

This is the Home Screen most lab workers will interface. It displays the lab worker that is logged in at the top right corner, the accessible icons across the bottom, and the **“HOME”** tab that will return you to this page from anywhere in the program.

From this page you can check your on-hand radioactive inventory and remove material, request waste supplies or a waste pick-up, and see equipment assigned to your lab.

Let's get started, you want to check your on-hand inventory for an upcoming experiment. Select the **“Inventory”** icon at the bottom of the screen.

The screenshot shows a web browser window with the URL alara.ehs.virginia.edu/EHSA/. The page header includes the EHS A logo and the University of Virginia logo. The main content area displays a table of contents for the RAM Inventory page, with a green arrow pointing to the "Removal of Isotope from PI's Inventory" link. The table of contents includes the following items:

- RAM Inventory
 - Removal of Isotope from PI's Inventory
 - View In-Lab Waste Containers

This is the table of contents for the **RAM Inventory** page. The function of interest for on-hand inventory and removal of material is the “**Removal of Isotopes from PI’s Inventory**”.

- **Removal of Isotopes from PI’s Inventory** – shows all radioactive material (allowed by PI’s permit) on-hand in inventory and includes the technical specifications of the material.
- **View In-Lab Waste Containers** – allows a lab to see the waste disposal containers assigned to the lab.

View Details | Ram Receipt | PI: | Inventory: Current Inventory | Options

Drag a column header and drop it here to group by that column

Inventory #	Isotope	Receipt Activity	Current Activity	Unit	Receipt Date	Assay Date	Assay Activity	Physical Form	Lot #	Compound	PO #	Lab/L
210922001	P-32	0.40603	0.000901	mCi	09-22-2021	10-02-2021	0.25	Liquid	09231	ATP	2385475	PINN
160818005A	H-3	0.23425	0.183877	mCi	10-13-2017	10-13-2017	0.23425	Liquid	2128790	adenosine cyclic p...	1761135	PINN

500 Items per page | 1 - 2 of 2 Items

The **Quick Isotope Entry** page shows the technical information related to all stock items in inventory. This information takes up more than can be seen on the screen, scrolling to the right will bring up more of the entry.

New material is added to the PI's inventory when orders are received at the EHS Radiation Safety office and checked in.

Radiation Safety staff enter information into the database from the order requisition and packing list for each stock vial received. It is the responsibility of laboratory staff to verify this information is correct (i.e., isotope, activity, assay date, lot number, etc.) once the new material is delivered.

If there are any discrepancies contact the Radiation Safety Office as soon as possible.

(Radiation Safety Tech number: 434-982-4919)

Usage Log PI: Inventory: View In-Lab Waste Options

Drag a column header and drop it here to group by that column

Inventory #	PI Name	Isotope	Receipt Activity	Assay Activity	Unit	Receipt Date	Lot #	Form	Compound	Lab/Location	Lic. Line #
220125002		I-125	1	1	mCi	01-26-2022	ABCDE	Liquid	Unbound I-125	SPECIAL MATERIALS HANDLING FACILITY:RM 134	BB
220126001		I-125	5	5	mCi	01-26-2022	ZZZZZ	Liquid	Test I-125	SPECIAL MATERIALS HANDLING FACILITY:RM 134	BB

50 Items per page 1 - 2 of 2 Items

A single mouse click highlights the entry, a double mouse click will open the inventory information in page format in a new window (see next page).

This may make verifying the information easier.

The “Back Arrow” at the top will return you to the previous page, while clicking the “EHS & Home” tab just below the “Back Arrow” will return you to the Homepage.

EHSA Inventory / Ram Inventory / Edit Ram Inventory (readonly) Cancel

Inventory # 210922001

*PI Name

*Isotope P-32

Lic. Line # BB

Permit # R-453

Lab/Location

Vendor PERKIN-ELMER LIFE SC

Catalog #

Select Compound

Compound ATP

Vial Description P-32 ATP

Physical Form Liquid Volatile

Requisition # R210921001

PO # 2385475

Lot # 09231

Total Left in Inventory

Not Decayed	0.40603	mCi
Decayed	0.000859	mCi

Assay Detail

*Assay Date 10/2/2021

*Receipt Date 9/22/2021

*Activity per Unit 0.25 mCi

X *# of Units 1

= *Assay Activity 0.25 mCi

*Receipt Activity 0.40603 mCi

Volume 0.00 Unit

Usage Log | Ram Inventory Usage Reports | PI: [] | Inventory: Current Inventory | View In-Lab Waste | Options

Drag a column header and drop it here to group by that column

Inventory #	PI Name	Isotope	Receipt Activity	Assay Activity	Unit	Receipt Date	Lot #	Physical Form	Compound	Lab/Location	Lic. Lir
▶ 220125002		I-125	1	1	mCi	01-26-2022	ABCDE	Liquid	Unbound I-125	SPECIAL MATERIALS HANDLING FACILITY:RM 134	BB
▶ 220126001		I-125	5	5	mCi	01-26-2022	ZZZZZ	Liquid	Test I-125	SPECIAL MATERIALS HANDLING FACILITY:RM 134	BB

50 items per page | 1 - 2 of 2 items

The **Removal of Isotopes from PI's Inventory** page is the accounting page for use and disposal of radioactive material from a PI's inventory. Select the "Usage Log" tab in the upper left corner.

Radioactive stock can be removed by activity, volume, or percentage (this will be decided by laboratory use for each stock vial in a PI's inventory), once a choice is made however, it will be the withdrawal method for that stock vial until depleted.

Radioactive material stock vials are automatically assigned an inventory number upon receipt and package check in by the Radiation Safety staff. The inventory number is tied to all the technical data associated with that stock vial, the most important being the manufacturers' lot number. Always verify that material is being removed from the appropriate stock vial.

This page allows for the removal and use, tracking or transfer, aliquoting, and disposal of radioactive material for the various projects being conducted in the laboratory.

Because disposal is directly linked to the withdrawal of material from the stock vial it is critical that you have a waste container (a waste box for solids, or a plastic jar/jug for liquids) in the laboratory before you begin any projects. Withdrawal transactions cannot be completed without a registered "in lab waste container".

All radioactive waste containers are supplied to labs by the EHS Radiation Safety Office and are barcoded for inventory and disposal purposes.

Browser tabs: EHSa

Address bar: alara.ehs.virginia.edu/ehsa/waste/ramremove/ramremovelist

Navigation: Apps, Human Resources | Univer..., 12VAC5-481 Table of Cont..., Legislative Information Sys..., Environmental Health & Sa..., Workday Central | UVA HR, EHSa Menu, Reading list

Page Header: EHSa Inventory / Ram Inventory Usage Help

Filters: Usage Log, Ram Inventory Usage Reports, PI: [dropdown], Inventory: Current Inventory, View In-Lab Waste, Options

Drag a column header and drop it here to group by that column

Inventory #	PI Name	Isotope	Receipt Activity	Assay Activity	Unit	Receipt Date	Lot #	Physical Form	Compound	Lab/Location	Lic. Lir
▶ 220125002		I-125	1	1	mCi	01-26-2022	ABCDE	Liquid	Unbound I-125	SPECIAL MATERIALS HANDLING FACILITY:RM 134	BB
▶ 220126001		I-125	5	5	mCi	01-26-2022	ZZZZZZ	Liquid	Test I-125	SPECIAL MATERIALS HANDLING FACILITY:RM 134	BB

Page Footer: 50 items per page, 1 - 2 of 2 items

This **RAM Inventory Usage** page shows two stock vials available for use in the on-hand inventory. Select the inventory number of the isotope you want to use by placing the mouse cursor anywhere in the row and single click. The stock vial will be color highlighted.

(see next page)

Browser tabs: EHSa

Address bar: alara.ehs.virginia.edu/ehsa/waste/ramremove/ramremovelist

Navigation: Apps, Human Resources | Univer..., 12VAC5-481 Table of Cont..., Legislative Information Sys..., Environmental Health & Sa..., Workday Central | UVA HR, EHSa Menu, Reading list

Page Header: EHSa Inventory / Ram Inventory Usage Help

Filters: Usage Log, Ram Inventory Usage Reports, PI: PAYNE, GREGORY, Inventory: Current Inventory, View In-Lab Waste, Options

Drag a column header and drop it here to group by that column

Inventory #	PI Name	Isotope	Receipt Activity	Assay Activity	Unit	Receipt Date	Lot #	Physical Form	Compound	Lab/Location	Lic. Line #
125002		I-125	1	1	mCi	01-26-2022	ABCDE	Liquid	Unbound I-125	SPECIAL MATERIALS HANDLING FACILITY:RM 134	BB
126001		I-125	5	5	mCi	01-26-2022	ZZZZZ	Liquid	Test I-125	SPECIAL MATERIALS HANDLING FACILITY:RM 134	BB

Page Footer: 50 items per page, 1 - 2 of 2 items

Double clicking this selection will bring up the **Usage** page which is where actual removal of material can be performed.

(see next page)

Inventory # 220126001 Receipt Date 1/26/2022

Isotope I-125 Receipt Activity 5 mCi

Compound Test I-125 Not Decayed 5 mCi

Lot # ZZZZZZ Decayed 4.942715 mCi

Review Due Date Volume 1 ml Unit Update

Last Reviewed Mark as Reviewed Current Volume 1 ml Unit

Usage Activity by Category

Usage for Inventory #: 220126001

Isotope	Disposal Date	Waste Inventory #	Usage ID ↓	Percent	Container	Usage Category	Usage Activity	Unit
<div style="display: flex; justify-content: space-between; align-items: center;"> + Add Edit Delete More Options </div>								

Verify this is the correct stock vial by comparing the lot number recorded in the inventory to the lot number on the physical stock vial.

Next select the “+Add” tab to withdraw from this vial. This will open the “Add RAM Inventory Usage Page”.

(see next page)

alara.ehs.virginia.edu/EHSA/waste/ramremove/ramremoveEdit?pkey=0&researcher=GFP5D&isotope=I-125&s=220126001

EHSA Inventory / Ram Inventory Usage / Add Ram Inventory Usage

Inventory Information

Inventory # 220126001

Isotope I-125

PI Name

Lic. Line # BB

Comments

Total Inventory as of January 27, 2022

Not Decayed 5 mCi

Decayed 4.886087

Enter Usage Information *Your selection of By Volume or By Activity cannot be varied once usage for this vial has been saved.

Disposal Date 1/27/2022 Disposed By

Activity Used 0 mCi

Mixed Waste?

Usage Category	Percent	Usage Activity
<input type="radio"/> Add	100.00 %	0 mCi

Totally Used?

This is where you will decide how this stock vial is to be distributed, by volume, activity, or percentage from the “Enter Usage Information” drop down menu.

Remember, this is a one-time selection per stock vial and cannot be changed.

alara.ehs.virginia.edu/EHSA/waste/ramremove/ramremoveEdit?pkey=0&researcher=GFP5D&isotope=I-125&s=220126001

EHSA Menu

PI Name PAYNE, GREGORY

Lic. Line # BB

Total Inventory as of January 27, 2022

Not Decayed 5 mCi

Decayed 4.886087

Enter Usage Information *Your selection of By Volume or By Activity cannot be varied once usage for this vial has been saved.

Disposal Date 1/27/2022 Disposed By PAYNE, GREGORY

Activity Used 0 mCi

Mixed Waste?

Usage Category	Percent	Usage Activity
<input type="radio"/> Add	100.00 %	0 mCi

Totally Used?

Save Cancel

Comments

- This Usage 0.01

Current Volume 0.99 ml

Act. per Vol. Unit 4.886087 per ml

Enter Usage Information By Volume *Your selection of By Volume or By Activity cannot be varied once usage for this vial has been saved.

Disposal Date 1/27/2022 Disposed By PAYNE, GREGORY

Volume Used 0.01 ml Activity Used 0.048861 mCi

Mixed Waste?

Add	Usage Category	Percent	Usage Activity
<input type="checkbox"/>	Animal	100.00 %	0.048861 mCi

Save Cancel

After selecting your usage criteria enter the amount of material you wish to withdraw. Then select a **“Usage Category”** that will show how this material will be used.

Some of the Usage Categories are not shown, and some of their uses are not self-explanatory.

A guide for the Usage Categories will be provided.

Comment boxes that open during any of this process are for lab use to describe what project the withdrawal was made for, or any other notes that are pertinent to the process.

Comments

- This Usage

Current Volume ml

Act. per Vol. Unit

Enter Usage Information By Volume *Your selection of By Volume or By Activity cannot be varied once usage for this vial has been saved.

Disposal Date

Disposed By

Volume Used ml

Activity Used mCi

Mixed Waste?

Usage Category Percent Usage Activity

Solid mCi Container

Totally Used?

Container	Isotope(s)	Usage Category	Description	Location	Comments
			Can		
2022-01-D-0001	I-125	To RSO	DIS Seeds at SMHF	SPECIAL MATERIALS HANDLING FACILITY 140	
2022-01-D-0004	P-32	Solid	2 cuft box	Medical Research Building 4 0125	
2022-01-D-0007	I-125	Solid	1.0 cu ft cardboard box	SPECIAL MATERIALS HANDLING FACILITY-RM 134	
2022-01-D-0013	P-32	Solid	2 cuft box	PHN Hall 5221	

Once a Usage Category is selected a waste container drop down box appears to the right, if not select the "Container" drop down arrow or you can type the container number in directly. If you are drawing material to be used in an immediate project you must select a waste container assigned to your lab in order to complete this process.

The Usage Category used was "Solid" which means that the material used will generate solid waste, and most or all the radioactive material will be wasted in the container. As mentioned earlier, a waste container should be assigned to the lab before you start a radioactive material project.

This page will calculate the stock vial amount remaining, as well as keeping a running total of waste generated to the waste container.

NOTE: this is the same for liquid containers, however, an additional information box will be available for liquid constituents also going in with the waste. This is the same requirement managed on the paper waste ticket, to give the percentage and pH of all liquids being disposed of in the container.

Also, any EPA registered hazardous chemicals, or alcohols in concentrations >10% will constitute a "Mixed Waste" condition.

alara.ehs.virginia.edu/EHSA/waste/ramremove/ramremoveview?pkey=191353

EHSA Inventory / Ram Inventory Usage / View Ram Inventory Usage

Inventory # 220126001 Receipt Date 1/26/2022

Isotope I-125 Receipt Activity 5 mCi

Compound Test I-125 Not Decayed 4.95114 mCi

Lot # ZZZZZZ Decayed 4.893289 mCi

Review Due Date Mark as Reviewed Volume 1 ml Unit Update

Last Reviewed Current Volume 0.99 ml Unit

Usage Activity by Category

Usage for Inventory #: 220126001

Isotope	Disposal Date	Waste Inventory #	Usage ID ↓	Percent	Container	Usage Category	Usage Activity	Unit
I-125	01-28-2022	W220127001	44395	100	2022-01-D-0007	Solid	0.04886	mCi

Once you have made all your entries, save your work and the page above will display. You can see the amount of radioactive material used (in Activity) appears as a bar graph, and the waste is already assigned to the container with the usage activity posted.

The physical data of the stock vial are updated to reflect your withdrawal, i.e., **“Decayed”** activity, **“Current Volume”**.

Press the large green **“Done”** tab and this will complete your transaction.

Welcome to your Safety Research Home Page

Quick Links

UNIVERSITY of VIRGINIA

Vice President for Research

Waste Pickup Request

Waste Supply Requests

Inventory

Equipment

Alerts Help

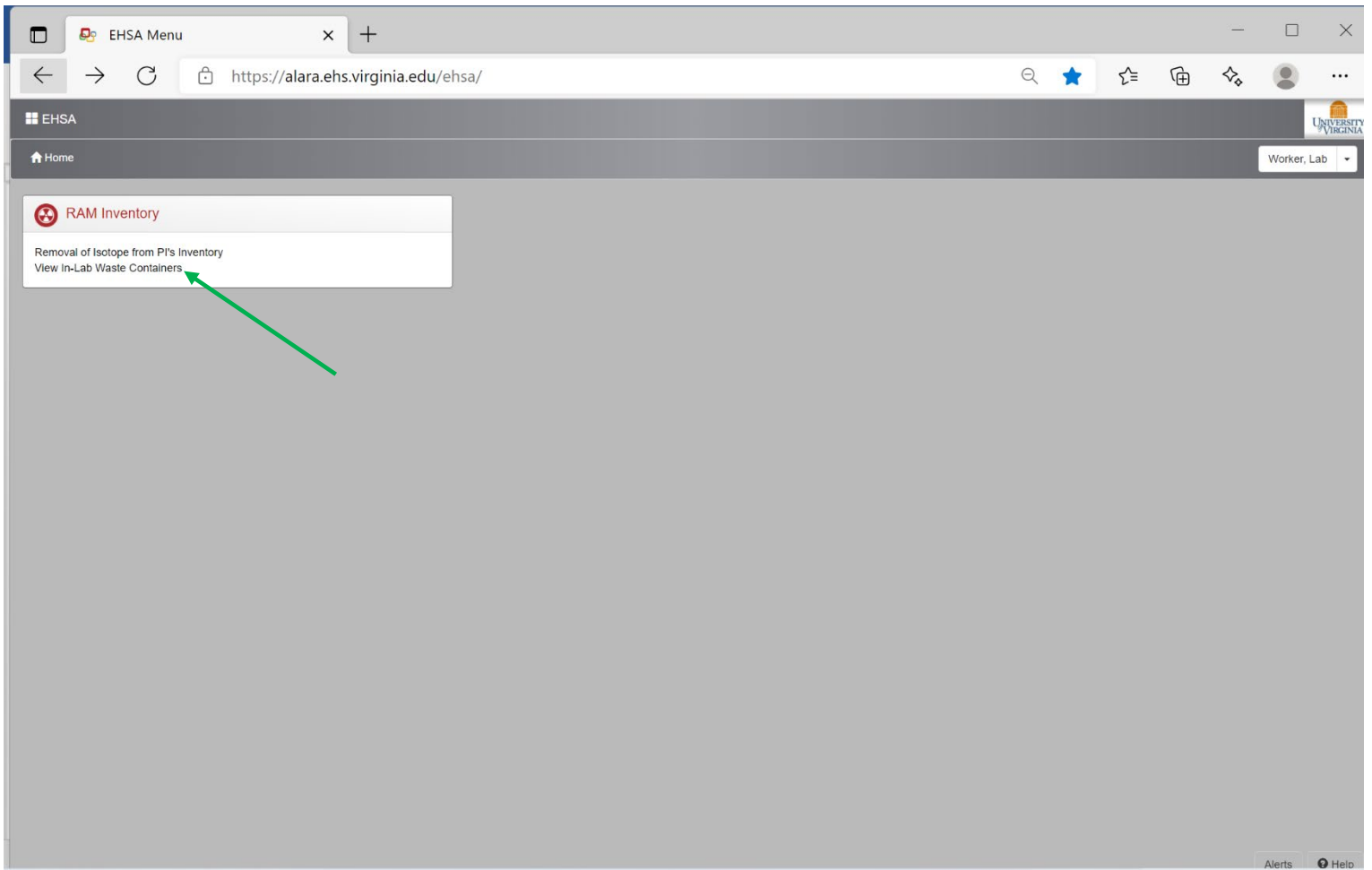
Waste disposal and supply reorder can be done from the Homepage using the icons at the bottom of the screen.

The closure requirements of waste containers are the same:

- Waste boxes – tape or zip tie the yellow inner bag, close and tape the box lid, and perform a contamination survey of the exterior. If you have a Liquid Scintillation counter swipe the box exterior and count. If using a hand held Geiger-Muller meter, swipe the exterior and measure the swipe in a low background area. **DO NOT** take a direct measure of the waste container with the meter.
- Liquid jars/jugs – secure the lid and perform a similar contamination survey of the exterior. Be sure you have listed the other chemical constituents on the waste request.

NOTE: disposal of waste containers is done through the “Inventory” icon.

Let’s dispose of some waste and send a request for pick-up.



From the **RAM Inventory** page select the **View In Lab Waste Containers**. Remember the waste containers are tied directly to withdrawal of radioactive material from the stock vial.

Drag a column header and drop it here to group by that column

			Container # ↑	Contents Description	Isotope		Container Type	Waste Type	PI Name	Open	
▶	Seal	Add Container Survey	Request Pickup	2022-01-D-0007	Solid waste	I-125	I-RAM	1.0	DIS	PAYNE, GREGORY	01-26
▶	Seal	Add Container Survey	Request Pickup	2022-01-L-0005 (empty)	Liquid waste	I-125	I-RAM	2.5	LIQ	PAYNE, GREGORY	01-24

Page 1 of 1 | 500 items per page | 1 - 2 of 2 items

This page displays all the waste containers that have been barcoded and assigned to the lab by the Radiation Safety Office. They are identified under the **Container #** column, waste boxes identified with a “D” in the barcode number, indicate “Dry Solids”. Liquid containers (1 liter wide mouth jars & 10 liter Jerry Cans) are labeled with an “L” in the barcode.

The “(empty)” designation on the liquid container above means that no waste has been added to this container yet.

The small triangle at the beginning of the row will expanded the container to show the waste contents.

(see next page)

Browser: EHS A | URL: https://alara.ehs.virginia.edu/ehsa/waste/inlabcontainer/inlabcontainerlist

Navigation: View Archived | In Lab Container Reports | Dispose | PI: Show All | View: In-Lab Waste Container | Container Category: RAM

Drag a column header and drop it here to group by that column

Container #	Contents Description	Isotope	Container Type	Waste Type	PI Name	Open
2022-01-D-0007	Solid waste	I-125	I-RAM	1.0	PAYNE, GREGORY	01-26

Buttons: Seal | Add Container Survey | Request Pickup

Isotope	PI Origin	PI Name	Orig Inventory #	Disposal Date	Est. Disposal Date	Waste Code	Disposed?	Receipt Activity	Unit
I-125			220126001	01-28-2022	08-22-2024		<input type="checkbox"/>	0.04886	mCi

Page 1 of 1 | 500 Items per page | 1 - 2 of 2 items

This expanded view of the waste contents shows: the isotope, the inventory number of the stock vial, the date the material was placed into the container, the estimated disposal date (UVA EHS Radiation Safety allows $T^{1/2} \times 10$ before disposal), and the waste activity (in millicuries).

Drag a column header and drop it here to group by that column

			Container # ↑	Contents Description	Isotope		Container Type	Waste Type	PI Name	Open
<input type="checkbox"/>	Seal	+ Add Container Survey	2022-01-D-0007	Solid waste	I-125	I-RAM	1.0	DIS	PAYNE, GREGORY	01-26
<input type="checkbox"/>	Seal	+ Add Container Survey	2022-01-L-0005 (empty)	Liquid waste	I-125	I-RAM	2.5	LIQ	PAYNE, GREGORY	01-24

Page 1 of 1 | 500 Items per page | 1 - 2 of 2 items

To prepare a waste container for pickup:

- Click on the container you wish to dispose of (it will become highlighted).
- Perform a contamination survey of the container, i.e. take a swipe of the container and hold the swipe to the detector of your Geiger-Mueller meter, or count the swipe in a liquid scintillation counter.
- Enter the results by selecting the **“+Add Container Survey”**, the window below will appear.

Container Survey

Container / Drain # 2022-01-D-0007 Autofill

Survey Date 1/31/2022

Survey Information

1 Meter DPM

Surface mR/hr

Background mR/hr

Survey Instrument

Liquid Scint. Counter

pH 0

Weight lbs.

Surveyor

Comments

Save Cancel

Enter the **“Surface and Background”** readings in the spaces provided, change the units to **“DPM”**.

Select your survey meter serial number from the drop down box and save the results.

The screenshot shows the ESHA 'In Lab Containers' interface. A table lists containers with columns for Container / Drain #, Contents Description, Isotope, Storage Type, Container Type, Waste Type, PI Name, and Open. The first row is highlighted, and a green 'Seal' button is circled in yellow. A 'Confirm' dialog box is open, with the 'Date Sealed' field set to 1/31/2022. The dialog asks: 'Are you sure you want to mark Container #: 2022-01-D-0007 as 'Sealed'?'. Buttons for 'Seal' and 'Cancel' are visible.

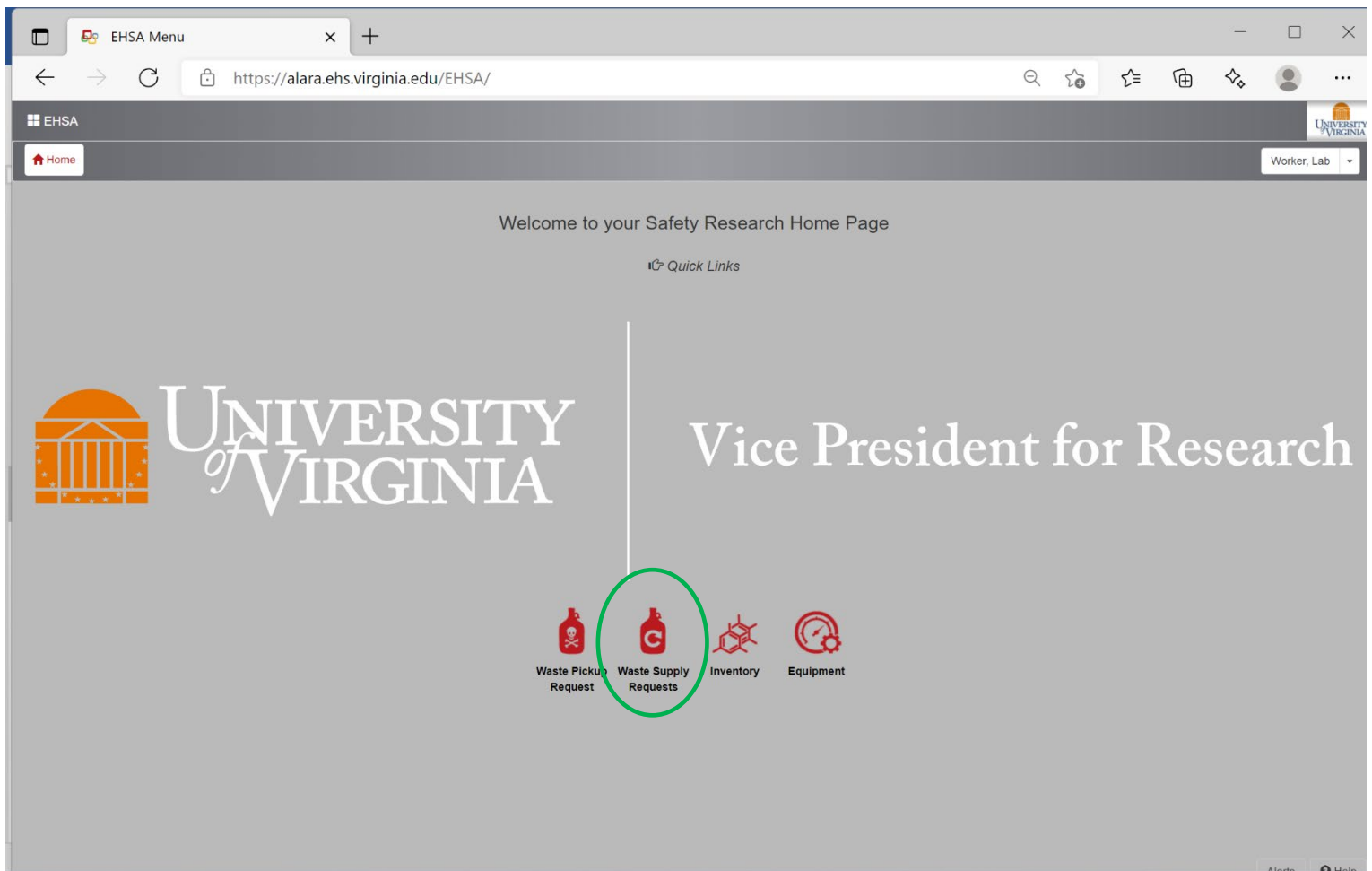
After saving your survey results you will be returned to the in lab waste container page. You now have to electronically seal the container to start the countdown clock for disposal. Select the “**SEAL**” button at the beginning of the row for the container. The dialog box above will open, confirm that you want to seal the container.

Next, select the “**+Request Pickup**” button and confirm your information and select the “**YES**” button in the lower left corner, a notification will be sent to the Radiation Safety Office for collection of the waste, and you will see a confirmation notice.

The screenshot shows the 'Waste Request Pickup' dialog box. It contains the following information:

- Container Information:**
 - Container #: 2022-01-D-0007
 - Isotope: I-125
 - Location: SPECIAL MATERIALS HANDLING FACILITY : SMHF-RM 140
- Request a pickup using the following waste request profile?**
- Waste Profile:**
 - Contact:** Myrsten, Michael (mfm5e)
 - Contact Phone:** (434)987-6367
 - Contact Email:** MFM5E@Virginia.edu
 - PI:** PAYNE, GREGORY(GFP5D)
 - Department:** Environmental Health & Safety Office (EHS)
 - Request Date:** 1/31/2022
 - Comments:** (Empty text area)

A green arrow points to the 'Yes' button at the bottom left of the dialog.



The Radiation Safety Office supplies all solid and liquid waste containers to labs. Replacement containers can be requested with a waste pickup, list your supply needs in the “**Comments**” box.

Or, you can request supplies using the icon on the home page. A new order page will open.

(see next page)

EHSA Waste / Waste Supply Request

+ Add Edit Delete View Completed Options

Drag a column header and drop it here to group by that column

Supply Request #	Request Date	Part of Waste Pickup Request	Location	Submitted By	Item(s) Requested	Completed
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0 500 items per page No items to display

The **Waste Supply Request** page allows labs to reorder radioactive material waste containers on demand.

Select the “+Add” tab in the upper left corner to open the order list form.

(see next page)

Browser: EHSa | URL: alara.ehs.virginia.edu/EHSA/waste/wasterequestsupply/wasterequestsupplyEdit?pkey=0

Navigation: EHSa Waste / Waste Supply Request / Add Waste Supply Request

Buttons: Save Cancel Help

Request Date: 1/28/2022

Building: Allow Any Location

Lab:

Quantity	Description
0	1 Liter Widemouth Jar
0	1.0 cu ft cardboard box
0	2 cuft box
0	2.5 gallon Jerry Can
0	LSV TRAY
0	Miscellaneous container

Comments: *Special Request Require Comments

Buttons: Save Cancel

This dialogue screen should be easy to follow, just select the supplies and quantities from the list. Depending on the quantity ordered Radiation Safety may adjust the request to a more appropriate number to prevent stockpiling of containers.

Fill in your selections and save, a line item will display on the screen to indicate a successful request.

Browser: EHSa | URL: <https://alara.ehs.virginia.edu/ehsa/waste/wasterequestsupply/wasterequestsupplylist>

Navigation: EHSa Waste / Waste Supply Request

Buttons: + Add Edit Delete View Completed Options

Drag a column header and drop it here to group by that column

Supply Request #	Request Date	Part of Waste Pickup Request	Location	Submitted By	Item(s) Requested	Completed	Completion Date	Complete
SFR0000003	01-31-2022	<input type="checkbox"/>		Worker, Lab	1 2 cuft box	<input type="checkbox"/>		

500 Items per page | 1 - 1 of 1 Items