University of Alberta
Environmental Health and Safety Tracking Software

CHEMATIX™ Waste Management Module
# Table of Contents

## Waste Management

*Waste Management* ................................................................. 1  

## Lab Personnel Waste Management

Lab Personnel Waste Management ........................................... 1  

Hazards in my area ................................................................. 1  

Waste Card Creation .................................................................. 2  

By Quantity ................................................................................. 2  

By Percentage .............................................................................. 6  

Pure Chemicals in Individual Containers ................................. 12  

Create a Waste Card Hotlist Item for Chemical Waste Mixtures ......................................................... 16  

Using the Hot List to Create Waste Cards .................................. 17  

Edit Waste Card .......................................................................... 19  

Create Pickup Worksheet ............................................................ 22  

View Submitted Worksheets ......................................................... 26  

RadWaste .................................................................................... 27  

## EHS Waste Management

EHS Waste Management .............................................................. 34  

HMTF Training ............................................................................. 34  

Manage Waste Pickup ................................................................. 36  

Manage Laboratory Waste ........................................................... 47  

EH&S ......................................................................................... 50  

Manage Campus Waste Storage .................................................. 53  

Drum/Lab Pack Maintenance ....................................................... 53  

Associate Labs to Waste Accumulation Area ............................... 65  

Reports ......................................................................................... 68  

RadWaste - Manage Waste Pickup ................................................. 74  

RadWaste - Laboratory Waste ...................................................... 77  

RadWaste - Manage Radiation Waste Resources ......................... 79  

RadWaste - Radioactive Waste Pickup Report .............................. 87  

## Superuser Waste Management

Superuser Waste Management .................................................... 89
Waste Management
The Waste Management module enables laboratory and regulatory personnel to manage all aspects of chemical disposal. All waste and its corresponding status can be tracked in detail at any point in the system. This module is a critical component of environmental health and safety, assisting in the assurance that each institution is in regulatory compliance with all local, regional, state and federal governing authorities.

Lab Personnel Waste Management
Waste management duties for users such as lab personnel, lab supervisors, principal investigators etc. include the monitoring of local hazards, waste card creation and waste pickup worksheet submission. These functionalities will be described below.

Hazards in my area

Click the Waste button at the top of the CHEMATIX™ screen:

Scroll down to the Generate Hazards in My Area Report link, and click on it.

Hazards in My Area

PEC
Peroxide Formers
Fetal Agents
Teratogen
Mutagen
Controlled substance
Bioagent

This list of chemical hazards is a configurable option defined by your institution and can be added to, changed, or modified by a CHEMATIX™ System Administrator. If you have any questions about Hazards in Your Area, contact your Environmental Health and Safety personnel.

For example, a definition for a teratogen is given as:

Teratogens are chemicals that may cause non-inheritable genetic mutations or malformations in the developing fetus (= birth defects). Teratogens may halt the pregnancy outright.

If you wish to view all of the teratogens in your area, click the Teratogen link.
A list of all teratogens in your lab locations is generated on page [WM478], for example:

<table>
<thead>
<tr>
<th>Location</th>
<th>Barcode</th>
<th>CAS No.</th>
<th>Container/Description</th>
<th>Container</th>
<th>Content</th>
<th>Expiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>S144/Health Sciences/360/</td>
<td></td>
<td></td>
<td>1.0 L 1.00 L 6/21/07</td>
<td>2.0 L</td>
<td>N,N-Dimethylformamide</td>
<td></td>
</tr>
<tr>
<td>S144/Health Sciences/360/</td>
<td></td>
<td></td>
<td>1.0 L 1.00 L 6/21/07</td>
<td>2.0 L</td>
<td>N,N-Dimethylformamide</td>
<td></td>
</tr>
</tbody>
</table>

**Waste Card Creation**

When creating chemical waste it is important to keep track of what chemicals are being wasted, either individually or by adding to a mixture of chemical waste. This is done by creating a waste card that contains information about individual waste containers.

**By Quantity**

Click the **Waste** button at the top of the CHEMATIX™ screen:

Home | Procurement | Inventory | Waste | RadWaste | Fiscal | Resources | Help |

You will now see the opening page for Waste Management [WM402].

Scroll down to:

- **Manage Laboratory Waste**
  - Create Waste Card
  - Edit Waste Card
  - Waste Card Hot List
  - Create Pickup Worksheet
  - 1 Worksheets Submitted for Pickup

Click on the link Create Waste Card.
Click **Chemical Mixture by Quantity**.

Other types of waste cards can also be created, either for waste chemical mixtures by percentage, pure chemicals in individual containers or for more generic products such as recyclable materials, paint, oil, aerosols etc. The availability of these options can be added to, changed, or modified by a CHEMATIX™ System Administrator. If you have any questions about the types of creatable waste cards, contact your Environmental Health and Safety personnel.

Instructor explains different types of waste cards
Chemical Mixture by Quantity Waste Card

General Information

- **Name:** Nick Gardner
- **Department:** Biology
- **Accumulation Start Date:** 07/05
- **Container Size:** 0.0 L
- **Physical State:** Liquid
- **Phone Number:** 555-666-7777
- **Laboratory:** Selected Location
- **Lab Barcode:**
- **Container Type:** Glass
- **PH Level:** Select

Chemical Information

To add a chemical:

- Scan a container, enter the constituent's quantity, select "Calculate". Once complete click "Generate Waste Card".
- Search for a chemical by selecting the "Select A Chemical" button, enter the constituent's quantity, select calculate. Once complete click "Generate Waste Card".
- Enter the chemical's name and CAS#, enter the constituent's quantity, select "calculate". Once complete, click "Generate Waste Card".

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Barcode</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.00</td>
<td>Select</td>
<td>55512-01-1</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>Select</td>
<td>55512-02-2</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>Select</td>
<td>55512-03-3</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>Select</td>
<td>55512-04-4</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>Select</td>
<td>55512-05-5</td>
</tr>
</tbody>
</table>

Total Volume: 0.89 L
Total Mass: 0.03 kg

Select the **Accumulation Start Date**, **Laboratory**, **Container Size/Unit**, and **Container Type**.

There are two options for selecting chemicals:

**Option 1:** Enter the barcode of the chemical container. For each chemical, scan or enter the container's barcode.

Enter the quantity/units of this chemical in the mixture.

**Option 2:** Search for and select a chemical by clicking **Select Chemical**. After clicking **Select Chemical**, you will now be transferred to page [WM453]:

SIVCO Inc. - CHEMATIX™ Waste Management Module

University of Alberta - January, 2008
Search for a Chemical

- Enter all or part of a chemical name and select "Search".
- Add a chemical to the waste card by selecting a chemical name from the list.
- If needed, add a new chemical to the CAD by selecting "Add New Chemical"

![Search](search.png)  [Add New Chemical](add_new_chemical.png)

Enter the Chemical Name or the CAS# into the appropriate fields.

Click **Search** to search for your Chemical Name or CAS# in CAD.

Search for a Chemical

- Enter all or part of a chemical name and select "Search".
- Add a chemical to the waste card by selecting a chemical name from the list.
- If needed, add a new chemical to the CAD by selecting "Add New Chemical"

![Search](search.png)  [Add New Chemical](add_new_chemical.png)

Search Results: Found 3 items.

- **CAS Number:** 7647-01-0  **Chemical Name:** hydrochloric acid
- **CAS Number:** 10050-04-0  **Chemical Name:** hydrochloric acid, reaction product with sodium, 2,3-dihydro, 1,4-oxazine-3,6-dione, 2,5-dihydro-4H-pyran-4-one and 1,6-hexanediol, ethyl 1,6-hexanediol, polyetheramide, fused, polyetheramide, fused
- **CAS Number:** 68132-76-7  **Chemical Name:** hydrochloric acid, salt of polyvinyl acetate, ethylene, partial ester, sodium salt, polyvinyl acetate, ethylene, partial ester, sodium salt

Click the **Chemical Name** from the generated list (for example, Hydrochloric acid) to
Chemical Mixture by Quantity Waste Card

General Information

- Created By: Stevens, Tyler
- Department Name: Biology
- Accumulation Start Date: 01/06
- Container Size: 0.0
- Physical State: Liquid
- Phone number: 555-392-3800
- Laboratory: Select Location
- Container Type: Glass
- pH Level: Select

Chemical Information

To add a chemical:
- Scan a container, enter the constituent’s quantity, select “Calculate”. Once complete click “Generate Waste Card”.
- Search for a chemical by selecting the “Select a Chemical” button, enter the constituent’s quantity, select “Calculate”, once complete click “Generate Waste Card”.
- Enter the chemical's name and CAS#, enter the constituent's quantity, select “Calculate”. Once complete, click “Generate Waste Card”.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>7647-01-0</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
</tr>
</tbody>
</table>

Total Volume: 0.00 L
Total Mass: 0.00 kg

To generate waste cards, pop-ups must be enabled.

- Generate Waste Card
- Add More Rows
- Remove Rows
- Reset

Enter the quantity/units of this chemical in the mixture.

After you have added all necessary chemicals to your waste card:

Click Generate Waste Card to view and print your Waste Card in PDF format.

By Percentage

Click the Waste button at the top of the CHEMATIX™ screen:

You will now see the opening page for Waste Management [WM402].
Scroll down to

Manage Laboratory Waste

- Create Waste Card
- Edit Waste Card
- Waste Card Hot List
- Create Pickup Worksheet
- 1 Worksheets Submitted for Pickup

Click on the link Create Waste Card.

Click Chemical Mixture by Percentage.

Other types of waste cards can also be created, either for waste chemical mixtures by quantity, pure chemicals in individual containers or for more generic products such as recyclable materials, paint, oil, aerosols etc. The availability of these options can be added to, changed, or modified by a CHEMATIX™ System Administrator. If you have any questions about the types of creatable waste cards, contact your Environmental Health and Safety personnel.
Create Waste Card

General Information

- **Created By:** Smith, AI
- **Department:** Chemical Engineering
- **Accumulation Start Date:** [ ]
- **Container Size/Unit:** [ ]
- **Physical State:** [ ]
- **Laboratory:** Select Location
- **Container Type:** Glass
- **pH Level:** Select
- **Phone Number:** 877-700-2600

Chemical Information

- **To add a chemical:**
  - Scan the container barcode.
  - Enter the constituent % (the total MUST add up to 100% EXACTLY), select "Calculate".
  - When complete, select "Generate Waste Card"

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Barcode</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.00</td>
<td>Select Chemical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
<td>Select Chemical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
<td>Select Chemical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
<td>Select Chemical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
<td>Select Chemical</td>
</tr>
</tbody>
</table>

Total Percent: 0.00

To generate waste cards, popups must be enabled.

- Generate Waste Card
- Remove This
- Add More Rows
- Close

If you have a waste card number, enter it here:
- Waste Card Name:
- Save to History

Select the **Accumulation Start Date:** [ ]
- **Laboratory:** [ ]
- **Container Size/Unit:** [ ]
- **Container Type:** [ ]
- **Physical State:** [ ]
- **pH Level:** [ ]

There are two options for selecting chemicals:

**Option 1:** Enter the barcode of the chemical container.
- For each chemical, scan or enter the container's barcode.
- Enter the quantity/units of this chemical in the mixture.

**Option 2:** Search for and select a chemical by clicking [Select Chemical].
- After clicking [Select Chemical], you will now be transferred to page [WM453]:

Search for a Chemical

- Enter all or part of a chemical name and select "Search".
- Add a chemical to the waste card by selecting a chemical name from the list.
- If needed, add a new chemical to the CAD by selecting "Add New Chemical"

Chemical Name: [ ] begins with [ ] contains [ ] exact
CAS#: [ ] begins with [ ] contains

[Search]  [Add New Chemical]

Enter the Chemical Name or the CAS# into the appropriate fields.

Click [Search] to search for your Chemical Name or CAS# in CAD.

Search Results: Found 3 items.

[Chemical Name] Hydrochloric acid
CAS Number: 7647-31-0

[Chemical Name] 30-92-4 hydrochloric acid, reaction product with melamine, 1-2 dimethylol 1,3,5-triazine-2,4,6-triamine and 1,6-dihydroxy-2,4,7-triazine and/or condensation
CAS Number: 68132-18-7

[Chemical Name] 10-87-4 hydrochloric acid, salt of polyampholytic amine, partial salt and/or salt (end-or salt); Polymerized triethanolamine, salt of and/or salt
CAS Number: 14054-74-9

Click the [Chemical Name] from the generated list (for example, Hydrochloric acid) to...
Create Waste Card

General Information
Created By: Smith, Al  Phone Number: 817-700-2400
Department Name: Chemical Engineering  Laboratory: Select Location
Accumulation Start Date:  Container Type: Glass
Container Size/Unit:  / Select  pH Level: Select
Physical State: Liquid

Chemical Information
To add a chemical:
• Scan the container barcode.
• Enter the quantity (% / total %) and select "Calculate".
• When complete, select "Generate Waste Card"

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Encode</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>7647-01-0</td>
<td>0.00</td>
<td>Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
<td>Select Chemical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
<td>Select Chemical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
<td>Select Chemical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
<td>Select Chemical</td>
</tr>
</tbody>
</table>

Total Percent: 0.00  Calculate

To generate waste cards: pop-ups must be enabled.
Generate Waste Card  Remove Row  Add More Rows  [Repair ]

Enter the percentage of this chemical in the mixture. The total percentage of chemicals must add up to 100.

After you have added all necessary chemicals to your waste card:

Click to view and print your Waste Card in PDF format.

Using Reusable Waste Containers
In order to use a reusable waste container, first select the Laboratory that it is located in from the Create Waste Card page.

The Reusable container type will appear in the drop down menu if there is a reusable container in that location.
Create Waste Card

General Information

Created By: Kanofa, Jack
Department Name: Chemical Engineering
Accumulation Start Date: 12/12/2021
Container Size/Unit: 40.0 / L
Physical State: Liquid

Phone Number: 877-700-2600
Laboratory: 97/1110/Thermodynamics Lab

Container Type: Unspecified
pH Level: Unspecified

Chemical Information

To add a chemical:
- Scan the container barcode.
- Enter the constituent % (the total MUST add up to 100% EXACTLY), select "Calculate".
- When complete, select "Generate Waste Card"

To generate waste cards, pop-ups must be enabled.

Upon selecting the reusable container type, an additional drop down menu will appear, containing all reusable waste containers currently at that location.
Select the appropriate container from the reusable container pulldown menu and continue with creating your waste card.

Pure Chemicals in Individual Containers
Creating waste cards for pure chemicals in individual containers is usually done when users wish to have chemical containers picked up as surplus, or when a lab is being cleared out.

Click the Waste button at the top of the CHEMATIX™ screen:

You will now see the opening page for **Waste Management** [WM402].
Scroll down to:

**Manage Laboratory Waste**
- Create Waste Card
- Edit Waste Card
- Waste Card Hot List
- Create Pickup Worksheet
- 1 Worksheets Submitted for Pickup

Click on the link **Create Waste Card**.

Click **Pure Chemicals in Individual Containers**.

---

**Create Waste Card**

- Chemical Mixture by Percentage
- Chemical Mixture by Quantity
- Pure Chemicals in Individual Containers
- Recyclable Materials
- Paint and Paint Related Materials
- Oil and Antifreeze
- Aerosols
- Gas Cylinders
- Photo Chemicals
**Pure Chemical Waste Card**

**General Information**

- **Created By:** Nick Gardner
- **Department Name:** Biology
- **Accumulation Start Date:** 10/11/05
- **Phone Number:** 555-666-7777
- **Laboratory:** Select Location
- **Lab Barcode:**

**Chemical Information**

For each pure chemical container:

- Do ONE of the following:
  - Container with barcode: Enter/scan the container barcode, then select 'Refresh'
  - Container missing barcode: Select 'Search' to look up the chemical information, change the quantity, container type & physical state, then select 'Refresh'
- Once complete, select 'Generate Waste Card'

<table>
<thead>
<tr>
<th>Container Size</th>
<th>Container Type</th>
<th>Physical State</th>
<th>Chemical Name CAS Number</th>
<th>Barcode</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>Select</td>
<td>Select</td>
<td>Select 2</td>
<td>0.00</td>
<td>Select</td>
</tr>
<tr>
<td>0.0</td>
<td>Select</td>
<td>Select</td>
<td>Select 2</td>
<td>0.00</td>
<td>Select</td>
</tr>
<tr>
<td>0.0</td>
<td>Select</td>
<td>Select</td>
<td>Select 2</td>
<td>0.00</td>
<td>Select</td>
</tr>
<tr>
<td>0.0</td>
<td>Select</td>
<td>Select</td>
<td>Select 2</td>
<td>0.00</td>
<td>Select</td>
</tr>
</tbody>
</table>

Select the **Accumulation Start Date**, **Laboratory**, **Container Size/Unit**, and the **PH Level**.

There are two options for selecting chemicals

**Option 1:** Enter the barcode of the chemical container.

For each chemical, scan or enter the container's barcode.

Enter the quantity/units of this chemical in the mixture.

**Option 2:** Search for and select a chemical by clicking [Select Chemical].

After clicking [Select Chemical], you will now be transferred to page [WM453]:

---

*SIVCO Inc. - CHEMATIX™ Waste Management Module*
Search for a Chemical

- Enter all or part of a chemical name and select "Search".
- Add a chemical to the waste card by selecting a chemical name from the list.
- If needed, add a new chemical to the CAD by selecting "Add New Chemical"

Chemical Name: [ ] begins with [ ] contains [ ] exact
CAS#: [ ] begins with [ ] contains

[Search] [Add New Chemical]
[Return]

Enter the Chemical Name or the CAS# into the appropriate fields.

Click [Search] to search for your Chemical Name or CAS# in CAD.

Search Results: Found 3 Items.

- 7647-01-0 Hydrochloric acid
- 62133-70-4 hydrochloric acid, 3,3-dimethyl-1-oxa-2,6-diazabicyclo[3.2.2]octane-1-carboxylic acid, 1:1 hydrate
- 26008-92-2 hydrochloric acid, 3,3-dimethyl-1-oxa-2,6-diazabicyclo[3.2.2]octane-1-carboxylic acid, 1:1 hydrate

Click the [Chemical Name] from the generated list (for example, Hydrochloric acid) to
Pure Chemical Waste Card

General Information

Created By: Shook, Al
Department Name: Chemical Engineering
Accumulation Start Date:

Phone Number: 877-700-2600
Laboratory: Select Location

Chemical Information

For each pure chemical container:

- Do one of the following:
  - Container with barcode: Enter/scan the container barcode, then select 'Refresh'
  - Container missing barcode: Select 'Search' to look up the chemical information, change the quantity, container type & physical state, then select 'Refresh'
- Once complete, select 'Generate Waste Card'

<table>
<thead>
<tr>
<th>Containment State</th>
<th>Container Type</th>
<th>Physical State</th>
<th>Chemical Name CAS Number</th>
<th>Barcode</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0000</td>
<td></td>
<td></td>
<td>Hydrochloric acid 7647-01-0</td>
<td></td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0000</td>
</tr>
</tbody>
</table>

To generate waste cards, pop-ups must be enabled.

Generate Waste Card | Remove Selected Rows | Add More Rows

Enter the quantity/units of this chemical in the mixture.

After you have added all necessary chemicals to your waste card:

Click [Generate Waste Card] to view and print your Waste Card in PDF format.

Create a Waste Card Hotlist Item for Chemical Waste Mixtures

If a particular waste card with the same chemical contents is constantly being created, then it is useful to add this waste card to a hotlist in order to facilitate faster waste card creation.

After your Waste Card has been generated and printed, scroll down to the bottom of page [WM451].
To save the waste card to the hotlist:
- Input the name of the hotlist item (Optional).
- Click "Save To Hotlist" button

**Hotlist Item Name:**

Enter the name for this chemical mixture into the **Hotlist Item Name** field. This is the **Template Name** field.

Click **Save To Hotlist**.

**Using the Hot List to Create Waste Cards**

Click the **Waste** button at the top of the CHEMATIX™ screen:

You will now see the opening page for **Waste Management** [WM402].

Scroll down to

**Manage Laboratory Waste**

- Create Waste Card
- Edit Waste Card
- Waste Card Hot List
- Create Pickup Worksheet
- 1 Worksheets Submitted for Pickup

Click on the link **Create Waste Card**.

If any hotlisted waste card have been defined, they should appear along with the standard waste card creation options.
There are two hot lists that appear on the screen. Your Waste Card Hotlist refers to hot listed waste cards that you have defined. These waste cards are available for your use only and will not be visible to other CHEMATIX™ users. The Global Waste Card Hotlist refers to hot listed waste cards that have been defined by the institution and are available for use by all CHEMATIX™ users.

Click the hot listed waste card that you wish to use.
Information corresponding to the hot listed waste card will appear on the screen. This can be used as a template and you can update or change all of the inputted information on this page before generating your new waste card.

**Edit Waste Card**

Click the **Waste** button at the top of the CHEMATIX™ screen:

You will now see the opening page for **Waste Management** [WM402].
Scroll down to

**Manage Laboratory Waste**
- Create Waste Card
- Edit Waste Card
- Waste Card Hot List
- Create Pickup Worksheet
- 1 Worksheets Submitted for Pickup

Click on the link **Edit Waste Card**.

**Edit a Waste Card**

To edit an existing waste card:
- Type or scan in the waste card barcode below and click "Search"

To view a list of existing waste cards:
- Leave the search field blank and click "Search"

---

From this page, there are two choices to search an existing Waste Card:

**Option 1:**  *Enter a waste barcode into the data field and click Search.*

**Option 2:**  *Leave the search field blank and click Search.*

The list of Waste Cards in your lab(s) will be generated at the bottom of page [WM113]:
To edit an existing waste card:
- Type or scan in the waste card barcode below and click “Search”

To view a list of existing waste cards:
- Leave the search field blank and click “Search”

<table>
<thead>
<tr>
<th>Start Date</th>
<th>Building Name</th>
<th>Room Number</th>
<th>Lab Name</th>
<th>Waste Card Number</th>
<th>Container Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>04/03/07</td>
<td>Swanson Chemistry Center</td>
<td>B16</td>
<td>Main Chemistry Lab</td>
<td>GTW0000016</td>
<td>5.0 L</td>
<td>Methyl alcohol; Toluene</td>
</tr>
<tr>
<td>04/03/07</td>
<td>Campus Environmental Health &amp; Safety</td>
<td>223</td>
<td>Test Center</td>
<td>GTW0000023</td>
<td>2.0 L</td>
<td>Acetone; Hexane</td>
</tr>
<tr>
<td>06/07/07</td>
<td>Swanson Chemistry Center</td>
<td>B16</td>
<td>Main Chemistry Lab</td>
<td>GTW0000047</td>
<td>1.0 L</td>
<td>Acetic anhydride</td>
</tr>
</tbody>
</table>

Select a checkbox next to a waste card and click the **Delete Selected Waste Cards** button if you wish to delete a waste card.

Click on a waste card number if you wish to edit, view, and print that Waste Card.
You will now be transferred to [WM475]:

**Edit Waste Card**

**General Information**

- **Principal Investigator:** Gardner, Nick
- **Created By:** Gardner, Nick
- **Department Name:** Biology
- **Accumulation Start Date:** 9/7/05
- **Container Size/Unit:** 3.0 / L
- **Physical State:** Liquid

**Chemical Information**

**To edit a chemical:**
- Scan a container, enter the constituent % (container total must = 100%), select "Calculate". Once complete click "Regenerate Waste Card".
- Search for a chemical by selecting the "Select A Chemical" button, enter the constituent % (container total must = 100%), select calculate. Once complete click "Regenerate Waste Card".

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Barcode</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric acid</td>
<td>7697-37-2</td>
<td></td>
<td>25.00</td>
</tr>
<tr>
<td>Hydrochloric acid</td>
<td>7647-01-0</td>
<td></td>
<td>75.00</td>
</tr>
</tbody>
</table>

Total Percent: 100.00

You can update or change all of the inputted information on this page.

**Create Pickup Worksheet**

Once you are ready to submit your waste container for pickup by EHS, you must create a pickup worksheet and attach your waste cards to the worksheet.

To access this functionality, click the **Waste** button at the top of the CHEMATIX™ screen:

You will now see the opening page for **Waste Management** [WM402].
Scroll down to

Manage Laboratory Waste

- Create Waste Card
- Edit Waste Card
- Waste Card Hot List
- Create Pickup Worksheet

1 Worksheets Submitted for Pickup

Click on the link Create Pickup Worksheet.

Hazardous Materials Pickup Worksheet

Created By: Shook, Al
Department: Chemical Engineering
Phone: 877-700-2600
Email Address: git@sivco.com
Location: Select
Pickup Contact: Shook, Al
Pickup Contact Phone: 877-700-2600
Instructions:

Select a laboratory location from the pulldown menu near the top of the page.
A generated list of Waste Cards in the laboratory location that you have selected will appear at the bottom of this page:

<table>
<thead>
<tr>
<th>Start Date</th>
<th>Location</th>
<th>Waste Card</th>
<th>Container Size</th>
<th>On Worksheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/27/06</td>
<td>5144/360/Waste Treatment Research</td>
<td>GITW00001R</td>
<td>1.5 L</td>
<td>#52</td>
</tr>
<tr>
<td>3/27/06</td>
<td>5144/360/Waste Treatment Research</td>
<td>GITW00001S</td>
<td>5.0 L</td>
<td>#52</td>
</tr>
<tr>
<td>3/27/06</td>
<td>5144/360/Waste Treatment Research</td>
<td>GITW00001U</td>
<td>5.0 L</td>
<td>#52</td>
</tr>
</tbody>
</table>

Scroll down to the bottom of the generated Waste Cards on page [WM200]:

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Waste Card</th>
<th>Container Size</th>
<th>On Worksheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/25/07</td>
<td>5144/360/Waste Treatment Research</td>
<td>GITW00005U</td>
<td>50.0 mL</td>
<td></td>
</tr>
<tr>
<td>10/30/07</td>
<td>5144/360/Waste Treatment Research</td>
<td>GITW00005O</td>
<td>9.0 L</td>
<td></td>
</tr>
<tr>
<td>10/30/07</td>
<td>5144/360/Waste Treatment Research</td>
<td>GITW00005P</td>
<td>5.0 L</td>
<td></td>
</tr>
</tbody>
</table>

Click on one or more check boxes ✓ to select Waste Cards. Click [Add Selection(s) to Worksheet] to add the selected Waste Cards to the Worksheet. The selected Waste Card(s) will be added to your Worksheet.
Hazardous Materials Pickup Worksheet

Created By: Shook, Al  
Department: Chemical Engineering  
Phone: 877-700-2600  
Email Address: git@sivco.com  
Location: 917/339/Thermodynamics Lab  
Pickup Contact: Shook, Al  
Pickup Contact Phone: 877-700-2600  
Instructions:

<table>
<thead>
<tr>
<th>Start Date</th>
<th>Location</th>
<th>Waste Card</th>
<th>Container Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/30/07</td>
<td>917/339/Thermodynamics Lab</td>
<td>GITW00004H</td>
<td>4.0 L</td>
</tr>
<tr>
<td>12/10/07</td>
<td>917/339/Thermodynamics Lab</td>
<td>GITW00002M</td>
<td>5.0 L #65</td>
</tr>
<tr>
<td>12/10/07</td>
<td>917/339/Thermodynamics Lab</td>
<td>GITW00005N</td>
<td>5.0 L #67</td>
</tr>
</tbody>
</table>

After you have added all necessary waste cards to your pickup worksheet:

Click **Save & Submit for Pickup** to submit the worksheet for pickup.

Note: Once you have submitted a waste card for pickup on a worksheet you will no longer be able to edit that worksheet.
View Submitted Worksheets

To view worksheets that you have submitted for pickup, click the **Waste** button at the top of the CEMATIX™ screen:

![](image)

You will now see the opening page for **Waste Management** [WM402].

Scroll down to

<table>
<thead>
<tr>
<th>Manage Laboratory Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create Waste Card</td>
</tr>
<tr>
<td>Edit Waste Card</td>
</tr>
<tr>
<td>Waste Card List</td>
</tr>
<tr>
<td>Create Pickup Worksheet</td>
</tr>
<tr>
<td>1 Worksheets Submitted for Pickup</td>
</tr>
</tbody>
</table>

Click on the **1 Worksheet Submitted for Pickup** link.

<table>
<thead>
<tr>
<th>1 Submitted Worksheets</th>
</tr>
</thead>
</table>

Worksheets submitted for pickup:

Location: **5144/360/Waste Treatment Research**
Dept: **Chemical Engineering**
Submitted Date: **8/21/07**
**WORKSHEET#2007-0045**

Click on the worksheet # of the submitted worksheet that you wish to view.
You will be able to view the details of the worksheet that you have selected.

**RadWaste**

Instructor provides description of:

- Create Radioactive Waste Card
- Create Radioactive Material Pickup Worksheet
- View Unsents Radioactive Waste Pickup Sheet
- View Submitted Radioactive Waste Pickup Sheet

**Exercise**

Create Radioactive Waste Card

Click the button at the top of the screen:

Radioactive Waste Management

Scroll down to

Manage Laboratory Waste

Create Radioactive Waste Card

Create Radioactive Material Pickup Worksheet

View Unsents Radioactive Waste Pickup Sheet

View Submitted Radioactive Waste Pickup Sheet
Click the Create Radioactive Waste Card link.

<table>
<thead>
<tr>
<th>Radioactive Material Waste Card</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information</td>
</tr>
<tr>
<td>Created by: Shoel, JI</td>
</tr>
<tr>
<td>Phone Number: 877-700-2602</td>
</tr>
<tr>
<td>Department Name: Chemical Engineering</td>
</tr>
<tr>
<td>Laboratory: Select Location</td>
</tr>
</tbody>
</table>

Waste Information
To enter a radioactive waste, please:

- Select a radioactive material from search
- Enter the content size and radioactivity level information
- Once complete, click "Generate Waste Card"

<table>
<thead>
<tr>
<th>Radiation Source</th>
<th>Radioisotope</th>
<th>Vol/Wt</th>
<th>Radioactive Activity Unit</th>
<th>Contaminant/Background Level (Bq/gross)</th>
<th>Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Select</td>
<td></td>
<td>0.0</td>
<td>Select ☑</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>☑ Select</td>
<td></td>
<td>0.0</td>
<td>Select ☑</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>☑ Select</td>
<td></td>
<td>0.0</td>
<td>Select ☑</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>☑ Select</td>
<td></td>
<td>0.0</td>
<td>Select ☑</td>
<td>0.0</td>
<td></td>
</tr>
</tbody>
</table>

Select the [Laboratory] that the radioactive waste is coming from.

Fill in the appropriate [Radiation Source], [Vol/Wt], [Radioisotope], [Activity], [Unit], [Contaminant/Background Level], [Background Level (Bq/gross)], [Permit Number], and [Container surface contamination level] to describe the radioactive waste being created.
Radioactive Material Waste Card

General Information

Created by: Shook, KI Phone Number: 977-708-2608
Department Name: Chemical Engineering Laboratory: 806/12/Chemistry/Research

Waste Information

To enter a radioactive waste, please:
- Select a radioactive material from the list
- Enter the container size and radioactivity level information
- Once complete, click "Generate Waste Card"

<table>
<thead>
<tr>
<th>Radiation Source</th>
<th>Radioisotope</th>
<th>Vol/WT</th>
<th>Radioactivity</th>
<th>Activity</th>
<th>Container size</th>
<th>Quantity</th>
<th>(PQ)</th>
<th>Radioluclide Code</th>
<th>Isotope Code</th>
<th>Requested by</th>
<th>Requested Date</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Solvent</td>
<td>1</td>
<td>1000</td>
<td>1000</td>
<td>Select</td>
<td>20343</td>
<td></td>
<td>SelectIsope</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Select</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Select</td>
<td>0</td>
<td></td>
<td>SelectIsope</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Select</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Select</td>
<td>0</td>
<td></td>
<td>SelectIsope</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Select</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Select</td>
<td>0</td>
<td></td>
<td>SelectIsope</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Select</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Select</td>
<td>0</td>
<td></td>
<td>SelectIsope</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Since the Radiation Source selected is Solvent, you will have to Select Isotope for the radioisotope and Select CAD for the solvent that contains the radioisotope.

Click the Select Isotope button

Search for RAD

Isotope Name: __________________________
Isotope Number: ________________________
Atomic Number: _________________________
Isotope Symbol: ________________________

Search | Reset | Cancel

Fill in one of the search fields to find the appropriate isotope and click the Search button.
Select the radio button beside the appropriate isotope and click the **Add to Waste Card** button.
Radioactive Material Waste Card

General Information
Created by: Rick, Al Phone Number: 877-709-2600
Department Name: Chemical Engineering Laboratory: 360/120 Corrosion Research

Waste Information
To enter a radioactive waste, please:
• Select a radioactive material from search
• Enter the content size and radioactivity level information
• Once complete, click "Generate Waste Card"

<table>
<thead>
<tr>
<th>Radiotraceable Source</th>
<th>Radionuclide</th>
<th>Vol/Wt.</th>
<th>Radioactivity Unit</th>
<th>Container Surface contamination level Background/Grass (CPM)</th>
<th>Remarks</th>
<th>Format Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source 1</td>
<td>Isotope-125</td>
<td>1.0</td>
<td>GBq</td>
<td>100.0</td>
<td>Select</td>
<td>SVE3</td>
</tr>
<tr>
<td>Source 1</td>
<td>Select</td>
<td>0.0</td>
<td>Select 1</td>
<td>0.0</td>
<td>Select</td>
<td>SelectCAD</td>
</tr>
<tr>
<td>Source 2</td>
<td>Select</td>
<td>0.0</td>
<td>Select 2</td>
<td>0.0</td>
<td>Select</td>
<td>SelectCAD</td>
</tr>
<tr>
<td>Source 3</td>
<td>Select</td>
<td>0.0</td>
<td>Select 3</td>
<td>0.0</td>
<td>Select</td>
<td>SelectCAD</td>
</tr>
</tbody>
</table>

Click the [SelectCAD] button.

Search for Chemical

• Enter a combination of letters that it may contain and click "Search"
• Under search results, click on the chemical name
• To add new chemical, click "Add"

Chemical Name: [Field] (eg begins with,c contains,exact)
CAS#: [Field] (eg begins with,c contains)

[Search] [Return]

Fill in one of the search fields to find the appropriate solvent and click the [Search] button.
Search for Chemical

- Enter a combination of letters that it may contain and click "Search"
- Under search results, click on the chemical name
- To add new chemical, click "Add"

Chemical Name: water  G begins with  C contains  C exact
CAS#:                     G begins with  C contains

Search  Add New Chemical

Return

Search Results: Found 3 items.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
</tr>
<tr>
<td>Water-d2</td>
<td>007289-20-0</td>
</tr>
<tr>
<td>Watercress oil</td>
<td>086917-72-6</td>
</tr>
</tbody>
</table>

Click on the name of the appropriate solvent.
Radioactive Material Waste Card

General Information

Created by: Shoem. AL Phone Number: 877-729-2640
Department Name: Chemical Engineering Laboratory: N202/253 Conception Research

Waste Information

To enter a radioactive waste, please:
- Select a radioactive material from search
- Enter the correct size and radioactivity level information
- Once complete, click "Generate Waste Card"

Click the [Generate Waste Card] button.