 Decon/Remed. 1 1 1 4 4 4									
Misc. Equip./Labware 50 0			132					┝─────┤	
Storage Tanks3001Other30011Sinks20011Drains0.0011Ventilation Drops0.0011DrainsNo.1Inch Dia.2Total ft³0.0DrainsNo.1Inch Dia.3Total ft³0.0DrainsNo.1Inch Dia.3Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledCharacterize8163288Equip. Release48164Pack/Load waste1111Decon/Remed.144	Misc. Equip./Labwa		50	0	·····				
Other300				- /					
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Drains0.000Ventilation Drops0.000DrainsNo.1Inch Dia.2Ventilation DropsNo.1Inch Dia.3Ventilation DropsNo.1Inch Dia.3Person-hoursMgrSupvsrHP TechShipperCharacterize816328Equip. Release48164Pack/Load waste111Decon/Remed.164									
DrainsNo.1Inch Dia.2Total ft³0.0Ventilation DropsNo.1Inch Dia.3Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize8163288Equip. Release48164Pack/Load waste111Decon/Remed.14			0.0	0					
Ventilation DropsNo.1Inch Dia.3Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize8163288Equip. Release48164Pack/Load waste111Decon/Remed.164Final Survey48164	/entilation Drops		0.0	0		··			
Ventilation DropsNo.1Inch Dia.3Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize8163288Equip. Release48164Pack/Load waste111Decon/Remed.164Final Survey48164	Drains	No	1	Inch Dia	2	Total ft ³	0.0		
Characterize 8 16 32 8 Equip. Release 4 8 16 4 Pack/Load waste 1 1 1 Decon/Remed. 1 4 4 Final Survey 4 8 16 4				F					
Characterize 8 16 32 8 Equip. Release 4 8 16 4 Pack/Load waste 1 1 1 Decon/Remed. - - - 4 Final Survey 4 8 16 4	Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Pack/Load waste 1 1 Decon/Remed. 1 1 Final Survey 4 8 16 4			16						•
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Final Survey 4 8 16 4	econ/Remed.		· · ·			1			
Lab Samples to be collected 1		- 4	8	16				4	
	Lab Samples to b	e collected	j t						
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Total Class 1 Remed. Remed. Class 2 Class 3 Area, ft ² 200 200 0.1 20								
Use Low level counting TRU, U, Ra, Sr-90, Beta-gamma, Low E TRU, U, Ra, Sr-90, Beta-g								
Use Low level counting TRU, U, Ra, Sr-90, Beta-gamma, Low E TRU, U, Ra, Sr-90, Beta-g								
Use Low level counting TRU, U, Ra, Sr-90, Beta-gamma, Low E TRU, U, Ra, Sr-90, Beta-g								
Use Low level counting TRU, U, Ra, Sr-90, Beta-gamma, Low E TRU, U, Ra, Sr-90, Beta-g								
Use Low level counting TRU, U, Ra, Sr-90, Beta-gamma, Low E TRU, U, Ra, Sr-90, Beta-g								
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Use Low level counting TRU, U, Ra, Sr-90, Beta-gamma, Low E TRU, U, Ra, Sr-90, Beta-g								
Use Low level counting TRU, U, Ra, Sr-90, Beta-gamma, Low E TRU, U, Ra, Sr-90, Beta-g	Building	245	Ro	om or Area		0	13	······
Tuckides, Extent of Contamination TRU, U, Ra, Sr-90, Beta-gamma, Low E Itlassification 1 rs above Basement 1 rs below Roof % ft2 Total Class 1 needing Remed. Class 2 Class 3 Area, ft ² 200 200 0 rea, ft ² 1200 1200 0 Area, ft ² 200 200 0	Dananig	240						
Tuckides, Extent of Contamination TRU, U, Ra, Sr-90, Beta-gamma, Low E Itlassification 1 rs above Basement 1 rs below Roof % ft2 Total Class 1 needing Remed. Class 2 Class 3 Area, ft ² 200 200 0 rea, ft ² 1200 1200 0 Area, ft ² 200 200 0	Use			Lov	v level cour	ntina		
Classification 1 rs above Basement needing rs below Roof needing Total Class 1 Remed. Remed. Class 2 Class 3 Area, ft ² 200 200 0 rea, ft ² 1200 1200 0 Area, ft ² 200 200 0 Start Fraction Fraction Fraction Components Total ft3 RW DAW Metal Lead Concrete Boxes 30 0	,	l				<u> </u>		
Total Class 1 Remed. Remed. Class 2 Class 3 Area, ft ² 200 200 0.1 20			taminatio	<u>1</u>	TRU, U,	Ra, Sr-90,	Beta-gamm	a, Low E
rs below Roof % ft2 needing Remed. Remeding Class 2 Class 3 Area, ft ² 200 200 0.1 20	rea Classificatio	n	1]				
Total Class 1 Remeding Remed. Remed. Class 2 Class 3 Area, ft ² 200 200 0.1 20 0 0 rea, ft ² 1200 1200 0 0 0 0 Area, ft ² 200 200 0.1 20 0 0 Area, ft ² 200 200 0 0 0 0 0 Area, ft ² 200 200 0 0 0 0 0 0 Area, ft ² 200 200 0	Floors above Ba	isement]				
Total Class 1 needing Remed. needing Remed. Class 2 Class 3 Area, ft ² 200 200 0.1 20	Floors below Ro	of						
Total Class 1 Remed. Remed. Class 2 Class 3 Area, ft ² 200 200 0.1 20								
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rea, ft ² 1200 1200 0 0 Area, ft ² 200 200 0 0 Components Boxes Total ft3 RW DAW Metal Lead Concrete Boxes 30 0					Remed.	Class 2	Class 3	
rea, ft ² 1200 1200 0 0 Area, ft ² 200 200 0 0 Components Boxes Total ft3 RW DAW Metal Lead Concrete Boxes 30 0	oor Area, ft ²	200	200	0.1	20			
Area, ft ² 200 200 0 Components Boxes Total ft3 RW DAW Metal Lead Concrete es/Tables/Desks ork/Cabinets s, Large Equipment Equip./Labware Ils e Tanks 30 0	all Area, ft ²	1200	1200		0			
Components Boxes Total ft3 RW DAW Metal Lead Concrete es/Tables/Desks ork/Cabinets s, Large Equipment cquip./Labware ills 30 0	iling Area, ft ²	200	200		0			
Components BoxesTotal ft3RWDAWMetalLeadConcreteBoxeses/Tables/Desks ork/Cabinets s, Large Equipment equip./Labware ills e Tanks300						••••••••	·····	•
Boxes	•					Fraction	Fraction	
es/Tables/Desks ork/Cabinets 30 0		nts	Total ft3	RW	DAW	Metal	Lead	Concrete
es/Tables/Desks 30 0	ove Boxes							
ork/Cabinets 160 0	ods	_						
s, Large Equipment 90 0 90 0 ils 90 0 90 0 e Tanks 45 0 90 0 25 0 90 0 1 ition Drops 0.0 0 1 1 No. 1 Inch Dia. 2 Total ft ³ 0.0							·	
Equip./Labware 90 0			160	0				
Ils Image: Constraint of the second seco								
e Tanks 45 0 1 25 0 1 1 20 0 1 1 ition Drops 0.0 0 1 No. 1 Inch Dia. 2 Total ft ³ 0.0		rare	90	0			1	
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No. 1 Inch Dia. 2 Total ft ³ 0.0	aine							
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		I		Inch Dia	2	Total ft ³	0.0	
	entilation Drops	No	1		<u>~</u>	. van it	0.0	1
	ntilation Drops nins		1			Total ft ³	0.0	
	ntilation Drops ains	No. No.	1	Inch Dia.		Total ft ³	0.0	
-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical	entilation Drops rains entilation Drops	No.	1 Supvsr	Inch Dia.	Shipper			Clerical
	entilation Drops ains entilation Drops erson <u>-hours</u>	No.	1 Supvsr 8	Inch Dia.	Shipper	Total ft ³ Skilled	0.0 Unskilled	Clerical 4
terize 4 8 16 4	rains entilation Drops rains entilation Drops erson-hours haracterize guip. Release	No. Mgr 4	8	Inch Dia. HP Tech 16	Shipper			4
terize 4 8 16 4 Release 4 8 16 4	entilation Drops ains entilation Drops rrson-hours paracterize	No. Mgr 4 4	8	Inch Dia. HP Tech 16		Skilled	Unskilled	4 4
terize 4 8 16 4 Release 4 8 16 4 oad waste 0.25 0.5 1 2 2 0.25 Remed. 0.25 0.5 1 2 2 0.25	ntilation Drops ntilation Drops <u>son-hours</u> aracterize Jip. Release	No. Mgr 4 4 0.25	8 8 0.5	Inch Dia. HP Tech 16 16 1		Skilled 2	Unskilled	4 4 0.25
		uipment	90 45 25 20 0.0	0 0 0 0 0 0	2	Total ft ³	0.0	
	ilation Drops ns ilation Drops on <u>-hours</u>	No.		Inch Dia.	Shipper			
terize 4 8 16 4	ntilation Drops hins ntilation Drops son-hours aracterize	No. Mgr 4	8	Inch Dia. HP Tech 16	Shipper			4
terize 4 8 16 4 Release 4 8 16 4	entilation Drops rains entilation Drops erson-hours naracterize quip. Release	No. Mgr 4 4	8	Inch Dia. HP Tech 16		Skilled	Unskilled	4 4
terize 4 8 16 4 Release 4 8 16 4 oad waste 0.25 0.5 1 2 2 0.25	ntilation Drops ains ntilation Drops rson-hours aracterize uip. Release ck/Load waste	No. Mgr 4 4 0.25	8 8 0.5	Inch Dia. HP Tech 16 16		Skilled 2	Unskilled 2	4 4 0.25
terize 4 8 16 4 Release 4 8 16 4 oad waste 0.25 0.5 1 2 2 0.25 Remed. 0.25 0.5 1 2 2 0.25	tilation Drops ins tilation Drops son-hours racterize ip. Release k/Load waste	No. Mgr 4 0.25 0.25	8 8 0.5 0.5	Inch Dia. HP Tech 16 16 1		Skilled 2	Unskilled 2	4 4 0.25 0.25

·-- · *

Building	245	Roc	om or Area		С	215	· · · · · · · · · · · · · · · · · · ·		
Use			Activi	ty measure	ments]	
Radionuclides, Ext	tent of Con	tamination	1	TRU. U	. Ra. Sr-90.	Beta-gamm	na. Low E	1	
Area Classification	1	1				<i>4</i>		-	
# Floors above Bas		1							
# Floors below Roo	of	3	%	ft2	<u>г </u>	1	1		
			needing	needing					
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²	200	200	0.1	20			1		
Wall Area, ft ²	900	900	0	0]		
Ceiling Area, ft ²	200	200	0	0]		
C	4-	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction	Fraction Concrete		
Componen Glove Boxes	115		N ¥¥	DAW	wietai	Lead		1	
Hoods				<u> </u>			· ·	1	
Benches/Tables/De	esks	120	0					1	
Casework/Cabinets		40	0	_]	
Reefers, Large Equ	lipment	80	0					4	
Misc. Equip./Labwa Hot Cells	are	80	0			<u> </u>		{	
Storage Tanks									
Other		20	0						
Sinks		20	0				•		
Drains		0.1	0						
Ventilation Drops	l	0.0	0					1	
Drains	No.	1	Inch Dia.	2	Total ft ³	0.1	1 .		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled			
Characterize	8	16	32				8	\	
Equip. Release	4	8	16		1	1	4	,	
Pack/I nad waeta	0.25	0.5	1		2	2	0.25		
Pack/Load waste Decon/Remed.		4	8				2		
Pack/Load waste Decon/Remed. Final Survey	2								
Decon/Remed.		ı [1		<u></u>				
Decon/Remed. Final Survey		ı [1				<u> </u>		
Decon/Remed. Final Survey		ı [1]
Decon/Remed. Final Survey		ı [1		. <u></u>]
Decon/Remed. Final Survey		· [
Decon/Remed. Final Survey		· [<u> </u>	
Decon/Remed. Final Survey		· [· · · · · · · · · · · · · · · · · · ·]

Building	245	Ro	om or Area		C	17]
Use				·	*]
Radionuclides, Ex	tent of Con	taminatior	ı	TRU, U	Ra, Sr-90,	Beta-gamm	ia, Low E	T T
Area Classificatio		1]	,				-
# Floors above Ba	sement	1						
# Floors below Ro	of	3				<u> </u>	-	
			%	ft2				· .
	Tatal	Class 4	needing	needing	01 2	01 2		
	Total 200	Class 1 200	Remed.	Remed.	Class 2	Class 3	4	
Floor Area, ft ²					<u> </u>	<u> </u>	4	1
Wall Area, ft ²	900	900			<u> </u>	<u> </u>	4	
Ceiling Area, ft ²	200	200	0	0	L	L	J	
ч.			Fraction	Fraction	Fraction	Fraction	Fraction	
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes					·	1	[1
Hoods]
Benches/Tables/D		120	0]
Casework/Cabinet		40	0					
Reefers, Large Eq		80	0		 			
Misc. Equip./Labw	are	80	0 `			<u> </u>		{
Hot Cells					·····			
Storage Tanks Other	,	20	0			<u> </u>		
Sinks		20	0			<u> </u>		
Drains		0.0						
Ventilation Drops	ŀ	0.0						
-							······································	•
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	8	16	32	<u>1'<u>1'</u>-'</u>			8	
Equip. Release	4	8	16				4	
Pack/Load waste	0.25	0.5		1	2	2	0.25	
Decon/Remed. Final Survey	0.25	0.5	<u>1</u> 8		2	2	0.25 2	

Building								
				đ°.				
	245	Ro	om or Area		C	25		
Use	•		Gam	ma Spectro	scopy			
Radionuclides, Ex	rtent of Con	tamination		_		Beta-gamm		
Area Classificatio	n .	1] . '		114, 01 00,	Dota gami		
# Floors above Ba		1]					
# Floors below Ro	oof	3	0/	<u>40</u>	. 	T	1	
			% needing	ft2 needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	400	400						
Wall Area, ft ²	1200	1200					1	
Ceiling Area, ft ²	400	400		-]	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes								
Hoods								
Benches/Tables/D		70	0			ļ	ļ	
Casework/Cabine Reefers, Large Eq		60	0	· · · · · ·				
Misc. Equip./Labw		80	0		·		<u> </u>	1
Hot Cells		0						
Storage Tanks						1	├── ─┤	
Other		60	0					
Sinks		20	0					
Drains		0.1	0		ļ	 	├ ────┤	· [
Ventilation Drops	l	0.0					L	
Drains	No.	1	Inch Dia.	2	Total ft ³	0.1		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Baar	Sum	UD Teal	Shinner	Skilled	Unskilled	Clerical	
Characterize	Mgr 4	Supvsr 8	HP Tech	Shipper	JAINEU	UNSKINEQ	4	1
Equip. Release	4	8	16		<u></u>		4	
i-quip. Neiedse	0.25	0.5		1	2	. 2	0.25	1
Pack/Load waste			1		2	2	0.25	
	0.25	0.5	1 8		<u> </u>	-	2	

			,					
·								
· · ·			_	r				
Building	245	Ro	om or Area		C Wing	Fan Room		I ,
Use	·		·	Ventilatio	n	<u> </u>		1
							<u> </u>	1
Radionuclides, Ex		tamination	<u>1</u>		Poten	tially all		
Area Classification		1	-					
# Floors above Ba # Floors below Ro			4					
			%	ft2		1	1	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	225			0	ļ			
Wall Area, ft ²	1200			0	ļ	<u> </u>		
Ceiling Area, ft ²	225	225	0	0	<u> </u>	<u> </u>	I	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes								,
Hoods					<u> </u>			
Benches/Tables/D Casework/Cabinet								
Reefers, Large Eq					<u> </u>			'
Misc. Equip./Labw								
Hot Cells								
Storage Tanks		200		0.05	0.75	<u> </u>		
Other Sinks		300	1	0.25	0.75			
Drains		0.0						
Ventilation Drops		0.0						
			I r		1		l	
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.	· · ·	Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	4	8	16				4	
Equip. Release								
Pack/Load waste	0.5	1	2	2	4	4		
Decon/Remed. Final Survey	2	4	8			· ·	2	
			<u> </u>					
# Lab Samples to b ر	e collected) t	1				•	
		• •						

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Building	245	Ro	om or Area		C	103		<u> </u>
Use				Office		· · · · · ·	· · ·]
Radionuclides, Ex		taminatio	<u>1</u>	L	Formerly	H-3, C-14		
Area Classification		3 -]					•
# Floors above Ba	sement	1] .					
# Floors below Ro	of .	1					_	
			%	ft2	3			
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	240			0		240		
Wall Area, ft ²	630			0		630		
Ceiling Area, ft ²	240			0		240		
Componer		Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes	its	TOTALITS		DAW	Wietan	Leau	Concrete	1
Hoods								1
Benches/Tables/D	oeke							
Casework/Cabinet		370	0					
Reefers, Large Eq					· · ·			
Misc. Equip./Labw								
Hot Cells	are							
Storage Tanks								
Other								
Sinks								
Drains	ĺ	0.0						
Ventilation Drops		0.0						
			······································		· · · · ·		J	
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.	,	Total ft ³	0.0		
remainer brope						0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.5	1	2	••			0.5	
Equip. Release								
Pack/Load waste					·			
Decon/Remed.								
Final Survey	0.25	0.5	1				0.25	
# Lab Samples to b	be collected	1	0					

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Building Use Radionuclides, Ex	245		om or Area	· · · · · · · · · · · · · · · · · · ·		104		<u></u>
			om or Area			104	·	1
Radionuclides, Ex			S	Storage clos	set		<u>`</u>]
Area Classificatio		taminatio	n T		N	one		ļ
# Floors above Ba	sement	1	5					·
# Floors below Ro	of	2	%	ft2		<u> </u>	1	
l	, i		needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	54			0		54		
Wall Area, ft ²	560		L	0	<u> </u>	560	н х	
Ceiling Area, ft ²	54	L	L	0	· · ·	54		
Compone	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes				-/			201101010	
Hoods								
Benches/Tables/D Casework/Cabine			·		<u> </u>		· ·	
Reefers, Large Eq								
Misc. Equip./Labw								
Hot Cells								
Storage Tanks Other							·	
Sinks		4	0					
Drains		0.3	0					
Ventilation Drops	l	0.0		<u> </u>	`			
Drains	No.		Inch Dia.	3	Total ft ³	0.3		
Ventilation Drops	No.		Inch Dia.	· · · · · · · · · · · · · · · · · · ·	Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.5	1	2				0.5	
Equip. Release								
Pack/Load waste Decon/Remed.		<u> </u>						
Final Survey	0.25	0.5	1		•		0.25	
# Lab Samples to I	oe collecter	1	0		• .		÷	×
							<u>,</u>	
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	Building	245	Ro	om or Area	i .	C'	105	· · · · · · · · · · · · · · · · · · ·	· · · ·	1
	Use	[·		Office				1	
					-				1	
	Radionuclides, Ex Area Classification		2	n T	Forme	erly TRU, Be	eta-gamma,	LOWE	I	
	# Floors above Ba	sement	1	1						1
	# Floors below Ro	of	1	%	ft2	r		1		
		Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3			
	Floor Area, ft ²	200		·	0	200				
	Wall Area, ft ²	600		<u> </u>	0	600				
	Ceiling Area, ft ²	200		<u> </u>	· 0	200		1		
				Fraction	Fraction	Fraction	Fraction	Fraction		<i>*</i> -
	Componer Glove Boxes	nts I	Total ft3	RW ¹	DAW	Metal	Lead	Concrete		I
	Hoods									1
	Benches/Tables/D Casework/Cabinet									
	Reefers, Large Equ									
•	Misc. Equip./Labw Hot Cells	are								
	Storage Tanks									
	Other	х. —								
	Sinks Drains		0.0					·····		
	Ventilation Drops		0.0		· · · ·					
•	Drains	No.		Inch Dia.		Total ft ³	0.0	I .		
	Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0			
	Person-hours Characterize	Mgr 4	Supvsr 8	HP Tech 16	Shipper	Skilled	Unskilled	Clerical 4		
	Equip. Release									
	Pack/Load waste							/		
•,	Decon/Remed.			· · ·			н			·
	Final Survey	2	4	8		<u> </u>		2		
	# Lab Samples to b	e collected	l,	1						
		·								
						•				
		••••			1. P					
								•		
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	۰. ۱							
			•					
Building	245	l Po	om or Area	r		106		
Dunung	243		UIII UI Alea			100		J
Use		· · · · · · · · · · · · · · · · · · ·		Office].
adionuclides, Ex	tont of Con	taminatio	_	t	N	one	· ·	
rea Classificatio		3	1	L				Ŀ
Floors above Ba		1			*			
Floors below Ro		2					_	
			%	ft2				
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
loor Area, ft ² Vall Area, ft ²	240		<u> </u>	0	}	240		
Vall Area, π Ceiling Area, ft ²	900 240		<u> </u>	.0 0		900 240		
Sening Area, it	240	,,,		<u> </u>	L	240		
-			Fraction	Fraction	Fraction	Fraction	Fraction	
Componei Blove Boxes	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	1
oods		<u> </u>				<u> </u>		-
enches/Tables/D	esks							1
asework/Cabinet]
eefers, Large Eq								
lisc. Equip./Labw	are					ļ		
ot Cells torage Tanks		·						1
orage ranks		<u> </u>						1
inks	L.							1
rains		0.0						· ·
entilation Drops	ł	0.0						
	Na	· · ·	Inch Dia.		Total ft ³	0.0	•	
rains entilation Drops	No. No.		Inch Dia. Inch Dia.		Total ft ³	0.0		• • .
entilation props	NO.[·			· ·	
erson-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
haracterize						·		
quip. Release ack/Load waste					ļ	├ ────┤		
econ/Remed.						┞╍───┤		
nal Survey	1	2	4		· · · · · · · · · · · · · · · · · · ·		1	4
Lab Samples to b	pe collected	i i	0					
						· · · · ·		
•								
	•							

			2							
		*								
		•								
						,				
-			1	· .						-
	Building	245	j Ro	om or Area	,	C	107		l	
	Use			Biology	/, Nuclear r	nedicine				
•		L							1	
	Radionuclides, Ex		president and and a second second second second second second second second second second second second second	j		l-125	i, P-32			
	Area Classification		1		ŧ			•		
	# Floors above Ba # Floors below Ro		1	{				•		
•	#110013 Delow 110		'	%	ft2	T	,]		
				needing	needing					
		Total	Class 1	Remed.	Remed.	Class 2	Class 3			1
	Floor Area, ft ²	240		1			ļ	1		
	Wall Area, ft ²	900			ļ		<u> </u>	1		
	Ceiling Area, ft ²	240	240	0	0					
				Fraction	Fraction	Fraction	Fraction	Fraction		
	Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete		
	Glove Boxes		x							
	Hoods		70	0						
	Benches/Tables/D		70	0			ļ.,			
	Casework/Cabinet		<u>300</u> 10	0			 	· · · · ·		
	Reefers, Large Equ Misc. Equip./Labw		65	0		<u>i – </u>			•.	
	Hot Cells	ur ç								
	Storage Tanks									
	Other									
	Sinks		2							1
,	Drains Ventilation Drops		0.1	0						
	ventilation Drops	1	0.0	1		I	L	1		
	Drains	No.	1	Inch Dia.	2	Total ft ³	0.1			
-	Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0			
					<u>.</u>					
	Person-hours Characterize	Mgr 1	Supvsr 2	HP Tech 4	Shipper	Skilled	Unskilled	Clerical		
	Equip. Release			_	· ··· ·			· · ·		
	Pack/Load waste	0.25	0.5			1	1	0.25	•	
	Decon/Remed.				,	4				
	Final Survey	1	2	4				1		
	# Lab Samples to b	ne collector	4	1					I	
	# Lab Samples to L		4	'						
						•				ľ
				· ·						
	. e									
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•										
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Building	245	l Ro	om or Area			108		
Dunung	240		UIII UI Alea	L		100		J
Use		<u></u>	<u> </u>	Office				ן ר
								' [
Radionuclides, Ext		tamination	<u>n</u>		Formerly (unsealed U]]
Area Classification		2	4					
# Floors above Bas		1	4					
# Floors below Roc	<u>, tr</u>	2	%	ft2	T		1	
l' l			needing	needing		ļ ·	ļ	1
.] 1	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	240		1	0	240		1	ŀ
Wall Area, ft ²	900		<u> </u>	0	90		1	
Ceiling Area, ft ²	240			0	240		1	
	· · ·			•			•	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Component	ts	Total ft3	RW	DAW	Metal	Lead	Concrete	,)
Glove Boxes Hoods					}			1 I.
Benches/Tables/De	eks	30	0		<u> </u>			{. {
Casework/Cabinets	L	40	0					
Reefers, Large Equ	ipment			· · ·				
Misc. Equip./Labwa	ire]]
Hot Cells			· · ·					
Storage Tanks	}	· · ·						· ·
Other Sinks	ŀ	2	0					
Drains		0.1	0					
Ventilation Drops	. 1	0.0	0]
	-							
Drains	No.		Inch Dia.	2	Total ft ³	0.1		
			In all Dra I		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.			لــــــــــــــــــ		
				Chiener			Clarical	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Person-hours Characterize				Shipper				
Person-hours	Mgr	Supvsr	HP Tech	Shipper				
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed.	<u>Mgr</u>	Supvsr 2	HP Tech 8	Shipper			<u> </u>	
Person-hours Characterize Equip. Release Pack/Load waste	Mgr	Supvsr	HP Tech	Shipper				
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	Mgr 1 0.5	Supvsr 2 1	HP Tech 8 4	Shipper			<u> </u>	
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed.	Mgr 1 0.5	Supvsr 2 1	HP Tech 8	Shipper			<u> </u>	
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	Mgr 1 0.5	Supvsr 2 1	HP Tech 8 4	Shipper			<u> </u>	
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	Mgr 1 0.5	Supvsr 2 1	HP Tech 8 4	Shipper			<u> </u>	
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	Mgr 1 0.5	Supvsr 2 1	HP Tech 8 4	Shipper			<u> </u>	
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	Mgr 1 0.5	Supvsr 2 1	HP Tech 8 4	Shipper			<u> </u>	
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	Mgr 1 0.5	Supvsr 2 1	HP Tech 8 4	Shipper			<u> </u>	
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	Mgr 1 0.5	Supvsr 2 1	HP Tech 8 4	Shipper			<u> </u>	
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	Mgr 1 0.5	Supvsr 2 1	HP Tech 8 4	Shipper			<u> </u>	
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	Mgr 1 0.5	Supvsr 2 1	HP Tech 8 4	Shipper			<u> </u>	
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	Mgr 1 0.5	Supvsr 2 1	HP Tech 8 4	Shipper			<u> </u>	
Person-hours Characterize Equip. Release Pack/Load waste Decon/Remed. Final Survey	Mgr 1 0.5	Supvsr 2 1	HP Tech 8 4	Shipper			<u> </u>	

Building	245	Roo	om or Area		сс	109	······	
Use			(Counting La	ab			1
						·····		
Radionuclides, Ex				TRU, U	, Ra, Sr-90,	Beta-gamm	a, Low E	
Area Classification		1						
# Floors above Ba		1						
# Floors below Ro	01	2	%	ft2	T	1	,	
			needing	needing	1)		
	Total	Class 1	Remed.	Remed.	Class 2			
					Class 2	Class 3		
Floor Area, ft ²	240	240	0.1	24	<u> </u>	<u> </u>	•	
Wali Area, ft ²	900	900	0	0		<u> </u>		
Ceiling Area, ft ²	240	240	0	0	<u> </u>	<u> </u>		
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes							•	
Hoods								
Benches/Tables/D	esks 👘	50	0.1	0.5	0.5			
Casework/Cabinet		60	0.1	0.5	0.5			
Reefers, Large Eq								1
Visc. Equip./Labw	are	100	1	1				
lot Cells					l			
Storage Tanks					ļ			
Other	I				<u> </u>			
Sinks	ļ	3	1		1			
Drains		0.0	0.1		1	· · · · · · · · · · · · · · · · · · ·		
entilation Drops	l	0.0			<u> </u>			
Numlu a	N - 1				Total ft ³			
Drains	No.		Inch Dia.	1		0.0		
/entilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	8	16	32				4	
Equip. Release	4	8	16				4	
Pack/Load waste	0.25	0.5		1	2	2	0.25	
Decon/Remed.	0.5		2		2	2	0.25	
inal Survey	4	8	16				2	
Lab Samples to b	e collected	ı [1					、
- <u></u>								

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Building	245) Ro	om or Area		C	112	<u> </u>	<u></u>
Use	·			Office			·]
Radionuclides, Ex	tent of Cor	taminatio	n	Forr	nerlv seale	d source - L	ow E	ł .
Area Classificatio		3	1					1
# Floors above Ba	sement	1	1					
# Floors below Ro	of	2						
			%	ft2				
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	240			0		240		
Wall Area, ft ²	900			0		900		
Ceiling Area, ft ²	240			0 .		240		
Componer		Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes	115	10141113					Concrete	7
Hoods	'							1
Benches/Tables/D	esks	50	0		· · · · ·	1	· .	1
Casework/Cabinet		30	0					1
leefers, Large Eq	-							1
lisc. Equip./Labw		20	0					1
lot Cells					·····	,		1
itorage Tanks								1
)ther								
Sinks								
Drains		0.0						
entilation Drops		0.0	•					
					Total ft ³			
Drains	No.	0	Inch Dia.			0.0		
entilation Drops	No.	0	Inch Dia.		Total ft ³	0.0		
erson-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	1 .
Characterize	0.5	1	2				0.5	ĺ
quip. Release								
Pack/Load waste								
Decon/Remed.								
inal Survey	0.25	0.5	1				0.25	
Lab Samples to t	be collecter	9	0					
			•					
			2					

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Building	245] Ro	om or Area		C	115	
Use			Forme	erly lab - no	w office	·· <u>·</u> ······	
Radionuclides, Ex	tent of Con	taminatio	n	1 (Beta-	gamma	
Area Classificatio		3	ï			guilling	
# Floors above Ba							
# Floors below Ro	-		1				,
TIOUS DEIOW ICO			%	ft2	T	1	1
			needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	200			0	0.000 2	200	
Wall Area, ft ²	720			0		720	
Ceiling Area, ft ²	200		1	0		200	
			Fraction	Fraction	Fraction	Fraction	Fraction
Componei	nts	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes			<u> </u>		ļ		
Hoods			<u> </u>		ļ		
Benches/Tables/D		100	<u> </u>			·	
Casework/Cabinet		200	0				
Reefers, Large Eq			<u> </u>		<u> </u>		
Misc. Equip./Labw	are						
Hot Cells			l		L		
Storage Tanks							
Other							
Sinks					L		
Drains		0.0		· · ·			
Ventilation Drops	Ĺ	0.0		·			
Draina	No.	0	Inch Dia.		Total ft ³	0.0	
Drains			4 1			0.0	
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	0.5	1	2	<u>rr=:</u>			0.5
Equip. Release							
Pack/Load waste							
Decon/Remed.							
Decon/Remea.	0.25	0.5	1				0.25

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Use Office Area Classification 3 # Floors above Basement 1 # Floor Area, ft ² 100 Wall Area, ft ² 100 Components Total ft 3 Reden, Reeding Fraction Glove Boxes	Formerly sealed Ra-226 Fo	Building	245	Ro	om or Area		C	116		
Area Classification 3 # Floors bolow Roof 2 # Floors below Roof 2 Image: Class 1 Remed. Protal Class 1 Remed. Class 2 Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 100 Wall Area, ft ² 560 Components Total ft3 RW DAW Metal Lead Components Total ft3 RW DAW Metal Lead Concrete	rea Classification 3 Floors above Basement 1 Floors below Roof 2 Total Class 1 Remed. Remed. Class 2 Class 3 loor Area, ft ² 100 0 0 100 /all Area, ft ² 560 0 0 560 eiling Area, ft ² 100 0 0 100 Components Total ft3 RW DAW Metal Lead Concrete love Boxes oods 0 0 560 enches/Tables/Desks asework/Cabinets 120 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Use				Office				
Area Classification 3 # Floors bolow Roof 2 # Floors below Roof 2 Image: Class 1 Remed. Protal Class 1 Remed. Class 2 Class 1 Remed. Class 2 Class 3 Floor Area, ft ² 100 Wall Area, ft ² 560 Components Total ft3 RW DAW Metal Lead Components Total ft3 RW DAW Metal Lead Concrete	rea Classification 3 Floors above Basement 1 Floors below Roof 2 Total Class 1 Remed. Remed. Class 2 Class 3 loor Area, ft ² 100 0 0 100 /all Area, ft ² 560 0 0 560 eiling Area, ft ² 100 0 0 100 Components Total ft3 RW DAW Metal Lead Concrete love Boxes oods 0 0 560 enches/Tables/Desks asework/Cabinets 120 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Radionuclidae Ext	ent of Con	taminatio			Formerly se	aled Ra-22(6	1
# Floors below Roof 2 % ft2 needing needing needing needing ft2 needing Floor Area, ft2 100 0 100 Wall Area, ft2 560 0 560 Ceiling Area, ft2 100 0 100 Wall Area, ft2 560 0 560 Ceiling Area, ft2 100 0 100 Components Total ft3 RW DAW Metal Lead Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes 120 0 -	Floors below Roof 2 Total Class 1 Remeding Remed. Remed. Class 2 Class 3 loor Area, ft ² 100 0 100 100 fall Area, ft ² 560 0 100 100 fall Area, ft ² 560 0 560 100 fall Area, ft ² 100 0 100 100 fall Area, ft ² 100 0 100 100 components Total ft3 RW DAW Metal Lead Concrete love Boxes				Ϊ	Ļ	ronneny se			ł
Total Class 1 % ft2 needing Remed. Class 2 Class 3 Floor Area, ft ² 100 0 100 Wall Area, ft ² 560 0 560 Ceiling Area, ft ² 100 0 100 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Benches/Tables/Desks 120 0 - - - - Casework/Cabinets 120 0 - - - - - Storage Tanks 120 0 -	Total Class 1 % ft2 needing Remed. Class 2 Class 3 loor Area, ft ² 100 0 100 100 fall Area, ft ² 560 0 560 eiling Area, ft ² 100 0 100 Components Total ft3 RW Fraction Fraction Fraction Components Total ft3 RW DAW Metal Lead Concrete love Boxes 120 0 100 100 100 100 cods 120 0 100 100 100 100 ods 120 0 100 100 100 100 100 ot cells 120 0 100 100 100 100 100 100 ot cells 120 0 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100				1		· · ·			
Total Class 1 needing Remed. Remed. Class 2 Class 3 Floor Area, ft ² 100 0 100 100 Wall Area, ft ² 560 0 560 100 Ceiling Area, ft ² 100 0 100 100 Components Total ft3 RW DAW Fraction Fraction Fraction Concrete Glove Boxes	Total Class 1 needing Remed. Class 2 Class 3 loor Area, ft ² 100 0 100 /all Area, ft ² 560 0 560 eiling Area, ft ² 100 0 100 /all Area, ft ² 100 0 100 /all Area, ft ² 100 0 100 /all Area, ft ² 100 0 100 /all Area, ft ² 100 0 100 /all Area, ft ² 100 0 100 /all Area, ft ² 100 0 100 /all Area, ft ² 100 0 100 /all Area, ft ² 100 0 100 /all Area, ft ² 100 0 100 /all Area, ft ² 100 0 100 /all Area, ft ² 100 0 100 /all Area, ft ² 100 0 100 /all Area, ft ² 100 0 100 /all Area, ft ² 120 0 100 /all Area, ft ² 120 0 100 /all Area, ft ² 120 0 100 /all Area, ft ² 0.1 0 100 /all Area, ft ²	# Floors below Roo	of	2				1		
Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 100 0 100 Wall Area, ft ² 560 0 560 Ceiling Area, ft ² 100 0 100 Components Fraction Fraction Fraction Fraction Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	Total Class 1 Remed. Class 2 Class 3 loor Area, ft ² 100 0 100 fall Area, ft ² 560 0 560 eiling Area, ft ² 100 0 100 corr Area, ft ² 100 0 100 generalized and the second an									
Floor Area, ft ² 100 0 100 Wall Area, ft ² 560 0 560 Ceiling Area, ft ² 100 0 100 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes	loor Area, ft ² 100 0 100 fall Area, ft ² 560 0 560 eiling Area, ft ² 100 0 100 Components Total ft3 RW DAW Metal Lead Concrete Iove Boxes Total ft3 RW DAW Metal Lead Concrete asework/Cabinets 120 0 1 Iove		Total	Class 1			Class 2	Class 3		
Wall Area, ft ² 560 0 560 Ceiling Area, ft ² 100 0 100 Components Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 RW DAW Metal Lead Concrete Glove Boxes Total ft3 Q Total ft3 Q Total ft3 Q Benches/Tables/Desks 120 0 Total ft3 Q Total ft3 Q Total ft3 Q Reefers, Large Equipment 120 0 Total ft3 Q	fall Area, ft ² 560 0 560 eiling Area, ft ² 100 0 100 Fraction Fraction Fraction Fraction Fraction Fraction Concrete love Boxes Fraction Frana Fracterize	Floor Area, ft ²		01033 1	Tterneu.					
Ceiling Area, ft ² 100 0 100 Fraction Fractor Fraction Fractor Fraction Fractor Fr	eiling Area, ft ² 100 0 100 Fraction Fraction Fraction Fraction Fraction Fraction Fraction Fraction Lead Concrete love Boxes DAW Metal Lead Concrete love Boxes	Wall Area, ft ²			1					
Components Total ft3 Rw DAW Metal Lead Concrete Glove Boxes	Components Total ft3 RW DAW Metal Lead Concrete love Boxes oods			· · · ·						
ComponentsTotal ft3RWDAWMetalLeadConcreteGlove Boxes	Components Total ft3 RW DAW Metal Lead Concrete love Boxes oods				<u></u>		L		I	
Hoods	oods		ts	Total ft3						I
Benches/Tables/Desks	enches/Tables/Desks asework/Cabinets eefers, Large Equipment isc. Equip./Labware ot Cells torage Tanks ther inks 4 0.1 0.0 inks 0.1 0.0 inks 0.1 0.1 0.0 inks 0.1 0.0 inks 0.1 0.0 inch Dia. 2 Total ft ³ 0.1 0.0 inch Dia. 2 inch Dia. 2 inch Dia. 3 0.1 0.0 inch Dia. 2 inch Dia. 2 inch Dia. 2 inch Dia. 2 inch Dia. 3 0.5 1 2 inaracteriz							· · · · ·		
Casework/Cabinets 120 0	asework/Cabinets 120 0		esks	·						
Reefers, Large Equipment	eefers, Large Equipment			120	0					
Misc. Equip./Labware	isc. Equip./Labware ot Cells torage Tanks ther inks 4 0 									
Storage Tanks	ther Image Tanks ther Image Tanks ther Image Tanks ther Image Tanks ther Image Tanks ther Image Tanks ther Image Tanks ther Image Tanks ther Image Tanks ther Image Tanks ther Image Tanks ther Image Tanks ther Image Tanks ther Image Tanks Image Tanks Image Tanks <td>Misc. Equip./Labwa</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Misc. Equip./Labwa								
Other Sinks401Drains0.1011Ventilation Drops0.011DrainsNo.1Inch Dia.2DrainsNo.1Inch Dia.2DrainsNo.1Inch Dia.2Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.512Pack/Load waste111Decon/Remed.120.5Final Survey0.5120.5	ther 4 0									1
Sinks Drains Ventilation Drops400.100.00.0Drains Ventilation DropsNo.1Inch Dia.2Total ft³0.1Ventilation DropsNo.1Inch Dia.2Total ft³0.0Person-hours CharacterizeMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.512-0.50.5120.5Equip. ReleasePecon/RemedFinal Survey0.5120.50.5-	A 0									1
Drains Ventilation Drops0.10	nains 0.1 0 1 entilation Drops 0.0 0.0 0.1 rains No. 1 Inch Dia. 2 Total ft ³ 0.1 entilation Drops No. 1 Inch Dia. 2 Total ft ³ 0.1 entilation Drops No. 1 Inch Dia. 2 Total ft ³ 0.0 erson-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical haracterize 0.5 1 2 0.5 0.5 0.5 quip. Release									1
Ventilation Drops0.0Inch Dia.2Total ft³0.1DrainsNo.1Inch Dia.Total ft³0.1Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledCharacterize0.5120.5Equip. Release0.5120.5Pack/Load waste0.5120.5Final Survey0.5120.5	entilation Drops 0.0 Inch Dia. 2 Total ft ³ 0.1 rains No. 1 Inch Dia. 2 Total ft ³ 0.1 entilation Drops No. Inch Dia. Total ft ³ 0.0 erson-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical haracterize 0.5 1 2 0.5 0.5 0.5 quip. Release					<u> </u>				1
DrainsNo.1Inch Dia.2Total ft³0.1Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.5120.50.5Equip. Release </td <td>rains No. 1 Inch Dia. 2 Total ft³ 0.1 entilation Drops No. Inch Dia. Total ft³ 0.1 erson-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical haracterize 0.5 1 2 0.5 0.5 quip. Release 0.5 1 2 0.5 ack/Load waste 0.5 1 2 0.5 econ/Remed. 0.5 1 2 0.5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	rains No. 1 Inch Dia. 2 Total ft ³ 0.1 entilation Drops No. Inch Dia. Total ft ³ 0.1 erson-hours Mgr Supvsr HP Tech Shipper Skilled Unskilled Clerical haracterize 0.5 1 2 0.5 0.5 quip. Release 0.5 1 2 0.5 ack/Load waste 0.5 1 2 0.5 econ/Remed. 0.5 1 2 0.5									
Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.5120.50.5Equip. Release </td <td>Inch Dia. Total ft³ 0.0 Inch Dia. Shipper Skilled Unskilled Clerical Inch Dia. 2 0.5 0.5 0.5 Inch Dia. Inch Dia. Total ft³ 0.0 Inch Dia. Shipper Skilled Unskilled Clerical Inaracterize 0.5 1 2 0.5 1 Inck/Load waste 1 2 0.5 1 2 Inck Dia. 1 2 0.5 1 2 0.5</td> <td>· · · · · · · · · · · · · · · · · · ·</td> <td>L</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Inch Dia. Total ft ³ 0.0 Inch Dia. Total ft ³ 0.0 Inch Dia. Total ft ³ 0.0 Inch Dia. Total ft ³ 0.0 Inch Dia. Total ft ³ 0.0 Inch Dia. Total ft ³ 0.0 Inch Dia. Total ft ³ 0.0 Inch Dia. Total ft ³ 0.0 Inch Dia. Shipper Skilled Unskilled Clerical Inch Dia. 2 0.5 0.5 0.5 Inch Dia. Inch Dia. Total ft ³ 0.0 Inch Dia. Shipper Skilled Unskilled Clerical Inaracterize 0.5 1 2 0.5 1 Inck/Load waste 1 2 0.5 1 2 Inck Dia. 1 2 0.5 1 2 0.5	· · · · · · · · · · · · · · · · · · ·	L							
Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.5120.5Equip. Release0.5120.5Pack/Load waste0.50.50.5Decon/Remed.0.5120.5Final Survey0.5120.5	erson-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalharacterize0.5120.5quip. Release0.5ack/Load waste </td <td>Drains</td> <td>No.</td> <td>1</td> <td>Inch Dia.</td> <td>2</td> <td>Total ft³</td> <td>0.1</td> <td></td> <td></td>	Drains	No.	1	Inch Dia.	2	Total ft ³	0.1		
Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize0.5120.5Equip. Release0.5Pack/Load waste </td <td>Arson-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalharacterize0.5120.50.5quip. Release0.5ack/Load waste<!--</td--><td>Ventilation Drops</td><td>No.</td><td></td><td>Inch Dia.</td><td></td><td>Total ft³</td><td>0.0</td><td></td><td></td></td>	Arson-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalharacterize0.5120.50.5quip. Release0.5ack/Load waste </td <td>Ventilation Drops</td> <td>No.</td> <td></td> <td>Inch Dia.</td> <td></td> <td>Total ft³</td> <td>0.0</td> <td></td> <td></td>	Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Characterize 0.5 1 2 0.5 Equip. Release 0.5	naracterize 0.5 1 2 0.5 quip. Release 0.5 0.5 0.5 0.5 ack/Load waste 0.5 <td><u> </u></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td>	<u> </u>			-					
Equip. Release Image: Constraint of the second	quip. Release					Shipper	Skilled	Unskilled		
Pack/Load waste Image: Constraint of the second s	ack/Load waste		0.5	1	2				0.5	
Decon/Remed. Final Survey 0.5 1 2 0.5	econ/Remed									i.
Final Survey 0.5 1 2 0.5	nal Survey 0.5 1 2 0.5			· · · ·						
			0.5	1	2	····			0.5	
# Lab Samples to be collected 0;	Lab Samples to be collected 0;				· · · · · · · · · · · · · · · · · · ·		· · · · · ·			
		# Lab Samples to b	e collected	1	0)		•			
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Building	245	Ro	om or Area	i	C	133		
								1
Use	·۱			Office				
Radionuclides, Ex	tont of Con	taminatio	n	1	Formarku	insealed Pu	. 1	
Area Classificatio		2	ή	L	Furnieny	Insealed Ft	اJ	
# Floors above Ba		1	-					1
# Floors below Ro		2	1		-			
]		%	ft2	1	<u> </u>	ר	
			needing	needing	1			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	}	
Floor Area, ft ²	240			0	240]	
Wall Area, ft ²	900		T	0	900]	ſ
Ceiling Area, ft ²	240			0	240		1	
Compone Glove Boxes	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Hoods	,]
			-					
Benches/Tables/D								
Casework/Cabinet	s	40	0					
Casework/Cabinet Reefers, Large Eq	ls uipment	40	0		· · · · · · · · · · · · · · · · · · ·			
Casework/Cabinel Reefers, Large Eq Misc. Equip./Labw	ls uipment	40	0					
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells	ls uipment	40	0					
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks	ls uipment	40	0					
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other	ls uipment		0					
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other	ls uipment	40 						
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains	ls uipment	2	0					
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks	ls uipment	2 0.6	0					
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops	ls uipment	2 0.6	0	4	Total ft ³	0.6		
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains	s uipment are	2 0.6	0	4	Total ft ³	0.6		
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops	s uipment vare No. No.	2 0.6 0.0 1	0 0 Inch Dia.		Total ft ³	0.0		
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours	s uipment are No. No.	2 0.6 0.0 1 Supvsr	0 0 Inch Dia. Inch Dia.	4 Shipper			Clerical	
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize	s uipment vare No. No. No.	2 0.6 0.0 1 Supvsr 8	0 0 Inch Dia. Inch Dia. HP Tech 16	Shipper	Total ft ³	0.0	4	
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	s uipment are No. No.	2 0.6 0.0 1 Supvsr	0 0 Inch Dia. Inch Dia.		Total ft ³	0.0		
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	s uipment vare No. No. No.	2 0.6 0.0 1 Supvsr 8	0 0 Inch Dia. Inch Dia. HP Tech 16	Shipper	Total ft ³	0.0	4	
Casework/Cabinet Reefers, Large Eq Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	s uipment vare No. No. No.	2 0.6 0.0 1 Supvsr 8	0 0 Inch Dia. Inch Dia. HP Tech 16	Shipper	Total ft ³	0.0	4	

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Building	245	Ro	om or Area		Ċ	135		
Use			Low lev	vel Radioch	nemistry			
Radionuclides, Ex	tent of Cor	tamination		· · ·	RU U Ra	Beta-gamn	na l	
Area Classification	n	1	ĺ			Bold guill	<u></u>	
# Floors above Ba # Floors below Ro		1 2					·	
# 110013 BCIOW 100		<u> </u>	%	ft2]	
	Tatal	01 4	needing	needing	0.000	01000.0		
Floor Area, ft ²	Total 240	Class 1 240	Remed. 0	Remed. 0	Class 2	Class 3		
Wall Area, ft ²	900	900			· · ·	ļ.,		
Ceiling Area, ft ²	240	and the second second second second second second second second second second second second second second second		0				
<u> </u>				•		L	ł	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componer Glove Boxes	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Hoods		100	0.5		1		· · · ·	
Benches/Tables/D								
Casework/Cabinet		45	0.1	0.5	0.5			
Reefers, Large Equ Misc. Equip./Labw		40	0		<u>.</u>			
Hot Cells	ale	40					·	
Storage Tanks		•		····· ,				
Other								
Sinks		4	0					
Drains Ventilation Drops		0.1 27.2	0					
	1						J	•
Drains	No.	1	Inch Dia.	2	Total ft ³	0.1		
Ventilation Drops	No.[2	Inch Dia.	14	Total ft ³	27.2		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	4	8	16				4	
Equip. Release	4	8	16				4	
Pack/Load waste Decon/Remed.	0.25	0.5		1	2	2	0.25	
Final Survey	2	4	8		<u></u>		2	
			· · · · · · · · · · · · · · · · · · ·				,	
# Lab Samples to b		a E	1					
•••••• <u>••</u> ••••••		<u></u> ,					<u></u>	
,								
	•			· ·				
			·* .					
				•				

Building	245	Ro	om or Area		C137	& C138		
Use				Clean Roo	m			
Radionuclides, Ex	tent of Con	taminatio	1	1 .	TRU, U, Ra	, Beta-gamn	na	1
Area Classification	n .	_ 1]					
# Floors above Ba		1						
# Floors below Ro	of	1					-	
	1	e .	%	ft2				
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	· ·	
Floor Area, ft ²	520	520	0	0	<u> </u>			
Wall Area, ft ²	<u> </u>	1064		0			1	
Ceiling Area, ft ²	520	520	0	0	<u> </u>		J	
	,		Eraction	Fraction	Fraction	Erection	Fraction	•
Componer	nte	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes	115			DAW	Wetai		Concrete	
Hoods	·					{	┠─────┤	
Benches/Tables/D	esks	50	0					
Casework/Cabinet		260	0			+	· · · · · · · · · · · · · · · · · · ·	
Reefers, Large Eq					<u> </u>	1		
Misc. Equip./Labw		2	0		1			
Hot Cells					····			
Storage Tanks	l l	30	0			†		
Other						· · ·		
Sinks		3	0					
Drains		0.1	0					
Ventilation Drops	. [0.0						
Drains	No.	1	Inch Dia.	2	Total ft ³	0.1	l	
Ventilation Drops	No.		Inch Dia.	<u> </u>	Total ft ³	0.0		
ventuation Drops					jiotain		ł	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled		
Characterize	4	8	16	·			4	\sim
Equip. Release	4	8	16		ļ	L	4	
Pack/Load waste	0.25	0.5		1	2	2	0.25	
Decon/Remed.								
Final Survey	2	4	8				2	
# Lab Samples to b	e collected	ı 1	1					,

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Building	245	Ro	om or Area	,	C	201	
Use			Forme	rly lab - no	w office		
Radionuclides, Ex		taminatio	<u>n</u> .		C-14, I	H-3 only	
Area Classificatio	n	3]				
# Floors above Ba]			•	
# Floors below Ro	of						
			%	ft2			
			needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	200		0	0	ļ	200	
Wall Area, ft ²	600		0	. 0		600	
Ceiling Area, ft ²	200		0	· 0		200	
0		T () (0)	Fraction	Fraction	Fraction	Fraction	Fraction
Compone Glove Boxes	nts I	Total ft3	RW	DAW	Metal	Lead	Concrete
Glove Boxes Hoods		40	0.5		1		
Benches/Tables/D	ocko	100	0.5				
Casework/Cabinet		80					
Reefers, Large Eq		100					
		100					
Misc. Equip./Labw	are i						
	are						
Hot Cells	vare						
Hot Cells Storage Tanks	vare					-	
Hot Cells Storage Tanks Other	rare	20		· · · · · · · · · · · · · · · · · · ·			
Misc. Equip./Labw Hot Cells Storage Tanks Other Sinks Drains	vare	20		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
Hot Cells Storage Tanks Other Sinks Drains	are			· · · · · · · · · · · · · · · · · · ·			
Hot Cells Storage Tanks Other Sinks Drains		0.0		· · · · · · · · · · · · · · · · · · ·			
Hot Cells Storage Tanks Other Sinks	vare	0.0	Inch Dia.	2	Total ft ³	0.0	
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains		0.0	Inch Dia.	2 20	Total ft ³ Total ft ³	0.0	
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops	No. No.	0.0 0.0 1 1	Inch Dia.	20	Total ft ³	0.0	
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours	No. No.	0.0 0.0 1 1 Supvsr	Inch Dia.				Clerical
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize	No. No.	0.0 0.0 1 1	Inch Dia.	20	Total ft ³	0.0	Clerical 0.5
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No. No.	0.0 0.0 1 1 Supvsr	Inch Dia.	20	Total ft ³	0.0	
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release Pack/Load waste	No. No.	0.0 0.0 1 1 Supvsr	Inch Dia.	20	Total ft ³	0.0	
Hot Cells Storage Tanks Other Sinks Drains Ventilation Drops Drains Ventilation Drops Person-hours Characterize Equip. Release	No. No.	0.0 0.0 1 1 Supvsr	Inch Dia.	20	Total ft ³	0.0	

			· .							
								•		
•										
Building	245	Ro	om or Area		C	203]]	
Use			C	Dosimetry La	ab]		
Radionuclides, Ex			<u>n</u>		Sealed	I-125 only				
Area Classification # Floors above Ba		3	4					,		
# Floors below Ro			4							
			%	ft2	ļ		Ì		1	
			needing	needing						
	Total	Class 1	Remed.	Remed.	Class 2	Class 3				
Floor Area, ft ²	150			0	ļ	150			ļ	
Wall Area, ft ²	500		ļ	0		500				
Ceiling Area, ft ²	150			0	L	150	l			
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	· ,		
Glove Boxes] .	(
Hoods								1		
Benches/Tables/D		30	0							
Casework/Cabinet		<u> 160 </u> 40	0			· · · · ·	·	{	i i	
Reefers, Large Equ Misc. Equip./Labw		120		ļ						
Hot Cells	are	120						 		
Storage Tanks		20	0			}		1		
Other							• .	1		
Sinks		20	0							
Drains		0.0	0		·					
/entilation Drops		0.0	0							
	-		7				1			
Drains	No.	1	Inch Dia.	2	Total ft ³	0.0				
entilation Drops	No.		Inch Dia.	L	Total ft ³	0.0				
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical			
Characterize	1	2	4				1			
Equip. Release	1	2	4				1			
Pack/Load waste	0.25	0.5			· 1	1	0.25			
Decon/Remed.			•							
inal Survey	0.5	1	2				0.5	1		
t Lab Samples to b	e collected	ł	0							
·						<u> </u>				
		·	i i							
· *										

Use Radionuclides, Exte Area Classification # Floors above Base # Floors below Roo				Office											
Area Classification # Floors above Base			n	t			Office								
Area Classification # Floors above Base				5	Sealed S	Sr-90 only									
# Floors above Base	amort	3	Ï		000100	Ji bo only									
# Floors below Roo	ement		1												
	f		1												
			%	ft2											
			needing	needing											
	Total	Class 1	Remed.	Remed.	Class 2	Class 3									
Floor Area, ft ²	200			0		200									
Wall Area, ft ²	720			0	ļ	720									
Ceiling Area, ft ²	200	l		0		200									
			Fraction	Fraction	Fraction	Fraction	Fraction								
Component	s	Total ft3	RW	DAW	Metal	Lead	Concrete								
Glove Boxes															
Hoods															
Benches/Tables/Des	sks	60	0		· · · · ·										
Casework/Cabinets		400	0												
Reefers, Large Equi															
Misc. Equip./Labwa	re		· · ·				·								
Hot Cells Storego Tonko															
Storage Tanks Other															
Sinks					·										
Drains		0.0	1												
Ventilation Drops		0.0													
· · · · · · · · · · · · · · · · · · ·	L														
Drains	No.	0	Inch Dia.		Total ft ³	0.0									
Ventilation Drops	No.	0	Inch Dia.		Total ft ³	0.0									
•	•														
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical								
Characterize	0.5 ·	1	2				0.5								
Equip. Release			ļ		· .										
Pack/Load waste															
Decon/Remed.					·										
Final Survey	0.5	1	2				0.5								

Radionuclides, Ex Area Classification		taminatior	1				· .	
# Floors above Ba								
# Floors below Ro	of							
			%	ft2				
	Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3		
Floor Area, ft ²	4497	3672		170.4	01255 2			
Wall Area, ft ²	9760			119				
Ceiling Area, ft ²	4497	3672		0		825		
		00.2	l	V	L U	020	l · ·	
		i	Fraction				ft ³	
Componer	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete	-
Glove Boxes		22		0				
Hoods		45						
Benches/Tables/D		662	0				<u> </u>	
Casework/Cabinet Reefers, Large Equ		<u>1319</u> 75	0	· · · ·				
Misc. Equip./Labw		1144	0				•	
Hot Cells		20				<u>.</u>		
Storage Tanks		0			,			
Other		415						
Sinks		62						
Drains		1.944444						
Ventilation Drops	l	2.291667						
	_							
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		•
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	51	102	204	0	0	0	51	
Equip. Release	33	66	132	0	· 0	0	33	
Pack/Load waste	4	8	18	. 8	28	28	4	
Decon/Remed.	3	6	12	0	- 12	12	3	
Final Survey	26	52	104	0	0	0	27	
# Lab Samples to b	e collected		7					

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				1				
Building	245] Roe	om or Area		E	102		,
Use	<u> </u>			Office				1
			·	0				
Dedienvelides Ext					Ne	one		
Radionuclides, Ext Area Classification		3			INC			J
# Floors above Bas		1						
# Floors below Roo	of	1	%	ft2	I		1	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ² Wall Area, ft ²	<u>225</u> 540			0		225		
Ceiling Area, ft ²	225	<u> </u>		0		225		
Componen		Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes								
Hoods Benches/Tables/De	aka	240	0					
Casework/Cabinets		<u>240</u> 60	0					
Reefers, Large Equ		3	0					
Misc. Equip./Labwa Hot Cells	Ire .							
Storage Tanks								
Other		<u>·</u>						
Sinks Drains		0.0						
Ventilation Drops	۰,	0.0						
Drains	No.	0	Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.	0	Inch Dia.	· · · · ·	Total ft ³	0.0		
Person-hours Characterize	Mgr 0.5	Supvsr 1	HP Tech 2	Shipper	Skilled	Unskilled	Clerical 0.5	
Equip. Release	0.0		<u> </u>				0.0	
Pack/Load waste]	
Decon/Remed. Final Survey	0.5	1	2				0.5	
# Lab Samples to b		d	0					
					•			

Building	245	Roo	om or Area		E	103		
Use			La	ser Radiat	ion	······································		
Radionuclides, Ext	tent of Con	tamination		TRU. U	. Ra. Sr90.	Beta-gamm	a. Low E	
Area Classification		1	· ·	,	,,			
# Floors above Ba	sement	1						
# Floors below Ro	of	1						
			%	ft2]	
			needing	needing		1		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		:
Floor Area, ft ²	1800	1800	0.05	90				,
Wall Area, ft ²	2380	2380	0.05	119				,
Ceiling Area, ft ²	1800	1800				· ·	1	
Componen	nte	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes	1.3	2	1	1	- metal			
Hoods				•	<u> </u>			
Benches/Tables/De	esks	100	0.05	0.25	0.75			
Casework/Cabinets		780	0.05	0.5	0.5			
Reefers, Large Equ							· ·	
Misc. Equip./Labwa		1000	0			1		
Hot Cells								
Storage Tanks								
Other								
Sinks		24	0					•
Drains	[0.1	0					
Ventilation Drops		0.0						
			r		1 ^		I	
Drains	No.		Inch Dia.	2	Total ft ³	0.1		
Ventilation Drops	No.[Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	16	32	64				16	
Equip. Release	16	32	64				16	
Pack/Load waste	1	2	.4	2	4	4	1	
			4		4	4	1	
Decon/Remed.	1	2 16	4 32		4	4		

Building	245	Ro	om or Area		E	104]
1100				shaniaal Di		·		, 1 .'
Use	l	· · · · · · · · · · · · · · · · · · ·	IVIE	chanical R		·····	· · · · · · · · · · · · · · · · · · ·]
Radionuclides, Ex			ŋ ·		N	one		. .
Area Classificatio		3			4			
# Floors above Ba		1			. •			
# Floors below Ro	of	1	ļ		· · ·	·	1	
			%	ft2				
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	<u>600 - 6000 - 600 - 600 - 600 - 600 - 600 - 600 - 600 - 600 - 600 - 600 - 600 </u>			· 0		600		
Wall Area, ft ²	1540		- N	0		1540		
Ceiling Area, ft ²	600			0		600		
Componei	nte	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes		- otdi ito	T					1
Hoods	•				· · · · · ·			1
Benches/Tables/D	esks					<u> </u>		1 ·
Casework/Cabinet	·· ·		· · · · · · · · · · · · · · · · · · ·	······			· · ·	
Reefers, Large Eq	uipment	* <u></u>				· · · ·		
Misc. Equip./Labw			1		1			
Hot Cells			· · · ·					
Storage Tanks	Ĩ					· ·		
Other			•					
Sinks	,							
Drains		0.0	100 C					
Ventilation Drops	[0.0					•	
Drains	No.		Inch Dia.		Total ft ³	0.0	۰.	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		,
•	, b			·		·	I	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.5	1	2				0.5	
Equip. Release					14			
Pack/Load waste				•				
Decon/Remed.								
Final Survey	0.5	1	2				0.5	· •
# Lab Samples to t	be collected	1	0				۶ ۲	

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	245		om or Area	L	<u> </u>	105		ł
Use		·	High le	evel radioch	nemistry	· · · · · · · · · · · · · · · · · · ·		l
Radionuclides, Ex	tent of Cor	ntaminatio	,	1	•		· ·	
Area Classificatio		1]	L				1
# Floors above Ba	asement	1				gamma, Lov	vE.Fe-	
# Floors below Ro	oof	1		contamina	tion marked	d on floor		,
······			%	ft2]	
			needing	needing				I
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	<u> </u>	
Floor Area, ft ²	336	336	0.1	33.6]	
Wall Area, ft ²	1000			0	<u> </u>		1	
Ceiling Area, ft ²	336			0			1	I
			•			•		ľ
-		-		Fraction		Fraction	Fraction	
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes		20			<u> </u>	·		
Hoods Received a Charles (C		30	0.25					
Benches/Tables/D	+	42	0.05					
Casework/Cabinet		48 72	0.05	0.5	0.5	<u> </u>		
Reefers, Large Eq		15	0.05	0.5	0.5			
Miśc. Equip./Labw Hot Cells	ale	20	0.05	0.5 0.33	0.33	0.34	L	
Storage Tanks		20	0.20	0.55	0.55	0.34		
Other		·	· · · · ·					
Sinks		4	0					
Drains		1.1	0					
/entilation Drops		1.7	0					
-								
Drains	No.		Inch Dia.	4	Total ft ³	1.1		
Ventilation Drops	No.	3	Inch Dia.	. 4	Total ft ³	1.7		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	8	16	32				8	
Equip. Release	5	10	20				5	
Pack/Load waste	1	2	4	2	4	4	1	
Decon/Remed.	0.5	1	2		2	2	0.5	
Final Survey	4	8	16				4	

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Building	245	Roo	om or Area		E	106	
Use			Medium I	Level Radio	ochemistry		
Radionuclides, Ex Area Classificatio		tamination	· •	TRU, U	, Ra, Sr90,	Beta-gamm	a, Low E
# Floors above Ba		1					
# Floors below Ro		1					
			%	ft2	1	r	1
			needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	336	336	0.05				
Wall Area, ft ²	1100	1100		0		i	
Ceiling Area, ft ²	336	336		0			
Componei		Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes							
Hoods		15	0		[
Benches/Tables/D	esks	8	0	,			
Casework/Cabinet	s	7	0				· · · · · · · · · · · · · · · · · · ·
Reefers, Large Eq							
Misc. Equip./Labw		4	0				
Hot Cells	*			(
Storage Tanks							
Other		15	0				I
Sinks		4	0				
Drains		0.4	0				
Ventilation Drops		0.6	0				
Drains	No.	3	Inch Dia.	2	Total ft ³	0.4	
Ventilation Drops	NO. No.		Inch Dia.	3	Total ft ³	0.4	
ventuation Drops	NO.[۷	men Dia.	J .		0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	8	16	32				8
Equip. Release	.5	10	20				5
Pack/Load waste							
Decon/Remed.	0.5	1	2		2	2	0.5
Final Survey	4	8	16				4
# Lab Samples to t	oe collected		1				

Building	245	Room or AreaE107										
Use		······································	Alpha, beta measurements									
Radionuclides, Ex	tent of Cor	tamination		три и	Ra Sr00	Beta-gamm						
Area Classificatio			1	11(0, 0	, Na, 0150,	Dela-yamm						
# Floors above Ba		1	1									
# Floors below Ro		1	1									
			%	ft2	[]					
			needing	needing								
	Total	Class 1	Remed.	Remed.	Class 2	Class 3						
Floor Area, ft ²	450	450	0	0]					
Wall Area, ft ²	900	900	0	0]					
Ceiling Area, ft ²	450	450	0	0		1	1					
					•		•					
_			Fraction	Fraction	Fraction		Fraction					
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete					
Glove Boxes						ļ						
Hoods Benches/Tables/D			0.05									
Casework/Cabinet		200 300	0.05	0.5	0.5							
Reefers, Large Eq		300	0									
Misc. Equip./Labw		25	0.05	0.5	0.5		· · · · · · · · · · · · · · · · · · ·					
Hot Cells			0.00			<u> </u>						
Storage Tanks												
Other												
Sinks		6	0.1		1							
Drains		0.1	0									
Ventilation Drops	[0.0	0									
Drains	No.	1	Inch Dia.	2	Total ft ³	0.1						
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0						
· p -			.				I					
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical					
Characterize	8	16	32		· · · · · · · · · · · · · · · · · · ·		8					
Equip. Release	5	10	20	1			5					
Pack/Load waste			2	2	4	4						
Decon/Remed. Final Survey	0.5	1 8	2 16		2	2	0.5					
		0 1	16				4					

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Building	245	Ro	om or Area		E'	108	····
Use			Radioacti	vity measu	rement lab		
Dedienvelidee Ev					Coolod		
Radionuclides, Ex Area Classification			ן ק		Sealeu	H-3 only	· · · · · · · · · · · · · · · · · · ·
# Floors above Ba		1	4				
			- ·				
# Floors below Ro		. 1	%	ft2	T	T	1
			needing	needing].	ļ	J
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	450	450		0			
Wall Area, ft ²	900	900	. 0	0			
Ceiling Area, ft ²	450	450	. 0	0			
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes							
Hoods					I		
Benches/Tables/D	esks	72	0				
Casework/Cabinet	s	124	0				
Reefers, Large Eq	uipment					•	
Misc. Equip./Labw		100	0				
Hot Cells							
Storage Tanks							
Other							
Sinks		24	0				
Drains		0.1	0				
Ventilation Drops	ł	0.0					
Drains	No.	· 1	Inch Dia.	2	Total ft ³	0.1	
	NO.	I	Inch Dia.	۷	Total ft ³	0.1	
Ventilation Drops	NO.[Jinch Dia. [·	JIOTAIR	0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	2	4	8				2
Equip. Release	2	4	8				2
Pack/Load waste				a. ar 1			
Decon/Remed.							
Final Survey	1	2	4				2
# Lab Samples to t	oe collected	1 	1				1

Storage Tanks 400 1 0.25 0.75 Other 400 1 0.25 0.75 Sinks 0.0 1 0.25 0.75 Drains 0.0 1 1 0.25 0.75 Ventilation Drops 0.0 1 1 1 1 Drains 0.0 1 1 1 1 1 Ventilation Drops 0.0 1 1 1 1 1 1 Drains No. Inch Dia. Total ft ³ 0.0 1 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>									
Use Ventilation equipment Radionuclides, Extent of Contamination Potentiality TRU, Ra, U, Beta-gamma Area Classification 1 Potentiality TRU, Ra, U, Beta-gamma # Floors above Basement 2 # Floors below Roof 1 / Image: model above Basement 2 / # Floors below Roof 1 / Image: model above Basement 2 / # Floors below Roof 1 / Image: model above Basement 2 / # Floor Area, ft ² 300 300 0.1 30 Floor Area, ft ² 300 300 0 - Galance Basement Emergination Fraction Fraction Fraction Fraction Galove Bases Total ft3 RW DAW Metal Lead Concrete Hoods Emergination Image: model above bases Image: model above base Image: model above base Image: model above base Glove Base Image: model above base Image: model above base Image: model above base Image: model above base <thimage: mode<="" th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></thimage:>									
Use Ventilation equipment Radionuclides, Extent of Contamination Potentiality TRU, Ra, U, Beta-gamma Area Classification 1 Potentiality TRU, Ra, U, Beta-gamma # Floors above Basement 2 # Floors below Roof 1 / Image: model above Basement 2 / # Floors below Roof 1 / Image: model above Basement 2 / # Floors below Roof 1 / Image: model above Basement 2 / # Floor Area, ft ² 300 300 0.1 30 Floor Area, ft ² 300 300 0 - Galance Basement Emergination Fraction Fraction Fraction Fraction Galove Bases Total ft3 RW DAW Metal Lead Concrete Hoods Emergination Image: model above bases Image: model above base Image: model above base Image: model above base Glove Base Image: model above base Image: model above base Image: model above base Image: model above base <thimage: mode<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>•</td><td>,</td><td></td></thimage:>							•	,	
Use Ventilation equipment Radionuclides, Extent of Contamination Potentiality TRU, Ra, U, Beta-gamma Area Classification 1 Potentiality TRU, Ra, U, Beta-gamma # Floors above Basement 2 # Floors below Roof 1 / Image: model above Basement 2 / # Floors below Roof 1 / Image: model above Basement 2 / # Floors below Roof 1 / Image: model above Basement 2 / # Floor Area, ft ² 300 300 0.1 30 Floor Area, ft ² 300 300 0 - Galance Basement Emergination Fraction Fraction Fraction Fraction Galove Bases Total ft3 RW DAW Metal Lead Concrete Hoods Emergination Image: model above bases Image: model above base Image: model above base Image: model above base Glove Base Image: model above base Image: model above base Image: model above base Image: model above base <thimage: mode<="" td=""><td>Desilation</td><td>045</td><td>, 1 [°] D-</td><td></td><td>r</td><td><u> </u></td><td></td><td></td><td></td></thimage:>	Desilation	045	, 1 [°] D-		r	<u> </u>			
Potentially TRU, Ra, U, Beta-gamma Potentially TRU, Ra, U, Beta-gamma Area Classification 1 # Floors above Basement 2 # Floors below Roof 1 # Floor Area, ft ² 300 300 0.1 Stora Area, ft ² 300 300 0	Building	245	j Ro	om or Area		Ventilation	Penthouse)	
Area Classification 1 # Floors above Basement 2 # Floors below Roof 1 # Floors below Roof 1 Total Class 1 Remed. Class 2 Class 1 Remed. Remed. Class 2 Class 3 0 Wall Area, ft ² 1400 1400 0 Components Total ft3 RW DAW Metal Lead Concrete Concrete Glove Boxes	Use	•		Vent	ilation equi	oment	·		
Area Classification 1 # Floors above Basement 2 # Floors below Roof 1 # Floors below Roof 1 Total Class 1 Remed. Class 2 Class 1 Remed. Remed. Class 2 Class 3 0 Wall Area, ft ² 1400 1400 0 Components Total ft3 RW DAW Metal Lead Concrete Concrete Glove Boxes	Radionuclides Ex	tent of Cor	taminatio	· · · · · · · · · · · · · · · · · · ·	Boton		Po II Rota		
# Floors below Roof 1 % ft2 needing needing Remed. ft2 Class 2 Class 3 Floor Area, ft ² 300 300 0.1 30]	Foten			gamma	
Total Class 1 ft2 needing Remed. class 2 class 3 Floor Area, ft ² 300 300 0.1 30			and the second se				, j		
Total Class 1 needing Remed. needing Remed. class 2 Class 3 Floor Area, ft ² 300 300 0.1 30	# Floors below Ro	of	1		#2	r	<u>.</u>	1	
Total Class 1 Remed. Remed. Class 2 Class 3 Floor Area, ft ² 300 300 0.1 30				•					
Wall Area, ft ² 1400 1400 0		Total	Class 1			Class 2	Class 3		
Ceiling Area, ft ² 300 300 0 Components Total ft3 RW Fraction	Floor Area, ft ²							4	
ComponentsTotal ft3Fraction RWFraction DAWFraction MetalFraction LeadFraction ConcreteGlove BoxesHoodsBenches/Tables/DesksBenches/Tables/DesksCasework/CabinetsReefers, Large EquipmentMisc. Equip./LabwareHot CellsStorage TanksOtherJainsDrainsNo.DrainsNo.Inch Dia.Total ft3OnDrainsNo.Inch Dia.Total ft3OnDrainsNo.Inch Dia.Total ft3OnOnPerson-hoursMgrSupvsrHP TechShipperSkilledOnDecon/Remed.0.512220.512220.5111111111111112222222223434						ļ	ļ	4	
Components Glove BoxesTotal ft3RWDAWMetalLeadConcreteGlove Boxes	Celling Area, ft	300		L	0	l	<u> </u>	J .	
Hoods		nts	Total ft3						
Benches/Tables/Desks									
Reefers, Large Equipment		esks							
Misc. Equip./Labware									
Hot CellsStorage TanksOther40040010.250.75SinksDrains0.0Ventilation Drops0.0Inch Dia.Total ft³0.0Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledCharacterize816328Equip. Release911222248164									
Other40010.250.75Sinks0.00.00.0Ventilation Drops0.00.0DrainsNo.Inch Dia.Total ft³OrainsNo.Inch Dia.Total ft³OperativeNo.Inch Dia.Total ft³Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledCharacterize816Sequence0.51Pack/Load waste24A164	Hot Cells	are							
Sinks0.00.00.0Drains0.00.00.0Ventilation DropsNo.Inch Dia.Total ft³DrainsNo.Inch Dia.Total ft³Ventilation DropsNo.Inch Dia.Total ft³Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize816328Equip. Release8Pack/Load waste2482Decon/Remed.0.51222Final Survey48164	Storage Tanks								
Drains0.0Image: Constraint of the state of the st			400	1	0.25	0.75			
Ventilation Drops0.0Inch Dia.Total ft³0.0DrainsNo.Inch Dia.Total ft³0.0Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledCharacterize8163288Equip. Release8Pack/Load waste24821616Decon/Remed.0.512220.5Final Survey481644			0.0						
Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize816328Equip. Release8Pack/Load waste248216162Decon/Remed.0.512220.5Final Survey48164	Ventilation Drops					· · · · · ·			
Ventilation DropsNo.Inch Dia.Total ft³0.0Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize816328Equip. Release8Pack/Load waste248216162Decon/Remed.0.512220.5Final Survey48164				[1	
Person-hoursMgrSupvsrHP TechShipperSkilledUnskilledClericalCharacterize8163288Equip. Release816162Pack/Load waste24821616Decon/Remed.0.512220.5Final Survey481644						Total ft ³			
Characterize 8 16 32 8 Equip. Release 2 4 8 2 16 16 2 Pack/Load waste 2 4 8 2 16 16 2 Decon/Remed. 0.5 1 2 2 2 0.5 Final Survey 4 8 16 4							0.0		
Equip. Release		Mgr		HP Tech	Shipper	Skilled	Unskilled		
Pack/Load waste 2 4 8 2 16 16 2 Decon/Remed. 0.5 1 2 2 2 0.5 Final Survey 4 8 16 4 4		8	16	32				8	
Decon/Remed. 0.5 1 2 2 2 0.5 Final Survey 4 8 16 4 4	Pack/Load waste	2	4	8	2	16	16	2	
	Decon/Remed.						2		
# Lab Samples to be collected 1	Final Survey	4	8	16				4	
	# Lab Samples to b	oe collected	ı [1			·		
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	Building	245	Ro	om or Area	•	F۷	Ving			1 ·
		· · · · · ·							1	
	Use								I .	
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	Radionuclides, Ex Area Classification		taminatior	1 · ·		·	·		1	
	# Floors above Bas		· · ·							
	# Floors below Ro	of			<u> </u>			י א ר		
				% needing	ft2 needing					
		Total	Class 1	Remed.	Remed.	Class 2	Class 3			
	Floor Area, ft ²	625	the second second second second second second second second second second second second second second second s		0					
	Wall Area, ft ²	1400			0					
	Ceiling Area, ft ²	625	0		0	0	625			
	· ·		ć	Fraction	_	_		ft ³		
	Componen	its	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete	I	1
	Glove Boxes Hoods		0		0	<u>·</u>				
	Benches/Tables/De		175	0						
	Casework/Cabinet		100 0	0						
	Reefers, Large Equ Misc. Equip./Labwa		30	<u> </u>						
	Hot Cells		0							[
	Storage Tanks Other		0		···					
	Sinks		4							
	Drains		0					,		· · .
	Ventilation Drops		0			l	l			
			·			· ·		•		
	Drains	No.	the second second second second second second second second second second second second second second second s	Inch Dia.	·····	Total ft ³	0.0			
	Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0]		•
	Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	·		
	Characterize Equip. Release	1 4	. 2 8	4 16	0	0 0	0	4	•	
	Pack/Load waste	4	4	8	4	8	8	•		
	Decon/Remed.	0	0	0	0	0	0	-		
	Final Survey	1	2	4	.0	0	. 0	1		
	# Lab Samples to b	e collected	t	0						
	L									
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Building	245] Ro	om or Area		F	101		
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Use			Co-60) sources a	nd well]
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Radionuclides, Ex		and the second s	1 [°] 7		Sealed (Co-60 only		J ·
Area Classification		3	4					
# Floors above Ba			ł					
# Floors below Ro			%	ft2		1	ז	
			needing	needing		1		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	625			0		625	1	,
Wall Area, ft ²	1400		<u> </u>	0		1400	•	
Ceiling Area, ft ²	625			0		625	1	
Celling Area, IL	025	·	L	U	<u> </u>	025	l	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes	1.5							1
Hoods		· ·						
Benches/Tables/D	esks	, 175	0					
Casework/Cabinet	S	100	0					-
Reefers, Large Eq								
Misc. Equip./Labw	are	30	0					
Hot Cells								
Storage Tanks						ļ		
Other		5	0		 	 		
Sinks		4	0		<u> </u>		·	
Drains Ventilation Drang		0.0	0			i		
Ventilation Drops	1	0.0	<u> </u>		L	L		
Drains	NI	1	Inch Dia	2	Total ft ³			
	No.			<u> </u>		0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	1	2 2	4	Sunhhei	UNITED	JIJANNEU		
Equip. Release	4	8	4 16				4	
Pack/Load waste	2		8	4	8	8	2	
Decon/Remed.		- r	ĭ	- r		<u>-</u>		
		2	4				1	
Final Survey	1	<u> </u>						

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Use			om or Area		· · · · · · · · · · · · · · · · · · ·]
		······]
				r				1
Radionuclides, Ex	tent of Con	tamination	Ì					
Area Classification	ו (
# Floors above Ba								
# Floors below Ro	of						1.	
		· ·	%	ft2				
	-		needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	4400	0		- 0		4400		
Wall Area, ft ²	5200			0		5200		
Ceiling Area, ft ²	4400	. 0		0		4400		
							- 3	
			Fraction	e 3		e.3	ft ³	
Componer	its I	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete	. 1
Glove Boxes		0		0			<u></u>	
Hoods		0						
Benches/Tables/De		800	0					
Casework/Cabinet		100 2500	0			· · · · ·		
Reefers, Large Equ Misc. Equip./Labwa		1000	0					
Hot Cells		0						
Storage Tanks		0			•			
Other		0						
Sinks		0					· · ·	
Drains		0			· · ·			
Ventilation Drops		0				· · · · .		
•	L. L. L. L. L. L. L. L. L. L. L. L. L. L	_		•				
	-							
Drains	No.	the second second second second second second second second second second second second second second second s	Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.[Inch Dia.		Total ft ³	0.0		
								1
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	1	, 2	4	0	0		1	
Equip. Release	1	2	. 4	0	• 0	0	1	
Pack/Load waste Decon/Remed.	0.5	0	0 \\0	0	2 0	2 0	0.5 0	
Final Survey	0 . 1	2	4	0	0	0	1	
	· •	2	-	U	0	U		.
# Lab Samples to b	e collecter	1	0					
		-	~					
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Building	201	l De		· · · · · · · · · · · · · · · · · · ·	D405	A and O	F	
Building	301	יא	om or Area	[B 1857	A and C		
Use				Shipping			•	
				r			·····	
Radionuclides, Ex			ŋ		Sealed N	Ni-63 only		
Area Classification # Floors above Ba		3	· .					
# Floors below Ro			1					
			% needing	ft2 needing				
· · ·	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	4400		[0		4400		
Wall Area, ft ²	5200		<u> </u>	0		5200		
Ceiling Area, ft ²	4400		I	0	L	4400		
	4		Fraction	Fraction	Fraction	Fraction	Fraction	
Componer Glove Boxes	ns [Total ft3	RW	DAW	Metal	Lead	Concrete	
Hoods				·				
Benches/Tables/De Casework/Cabinets		800	0					
Reefers, Large Equ	lipment	2500	0				· · · · · · · · · · · · · · · · · · ·	
Misc. Equip./Labwa	are	1000	0					
Hot Cells Storage Tanks	-							
Other				-			· · · · · · · · · · · · · · · · · · ·	
Sinks Drains	-							
Ventilation Drops	. [
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Dereen hours		Curring	HP Tech	Oh:	01-111-1	11		
Person-hours Characterize	Mgr 1	Supvsr 2	4	Shipper	Skilled	Unskilled	Clerical 1	
Equip. Release	1	2	4	•			1	
Pack/Load waste Decon/Remed.	0.5	1			2	2	0.5	
Final Survey	1	2	4				1	1
# Lab Samples to b	e collected	r	0					
		ſ		•				
						•		
							•	

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Buildin	g 303] Rod	om or Area	+		·····		
Us	<u>م</u>							
03	• <u></u>							
Dedienvelidee . F	where the figure							
Radionuclides, E Area Classificati			1			· ·	,	
# Floors above B			1					
# Floors below R	oof				r		I	
			% needing	ft2 needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	6400	. 0	1	0		6400		
Wall Area, ft ²	8000		t	0		8000		
Ceiling Area, ft ²	6400	0		0		6400		
			Fraction				ft ³	
Compone	ents	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead		
Glove Boxes		0		0				
Hoods	. .	0						
Benches/Tables/ Casework/Cabine		300 200	0					
Reefers, Large E		1000	0		·			
Misc. Equip./Lab		0						
Hot Cells		0						
Storage Tanks Other		0						
Sinks		0	· ·					
Drains		0						
Ventilation Drops	i	0	•					1
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	н. 1
Characterize	1.5	Supvsr 3		Silippei 0	O		1.5	
Equip. Release	1.5	3	6	0	0		1.5	
Pack/Load waste		1	0	0	2		0.5	
Decon/Remed.		0	<u> </u>	0	0	0	. 0	
Final Survey	1.5	3	6	0	0	0	1.5	

Building	303	Ro	om or Area		1	12		
Use	<u> </u>							
550	L	····						
Radionuclides, Ex			n T		Sealed I	Ni-63 only		
Area Classification	-	3						
# Floors above Ba			4					
# Floors below Ro	01		%	ft2	Г		1	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	1	
Floor Area, ft ²	6400			0	<u> </u>	6400	1	
Wall Area, ft ²	8000			0	t	8000	4	
Ceiling Area, ft ²	6400			0		6400	1	
			Fraction	Fraction	Fraction	Fraction	Fraction	
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes								
Hoods			<u> </u>		ļ			
Benches/Tables/D		300	0		 			
Casework/Cabinet		200	0		<u> </u>			
Reefers, Large Equ Misc. Equip./Labwa		1000	0		ļ			
Hot Cells	are							
Storage Tanks								
Other								
Sinks								
Drains	Į							
Ventilation Drops								
	r		1 <u></u> r		19		I	
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mar	Sunver	HP Tech	Shinner	Skilled	Unskilled	Clerical	
Characterize	Mgr 1.5	Supvsr 3	6	Shipper	Skilled	UNSKINED	1.5	5
Equip. Release	1.5	3	6				1.5	
Pack/Load waste	0.5	1			2	2	0.5	
Decon/Remed.								
Final Survey	1.5	3	6				1.5	
			0	<u> </u>				
Lab Samples to b								

	423	Roo	om or Area					
Use	»							
			-	,				
Radionuclides, Ex	rtent of Cor	ntaminatior	1					
Area Classificatio]					
# Floors above Ba	asement		1					
# Floors below Ro	oof							
			%	ft2				
	Total	Class 1	needing Remed.	needing Remed.	Class 2	Class 3		
Floor Area, ft ²	630			Nemeu.	1	630		
Wall Area, ft ²	1080			. 0		1080		
Ceiling Area, ft ²	630			0	7	630	•,	
			Fraction	c:3	ci3 ma	<i>c</i> ,3 , , ,	ft ³	
Compone	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete	
Glove Boxes Hoods		0						
Benches/Tables/)	6	0					
Casework/Cabine		120	0					
Reefers, Large Eq		200	0					
Misc. Equip./Labv		50						
Hot Cells	, and	0						
Storage Tanks		0						
Other		0						
Sinks		2						
Drains		0	<i></i>					
Ventilation Drops		0			<u> </u>			
		÷.						
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.	,	Total ft ³	0.0		
		C	UD Teat	Chinese	Skilled	Unskilled	Clerical	
Person-hours Characterize	Mgr 1	Supvsr 2	HP Tech 4	Shipper 0				
Equip. Release	0.5		2	ů 0			0.5	
Pack/Load waste	0.5	(` 0	0	2		0.5	
Decon/Remed.	1 0	0	0	0	0	0	0	
Final Survey] 1	2	4	0	. 0	0	1	
I								

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Building	423	Ro	om or Area	al	X	100		
Use) 							
				r				
Radionuclides, E	ctent of Cou	ntaminatio	n		Sealed k	(r-85, Ni-63	· ·	
Area Classificatio		3	7	L	Obulca			ł
# Floors above Ba]					
# Floors below Ro	pof	<u> </u>	<u> </u>	ft2	· · · · · · · · · · · · · · · · · · ·	T	1	
ł		(needing	needing		1	ł	
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	180			0		180		
Wall Area, ft ²	360	f	 	0	<u> </u>	360	1	
Ceiling Area, ft ²	180			0		180		
			Fraction	Fraction	Fraction	Fraction	Fraction	
Compone	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes								
Hoods) a a ka	6	0		<u> </u>			
Benches/Tables/E Casework/Cabine			┼───					
Reefers, Large Eq				<u> </u>				
Misc. Equip./Labv			ļ					
Hot Cells			<u> </u>		<u> </u>			
Storage Tanks Other			<u> </u>		┦────			
Sinks				· · · · · · · · · · · · · · · · · · ·	ļ			
Drains								
Ventilation Drops					l			
Drains	No.		Inch Dia.	[Total ft ³	0.0		[
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	I	
		<u> </u>	1	L]			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize Equip. Release	0.5	1	2		 		0.5	
Pack/Load waste			 					
Decon/Remed.								
Final Survey	0.5	1	2				0.5	
inter our roy			<u> </u>	L	L	II		
			<u> </u>					

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Radionuclides, Ex			n	2.	N	one		
Area Classification		3						
# Floors above Ba # Floors below Ro		01	4					•
# FIGOIS DEIOW RO		ł	%	ft2	r ———	T		
			needing	needing			,	
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	450			0		450		
Wall Area, ft ²	720			0		720		
Ceiling Area, ft ²	450			0		450		
					· · · · · · · · · · · · · · · · · · ·			
0	-1-	T-4-1-60	Fraction	Fraction	Fraction	Fraction	Fraction	
Componer Glove Boxes	115	Total ft3	RW	DAW	Metal	Lead	Concrete	· ·
Hoods								
Benches/Tables/D	osks		· · · · · · · · · · · · · · · · · · ·	· · ·			<u> </u>	
Casework/Cabinet		120	0					
Reefers, Large Eq		200	.0			·		,
Nisc. Equip./Labw		50	0					
Hot Cells			<u>├</u> ──ॅ					
Storage Tanks			· · · · · · · · · · · · · · · · · · ·					
Other								
Sinks		2	0					
Drains		0.0	0					
/entilation Drops		0.0						
	N - [lun bra		Total ft ³	0.0		
Drains	No.	1	Inch Dia.	2	Total ft ³	0.0		
/entilation Drops	No.		Inch Dia.		Total It	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	0.5	1	2				0.5	
quip. Release	0.5		2				0.5	
Pack/Load waste	0.5	1	ļ		2	2	0.5	
Decon/Remed.	0.5	4						
inal Survey	0.5	1	2				0.5	
	a collecter	4	1					
t I ah Samples to b		a						
Lab Samples to b								

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Building	Various	Ro	om or Area	Va	rious labe p	reviously us	sed]]
Use		. <u> </u>	5	See list belo	w]
-								-
Radionuclides, Extent Area Classification	t of Contar	2 and 3]	L	P			J [
# Floors above Basem	nent	2 414 0	1					· ·
# Floors below Roof			·					1
			%	ft2				
	Tatal	01	needing	needing	010	01		
Floor Area, ft ²	Total 50000	Class 1 0	Remed.	Remed. 0	Class 2 25000	Class 3 25000		
Wall Area, ft ²	135000	0		0				
Ceiling Area, ft ²	50000	0		0				
				<u>v</u>			I	
		•	Fraction				ft ³	{
Components	;	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete	, l
Glove Boxes Hoods		0		0				4
noods Benches/Tables/Desks		0	0					1
Casework/Cabinets		0	0					1 1
Reefers, Large Equipn	nent	0	0					
Misc. Equip./Labware		0						1. 1
Hot Cells Storage Tanks	ľ	0						
Other	ŀ	0						1
Sinks	ľ	0						1
Drains	[0						
Ventilation Drops	L	0	I		l			l l
								1
Drains	No.		Inch Dia.		Total ft ³	0.0		
/entilation Drops	No.[Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	62.5	125	250	0	0	0	62.5	
Equip. Release	25	50	100	0	0	0	25	
Pack/Load waste Decon/Remed.	12.5 0	25 0	0 0	0 0	50 0	50 0	12.5 0	
inal Survey	0 25	50 ·	100	0	0	0	0 25	1
		50			v	. .	20	
Lab Samples to be co	ollected		25	-				
· · · · · · · · · · · · · · · · · · ·					<u> </u>			I
			÷ ,					
	•							
								•
х		,						
							•	

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TAB 3.5: FACILITY ROLL-UP - Laboratories

•	Total	Class 1	% needing Remed.	ft2 needing Remed.	Class 2	Class 3
Floor Area, ft ²	155563	32340		2258.4	33740	86083
Wall Area, ft ²	363991	85690		836.2	86700	184051
Ceiling Area, ft ²	156323	32340		250	33740	86843

		Fraction				ft ³
Components	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete
Glove Boxes	357		119	13.5	0	· 0
Hoods	2411		0	270	0	0
Benches/Tables/Desks	17557		68.8	146.7	0	0
Casework/Cabinets	25749		• 78	101.8	. 0	0
Reefers, Large Equipment	44991		177.5	181.5	0	0
Misc. Equip./Labware	25835		104.1	87.4	0	0
Hot Cells	47		0	0	0	0
Storage Tanks	3524		. 0	360	0	0
Other	7303		0	27	5.2	10
Sinks	1012		1.275	30.475	0	0
Drains	12.15278		0.006944	0.076389	0	0
Ventilation Drops	596.5972		6.25	6.25	0	0
Waste in Storage	960		768	192	0	0
Drains No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops No.		Inch Dia.	,	Total ft ³	0.0	

Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	503.85	1007.75	2054	· 0	4	4	493.6
Equip. Release	320.95	640	1318	0	2	2	316.15
Pack/Load waste	58.45	118.5	77.5	159.5	333.5	331.5	57.95
Decon/Remed.	13.6	24.5	44	4	68	68	12.95
Final Survey	263.1	527.3	1077	0	0	0	258.8

Lab Samples to be collected

162

3.6 PLANNING AND PREPARATION (Work Days)

Estimate the number of workdays, by specific labor category, t including Supervisor, Foreman, Craftsman, Technician, Health					on activities. In	clude all labor c	ategories,
Activity	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical
Preparation of Documentation for Regulatory Agencies	15.0	15.0	5.0	15.0			10.0
Submittal of Decommissioning Plan to NRC when required by 10 CFR 30.36(g)(1), 40.42(g)(1), or 70.38(g)(1)	5.0			5.0			5.0
Development of Work Plans	. 10.0	10.0		10.0			10.0
Procurement of Special Equipment	20.0	5.0		5.0			5.0
Staff Training	2.0	4.0	8.0	2.0	40.0	40.0	5.0
Characterization of Radiological Condition (including sampling, soil and tailings analysis, or groundwater analysis, if applicable)	63.0	126.0	256.8	0.0	0,5	0.5 ·	61.7
Other (specify) Mobilization	1.0	2.0	8.0	1.0			
TOTALS	116.0	162.0	277.8	38.0	40.5	40.5	96.7

3.7 DECONTAMINATION OR DISMANTLING OF RADIOACTIVE FACILITY COMPONENTS

(Work Days)

Estimate the number of workdays, by specific labor category, that will be required to complete decontamination and/or dismantling activities for each facility component. Copy and complete this table as necessary for each room, laboratory, or area. Rooms, laboratories, or areas with similar levels of contamination may be consolidated in one table.

Name of room, laboratory, or a	area:							
Level of Contamination:								
Component	Action	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical
Glove Boxes	Remove/Disp	3	6	12	1	2	2.	2
Fume Hoods	Remove/Disp	4	8	16	1	2	2	2
Lab Benches	Decon/Remove					4 [·]	. 4	
Sinks	Decon/Remove					2	2	
Drains	Remove/Disp	2	4	4	1	1	1	2
Floors	Decon/Wipe	2	4	8		3	3	2
Walls	Decon/Wipe	. 1	2	2		5	5	1
Ceilings	Decon/Wipe						,	
Ventilation/Ductwork	Remove/Disp	2	4	7	. 1	2	2	2
Cabinets	Decon/Remove	2	5	2		4	4	2
Hot Cells	Remove/Disp	1	2	2		3	. 3	1
Equipment/Materials	Sur/Rem/Disp	27	53	107	1	17	17	27
Soil Plots	Sample							
Storage Tanks /	N/A							
Storage Areas	Remove/Disp	'1	2	4				1
Radwaste Areas	Remove/Disp	1	2	4	1	2	2	. , 1
Scrap Recovery Areas	N/A				•			
Maintenance Shop	Remove/Disp							
Equipment Decontamination	Remove/Disp							
Sources	Remove/Disp	3	6	12	14	5	5	5
Other (specify)	Remove/Disp					N 4		
TOTALS		49	98	20	180	50	50	48

ESTORATION OF CONTAMINATED AREAS ON FACILITY GROU

(Work Days)

Estimate the number of wo facility grounds.	rk days, by spe	cific labor cate	egory, that wi	ill be require	d to restore cor	ntaminated areas	s on the
Name of room, laboratory,	or area:			<u> </u>			
Activity	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical
Restore Floors	1	1	2	1	2	2	. 1
Restore Walls							
Restore Roof							_
Restore Utilites							
TOTALS	1	1	2	1	2	2	1

Name of room, laboratory,	or area:					· · · · · · · · · · · · · · · · · · ·	
Activity	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical
FSS Setup	10	5	5				16
Survey Packages	10	5	5				16
Class 1	5	33	· 79				
Class 2	4	12	24				
Class 3	4	10	22		· .		
TOTALS	33	65	135	0	0	0	32

3.9 FINAL RADIATION SURVEY (Work Days)

3.10 SITE STABILIZATION AND LONG-TERM SURVEILLANCE

(Work Days)

Estimate the number of work surveillance activities.	days, by specif	ic labor categ	·	be required	to complete site Radiation	stabilization and	long-term
Activity	Project Mgr	 Supervisor 	HP Technician	Shipper	Workers (Craftsmen)	Workers (Non-skilled)	Clerical
No Site Stabilization or							
Long Term Maintenance					· · · · · · · · · · · · · · · · · · ·		
			/			·	
						· · · · · · · · · · · · · · · · · · ·	
TOTALS	. 0	0	0	0	0	· 0	0

3.11 TOTAL WORK DAYS BY LABOR CATEGORY

Enter the total work days for each specific labor category from the applicable table above (i.e., from the bottom rows of Tables 3.6 through 3.10).

3.0 illiougii 3. roj.							
Task	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical
Planning and Preparation (TOTALS from Table 3.6)	116	162	278	38	41	41	97
Decontamination and/or Dismantling of Radioactive Facility Components (Sum of TOTALS from all copies of Table 3.7)	49	98	20	180	50	50	48
Restoration of Contaminated Areas on Facility Grounds (TOTALS from Table 3.8)	1	1	2	1	2	. 2	1
Final Radiation Survey (TOTALS from Table 3.9)	33	65	135	0	0	0	32
Site Stabilization and Long- Term Surveillance (TOTALS from Table 3.10)	0	0	0	0	0	0	0

3.12 WORKER UNIT COST SCHEDULE

Estimate labor costs (including salary, fringe benefits, and corporate overhead). Include all appropriate labor categories, including Supervisor, Foreman, Craftsman, Technician, Health Physicist, Laborer, Clerical, and others as needed.								
Labor Cost Component	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical	
Salary & Fringe (\$/year)	\$106,951	\$88,487	\$80,442	\$65,850	\$43,479	\$39,870	\$35,658	
Overhead Rate (%)	75%	75%	75%	75%	75%	75%	75%	
Total Cost Per Year	\$187,164	\$154,852	\$140,774	\$115,238	\$76,088	\$69,773	\$62,402	
Living Expenses (PD*7/5) ¹	\$382	\$382	\$382	\$382	\$0	0	0	
Total Cost Per Work Day ²	\$1,102	\$978	\$924	\$825	\$293	\$268	\$240	

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¹ Per Diem Rate: <u>\$273</u> per day.

²Based on <u>260</u> work days per year (e.g., 260).

3.13 TOTAL LABOR COSTS BY MAJOR DECOMMISSIONING TASK

Multiply the estimated work days for each specific labor category (from Table 3.11) by the total cost per work day for the corresponding labor category (from Table 3.12), and enter the results in the table below. Then, add across all labor categories to determine the total labor costs for each major decommissioning task.

each major decommissioning te					_			
Labor Cost Component	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical	Total Labor Çost
Planning and Preparation	\$127,819	\$158,371	\$256,540	\$31,366	\$11,852	\$10,868	\$23,209	\$620,025
Decontamination and/or Dismantling of Radioactive Facility Components	\$54,139	\$95,701	\$18,877	\$148,524	\$14,760	\$13,468	\$11,612	\$357,081
Restoration of Contaminated . Areas on Facility Grounds	\$622	\$1,104	\$2,086	\$466	\$661	\$606	\$136	\$5,681
Final Radiation Survey	\$36,368	\$63,556	\$124,691	\$0	\$0	\$0	\$7,680	\$232,295
Site Stabilization and Long- Term Surveillance	\$0	\$0	\$0	\$0	\$0 ⁻	\$0	\$0	\$0

3.14 PACKAGING, SHIPPING, AND DISPOSAL OF RADIOACTIVE WASTES (Excluding Labor Costs)

(a) Packing Material Costs

Waste Type	Volume (ft3)	Number of Containers	lype of Containers	Unit Cost of Container	Total Packaging Costs
DAW	1323	1.5	20' Sea-Land	\$1,100	\$1,650
Metal	1417	1.5	20' Sea-Land	\$1,100	\$1,650
Lead	5	1.0	55 gal. Drum	\$200	\$200
Concrete	177	2.0	B-25	\$750	\$1,500
Sealed Sources		1.0	Cask	\$100,000	\$100,000
TOTAL	201000 30 20 00 00 00 00 00 00 00 00 00 00 00 00				\$105,000

(b) Shipping Costs

Estimate the types and volumes of waste expected to be generated, along with the number and types of containers required for packaging the waste. Multiply the number of containers required by the unit cost per container.

Waste Type	Number of Truckloads	Unit Cost (\$/mile/truckload)	Surcharges (\$/mile)	Overweight Charges(\$/mile)	Distance Shipped (miles)	Total Shipping Costs
DAW	1	\$1.25	\$1.50	\$0.00	525	\$1,444
Metal	1	\$1.25	\$1.50	\$0.00	525	\$1,444
Lead	0	\$1.25		\$0.00	525	\$0
Concrete	0	\$1.25		\$0.00	525	\$0
Sealed Sources	1	\$5.00	\$20.00	\$10.00	2400	\$84,000
TOTAL	3					\$86,888

(c) Waste Disposal Costs

Estimate the volume of waste to be disposed. Multiply the volume of waste disposed by the unite\disposal cost (including any volume based surcharges). Add any surcharges that are based on the number of containers of waste. along with the number and types of containers required for packaging the waste. Multiply the number of containers required by the unit cost per container.

Waste Type	Disposal Volume (ft3)	Density (lb/ft3)	Disposal Mass (lbs)	Unit Cost	Surcharges (\$/ft3 or \$/container)	Total Disposal Costs
DAW	1323	15	19844	\$7.25	. 0	\$143,869
Metal	1417	20	28334	\$3.25	0	\$92,086
Lead	5	60	312	\$4.00	0	\$1,248
Concrete	177	20	3545	\$3.75	0	\$13,292
Sealed Sources					ļ	\$500,000
TOTAL	2922					\$750,495

3.15 EQUIPMENT/SUPPLY COSTS (Excluding Containers)

Estimate the quantity of equipment and supplies required for decommissioning and multiply that quantity by the appropriate unit costs.								
Equipment/Supplies	Quantity	Unit Cost	Total Equipment/Supply Cost					
Protective Clothing	2740	\$3	\$8,219					
Respirators	227	\$10	\$2,268					
HP Instruments	12	\$800	\$9,600					
Misc Tools	1	\$25,000	\$25,000					
Consumables	1	\$5,000	\$5,000					
TOTAL			\$50,088					

3.16 LABORATORY COSTS

If applicable, estimate the costs for analyses to be performed by an independent third party laboratory.								
Activity	Quantity	Unit Cost	Total Item Cost					
Sampling	162	\$10	\$1,620					
Transport of Samples	162	\$10	\$1,620					
Testing and Analysis	162	\$275	\$44,550					
Other (specify)								
TOTAL	a san dan sa sa sa sa sa sa sa sa sa sa sa sa sa		\$47,790					

3.17 MISCELLANEOUS COSTS

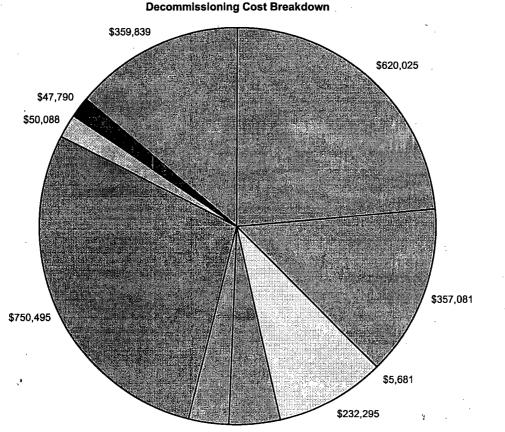
Estimate any other applicable costs.	
Activity	Total Cost
License Fees	\$1,400
Insurance	\$72,905
Taxes	\$225,534
Security	\$60,000
TOTAL	\$359,839

*Security; Increased Controls

3.18 TOTAL DECOMMISSIONING COSTS

Enter the total costs reported in Tables 3.13, 3.14(a)-(c), 3.15, 3.16, and 3.17 into the appropriate cells below, and add then to obtain a subtotal. Add to the subtotal a contingency allowance in the amount of 25 percent of the total decommissioning cost estimate. Also, calculate for each task/component the percentage it represents of the total.

Task/Component	Cost	Percentage
Planning and Preparation (from Table 3.13)	\$620,025	23.7%
Decontamination and/or Dismantling of Radioactive Facility (From Table 3.13)	\$357,081	13.7%
Restoration of Contaminated Areas on Facility Grounds (From Table 3.13)	\$5,681	0.2%
Final Radiation Survey (From Table 3.13)	\$232,295	8.9%
Packing Material Costs (TOTAL from Table 3.14(a))	\$105,000	4.0%
Shipping Costs (TOTAL from Table 3.14(b))	\$86,888	3.3%
Waste Disposal Costs (TOTAL from Table 3.14(c))	\$750,495	28.7%
Equipment/Supply Costs (TOTAL from Table 3.15)	\$50,088	1.9%
Laboratory Costs (TOTAL from Table 3.16)	\$47,790	1.8%
Miscellaneous Costs (TOTAL from Table 3.17)	\$359,839	13.8%
SUBTOTAL	\$2,615,180	100.0%
25% Contingency	\$653,795	25.0%
TOTAL DECOMMISSIONING COST ESTIMATE	\$3,268,975	. 125.0%



\$86,888 \$105,000

Planning and Preparation (from Table 3.13)
Decontamination and/or Dismantling of Radioactive Facility (From Table 3.13)
Restoration of Contaminated Areas on Facility Grounds (From Table 3.13)
Final Radiation Survey (From Table 3.13)
Packing Material Costs (TOTAL from Table 3.14(a))
Shipping Costs (TOTAL from Table 3.14(b))
Waste Disposal Costs (TOTAL from Table 3.14(c))
Equipment/Supply Costs (TOTAL from Table 3.16)
Miscellaneous Costs (TOTAL from Table 3.17)

National Institute of Standards and Technology Gaithersburg, MD Laboratory Facilities

August 2009

Appendix C Accelerator Areas Cost Estimating Worksheets

Building	245	Ro	om or Area		LIN	AC	
Use							
Radionuclides, Ex	tent of Con	taminatior	1				
Area Classification			1	L			
# Floors above Ba	sement		1		,		
# Floors below Ro	of		1		·		
			%	ft2			
		ч.	needing	needing		L.	
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	3020	3020		600		. 0	
Wall Area, ft ²	8500	8500		0	0	0	
Ceiling Area, ft ²	3020	3020	1	0	0	0	
			· · · · ·				, a
			Fraction		- 3 -	- 3 -	ft ³
Componer	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete
Glove Boxes		0		0	0	0	0
	oods enches/Tables/Desks			0	0	0	0
Casework/Cabinet		50 75		0	50	0	0
Reefers, Large Equ	- 1	1500		0	75 1500	0	0
Misc. Equip./Labwa		100		50	50	0	0
Hot Cells	aie	0		0	0	0	0
Storage Tanks	f	0		0	0	0	0
Other	ł	4000		0	0	0	4000
Sinks	. 1	0		0	0	0	0
Drains		0	-	0	0	0	0
Ventilation Drops	ľ	750		0	750	0	0
Accumulated Wast	te [₀ 100		100	0	0	0
Drains	No.[Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	0	<u></u> 60	120	Sillipper 0		60	Sierical 30
Equip. Release	0	. 5	120	0	00	00	2.5
Pack/Load waste	0	12.5	. 30	. 30	80	80	2.5
Decon/Remed.	Ŭ Ŭ	25	50	0	120		2.5
Final Survey	Ő	28	56	0	0	0	4
# Lab Samples to be collected 62							

Building	245	Ro	om or Area		LINAC	Hallway	
Use			Decomm	nissioned A	ccelerator		
Radionuclides, Ex		taminatior	<u>1</u>	Accel	lerator produ	uct: Co-60, I	Eu-152
Area Classification	n	1					
# Floors above Ba							
# Floors below Ro	of	<u> </u>				r	•
			%	ft2			
		.	needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	1820	1820					
Wall Area, ft ²	4000	4000		0	ļ	ļ	
Ceiling Area, ft ²	1820	1820	0	0	<u> </u>		
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes							
Hoods							
Benches/Tables/D	L L L L L L L L L L L L L L L L L L L						
Casework/Cabinet	-						
Reefers, Large Equ							
Misc. Equip./Labw	are				<u> </u>		
Hot Cells Storage Tanks	ŀ				<u> </u>		
Shielding	· •				<u> </u>		
Sinks	-						
Drains	ł			1			
Ventilation Drops	ŀ			·	<u> </u>		
Accumulated Wast	te	100	1	1			
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
					1		1
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize		20	40		20	20	10
Equip. Release							
Pack/Load waste		10	20	20	40	40	5
Decon/Remed.		20	40		80	80	
Final Survey		20	40				
# Lab Samples to b	e collected	[50				

Building	245	Ro	om or Area		Magne	et Room				
Use			N	lagnet Roo	m					
Radionuclides, Ex			1	Exte	ensive. Acc	elerator pro	ducts	I		
Area Classificatio		1								
# Floors above Ba		0								
# Floors below Ro	of	6								
			%	ft2		ſ	ł			
			needing	needing						
	Total	Class 1	Remed.	Remed.	Class 2	Class 3				
Floor Area, ft ²	1200	1200	0.5	600]	۰.		
Wall Area, ft ²	4500	4500	0	0]			
Ceiling Area, ft ²	1200	1200	0	0						
		· · ·	Fraction	Fraction	Fraction	Fraction	Fraction			
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete			
Glove Boxes										
Hoods								,		
Benches/Tables/D	esks	50	1		1					
Casework/Cabinet	S	75	1		- 1					
Reefers, Large Equ		1500	· 1		1					
Misc. Equip./Labw	are	100	1	0.5	0.5					
Hot Cells							· .			
Storage Tanks										
Shielding		4000	1				1			
Sinks					<u> </u>					
Drains		0.0								
Ventilation Drops		750.0	1		1					
					· · ·					
Drains	No.	2	Inch Dia.	6	Total ft ³	0.0				
Ventilation Drops	No.	4	Inch Dia.	30	Total ft ³	750.0				
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical			
Characterize		40	80		40	40	20			
Equip. Release		5	10				2.5			
Pack/Load waste		2.5	10	10	40	40	1			
Decon/Remed.		5	10		40	40	2.5			
Final Survey		8	16				4			
# Lab Samples to be collected 12										

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National Institute of Standards and Technology Gaithersburg, MD Accelerator Worksheets

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Building	245] Ro	om or Area		MI	RF		
Use								
				····				
Radionuclides, Ex	tent of Cor	ntaminatior	า					
Area Classification			1					
# Floors above Ba	sement		1		/			
# Floors below Ro	of						_	
			%	ft2]	
			needing	needing				
·	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floo <u>r Area, ft²</u>	2200			0		300		
Wall Area, ft ²	5280	4000		0		1280		
Ceiling Area, ft ²	2200	1900		0	0	300	l	
			Fraction				ft ³	
Componer	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete	
Glove Boxes	-	0		0	0	0	0	
Hoods		0		0	0	0	0	
Benches/Tables/D	esks	125	0	0	0	0	0	
Casework/Cabinet	-	90	0	0	0	0	0	
Reefers, Large Eq		250	0	0	0	0	0	
Misc. Equip./Labw	are	1000		0	500	0	500	
Hot Cells		0		0	0	0	0	
Storage Tanks		0		0	0	0	0	
Other		0		0	0	0	0	
Sinks Drains		0		0	0	0	0	
Drains Ventilation Drops		0		0	0	0	0	
ventuation props	1	U		U		U	U	
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	12	24	48	0	42	42	12	
Characterize Equip. Release	12	24	48	0	5	5	10	
Pack/Load waste	10	20	40	20	40	40	10	
Decon/Remed.	2	5	10	·0	10	10	2.5	
Final Survey	5	10	20	0	0	. 0	5	
# Lab Samples to be collected 24								

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Building	245	Ro	om or Area		A	004	· · · · · · · · · · · · · · · · · · ·
Use			MIR	F Control F	Room		
• .							
Radionuclides, Ex	tent of Con	taminatio	n	Po	tential acce	lerator prod	ucts
Area Classificatio		3]				
# Floors above Ba		0					•
# Floors below Ro	of	6					•
			%	ft2			,
· .			needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	300			0	· ·	300	
Wall Area, ft ²	1280			0	ļ	1280	
Ceiling Area, ft ²	300			0	l	300	
Componer		Tatal 42	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes	11.5	Total ft3	KVY	DAW		Leau	Concrete
Hoods							· · ·
Benches/Tables/D	aske	125	0		+		·
Casework/Cabinet		90	0		<u> </u>		
Reefers, Large Eq		250	0		<u> </u>		· · · ·
Misc. Equip./Labw					<u>+</u>		
Hot Cells						·	
Storage Tanks		······································	· · · · · · · · · · · · · · · · · · ·		· ·		<u> </u>
Other	· ĵ						
Sinks		<u>,</u>				<i>C</i>	
Drains	[0.0	•				
Ventilation Drops		0.0					
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.	······································	Inch Dia.		Total ft ³	0.0	,
ventilation brops	NO.[jinch Dia.		Jiotai It	0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	2	4	8		2	2	2
Equip. Release	2	4	8				
Pack/Load waste							
		·			1		
Decon/Remed. Final Survey	<u> </u>	2	4				1

Building	245	Ro	om or Area		A004 a	nd A005				
Use				Accelerato	or]		
Radionuclides, Ex			י ד	Accel	erator produ	icts Co-60,	Eu-152]		
Area Classificatio		1	ľ							
# Floors above Ba		0	1							
# Floors below Ro	of	6			·		,			
			%	ft2	1	1				
			needing	needing						
	Total	Class 1	Remed.	Remed.	Class 2	Class 3]	,		
Floor Area, ft ²	1900	<u> 190</u> 0		0						
Wall Area, ft ²	4000	4000		0			· .			
Ceiling Area, ft ²	1900	1900		0						
Componer	nte	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	• •		
Glove Boxes					motar		Jonciele	۰. ۱		
Hoods						 	·			
Benches/Tables/D	oeke				<u></u>					
Casework/Cabinet					<u> </u>					
Reefers, Large Eq										
Misc. Equip./Labw		1000	1	<u> </u>	0.5		0.5			
Hot Cells										
Storage Tanks					1		<u> </u>			
Other							· · ·			
Sinks	ł				t					
Drains		0.0								
Ventilation Drops		0.0		<u>_</u> #	t					
	. L				•	L	L	l		
Drains	No.		Inch Dia.		Total ft ³	0.0				
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0				
tennanon brops		J	nion bidi	·	J. Star It					
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical			
Characterize	10	20	40		40	40	10			
Equip. Release	10	20	40		5	5	10			
Pack/Load waste	10	20	40	20	40	40	10			
Decon/Remed.	2	5	10		10	10	2.5			
Final Survey	4	8	16				4			
# Lab Samples to be collected 20										

\

Building	245	Ro	om or Area		Time of Fl	ight Facility	
Building	240				TIME OF F	ignit i aciiity	
Use		- ,					
				· · · ·			
Radionuclides, Ex	tent of Con	tamination					
Area Classification		ann an o					
# Floors above Ba							
# Floors below Ro	of				i		_
			%	ft2			
			needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	300	300		225		0	
Wall Area, ft ²	1800	1800		1800		· 0	
Ceiling Area, ft ²	300	300		300		0	
							. 9
-			Fraction	a.3	•3 • · · ·		ft ³
Componer	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete
Glove Boxes		0		0	0	0.	0
Hoods		0		0	0	0	0
Benches/Tables/D		0	0	0	0	0	0
Casework/Cabinet	-	0	0	0	0	0	0
Reefers, Large Eq Misc. Equip./Labw		0	0	0	0	0	0
Hot Cells	are	0		0	0	0	0
Storage Tanks		0		0	0	0	0
Other	· ·	3975		0	198.75	· 0	1788.75
Sinks		0		0	0	0	0
Drains		0		0	0	0	0
Ventilation Drops		0		0	0	0	0
	<i>,</i> •						
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
-							
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	.10	20	40	. 0	40	40	10
Equip. Release	10	20	40	0	5	5	10
Pack/Load waste	10	20	40	20	40	40	10
Decon/Remed.	40	80	160	0	160	160	40
Final Survey	10	20	40	0	0	0	10
# Lab Samples to b	pe collected		50				

Building	245] Roo	om or Area		Time of F	light Facility	
Use	, <u></u>		Ne	utron activa	ation		
	L						
Radionuclides, Ex		tamination	ļ		<u> </u>	Eu-152	
Area Classificatio		1					
# Floors above Ba		0					
# Floors below Ro	of	1		<u> </u>		T	1
			%	ft2			
	Total	Class 1	needing Remed.	needing	Class	Class 2]
	Total			Remed.	Class 2	Class 3	1
Floor Area, ft ² Wall Area, ft ²	300		0.75		┼────	<u>├</u>	ł
	1800			1800	<u> </u>		4
Ceiling Area, ft ²	300	300	1	300	<u> </u>	<u> </u>]
Compone	nte	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes							
Hoods						<u> </u>	
Benches/Tables/D	esks				1	<u> </u>	
Casework/Cabinet	s			······································	<u> </u>		
Reefers, Large Eq	uipment						
Misc. Equip./Labw	are						
Hot Cells							
Storage Tanks							
Shielding		3975	0.5		0.1		0.9
Sinks					<u> </u>		
Drains							
Ventilation Drops	Į				L	l	
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
ventilation Drops	NO.		ilicii Dia. Į			0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	10	20	40		40	40	10
Equip. Release	10	20	40		5	5	10
Pack/Load waste	10	20	40	20	40	40	10
Decon/Remed.	40	80	160		160	160	40
Final Survey	10	20	40				10
# Lab Samples to I	oe collected	ј к					

Building	245	Roc	om or Area		SUF	RF III		
Use		· · · · · · · · · · · · · · · · · · ·]
	-			· · · · · · · · · · · · · · · · · · ·				1
Radionuciides, Ex	tent of Con	tamination						
Area Classification	n 🧃							•
# Floors above Ba	sement						•	
# Floors below Ro	of							
	T ()		% needing	ft2 needing				
m ²	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	1200	1200		120		0		
Wall Area, ft ²	5600	5600		0	0	0		
Ceiling Area, ft ²	1200	1200		· 0	0	0		
			Fraction				ft ³	
Componer	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete	
Glove Boxes	[0		0	0	0	0	
Hoods		0		0	0	0	0	
Benches/Tables/De	esks	180	0	0	0	0	0	
Casework/Cabinet		200	0	0	0	0	0	
Reefers, Large Equ		500	0	0.	0	0	0	
Misc. Equip./Labw	are	0		0	0	0	0	
Hot Cells		0		0	0	0	0	
Storage Tanks		0		0	0	0	0	
Other		20		0	0	0	0	
Sinks		20		0	0	0	0	
Drains		0		0	. 0	0	00	
Ventilation Drops	Ł	0	l	0	0	0	0	
Drains -	No.		Inch Dia.]	Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Barroon haven			UD Teel	Chimmer	el:::	lingkille al	Clarical	
Person-hours Characterize	Mgr 8	Supvsr 16	HP Tech 32	Shipper 0	Skilled 0	Unskilled 0	Clerical 8	
Equip. Release	. 0	8	32 16	0	. U	. 0	o 4	
Pack/Load waste	4	0 16	32	· 0	32	32	. 8	
Decon/Remed.	2	4	32	0	32 8	32	2	
Final Survey	2	4	4	0	0	0	2	
# Lab Samples to b	•	_	4	:				

i. 1

Building	245] Roo	om or Area		SU	RF III		
Use	[<u> </u>	······		<u> </u>			1
	• • • • • • • • •			·····	·····			
Radionuclides, Ex	tent of Con	itaminatior	ı	Po	ssible acce	lerator prod	ucts	l .
Area Classification		1	1					
# Floors above Ba								
# Floors below Ro	of		%	ft2		· · · · · · · · · · · · · · · · · · ·	3 ·	
			needing	needing				
	Total	Class 1	Remed.	Remed.	Class 2	Class 3		
Floor Area, ft ²	1200		0.1	120] .	
Wall Area, ft ²	5600	5600	0	0			}.	
Ceiling Area, ft ²	1200	1200	Ö	0			· .	
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	
Glove Boxes]							
Hoods								
Benches/Tables/D		180	0	· · · · · ·	L			
Casework/Cabinet		200	0			· · ·		
Reefers, Large Eq Misc. Equip./Labw		500			┢────			
Hot Cells					<u>├</u> ────			
Storage Tanks	· ·							
Other		20	0					
Sinks	· ·	20	0					
Drains						·		
Ventilation Drops	, [<u> </u>		Ļļ	
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	,
Characterize	8	16	32	2		Stienting	8	
Equip. Release	4	8	16				4	
Pack/Load waste	8	16	32		32	32	8	
Decon/Remed.	2	4	8		8	8	2	
Final Survey		2	4		L]	1	
# Lab Samples to b	e collecter	i [4					

Building	245	Roo	om or Area	r · · · · ·	CLI	NAC	
Use							
Radionuclides, Ex	tent of Con	taminatior	1	٠.			
Area Classification			1			,	
# Floors above Ba	sement						
# Floors below Ro	of				· · ·		
	Total	Class 1	% needing Remed.	ft2 needing Remed.	Class 2	Class 3	
Floor Area, ft ²	1000	1000		0		0	
Wall Area, ft ²	3000	3000		0		0	
Ceiling Area, ft ²	1000	1000		0		0	*
	L						3
* _			Fraction		- 1	- 3 -	ft ³
Componer	nts ,	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete
Glove Boxes		0	· ·	0.	. 0	0.	0
Hoods		0		0	0	. 0	0
Benches/Tables/D		0	0	0	0	0	0
Casework/Cabinet		0	0	0	0	0	0
Reefers, Large Equ Misc. Equip./Labw		0	U	0	0	0	0
Hot Cells	are	0		0	0	0	0
Storage Tanks	-	0		0	0	0	0
Other	ł	2000	<u> </u>	0	50	0	150
Sinks	·	0		0	0	0	0
Drains	· f	0		0	0	0	0
Ventilation Drops	ľ	0		0	0	0	0
	- - r						
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.[Inch Dia.		Total ft ³	0.0	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	10	20	40	0	40	40	10
Equip. Release	10	20	40	0	5	5	10
Pack/Load waste	10	20	40	20	40	40	
Decon/Remed.	5	10	20	0	20	20	5
Final Survey	4	8	16	0	0	0	4
# Lab Samples to b	e collected	I	20				

June 2009

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Building	245] Ro	om or Area		CLI	NAC		
Use				Accelerato	or			ł
Į –	L		<u>.</u> .	······				· ·
Radionuclides, Ex	tent of Cor	tomination			Co 60	Eu-152	•	
Area Classification		1	1		0-00,	Eu-152		1
# Floors above Ba		0						
# Floors above Ba # Floors below Ro		6						
# FIGUIS DEIGW RO			%	ft2	·	·	1	
			needing	needing	1]]	
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	4	
Floor Area, ft ²	1000		0	0	01055 2	01233 0	1	
Wall Area, ft ²	3000			0	┼────	<u> </u>		
Ceiling Area, ft ²	1000			0	<u> </u>	}·	1	
Celling Area, It	1000	1000	0		I	L	1	
			Fraction	Fraction	Fraction	Fraction	Fraction	×.
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete	
Glove Boxes					1			
Hoods								
Benches/Tables/D	esks							
Casework/Cabinet	s							
Reefers, Large Eq	uipment						·	I
Misc. Equip./Labw	are							
Hot Cells								
Storage Tanks								
Other		2000	0.1		0.25		0.75	
Sinks								
Drains								
Ventilation Drops								
	r		r		۰ ۱		ŀ	
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	10	20	40		40	40	10	
Equip. Release	10	20	40		5	5	10	
Pack/Load waste	10	20	40	20	40	40	10	,
Decon/Remed.	5	10	20		20	20	5	
Final Survey	4	8	16				4	
# Lab Samples to b	e collected	ı [20	·			·	

Building	245	Roc	om or Area		4 MV Van	der Graaff	
Use							
						2	· · · · · · · · · · · · · · · · · · ·
Radionuclides, Ex	tent of Cor	tamination					
Area Classificatio		lanmation					
# Floors above Basement		· · · · ·					
# Floors below Roof							
	<u> </u>		%	ft2	1	<u>r</u>]
			needing	needing]	
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	4200	4200	•	120		0	
Wall Area, ft ²	8700	8700		0	1	0	
Ceiling Area, ft ²	4200	4200		0		0	
			Fraction			_	ft ³
Componer	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete
Glove Boxes		0		0	0	0	0
Hoods		0		0	0	0	0
Benches/Tables/Desks		480	0	64.5	100.5	0	0
Casework/Cabinets		650	0	45	65	0	0
Reefers, Large Equipment		2300	0	230	255	0	0
Misc. Equip./Labware		700		70	70	0	0
Hot Cells		0		0	.0	0	0
Storage Tanks		0		0	0	0	0
Other Sinks		620 40	· · · · · · · · ·	0	0	80 0	0
Drains		40		0	0	0	0
Ventilation Drops		27.77778	•	0	2.777778	0	0
Ventilation Drops	L	21.11110		- 0	2.111110		
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
	[I				
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	16	32	64	0		4	16
Equip. Release	12	24	48	0	. 4	4	12
Pack/Load waste	12	24	48	24		48	
Decon/Remed.	12	24	48	0	8	8	12
Final Survey	3	6	. 12	0	0	· 0	3
# Lab Samples to b	e collecter	1	8				

Building	245] Roc	om or Area		E	129	
Use			4 M	Van der (Graaff		
				vanuer	Jiddii	· · · · · · · · · · · · · · · · · · ·	
Radionuclides, Ex		tamination	1	Po	ssible acce	lerator prod	ucts
Area Classificatio	n	1					· · · ·
# Floors above Ba							
# Floors below Ro	of	·			<u></u>		
			%	ft2			
	T -4-1	0	needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	1200				<u> </u>	 -	
Wall Area, ft ²	5600			0			
Ceiling Area, ft ²	1200	1200	0	0		L	l I
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes							
Hoods							
Benches/Tables/D		180	0.5	0.3	0.7		
Casework/Cabinet		200	0.1		1		
Reefers, Large Eq		500	0.25	0.4	0.6		
Misc. Equip./Labw	are				 		
Hot Cells Storage Tanks					<u>├</u>		
Other		20	1		┼────	1 1	
Sinks		20	0				
Drains		2.0			<u> </u>		
Ventilation Drops				<u></u>	<u> </u>		
·····	L				L	ا ا	
Drains	No.		Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0	
		H				L	
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	8 .	16	32				8
Equip. Release	4	8	16				_4
Pack/Load waste	8	16	32	16	32	32	8
Decon/Remed.	2	4	8		8	8	2
Final Survey	1	2	4				1
# Lab Samples to b	oe collected	ı [4				

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Building	245	Roo	om or Area		B027 a	nd B031			
Use				Targets					
Use				raigets				I	
Radionuclides, Ex	tent of Con	taminatior	1	[All nu	uclides			
Area Classificatio		1]						
# Floors above Ba	sement	2							
# Floors below Ro	of	4							
			%	ft2					
			needing	needing					
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²	3000	3000				· · · · · · · · · · · · · · · · · · ·			
Wall Area, ft ²	3100	3100		0					
Ceiling Area, ft ²	3000	3000	0	0	<u> </u>	l	ĺ		
	Fraction Fraction Fraction Fraction Fraction								
Componer	nts	Total ft3	RW	DAW	Metal	Lead	Concrete		
Glove Boxes									
Hoods									
Benches/Tables/D	esks	300	0.25	0.5	0.5		· · · · ·		
Casework/Cabinet	s	450	0.2	0.5	0.5				
Reefers, Large Eq	uipment	1800	0.2	0.5	0.5				
Misc. Equip./Labw	are	700	0.2	0.5	0.5				
Hot Cells									
Storage Tanks									
Other		600	0.1			1			
Sinks	·	20	0		·				
Drains		0.6	0						
Ventilation Drops	l	27.8	0.1		1				
	r				I				
Drains	No.		Inch Dia.	2	Total ft ³	0.6			
Ventilation Drops	No.	2	Inch Dia.	10	Total ft ³	27.8			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Characterize	8	16	32		4	4	8		
Equip. Release	8	16	32		4	4			
Pack/Load waste	4	8	16	8	16	16	4		
Decon/Remed.	10	20	40				10		
Final Survey	2	4	8				2		
# Lab Samples to b	e collected	ı [4						

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Building	245	Ro	om or Area		1.5 MV D	ynamatron			
Use									
				ſ			· · · · · · ·		
Radionuclides, Ex	tent of Con	taminatior	1	ļ					
Area Classificatio	n]		· · · ·				
# Floors above Ba]						
# Floors below Ro	of								
	:		%	ft2			l		
	T (1)	0	needing	needing					
	Total	Class 1	Remed.	Remed.	Class 2	Class 3			
Floor Area, ft ²	500	500		0		0			
Wall Area, ft ²	3600	3600		0	+	0			
Ceiling Area, ft ²	500	500		0	<u> </u>	0	}		
		•	E				ft ³		
C	- 4 -	Total #2	Fraction	ft ³ DAW	ft ³ Metal	£43 a a -1			
Componer Glove Boxes	ns [Total ft3	RW	$\pi^2 DAW$	$\frac{\mathbf{\pi}^{\circ} \mathbf{M} \mathbf{e} \mathbf{t} \mathbf{a}}{0}$	ft ³ Lead	Concrete 0		
Hoods	-	0		0	0	0	0		
Benches/Tables/D	esks	120	0	0	0	0	0		
Casework/Cabinet		0	0	0	0	0	0		
Reefers, Large Equ	-	1200	0	0	120	0	0		
Misc. Equip./Labw		0		0	0	0	0		
Hot Cells		0		0	0	0	0		
Storage Tanks		0		0	0	0	0		
Other		0		0	0	0	0		
Sinks	· [0		0	0	0	0		
Drains		0		Ō	0	Ō	0		
Ventilation Drops	L	0	l	0	0	0	0		
. .	r				 3				
Drains	No.		Inch Dia.		Total ft ³	0.0			
Ventilation Drops	No.		Inch Dia.	<u></u>	Total ft ³	0.0			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Characterize	2	4	8	1	1	0	2		
Equip. Release	5	10	20	0	0	0	5		
Pack/Load waste	0	0	. 1	2	4	4	1		
Decon/Remed.	0.5	1	2	0	0	0	0.5		
Final Survey	1	2	4	0	0	0	1		
# Lab Samples to be collected 4									

Building	245	Roc	om or Area		B	26	
Use			1.5	MV Dynam	atron		
Radionuclides, Ex	tent of Con	tamination	L .	. ^и Ро	ossible acel	erator produ	icts
Area Classification		1					
# Floors above Ba							
# Floors below Ro	of		- 0/		· · · · · ·		1
			% needing	ft2 needing	· .		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
Floor Area, ft ²	500	500				0/0330	
Wall Area, ft ²	3600		0				
Ceiling Area, ft ²	500	500	0	0	1	<u>├</u>	
Componer		Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete
Glove Boxes				,		ļ	
Hoods		400			ļ		
Benches/Tables/D		120	0	·			·
Casework/Cabinet Reefers, Large Eq	-	1200	0.1		1		
Misc. Equip./Labw		1200	V.1	L	<u> </u>		
Hot Cells							
Storage Tanks					<u>†</u> ,		
Other							
Sinks							
Drains							
Ventilation Drops	l						
Drains	No.]	Inch Dia.		Total ft ³	0.0	
Ventilation Drops	No.		Inch Dia.	·	Total ft ³	0.0	
			[/ · · · · · · ·		:
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
Characterize	2	4	8	1	1		2
Equip. Release	5	10	20				5
Pack/Load waste			1	2	4	4	1
Decon/Remed.	0.5	1	2		· · ·		0.5
Final Survey	1	2	4		l		1
# Lab Samples to b	e collecter	ı [:] [4	· .			· · ·

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Building	202	Ro	om or Area		500 KeV	Accelerator			
Use	r						.]		
	L								
					``				
Radionuclides, Ex		taminatior	1						
Area Classification			ł						
# Floors above Ba			4						
# Floors below Ro			%	ft2	1	γ <u> </u>	1 .		
			needing	needing		ļ	{		
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	[
Floor Area, ft ²	1400	1400		0		01233 5	1		
Wall Area, ft ²	4800	4800		0		0	· ·		
Ceiling Area, ft ²	1400	1400		0		0	4		
Sonny Alea, IL			I	0	L	L0	1		
			Fraction				ft ³		
Componer	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete		
Glove Boxes		0		0	0	0	0		
Hoods		0		0	0	0	0		
Benches/Tables/D	esks	60	0	0	0	0	0		
Casework/Cabinet		120	0	0	0	0	0		
Reefers, Large Eq		250	0	0	250	0	0		
Misc. Equip./Labw	are	500		0	50	0	0		
Hot Cells		0		0	0	0	0		
Storage Tanks		0		0	0	0	0		
Other		0		0	0	0	0		
Sinks		0		0	0	0	0		
Drains Ventilation Drong	-	0		0	0	0	0		
Ventilation Drops	Ł	U	L	U	<u> </u>	U			
Drains	No.		Inch Dia.		Total ft ³	0.0			
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0			
tonuation props	NO.[, otar n	0.0			
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical		
Characterize	10	20	40	0	10	10	10		
Equip. Release	4	. 8	16	0	0	0	4		
Pack/Load waste	1	2	4	4	4	4	1		
Decon/Remed.	5	10	20	0	0	0	5		
Final Survey	3	6	· 12	0	0	0	3		
# Lab Samples to be collected 4									

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Building	245	Roo	om or Area		B	028		
Úse			500	VK accele	rator			
Radionuclides, Ex	tent of Con	taminatior	1	Po	ssible accel	ucts		
Area Classification		1				· · · · · · · · · · · · · · · · · · ·		
# Floors above Ba		0		· ·			• •	
# Floors below Ro	of	3				·	· .	•
			%	ft2				
	Tetal	Olana 4	needing	needing Remed.				
Flag A. (1 ²	Total	Class 1	Remed.		Class 2	Class 3		
Floor Area, ft ²	1400	1400		0	<u> </u>			
Wall Area, ft ²	4800	4800		. 0				
Ceiling Area, ft ²	1400	1400	0	0			l	
Componer	nts	Total ft3	Fraction RW	Fraction DAW	Fraction Metal	Fraction Lead	Fraction Concrete	•
Glove Boxes	l							
Hoods								
Benches/Tables/De		60	0					
Casework/Cabinet		120	0				Ļ	
Reefers, Large Equ		250	1		1			
Misc. Equip./Labwa	are	500	0.1		1			
Hot Cells					┠		· · · · · ·	
Storage Tanks Other	ŀ					·		
Sinks								
Drains	}							
Ventilation Drops	ł							
tennadon brops	1				L.,	LJ	L	
Drains	No.		Inch Dia.		Total ft ³	0.0		
Ventilation Drops	No.		Inch Dia.		Total ft ³	0.0		
ventilation brops	NO.[ł				0.0		
Person-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical	
Characterize	10	20	40		10	10	10	
Equip. Release	4	8	16				4	
Pack/Load waste	1	2	4	4	4	4	1	
Decon/Remed.	5	10	20				5	
Final Survey	3	6	12				3	
# Lab Samples to b	be collected	a [4					

Building	245] Ro	om or Area	/	ccelerator	Facility Tota	ls
Use					- <u></u>	<u> </u>	
Radionuclides, Ex	rtent of Co	ntaminatio		· · · · · · · · · · · · · · · · · · ·			
		·		L	<u> </u>		
		l	%	ft2		-	
			needing	needing			
	Total	Class 1	Remed.	Remed.	Class 2	Class 3	
loor Area, ft ²	13820	13520		1065	0		
Vall Area, ft ²	41280	40000		1800	0	1280	
Ceiling Area, ft ²	13820	13520		300	0	300	
			Fraction				ft ³
Compone	nts	Total ft3	RW	ft ³ DAW	ft ³ Metal	ft ³ Lead	Concrete
love Boxes		0		0		0	0
loods		0		0	0	0	0
Benches/Tables/Desks		1015		64.5	150.5	0	0
asework/Cabine	ts	1135		45	140	0	0
eefers, Large Eq	uipment	6000		230	2125	0	0
lisc. Equip./Labw	vare	2300		120	670	0	500
ot Cells		0		0	0	0	0
torage Tanks		0		0	0	0	0
ther		10615		0	248.75	80	5938.75
inks		60	· · · · · · · · · · · · · · · · · · ·	0	0	0	0
rains		0.555556		0	0	0	0
entilation Drops	l	777.7778		0	752.7778	0	0
rains	No.		Inch Dia.		Total ft ³	0.0	
entilation Drops	No.		Inch Dia.		Total ft ³	0.0	
· · · · ·	۱ 			······································			
erson-hours	Mgr	Supvsr	HP Tech	Shipper	Skilled	Unskilled	Clerical
haracterize	68	196	392	1	197	196	98
uip. Release	57	119	238	0	.19	19	57.5
ack/Load waste	51	114.5	235	120	288	288	58
econ/Remed.	66.5	159 82	318	0	326	326	69.5
inal Survey	27	82	164	0	0	0	31
Lab Samples to	be collecte	d [176				

3.6 PLANNING AND PREPARATION

(Work	Days)
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Activity	Project Mgr	Supervisor	HP Technician	Shipper	 Radiation Workers (Craftsmen) 	Radiation Workers (Non-skilled)	Clerical
Preparation of Documentation for Regulatory Agencies	15.0	15.0	5.0	10.0			5.0
Submittal of Decommissioning Plan to NRC when required by 10 CFR 30.36(g)(1), 40.42(g)(1), or 70.38(g)(1)	5.0		:	5.0			5.0
Development of Work Plans	10.0	10.0		10.0			5.0
Procurement of Special Equipment	20.0	5.0					5.0
	2.0	4.0	8.0	2.0	40.0	40.0	5.0
Characterization of Radiological Condition (including sampling, soil and tailings analysis, or groundwater analysis, i applicable)	8.5	24.5	49.0	0.1	24.6	24.5	12.3
Other (specify) Mobilization	1.0	2.0	8.0	1.0			
TOTALS	61.5	60.5	70.0	28.1	64.6	64.5	37.3

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3.7 DECONTAMINATION OR DISMANTLING OF RADIOACTIVE FACILITY COMPONENTS (Work Days)

Estimate the number of workdays, by specific labor category, that will be required to complete decontamination and/or dismantling activities for each facility component. Copy and complete this table as necessary for each room, laboratory, or area. Rooms, laboratories, or areas with similar levels of contamination may be consolidated in one table.

Name of room, laboratory, or a	area: '							
Level of Contamination:								
Component	Action	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical
Glove Boxes	Remove/Disp							
Fume Hoods	Remove/Disp							
Lab Benches	Decon/Remove	0.5	1	2		2	2	0.5
Sinks	Decon/Remove							
Drains	Remove/Disp							
Floors	Decon/Wipe		``.					
Walls	Decon/Wipe	7	14	30		30	30	7 ´
Ceilings	Decon/Wipe	0.5	1	2		2	2	1
Ventilation/Ductwork	Remove/Disp	0.5	1	2		2	2	1
Cabinets	Decon/Remove							
Hot Cells	Remove/Disp							
Equipment/Materials	Sur/Rem/Disp	5	16	28	10	21	21	5
Soil Plots	Sample				·			
Storage Tanks	N/A							
Storage Areas	Remove/Disp							
Radwaste Areas	Remove/Disp				2	2	2	
Scrap Recovery Areas	N/A							
Maintenance Shop	Remove/Disp							
Equipment Decontamination	Remove/Disp	0.5	1	3		4	4	0.5
Sources	Remove/Disp				,			+ <u></u>
Shielding	Remove/Disp	8	16	32	3	16	16	8
TOTALS		22	50	99	15	79	79	23

RESTORATION OF CONTAMINATED AREAS ON FACILITY GROU

(Work Days)

Estimate the number of w grounds.	ork days, by specif	ic labor categ	ory, that will b	e required t	o restore contar	ninated areas or	1 the facility
Name of room, laboratory, or area:							
Activity	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical
Restore Floors							
Restore Walls							
Restore Roof							
Restore Utilites							
TOTALS	0	0	0	0	0	0	0

3.9 FINAL RADIATION SURVEY

(Work Days)

Estimate the number of wo	ork days, by specif	ic labor categ	ory, that will b	e required to	conduct a final	radiation survey	•
Name of room, laboratory,	, or area:		· · · · · · · · · · · · · · · · · · ·				
Activity	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical
FSS Setup	2	6					2
Survey Packages	1	4					2
Class 1			18				
Class 2			0.				
Class 3			2				
TOTALS	3	10	20	0	0	0	4

3.10 SITE STABILIZATION AND LONG-TERM SURVEILLANCE

(Work Days)

Estimate the number of work days, by specific labor category, that will be required to complete site stabilization and long-term surveillance activities.

	•						
Activity	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical
Security				· · · · · · · · · · · · · · · · · · ·			19
Annual Sampling	40	•	100				
Quarterly surveys	80		160 ·				
· · · · · · · · · · · · · · · · · · ·	·						
TOTALS	120	0	260	0	0	0	19

Figures are total for a 20-year period.

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3.11 TOTAL WORK DAYS BY LABOR CATEGORY

Enter the total work days for each specific labor category from the applicable table above (i.e., from the bottom rows of Tables 3.6 through 3.10).

3.6 through 3.10).						_	
Task	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical
Planning and Preparation (TOTALS from Table 3.6)	15	15	5	10	0	0	5
Decontamination and/or Dismantling of Radioactive Facility Components (Sum of TOTALS from all copies of Table 3.7)	22	50	99	15	79	79	23
Restoration of Contaminated Areas on Facility Grounds (TOTALS from Table 3.8)	0	0	0	0	0	0	0
Final Radiation Survey (TOTALS from Table 3.9)	3	10	20	0	0.	0	4
Site Stabilization and Long- Term Surveillance (TOTALS from Table 3.10)	120	0	260	0	0	0	19

3.12 WORKER UNIT COST SCHEDULE

Estimate labor costs (including including Supervisor, Foreman	salary, fringe , Craftsman, T	benefits, and echnician, He	corporate over ealth Physicis	erhead). Incl t, Laborer, Cl	ude all appropri erical, and othe	ate labor categ rs as needed.	ories,
Labor Cost Component	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical
Salary & Fringe (\$/year)	\$106,951	\$88,487	\$80,442	\$65,850	\$43,479	\$39,870	\$35,658
Overhead Rate (%)	75%	75%	75%	75%	75%	75%	75%
Total Cost Per Year	\$187,164	\$154,852	\$140,774	\$115,238	\$76,088	\$69,773	\$62,402
Living Expenses (PD*7/5) ¹	\$382	\$382	\$382	\$382	\$0	0.	0
Total Cost Per Work Day ²	\$1,102	\$978	\$924	\$825	\$293	\$268	\$240

¹ Per Diem Rate: <u>\$273</u> per day.

²Based on <u>260</u> work days per year (e.g., 260).

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3.13 TOTAL LABOR COSTS BY MAJOR DECOMMISSIONING TASK

Multiply the estimated work days for each specific labor category (from Table 3.11) by the total cost per work day for the corresponding labor category (from Table 3.12), and enter the results in the table below. Then, add across all labor categories to determine the total labor costs for each major decommissioning task.

Labor Cost Component	Project Mgr	Supervisor	HP Technician	Shipper	Radiation Workers (Craftsmen)	Radiation Workers (Non-skilled)	Clerical	Total Labor Cost
Planning and Preparation	\$16,531	\$14,667	\$4,618	\$8,254	\$0	\$0	\$1,200	\$45,270
Decontamination and/or Dismantling of Radioactive Facility Components	\$24,245	\$48,889	\$91,440	\$12,381	\$23,119	\$21,200	\$5,520	\$226,795
Restoration of Contaminated Areas on Facility Grounds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Final Radiation Survey	\$3,306	\$9,778	\$18,473	\$0	\$0	\$0	\$960	\$32,517
Site Stabilization and Long- Term Surveillance	\$132,248	\$0	\$240,146	\$0	\$0	\$0	\$4,560	\$376,953

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3.14 PACKAGING, SHIPPING, AND DISPOSAL OF RADIOACTIVE WASTES (Excluding Labor Costs)

(a) Packing Material Costs

Waste Type	Volume (ft3)	Number of Containers	Type of Containers	Unit Cost of Container	Total Packaging Costs
DAW	460	5	B-25	\$750	\$3,590
Metal	4,087	3	20' Sea-Land	\$1,100	\$3,300
ead	80	11	55 gal. Drum	\$200	\$2,133
Concrete	6597	3	20' Sea-Land	\$1,100	\$3,300
TOTAL					\$12,323

(b) Shipping Costs			•			·
Estimate the types and volum packaging the waste. Multiply					s of containers r	equired for
Waste Type	Number of Truckloads	Unit Cost (\$/mile/truckload)	Surcharges (\$/mile)	Overweight Charges(\$/mile)	Distance Shipped (miles)	Total Shipping Costs
DAW	1	\$1.00	1.5	0	525	\$789
Metal	2 .	\$1.00	1.5	0	525	\$1,577
Lead	0	\$0.00	1.5	0.	0	\$0
Concrete	2,	\$1.00	1.5	0	525	\$1,577
TOTAL	5					\$3,943

(c) Waste Disposal Costs

Estimate the volume of waste to be disposed. Multiply the volume of waste disposed by the unite\disposal cost (including any volume based surcharges). Add any surcharges that are based on the number of containers of waste. along with the number and types of containers required for packaging the waste. Multiply the number of containers required by the unit cost per container.

Waste Type	Disposal Volume (ft3)	Density (lb/ft3)	Disposal Mass (lbs)	Unit Cost	Surcharges (\$/ft3 or \$/container)	Total Disposal Costs
DAW	460	15	6892.5	7.25	1'	\$49,971
Metal	4,087	20	81741	3.00	1	\$245,222
Lead	80	60	4800	4.00	1	\$19,200
Concrete 7	6,597	20	131940	3.75	1	\$494,775
TOTAL	11224					[.] \$809,167

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3.15 EQUIPMENT/SUPPLY COSTS (Excluding Containers)

Estimate the quantity of equipm	ent and supplies required appropriate u	nd multiply that quantity by the	
Equipment/Supplies	Quantity	Unit Cost	Total Equipment/Supply Cost
Protective Clothing	20000	\$3	\$60,000
Respirators	5000	\$10	\$50,000
HP Instruments	12	\$800	\$9,600
Misc Tools*	1	\$150,000	\$150,000
Security System - long term	1	\$50,000	\$50,000
Consumables	1	\$120,000	\$120,000
TOTAL			\$439,600

Misc. Tools:

Crane and crew

Concrete cutting equipment

Shears

Containments

Brokk

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3.16 LABORATORY COSTS

If applicable, estimate th	e costs for analyses to	be performed by	an independent third party laboratory.
Activity	Quantity	Unit Cost	Total Item Cost
Sampling	176	\$50	\$8,800
Transport of Samples	176	\$10	\$1,760
Testing and Analysis	176	\$110	\$19,360
Other (specify)			
TOTAL			\$29,920

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3.17 MISCELLANEOUS COSTS

Estimate any other applicable costs.	
Activity	Total Cost
License Fees*	\$0
Insurance	\$18,275
Taxes	\$159,954
TOTAL	\$178,228

Reciprocity is covered under Laboratory decommissioning

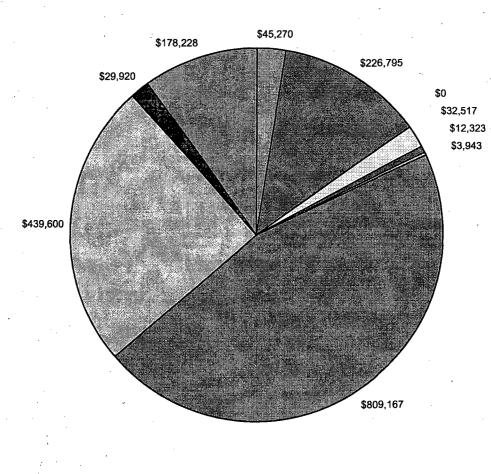
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3.18 TOTAL DECOMMISSIONING COSTS

Enter the total costs reported in Tables 3.13, 3.14(a)-(c), 3.15, 3.16, and 3.17 into the appropriate cells below, and add then to obtain a subtotal. Add to the subtotal a contingency allowance in the amount of 25 percent of the total decommissioning cost estimate. Also, calculate for each task/component the percentage it represents of the total.

Task/Component	Cost	Percentage
Planning and Preparation (from Table 3.13)	\$45,270	2.5%
Decontamination and/or Dismantling of Radioactive Facility (From Table 3.13)	\$226,795	12.8%
Restoration of Contaminated Areas on Facility Grounds (From Table 3.13)	\$0	0.0%
Final Radiation Survey (From Table 3.13)	\$32,517	1.8%
Packing Material Costs (TOTAL from Table 3.14(a))	\$12,323	0.7%
Shipping Costs (TOTAL from Table 3.14(b))	\$3,943	0.2%
Waste Disposal Costs (TOTAL from Table 3.14(c))	\$809,167	45.5%
Equipment/Supply Costs (TOTAL from Table 3.15)	\$439,600	24.7%
Laboratory Costs (TOTAL from Table 3.16)	\$29,920	1.7%
Miscellaneous Costs (TOTAL from Table 3.17)	\$178,228	10.0%
SUBTOTAL	\$1,777,764	100.0%
25% Contingency	\$444,441	25.0%
TOTAL DECOMMISSIONING COST ESTIMATE	\$2,222,205	125.0%



Decommissioning Cost Breakdown

Planning and Preparation (from Table 3.13)

Decontamination and/or Dismantling of Radioactive Facility (From Table 3.13)

Restoration of Contaminated Areas on Facility Grounds (From Table 3.13)

Final Radiation Survey (From Table 3.13)

Packing Material Costs (TOTAL from Table 3.14(a))

Shipping Costs (TOTAL from Table 3.14(b))

Waste Disposal Costs (TOTAL from Table 3.14(c))

Equipment/Supply Costs (TOTAL from Table 3.15)

Laboratory Costs (TOTAL from Table 3.16)

Miscellaneous Costs (TOTAL from Table 3.17)

Natinal Institute of Standards and Technology Accelerator Facilities Gaithersburg, MD

Decommssioning Cost Estimate March 2009

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Appendix D Sealed Source Inventory for Disposal

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	·	••••					·····
	Nuclide	Curios	Primary		Nuclide	Ciurice	Primary
	Name	Curies	Storage (Bldg/Room)		Name	Curies	Storage (Bldg/Room)
	CO60	1.33E+04	245/B140		H3	7.43E-02	217/C118
,	CO60	3.97E+03	245/B034		PUBE-9	6.89E-02	245/B132
	CO60	2.76E+03	245/B140	tini Marina di Pi	CO60	5.95E-02	245/B015
	CS137	2.04E+03	245/B143		1125	5.89E-02	245/B46
	CO60	9.38E+02	245/B036		KR85	5.00E-02	245/B003
	_ CO60	7.32E+02	245/B140		SR90	4.68E-02	245/B20
	CS137	6.46E+02	245/B036		RA226	4.65E-02	245/B145
	CO60	1.94E+02	245/B143		NI63	4.57E-02	245/B131
	CS137	1.22E+02	245/B021		AMBE	3.81E-02	245/B132
	CS137	9.49E+01	245/A10E		SR90	3.76E-02	245/B20
	CO60	9.30E+01	245/F101		SR90	3.73E-02	245/B20
,	CS137	4.35E+01	245/B132		SR90	3.73E-02	245/B20
	CO60	2.55E+01	245/B143		RA226	3.73E-02	245/B142
	CS137	1.31E+01	245/B015		CO60	3.62E-02	245/B132
	AMBE	6.03E+00	245/B143		NI63	2.95E-02	217/C118
	H3	3.95E+00	245/A018		CO60	2.76E-02	245/B132
	CS137	1.85E+00	245/B132		SR90	2.70E-02	245/B20
	CS137	1.61E+00	245/A012		RA226	2.43E-02	245/B132
	H3	1.31E+00	227/B151		SR90	2.37E-02	245/B003
	H3	1.05E+00	227/B151		SR90	2.31E-02	245/B003
	RABE	9.89E-01	245/B143		RA226	2.29E-02	245/B145
	AMBE	9.78E-01	245/B143		SR90	2.26E-02	245/B20
	RABE	9.70E-01	245/A012		RA226	2.00E-02	245/B142
	RABE	9.68E-01	245/A012		C14	1.99E-02	245/B023
	RABE	9.30E-01	245/B132		CS137	1.91E-02	245/B145
	CO60	8.00E-01	245/B021		CS137	1.85E-02	245/B132
	PUBE-9	6.00E-01	245/B132		CS137	1.69E-02	245/B145
	RABE	4.95E-01	245/B143		RA226	1.52E-02	245/B142
	RABE	2.52E-01	245/A012		NI63	1.48E-02	217/D119
	RABE	2.52E-01	245/A012		NI63	1.48E-02	217/C121
,	RA226	2.24E-01	245/B145		NI63	1.46E-02	227/A126
	H3	2.11E-01	227/B151		NI63	1.45E-02	217/C118
	НЗ	2.11E-01	227/B151		NI63	1.44E-02	217/C118
	RABE	1.99E-01	245/B143		NI63	1.38E-02	227/A126
	CS137	1.91E-01	245/B145		RA226	1.38E-02	245/B145
	CS137	1.51E-01	245/B132		NI63	1.36E-02	227/B111
	RABE	9.92E-02	245/B132	•	RA226	1.35E-02	245/B132
	RABE	9.78E-02			NI63	1.33E-02	227/A126
	AMBE	9.35E-02	245/B132	-	CO60	1.31E-02	245/B132

				' 3				
	Nuclide Name	Curies	Primary Storage (Bldg/Room)		Nuclide Name	Curies	Primary Storage (Bldg/Room)	·
	RA226	9.22E-02	245/B145		NI63	1.20E-02	227/A126	
	NI63	1.15E-02	227/A126		CO60	4.43E-03	245/B132	
	CS137	1.06E-02	245/B145		SR90	4.32E-03	245/B143	
	CS137	1.06E-02	245/B145		CO60	4.30E-03	245/B132	
	CS137	1.04E-02	245/B145		SR90	4.30E-03	245/B143	
	NI63	9.95E-03	217/C118	Section Trans	RA226	3.89E-03	245/B132	
	NI63	9.95E-03	301/B185		RA226	3.89E-03	245/B132	
÷ :	NI63	9.78E-03	217/D119		CO60	3.62E-03	245/B132	
	NI63	9.76E-03	217/C104	19. 19	SR90	3.59E-03	245/B20	
	NI63	9.70E-03	303/X112		CS137	3.43E-03	245/B145	
	RA226	9.65E-03	245/B145		PO210	2.92E-03	218/F005	
	EU152	9.59E-03	245/C109		CO60	2.81E-03	245/B132	
	AM241	9.54E-03	245/B023		CO60	2.40E-03	245/B132	
	AM241	9.54E-03	245/B023		CS137	2.28E-03	245/B132	
	RA226	9.51E-03	245/B132	-	CS137	2.28E-03	245/B132	
	KR85	9.49E-03	227/B311		CS137	2.28E-03	245/B132	
	PM147	9.00E-03	245/B003		CS137	2.28E-03	245/B132	
	RADBE	8.95E-03	245/B132		MO99	2.10E-03	245/B156	
	KR85	8.68E-03	423/X100		CO60	1.95E-03	245/B132	
	CO60	7.11E-03	245/B132		CS137	1.91E-03	245/B145	
	CO60	6.49E-03	245/B145		KR85	1.90E-03	227/B311	
	CS137	5.89E-03	245/B145		AM241	1.88E-03	245/B132	
	CS137	5.89E-03	245/B145	-	RA226	1.88E-03	245/B145	
	CS137	5.89E-03	245/B145		KR85	1.61E-03	224/B363	
	PM147	5.78E-03	245/B003		CO60	1.52E-03	245/B132	•
	CS137	5.30E-03	245/B145	- 997 - 991 1997 - 991	1131	1.33E-03	245/B46	
	CS137	5.30E-03	245/B145		CO60	1.30E-03	245/B145	
	CS137 CS137	5.30E-03 5.30E-03	245/B145 245/B145		CO60	1.21E-03	245/B132	
	CS137 CS137	5.30E-03	245/B145 245/B145		PO210	1.18E-03	224/A264	
ļ	MN54	5.22E-03	245/B145 245/B46		CS137 PO210	1.15E-03 1.14E-03	245/B145 227/B311	•
}	CS137	5.11E-03	245/B132		CO60	1.14E-03	245/B132	
ŀ	NI63	4.92E-03	2245/D132		KR85	1.14E-03	243/B132 217/C121	
ŀ	NI63	4.92E-03	226/A326		RADBE	1.12E-03	245/B132	
ŀ	NI63	4.92E-03	226/A326		SR90	1.06E-03	245/B003	
ŀ	NI63	4.92E-03	226/A326		CO60	1.01E-03	245/B132	
-	AM241	4.92E-03	245/B08		RA226	1.01E-03	245/B145	
}	NI63	4.92E-03	423/X100		RA226	9.86E-04	245/B47	
ŀ	RA226	4.92E-03	245/B47		RA226	9.86E-04	245/B49	
ŀ	RA226	4.73E-03	245/B145		CO60	9.24E-04	245/B145	

Name SR90	4.49E-03	(Bldg/Room) 245/B043		Name CO60	9.03E-04	(Bldg/Room) 245/B132	
CO60	4.43E-03	245/B132		CS137	8.51E-04	245/B132	
SR90	8.05E-04	245/B20		RA226	9.86E-05	245/B49	
KR85	7.70E-04	245/B20 224/A264		RA226	9.88E-05	245/B49 245/B47	
CO60	7.41E-04			CO57	9.64E-05	223/B151	
KR85	7.41E-04 7.19E-04	245/B145 217/C121		CO60	9.08E-05 8.57E-05	245/B132	
KR85	7.19E-04	217/D121 217/D119		PB210	7.84E-05	245/B132 245/B46	
CO60				······	7.84E-05	245/C11	
	5.54E-04	245/B145		CS137		245/C11	
RA226	4.97E-04	245/B145		CS137	7.81E-05	245/B132	
KR85	4.92E-04	224/A264		CO60	7.81E-05		
KR85	4.92E-04	224/B363		PD103	7.76E-05	245/B06	
RA226	4.92E-04	245/B47		NP237	6.35E-05	245/C11	
SR90	3.89E-04	245/B143		CO60	6.24E-05	245/B132	
CS137	3.84E-04	245/B145		FE55	6.19E-05	217/D104	
CO60	3.70E-04	245/B145		SR90	5.19E-05	245/B20	
CO60	3.24E-04	245/B132	e e e e e e e e e e e e e e e e e e e	C14	5.00E-05	227/B141	
CO60	3.22E-04	245/B132		CO60	4.95E-05	245/B132	
CO60	3.22E-04	245/B132	Head of the second	CO60	4.95E-05	245/B132	
CS137	2.95E-04	245/B132		CO60	4.95E-05	245/B132	
CO60	2.89E-04	245/B132		CO60	4.95E-05	245/B132	
CO60	2.84E-04	245/B132		CO60	4.95E-05	245/B132	
KR85	2.78E-04	227/B311		CO60	4.95E-05	245/B132	
CO57	2.66E-04	245/C11		CO60	4.95E-05	245/B132	
KR85	2.58E-04	227/B111		RA226	4.92E-05	245/B47	
PM147	2.47E-04	245/B003		XE133	4.89E-05	245/C11	
H3	2.46E-04	227/B243		RA226	4.86E-05	245/B47	
CO60	2.44E-04	245/B132	and the	AM241	4.68E-05	245/C11	
CO60	2.17E-04	245/C11		CO60	4.41E-05	245/B132	
CS137	2.14E-04	245/B132		BA133	4.35E-05	245/B132	
RA226	1.94E-04	245/B47		CO60	4.24E-05	245/B132	х
1125	1.91E-04	245/B06		AM241	4.19E-05	245/B023	
CO60	1.85E-04	245/B145	5.5	CO60	4.11E-05	245/B132	
CO60	1.81E-04	245/B132		TL204	3.59E-05	245/B003	
IR192	1.69E-04	245/B06		CF252	3.59E-05	245/B143	
CO60	1.65E-04	245/B132		RA223	3.51E-05	245/E105	
CO60	1.45E-04	245/B132		FE55	3.35E-05	223/A232	
MO99	1.29E-04	245/B46	de la sita	CO60	3.30E-05	245/B132	
BA133	1.22E-04	245/C11		BA133	3.08E-05	245/B132	
BA133	1.22E-04	245/C11		CS137	2.97E-05	245/C11	
CO60	1.19E-04		- Martine Party	CD109	2.50E-05	245/B044	

Nuclide Name Curies (Bidg/Room)
CO60 1.19E-04 245/B145 CO60 2.46E-05 245/B132
CO60 1.19E-04 245/B145 CS137 2.21E-05 245/B132
C14 1.15E-04 245/B50 RA226 1.97E-05 245/B47
RA226 1.94E-05 245/B47 CS137 9.68E-06 245/B132
1125 1.90E-05 245/B06 CS137 9.68E-06 245/B132
CS137 1.65E-05 245/C11 CS137 9.68E-06 245/B132
CO60 1.61E-05 245/B132 CS137 9.68E-06 245/B132
CO60 1.51E-05 245/C11 CS137 9.68E-06 245/B132
CS137 1.35E-05 245/B143 CS137 8.81E-06 245/B131
CD109 1.32E-05 245/B044 CO60 8.32E-06 245/B132
CO60 1.25E-05 245/B132 CO60 8.22E-06 245/B132
BA133 1.09E-05 245/C11 BA133 7.05E-06 245/B131
BA133 1.09E-05 245/C11 MAP 7.00E-06 217/D105
U238 1.00E-05 245/B51 BA133 7.00E-06 245/C11
RA226 9.92E-06 245/B132 BA133 7.00E-06 245/C11
RA226 9.70E-06 245/B47 AM241 6.86E-06 221/A58
CS137 9.68E-06 245/B131 CS137 6.22E-06 245/B131
CS137 9.68E-06 245/B131 CS134 6.08E-06 245/B131
CS137 9.68E-06 245/B132 NB94 5.95E-06 245/C11
CS137 9.68E-06 245/B132 TH232 5.49E-06 227/A334
CS137 9.68E-06 245/B132 CF252 5.32E-06 245/B143
CS137 9.68E-06 245/B132 Bl207 5.19E-06 245/C11
CS137 9.68E-06 245/B132 RA226 4.95E-06 245/B131
CS137 9.68E-06 245/B132 P32 4.54E-06 227/B243
CS137 9.68E-06 245/B132 P32 4.54E-06 227/B243
CS137 9.68E-06 245/B132 CO60 4.24E-06 245/C11
CS137 9.68E-06 245/B132 CO60 4.24E-06 245/C11
CS137 9.68E-06 245/B132 FE55 4.24E-06 245/B131
CS137 9.68E-06 245/B132 EU152 4.22E-06 245/B023
CS137 9.68E-06 245/B132 TL204 4.05E-06 245/B003
CS137 9.68E-06 245/B132 CF252 3.95E-06 245/B143
CS137 9.68E-06 245/B132 CO57 3.95E-06 245/C11
CS137 9.68E-06 245/B132 CO57 3.95E-06 245/C11
CS137 9.68E-06 245/B132 CO57 3.95E-06 245/C11
CS137 9.68E-06 245/B132 CO57 3.95E-06 245/C11
CS137 9.68E-06 245/B132 CO60 3.92E-06 245/B132
CS137 9.68E-06 245/B132 AM241 3.49E-06 224/A264
CS137 9.68E-06 245/B132 CF252 3.38E-06 245/B143
CS137 9.68E-06 245/B132 PO210 3.14E-06 227/B123
CS137 9.68E-06 245/B132 PO210 3.14E-06 227/B123

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