

Virginia Tech Environmental Health & Safety Safety Management System User's Guide

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VT EHS welcomes any suggestions that will improve this system for our clients. Please provide feedback to safety@vt.edu and it will be relayed to the development team. If you have an immediate concern, please call 1-3600.

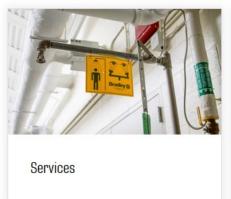


Using the EHS Safety Management System

The EHS Safety Management System (SMS) can be used to manage a number of tasks associated with a campus space or group of people that work together. The Safety Management System allows users to manage:

- Emergency contacts and critical information
- People
- Required training
- Chemical registration
- Waste pickup and more!

To access the SMS, use the links on the EHS website, https://ehs.vt.edu







Programs

Training









On the next screen, click on 'Access the Safety Management System'



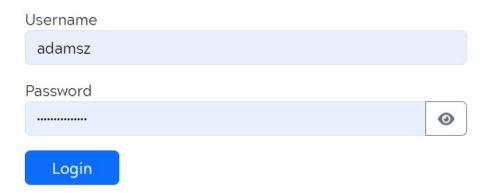
Logging into the SMS

The Safety Management System uses Virginia Tech's LDAP system to authorize access. Users must have a Virginia Tech PID or Guest ID in order to access EHS systems and training. If you are temporarily associated with Virginia Tech, please obtain a sponsored PID (http://www.ims.vt.edu/forms/sponsored-pid.pdf).

If you have problems logging in from this screen, please contact 4HELP at http://4help.vt.edu or by calling 540-231-4357.



Login to www.ehss.vt.edu





The Welcome Screen

Once you are successfully logged in, the labs or spaces your PID is associated with will be displayed. The headings only display if you have labs falling within the respective criteria.

- Labs or workspaces where you are the Principle Investigator or Responsible Person;
- Labs or workspaces that you created;
- Labs or workspaces that you are associated with; and
- Labs or workspaces you have responsibility for within your Department (i.e., you are assigned the coordinator role by your Department)





Creating a New Lab or Workspace

Any Virginia Tech Faculty or Staff member with a valid PID can create a lab or space.

When creating a lab or space, it's important that you have the following information available:

- Principle Investigator or Responsible Party name and PID
- Lab Department, Building, and Room or Group name
- Location of the CHP / HazCom plan, and last date updated
- Location of the spill kit, if one is in the space
- Name and phone numbers (work, home, & cell) for two emergency contacts

To begin creating a new lab or space, simply click the [Add A New Lab/Workspace] button from the Welcome Screen.

Welcome to the Safety Management System

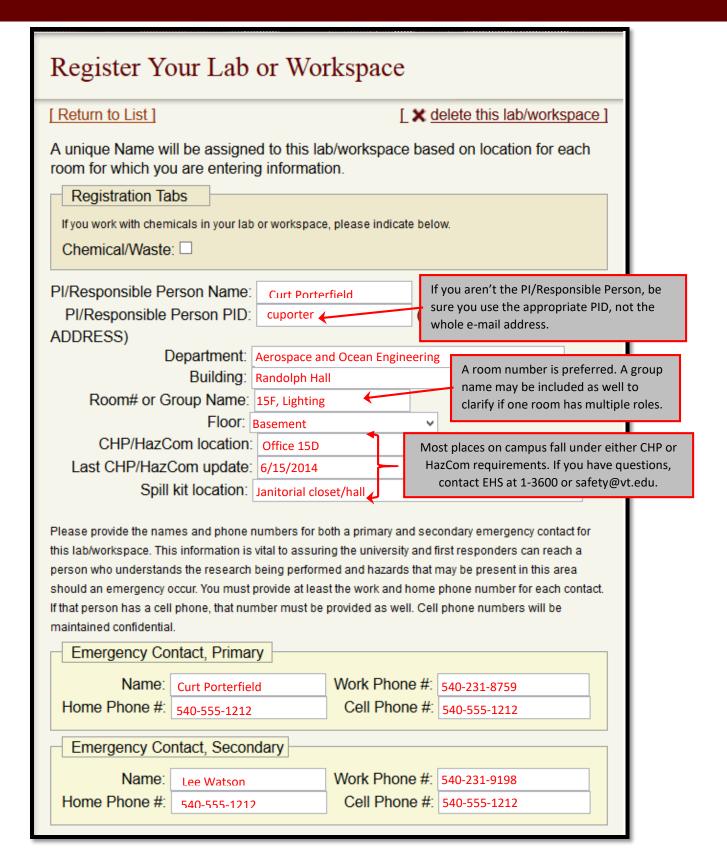
Formerly Laboratory Management System/Chemical Inventory [Logout]

Each room you use, where you store or use chemicals, should be entered as a separate Lab/Workspaces. To do this, click on 'Add A New Lab/Workspace' link below. Once you have entered the data for that room, you will be returned to this page where you can add additional rooms as needed.

Add A New Lab/Workspace

The following screen will appear. Complete the form fields, then hit [Save].



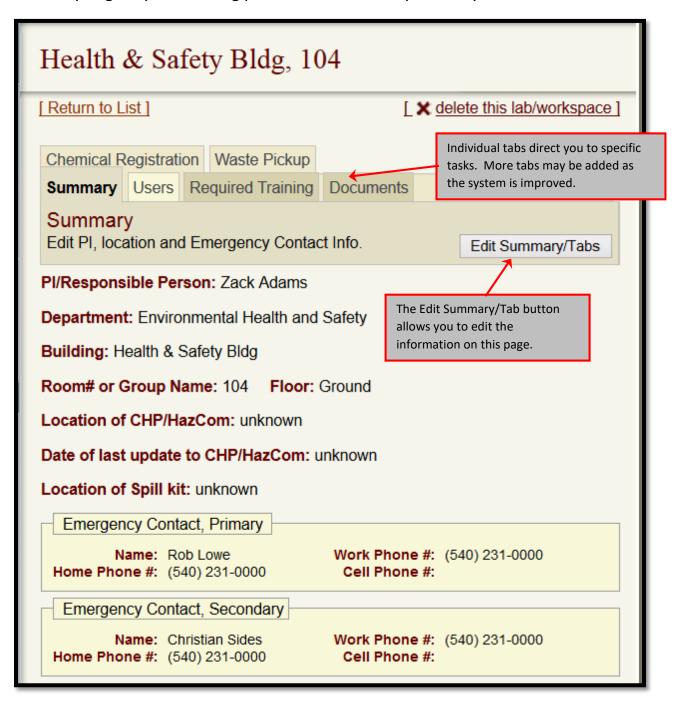






Your Lab / Workspace Summary Page

When you click on the [Manage Lab/Workspace] button, or the lab/workspace name from the Welcome Page, you are taken to the Summary Page. The Summary Page is your starting point for most activity in the system.





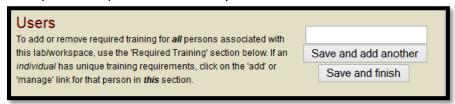
Managing Lab / Workspace Users

Begin by navigating to the [Users] tab.



To ADD users to a Lab / Workspace:

- 1. Click on the link [Add user PIDs].
- 2. This opens an input box. Enter only valid PIDs into the box.



After entering the PIDs, click the button to save and add another, or save and finish. You will receive an error message if the PID cannot be validated.

To remove ALL users from a Lab / Workspace:

- 1. Click on the [Purge PIDs] button.
- 2. You will receive a warning alert:



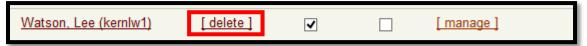
3. Click [OK] to remove all users EXCEPT Managers, [Cancel] to cancel and return to the screen.





To remove a single User from a Lab / Workspace:

- 1. If necessary, scroll down to the User you wish to delete.
- 2. Click the [delete] text link directly beside the User's name.



3. The user is deleted from the Lab/Workspace. Note that this does not DELETE the user from the EHS system, or affect any of the individual's training records. Deleting a person from a lab simply removes the affiliation with the space.

To assign/unassign an individual as a Manager for the Lab / Workspace:

Managers can perform all tasks associated with the Lab / Workspace.

- 1. If necessary, scroll down to the User you wish to assign as a Manager.
- 2. To assign a User as a Manager, check the box in the "Manager" column. To unassign, uncheck the box. Changes are effective immediately.





What Training is Required for my Users?

Most training requirements are driven by specific tasks, equipment or hazards. For specific guidance: http://www.ehss.vt.edu/training/what_training.php. Inspection or audit reports may contain recommendations on training. This is not an all-inclusive list; EHS provides over 90 training classes on a wide range of topics. Individual managers or coordinators are still responsible for lab-specific or machine-specific training.

- Adult First Aid / CPR training is required for machine shop coordinators, persons
 who work in remote locations (i.e. farms, field work such as forest surveys), on
 energized electrical systems, in confined spaces, etc.
- Users involved in biological research typically have very specific requirements for training. For details, see http://www.ibc.researchcompliance.vt.edu/training.
- Bloodborne pathogens training is mandatory for persons potentially exposed to human blood, tissues or body fluids in the course of work activities.
- Compressed Gas Cylinder Safety is recommended for anyone working in a Lab / Workspace that uses any type of compressed gas.
- Individuals who use aerial lifts (boom trucks, articulating lifts, scissor lifts, or telescoping lifts) or powered industrial trucks (forklifts, low-lift/high-lift walkies, order pickers) must complete both an online class and a skills observation.
 Generally, not everyone in a Lab/Workspace needs these certifications – only those individuals that will be actually using the lift.
- Electrical Qualified Person training is required for any persons exposed to energized electrical systems operating at 50 volts or more to ground. This includes exposures that occur as part of research.
- Persons with an occupational exposure to X-rays must complete appropriate training in X-ray safety.
- Persons working with radioisotopes must complete appropriate training in radioactive materials safety.

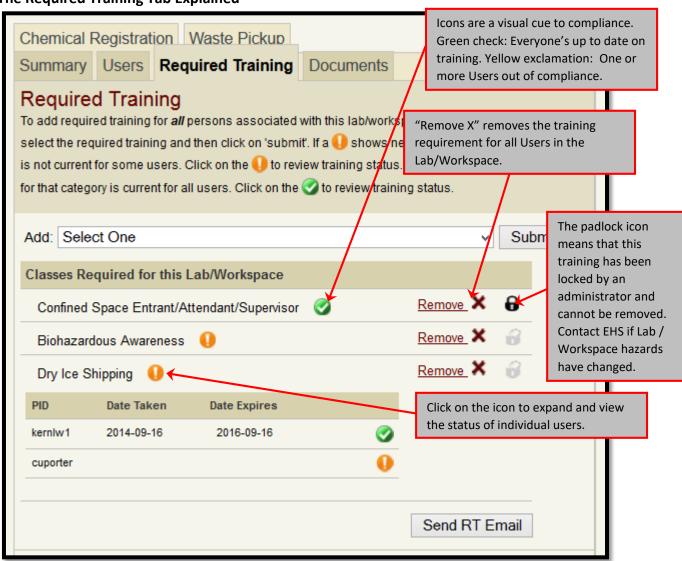


Managing Training for Lab / Workspace Users

Training requirements for Users falls into two basic categories:

- Training that is assigned to ALL persons associated with the Lab / Workspace
- Training requirements that are unique to an individual, based on a specific hazard, piece of machinery/equipment, or task

The Required Training Tab Explained



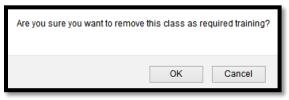


To assign training as REQUIRED for all Users of a Lab / Workspace:

- 1. Click on the [Required Training] tab.
- 2. Select the class from the drop-down list and click [Submit].

To remove training as REQUIRED for all Users of a Lab / Workspace:

- 1. Select the "Remove" link or click the [X] beside the class name.
- 2. You will receive a confirmation box



3. Click [OK] or [Cancel].

Note: If the padlock symbol appears to the right of a required training, it is locked by an administrator. Please contact EHS at 1-3600 or safety@vt.edu to discuss.

To notify Users that you have changed or updated training requirements for the lab:

- 1. Make any changes needed to the required training.
- 2. Click the [Send RT Email] button.
- 3. All Users associated with the Lab / Workspace receive an email similar to the following, specifying the Lab / Workspace and building.

This message is to inform you, that the required training for the lab/workspace located in Training Inc Health & Safety Bldg, with which you are associated, has been updated.

Please log in to your training profile page using the link below, to ensure that your training is up to date.

https://secure.hosting.vt.edu/www.ehss.vt.edu/training/training_report.php

Thank you.

-EHS Team

To EXEMPT a Manager from a Lab / Workspace's Required Training.

- 1. Make any changes needed to the required training.
- 2. Return to the [Users] tab.
- 3. If necessary, scroll down to the Manager you wish to exempt.
- 4. To exempt a Manager, check the box in the "RT Exempt" column. To enforce training requirements, un-check the box. Changes are effective immediately.







Occasionally, Managers may need to set additional specific training requirements for an individual User. For example, one User may be required to use an Aerial Lift or Forklift. The Manager probably does not want to assign that training to the entire Lab / Workspace staff.

To ASSIGN training to a specific Lab / Workspace User:

- 1. Navigate to the [Users] tab.
- 2. If necessary, scroll down to the User you want to assign training to.
- 3. Click the link in the Individual Training column.

 If an individual already has individual training requirements, the link will say [manage] .

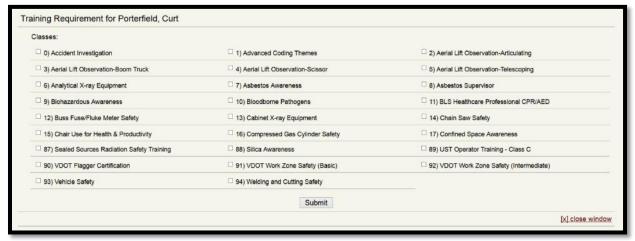


If an individual has no individual training requirements, the link will say [add].



4. A window opens with a complete list of EHS training programs (over 90+ possible trainings). Check the boxes for the individual requirements you wish to assign. Some boxes may already be checked, if the individual already has additional required training. You do NOT need to duplicate training that is already established on the [Required Training] tab.

This does not preclude or replace any lab-specific or machine-specific training to work in your lab or workspace.



5. Click [Submit]



Helping Users View / Register for Training

Setting requirements in the SMS affects each User's personal profile in the EHS system. Each User has a Training Profile that shows personal training requirements and supports registration/completion of EHS classes. A User can access their profile from the EHS Home Page. Go to the "Training" link.

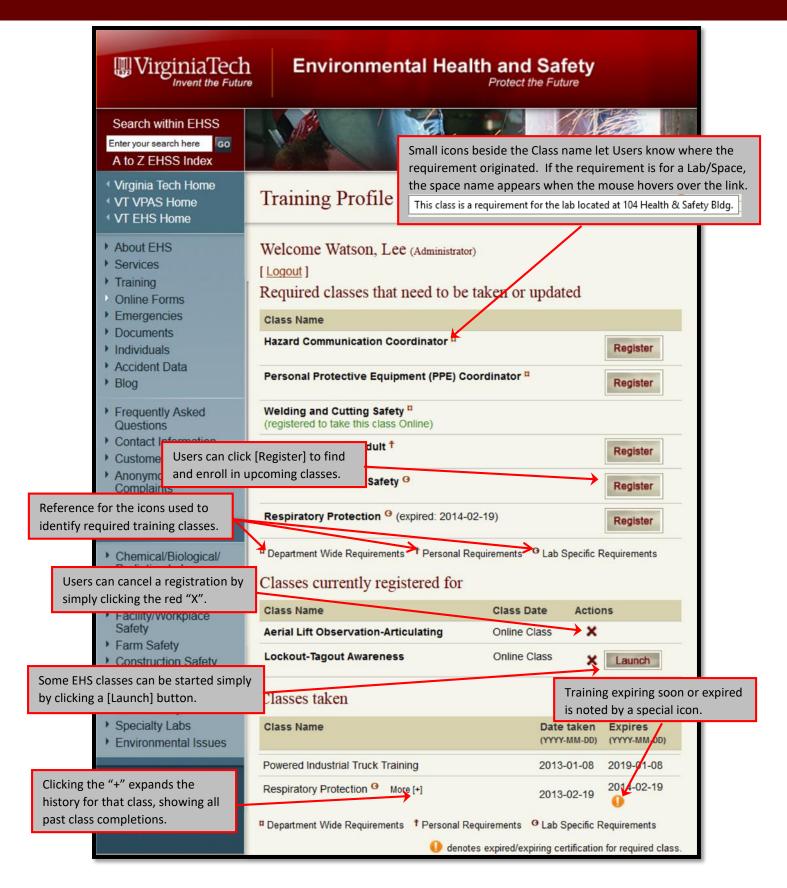


From there, select the "View Training Profile" link.



If the User is not logged in through CAS, the CAS dialog will appear. See Page 2 for any issues logging in through CAS.







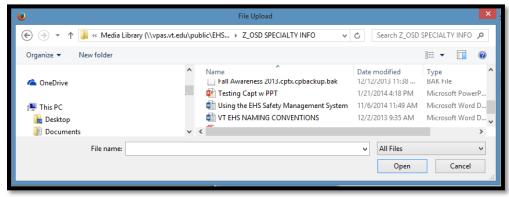
Using the Document Repository

Each Lab / Workspace has an associated document repository. This can be used to share documents between Managers and EHS. The maximum file size is 15 MB, and once a document is uploaded it cannot be edited, renamed etc.



To UPLOAD a document to your Lab / Workspace:

- 1. Navigate to the [Documents] tab.
- 2. Select [Browse]. The File Upload dialog box will open. Note: The dialog box may look slightly different than shown, depending on your Internet browser.



- 3. Select the file you wish to upload.
- 4. The file name will appear beside the [Browse] button. Click [Submit].



5. The file will now appear in the Document Repository.



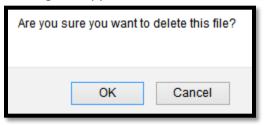
To DELETE a document from your Lab / Workspace:

- 1. Navigate to the [Documents] tab.
- 2. Select the "Delete" link or [X] to the right of the file name.



Note: Deletion from a Lab / Workspace is permanent and cannot be undone.

3. A dialog box appears.



4. Select [OK] to delete the file, or [Cancel] to return to the Document Repository.

To OPEN a document from your Lab / Workspace:

- 1. Navigate to the [Documents] tab.
- 2. Click on the file name. Depending on file type, you may be prompted to Download the file, or the file may open in the Browser directly.





Registering Chemicals & Hazardous Substances

Potentially hazardous materials and conditions that may result in immediate or serious harm must be registered within the Safety Management System.

- This system will assist in determining that the quantity of chemicals in a building does not exceed <u>allowable limits imposed by the Fire Code</u> for each hazard class of chemical (e.g., corrosive, flammable, toxic, etc.).
- Emergency responders will have access to this information when responding to emergencies.
- We need to know the maximum <u>quantities of certain chemicals located in each room</u>. Each room = a lab; you do not have to separately enter rooms within rooms. Ask yourself: What is the maximum amount of a particular chemical you think you'll have, on any one day, during the course of the year?
- This is **not** a complete inventory of all your chemicals. We do not expect you to provide exact amounts for each chemical listed in this system, but rather the expected maximum quantities or volumes on any one day throughout the year.
- If you have chemicals not listed in one of the pre-loaded categories, you can provide an aggregate quantity and appropriate unit of measure for any other materials in a hazard group in the room. This will go in the "Other" field at the bottom of each hazard class section.

Questions related to the Chemical Registration process

• Do I need to add all chemicals I may have currently that are not specifically listed in each category on the form?

EHS is asking participants to register the maximum amount of the specific chemicals listed for each category or grouping. Any other chemicals /materials in your lab space, that are part of a particular category but not listed in the pre-loaded form, should be reported as one aggregate quantity / amount in the space for "If you have any other (category) not listed above, please enter the approximate aggregate quantity for those materials here and provide the appropriate unit of measure for those materials (e.g., liters, pounds, etc.)".

• If the quantity / volume of a particular chemical varies frequently through the course of the year, how should I report my quantity?

The object is to estimate the maximum amount of materials at any time throughout the course of a year. Please report the maximum amount you expect to have in the space at any time during the year.

Should rooms within a room be registered separately?

• I have instruments that are connected to solvent reservoirs when in operation. How do I report these?

Include these volumes in your total for the lab space.

How will participation be monitored?

EHS will be working with Department Heads, Directors, and other University Administrators to encourage and verify responses.





Preparing to Register Your Chemicals

Go to the [Chemical Registration] tab. If this is your first time creating the Chemical Registration, you will probably find it helpful to download the Excel spreadsheet and use it to gather information on your Lab / Workspace. Once you've gathered the information, you'll want to have it handy as you complete the registration process.



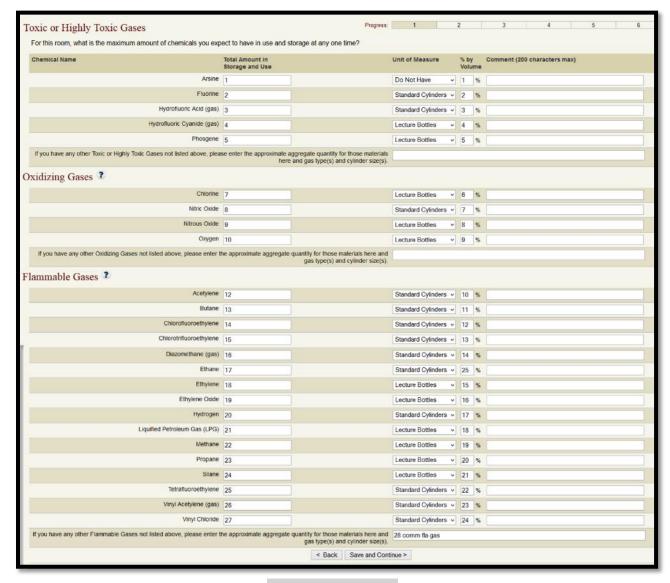
Spreadsheet Example:

have a specific chemical, leave that field blank.					
Chemical	Total Amount in Storage and Use	Units	Primary Hazard	Secondary Hazard	
2-Cyclohexen-1-ol			Peroxide Formers		
2-Hexanol			Peroxide Formers		
2-Pentanol			Peroxide Formers		
3-Methyl-1-butanol			Peroxide Formers		
4-Heptanol			Peroxide Formers		
4-Penten-1-ol			Peroxide Formers		
Acetal			Peroxide Formers	Flammable Liquid (Class IA, IB, IC)	
Acetalaldehyde			Peroxide Formers	Flammable Liquid (Class IA, IB, IC)	
Acetic Acid			Combustible Liquid (Class II, IIIA, IIIB)	Corrosives	
Acetic acid anyhride			Combustible Liquid (Class II, IIIA, IIIB)	Water Reactive	
Acetone			Flammable Liquid (Class IA, IB, IC)		
Acetone peroxide			Organic Peroxides		
Acetonitrile			Flammable Liquid (Class IA, IB, IC)		
Acetyl chloride			Flammable Liquid (Class IA, IB, IC)	Water Reactive	
Acetylene			Flammable Gas		



Completing your Annual Chemical Registration

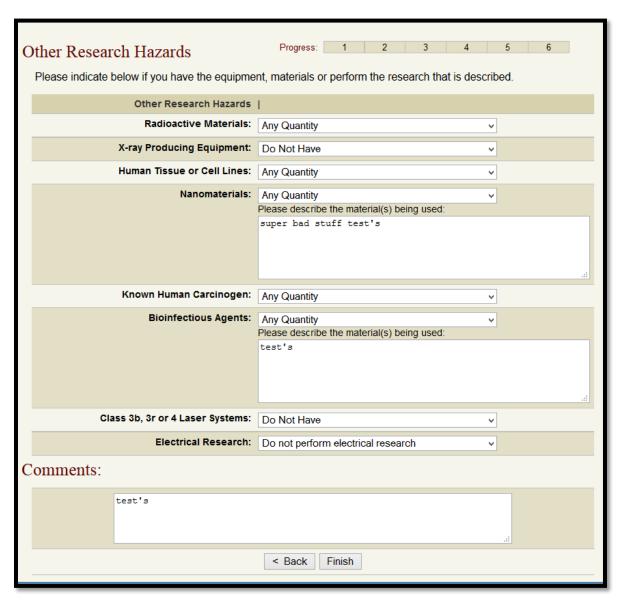
- 1. Navigate to the [Chemical Registration] tab and click [Annual Chemical Registration].
- 2. Using the information from your spreadsheet, enter the appropriate information in the form. Use the "Comment" fields to add information as necessary. There are five screens with categories that match those found on the Excel spreadsheet.



3. At the bottom of each screen, click the [Save and Continue] button to move to the next section.



4. The 6th Screen allows for the input of additional research hazards present in the Lab / Workspace.



5. Click the [Finish] button. You will get a confirmation message.

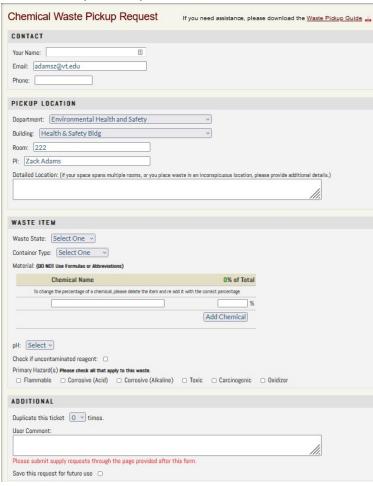




Requesting a Waste Pickup

This tab should only be used for chemical waste ONLY. Please do NOT use this form for Radiological, Biological, or general waste (trash).

- 1. Navigate to the [Waste Pickup] tab and click [Request Waste Pickup].
- 2. The Chemical Waste Pickup form opens.



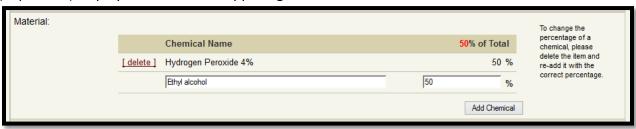
Enter the waste state and the type of chemical to be picked up.Common waste states and types can be selected using the drop-down menus.



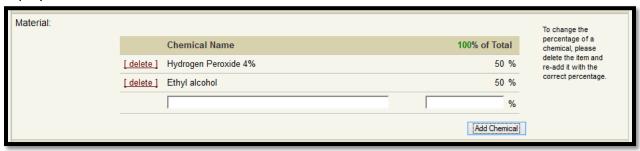
4. Your e-mail address and the Principal Investigator's name should automatically be populated on the form. Type your name and a contact phone number in the appropriate spaces.



5. Enter the individual components of the waste in the container.
Identify the chemical name of the material, and as a percentage of the total amount identified in Step 3. Click [Add Chemical] to update each line and the total percent. The sum (in percent) displays in RED on the upper right of the section.



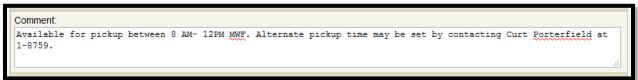
The total of materials MUST equal 100%. When the total is correct, the percentage displays in **GREEN**.



6. Enter the pH of the waste material. If the material is an uncontaminated reagent, check the appropriate box.



7. Enter any comments that the Hazardous Materials Management team may need in order to process your waste pickup.

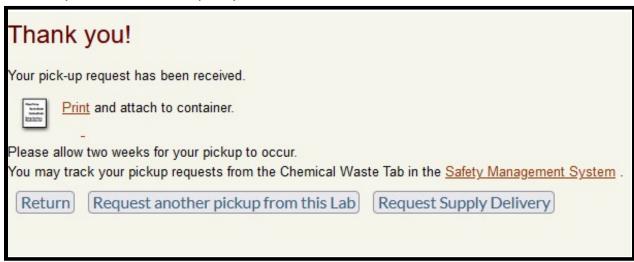


8. You have the option to save the request as a template for future use. If you are satisfied with the information, click [Submit]. In submitting the request, you are certifying the type and amount of waste in accordance with all regulations.



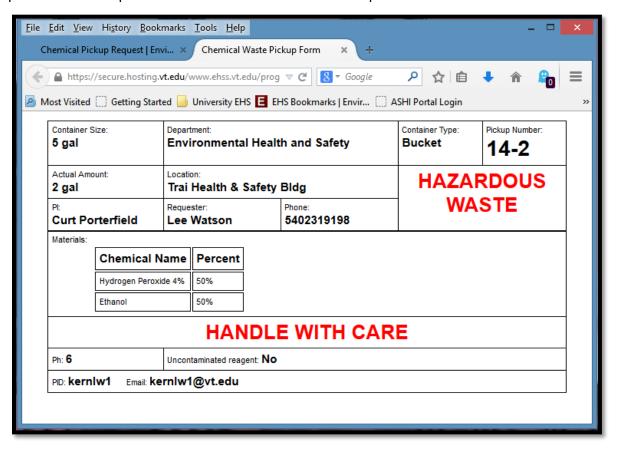


9. Once the ticket is submitted, you will see a confirmation screen. You must print and attach the pickup ticket to the container.



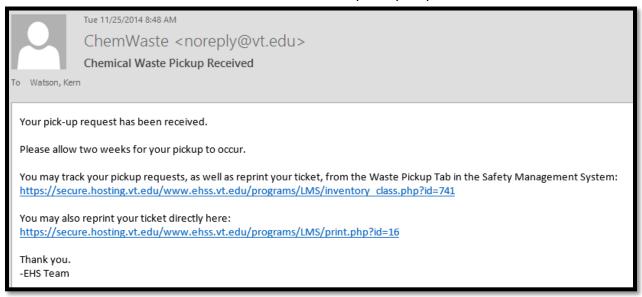
You have the option to request another pickup or order containers and supplies from this same screen.

When you click the "Print" link, a new browser window will open. Use your browser's print function to print the ticket. It does not have to be printed in color.



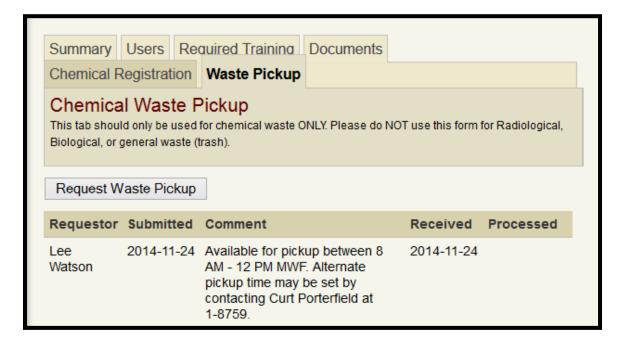


10. You will receive an e-mail confirmation that the waste pick-up request was successful.



11. After a ticket is submitted, you will be able to track the process on the Waste Pickup tab. The ticket will initially appear with a submitted date. You have the ability to reprint edit, or delete the waste pickup ticket.

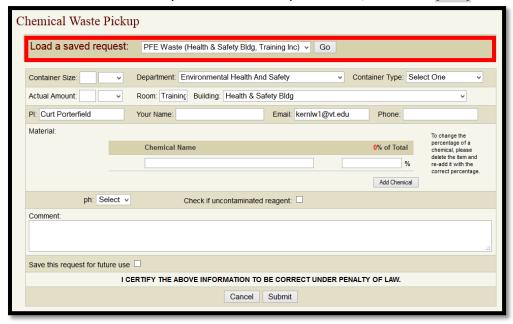
The ticket status will be updated by EHS.



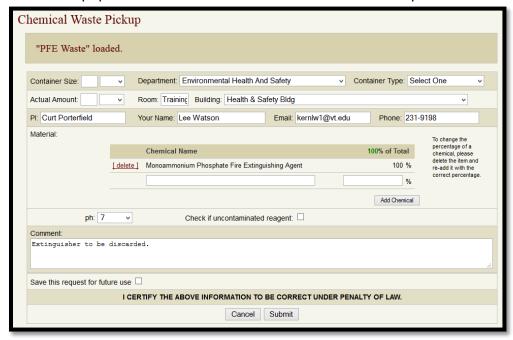


To Load a Saved Waste Pickup Request

- 1. Navigate to the [Waste Pickup] tab and click [Request Waste Pickup].
- 2. The Chemical Waste Pickup form opens. You will see a new section at the top of the form. Select the saved request from the drop-down list, then click [Go].



The form is populated with the information from the saved request.



After loading the saved request, you will need to add in the Container size, type and actual amount. You can also update any other fields as necessary before submitting the form.