Reconciling Chematix Inventory with Chemicals in the Lab --- One Room at a Time

One way of ensuring that the data stored in the chemical inventory system is up-to-date is to perform an inventory reconciliation. In this process all chemical containers in the lab are scanned and uploaded into Chematix; Chematix then compares the uploaded barcodes to the barcodes listed in the electronic inventory. The discrepancies are listed in categories to make the process of resolving them easier. When all of the discrepancies are resolved, the reconciliation is marked complete and the date of completion will be reported to Environmental Health and Safety.

- To complete this procedure quickly and accurately, use of a barcode scanner is recommended (scanner MUST be able to read Code 128). EH&S has found that wireless barcode scanners with a memory function work adequately. **For scanner recommendations and vendors click here.** Additionally, a laptop computer is highly recommended. If a laptop is not available, then a desktop computer in the same room that is being reconciled can be used.

  Note that anyone from the lab with access to Chematix can upload the barcodes for reconciliation.

  Only the PI and the Chematix Supervisor can manage or resolve any discrepancies resulting from the comparison of the Chematix inventory and the uploaded barcodes.

- This procedure is for reconciling one room at a time and is useful for lab groups with a small to moderate number of chemical containers.

- Labs with multiple rooms containing an overall small to moderate number of chemical containers may opt to reconcile all their lab rooms at one time. This procedure is called **Reconciling Chemical Inventory with Chemicals in the Lab --- Multiple Rooms Simultaneously**. **(add link)**

- If your lab is in possession of a large number of chemicals, it will be easier to reconcile by storage unit. This procedure is called **Reconciling Chematix Inventory with Chemicals in the Lab --- One Storage Unit at a Time.** **(Coming Soon)** NOTE: If you choose to reconcile using this option you have thirty (30) days from when you begin the process to complete your reconciliation. If you are not able to complete your reconciliation within this window all progress will be lost.

1. Log into Chematix using your Net ID and password https://www.rochester.chematix.com/Chematix . Choose **Continue with UR Credentials**
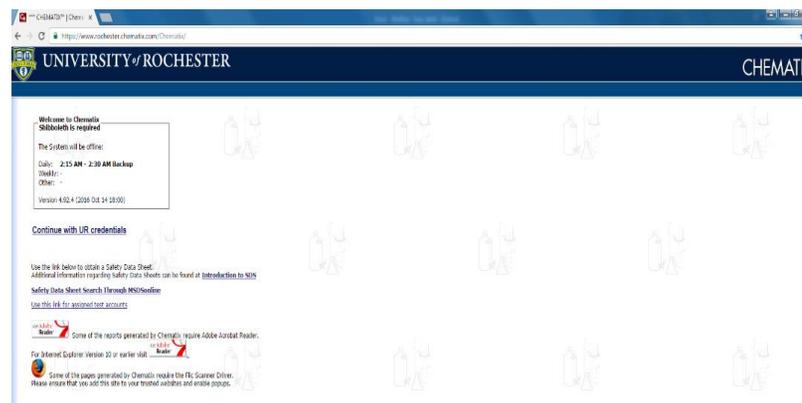
2. Choose the **Resources** tab at the top of the page.
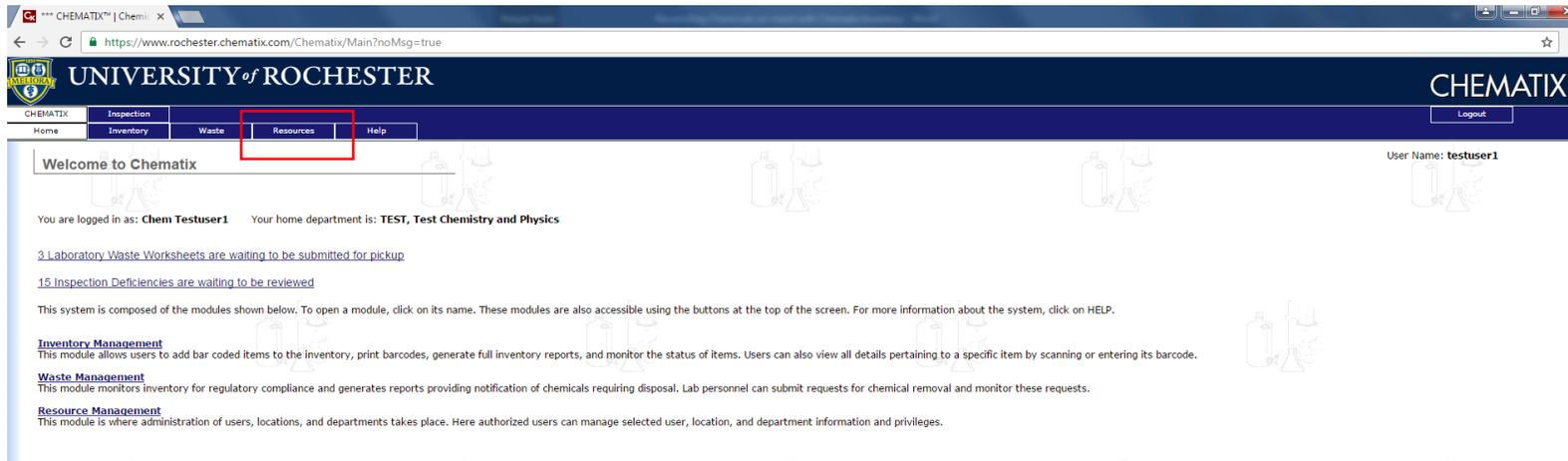
3. Under **Manage Locations,** choose **View my Locations**.

4. Choose the room you wish to reconcile by clicking the **Lab Name** in the **Laboratory** column.

5. On the **Laboratory Summary Page**, choose **Upload Scanned Chemical Barcodes.**

6. IMPORTANT: Open up **Notepad** in Windows (or TextEdit for Mac) and proceed to scan the barcodes into the **Notepad (or TextEdit) Field.** This step MUST be done in order to ensure all barcodes are captured. Scanning directly into Chematix will cause the program to time out after twenty minutes, and all barcodes scanned will be deleted and the ENTIRE inventory will need to be scanned in AGAIN. *Do not use Microsoft word or other word processing apps, it must be a .txt file type app.*

7. Once all of the barcodes are entered into the Notepad field, copy and paste them into the **Barcodes** box on the **Upload Scanned Barcodes** screen, then click **Send to Chematix**.
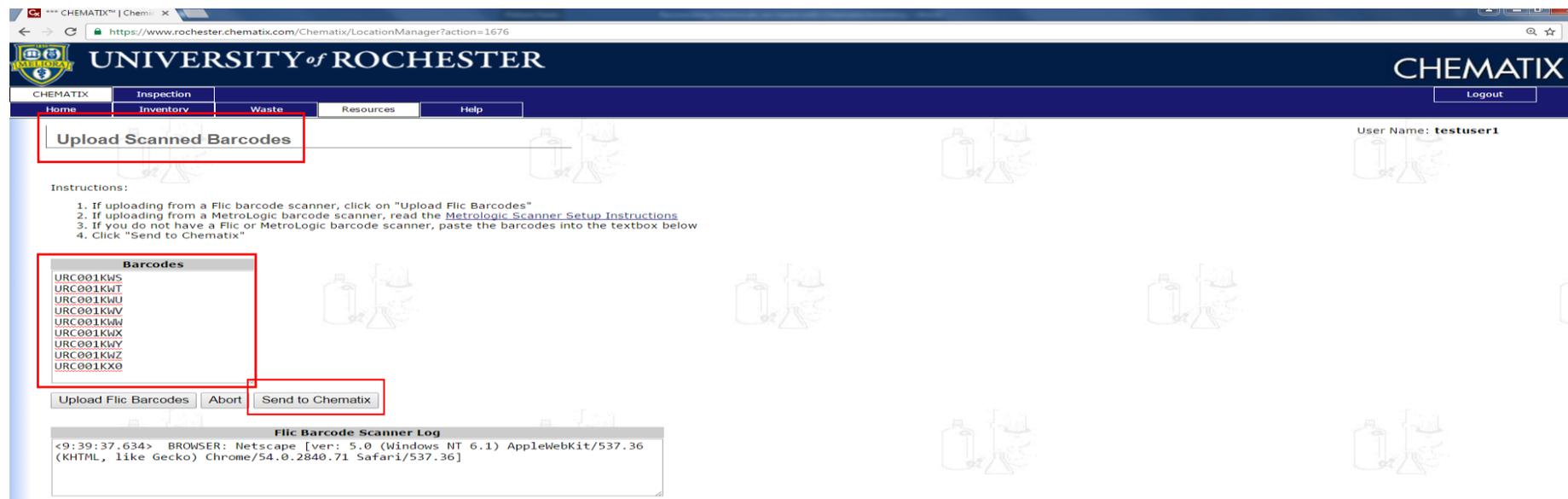
8. The next screen, the **Barcode Upload Summary,** will list which containers are missing. Missing containers are those which should be in the lab but have not been scanned. **Search your lab to find the missing containers!** Clicking on the container barcode in the **Barcode** column, will allow the **Container Details** screen to pop-up. In this pop-up window, you'll see additional information for each container, such which room and storage unit it should be in. (Be sure to enable Chematix pop-ups in your browser.)

To add additional barcodes (i.e. missing containers that were found) or to continue with the reconciliation process, click **Return** on the **Barcode Upload Summary page**. This will take you back to the **Laboratory Summary Page** to choose to upload additional barcodes and to manage the discrepancies. Repeat previous steps for uploading additional barcodes.

UNIVERSITY of ROCHESTER

CHEMATIX™

CHEMATIX | Inspection

Home | Inventory | Waste | Resources | Help

Barcode Upload Summary

Laboratory Information

Laboratory:	Test User 1
Department:	Environmental Health & Safety
Lab PI:	Chem Testuser1

Barcode Summary

Valid Barcode Format: 2G
NOT Allocated to Containers: None
NOT Associated with Containers:

- URC001212

Invalid Barcode Format: None
Duplicates: 0
Total Uploaded: 2G

Missing Containers

Barcode	CAS #	
URC0008JF	64-19-7	Acetic Acid
URC004AIV	7440-23-5	Sodium
URC001XS9	50-00-0	J'Quan's Formaldehyde
URC0026W3	94-36-0	Benzoyl peroxide
URC000SLI	50-00-0	Formaldehyde, 37%
URC0008JC	7647-14-5	Sodium chloride
URC0026W2	94-36-0	Benzoyl peroxide
URC0026W1	94-36-0	Benzoyl peroxide
URC0026VX	60-29-7	ethyl ether
URC0026VW	60-29-7	ethyl ether
URC0026VZ	60-29-7	ethyl ether
URC0026VY	60-29-7	ethyl ether
URC0026W4	67-63-0	Isopropanol
URC001ADV	67-64-1	Acetone
URC001KL6	67-64-1	acetone
URC001KXB	471-34-1	Calcium carbonate (e)
URC001KXC	471-34-1	Calcium carbonate (e)
URC001KXD	471-34-1	Calcium carbonate (e)
URC001KXE	471-34-1	Calcium carbonate (e)

[Clear Flic Scanner] [Return]

Flic Barcode Scanner Log

<10:06:13.882> BROWSER: Netscape [ver: 5.0 (Windows NT 6.1)
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/54.0.2840.71 Safari/

Container Details

Container Barcode:	URC0008JF
Container Description:	Acetic Acid
Chemical Name:	Acetic Acid
CAS#:	64-19-7
Chemical Formula:	C2H4O2
Container Size/Unit:	1.00/L
Content Size/Unit:	1.00/L
Concentration:	100 %
Container Status:	Shelved
PEC:	No
Expiration Date:	
Lot#:	2.99
Surplus:	No
Date Received:	
Date Last Changed:	07/16/2015
Store Catalog Number:	
Manufacturer:	
Manufacturer Catalog Number:	
Supplier:	
Supplier Catalog Number:	
Lot Number:	2.99
Building Name:	064 / 685 MT HOPE (FAIRBANK)
Location:	B013/Test User 1
Lab Barcode:	URL0002JP
Storage Unit:	Undefined
Storage Unit Barcode:	URS0002LH
PI Name:	Testuser1, Chem
PI Contact:	877-700-2600
Lab Supervisor:	Testuser1, Chem
Lab Supervisor Contact:	877-700-2600

TRANSFER HISTORY

Date	Initiated	From Person	From Location	To Person	To Location

[Print] [Close]

User Name: **testuser1**

Room: **B013**

			Storage Unit	Expiration Date
			Undefined	
			Undefined	
			Under Fume Hood	
			Under Fume Hood	03/15/2016
			Undefined	
			Undefined	
			Under Fume Hood	08/01/2015
			Under Fume Hood	08/01/2015
			Under Fume Hood	10/01/2015
			Under Fume Hood	08/01/2015
			Under Fume Hood	09/05/2015
			Under Fume Hood	02/01/2016
			Under Fume Hood	09/01/2015
			Under Fume Hood	01/01/2017
			Under Fume Hood	04/28/2016
			In Fume Hood	
			In Fume Hood	
			In Fume Hood	
			In Fume Hood	

9. Once you are satisfied that all the barcodes have been uploaded into Chematix, choose **Manage Discrepancy** from the **Laboratory Summary Page**. Chematix will now compare your Chematix inventory to the barcodes you uploaded.

10. The results of the comparison are displayed on The **Inventory Discrepancy Report and Reconciliation** screen. The discrepancies are broken down into different categories (**Missing Containers, Misplaced Containers, Containers Not Registered to You, Inactive Containers, Unassigned Container Records**). Each barcode in each category must be resolved before the reconciliation can be marked as complete. The next few screen shots will address the categories separately.

11. **Missing containers** are containers which should be in the lab but were not scanned into the upload page. After your investigation as to why these containers are missing from the upload, you may indicate which containers have been consumed, which containers are missing, and which containers a wastecard pickup has been requested (see screen shot immediately below). If some of your containers should be marked as consumed and others should be marked as missing, etc., then you must do the designation separately and sequentially. You must tell Chematix which containers have been consumed in a separation action from indicating which containers are missing, etc.

- **Mark as Consumed** – These containers are considered to be used up and will not count in any inventory summary. By choosing this button, the containers will be removed from the "Active" inventory to the "Used/Waste" inventory. Once this button has been selected, the marked containers will be removed from your list of Missing Containers. In order to indicate which container(s) should be **Marked as Consumed**, you must first click the check box(es) next to the appropriate barcode(s). Then click the **Mark as Consumed** button.

- **Mark as Missing** – This means that the container has not been found in the reconciliation of the laboratory, but you are certain that it has NOT been used up or consumed. They may be found in later reconciliations of your laboratories or in other laboratories. Once this button has been selected, the marked containers will be removed from your list of Missing Containers. In order to indicate which container(s) should be **Marked as Missing**, you must first click the small box(es) next to the appropriate barcode(s). Then click the **Mark as Missing** button.

Inventory Discrepancy Report and Reconciliation   User Name: **testuser1**

Laboratory Information

Room / Laboratory:	**B013 / Test User 1**		
Department:	**Environmental Health & Safety**	Building:	**685 MT HOPE (FAIRBANK)**
Lab PI:	**Testuser1, Chem**		

Missing Containers

Barcode	CAS #	Container Description	Container Size	Storage Unit	Expiration Date
URC001KXB	471-34-1	Calcium carbonate (exempt from inventory)	500.00 g	Test User 1 /In Fume Hood	
URC001KXC	471-34-1	Calcium carbonate (exempt from inventory)	500.00 g	Test User 1 /In Fume Hood	
URC001KXD	471-34-1	Calcium carbonate (exempt from inventory)	500.00 g	Test User 1 /In Fume Hood	
URC001KXE	471-34-1	Calcium carbonate (exempt from inventory)	500.00 g	Test User 1 /In Fume Hood	
URC000SLI	50-00-0	Formaldehyde, 37%	1.00 L	Test User 1 /Undefined	
URC0008JC	7647-14-5	Sodium chloride	100.00 g	Test User 1 /Undefined	
URC0026W2	94-36-0	Benzoyl peroxide	100.00 mL	Test User 1 /Under Fume Hood	08/01/2015
URC0026W1	94-36-0	Benzoyl peroxide	100.00 mL	Test User 1 /Under Fume Hood	08/01/2015
URC0026VX	60-29-7	ethyl ether	1.00 L	Test User 1 /Under Fume Hood	10/01/2015
URC0026VW	60-29-7	ethyl ether	1.00 L	Test User 1 /Under Fume Hood	08/01/2015
URC0026VZ	60-29-7	ethyl ether	1.00 L	Test User 1 /Under Fume Hood	09/05/2015
URC001ADV	67-64-1	Acetone	1.00 L	Test User 1 /Under Fume Hood	01/01/2017
URC0026VY	60-29-7	ethyl ether	1.00 L	Test User 1 /Under Fume Hood	02/01/2016
URC0008JF	64-19-7	Acetic Acid	1.00 L	Test User 1 /Undefined	
URC0026W4	67-63-0	Isopropanol	100.00 mL	Test User 1 /Under Fume Hood	09/01/2015
URC004AIV	7440-23-5	Sodium	100.00 g	Test User 1 /Undefined	
URC001XS9	50-00-0	J'Quan's Formaldehyde	100.00 mL	Test User 1 /Under Fume Hood	
URC0026W3	94-36-0	Benzoyl peroxide	100.00 mL	Test User 1 /Under Fume Hood	03/15/2016
URC001KL6	67-64-1	acetone	4.00 L	Test User 1 /Under Fume Hood	04/28/2016

Toggle Selection | Mark as Consumed | Mark as Missing

Container(s): Discarded as solid waste ▼ | Mark as Discarded

- **Mark as Discarded**: This option will mark the select containers as discarded and remove them from the "Active" inventory to the "Used/Waste" inventory and a wastecard will be generated. From the dropdown menu, you must choose **Wastecard Pickup Requested**. The other choices will not work. You will still have to edit, print out, affix the wastecard to the container, and add the wastecard to a pickup worksheet. (The wastecard will be in your list of waste cards. To find it click on Waste module tab at top of page, then click Edit Wastecard. Leave the search box empty, then click Search. A list of all the waste cards for the room will be shown. Choose the correct one using the inventory barcode.) Once the **Mark as Discarded** button has been selected, the marked containers will be removed from your list of Missing Containers. **Remember:** In order to indicate which container(s) should be **Marked as Discarded**, you must first click the small box(s) next to the appropriate barcode(s). Then click the **Mark as Discarded** button.

Inventory Discrepancy Report and Reconciliation

User Name: **testuser1**

Laboratory Information

Room / Laboratory:	**B013 / Test User 1**
Department:	**Environmental Health & Safety**
Lab PI:	**Testuser1, Chem**

Building: **685 MT HOPE (FAIRBANK)**

Missing Containers

	Barcode	CAS #	Container Description	Container Size	Storage Unit	Expiration Date
☐	URC001KXB	471-34-1	Calcium carbonate (exempt from inventory)	500.00 g	Test User 1 /In Fume Hood	
☐	URC001KXC	471-34-1	Calcium carbonate (exempt from inventory)	500.00 g	Test User 1 /In Fume Hood	
☐	URC001KXD	471-34-1	Calcium carbonate (exempt from inventory)	500.00 g	Test User 1 /In Fume Hood	
☐	URC001KXE	471-34-1	Calcium carbonate (exempt from inventory)	500.00 g	Test User 1 /In Fume Hood	
☐	URC000SLI	50-00-0	Formaldehyde, 37%	1.00 L	Test User 1 /Undefined	
☐	URC0008JC	7647-14-5	Sodium chloride	100.00 g	Test User 1 /Undefined	
☐	URC0026W2	94-36-0	Benzoyl peroxide	100.00 mL	Test User 1 /Under Fume Hood	08/01/2015
☐	URC0026W1	94-36-0	Benzoyl peroxide	100.00 mL	Test User 1 /Under Fume Hood	08/01/2015
☐	URC0026VX	60-29-7	ethyl ether	1.00 L	Test User 1 /Under Fume Hood	10/01/2015
☐	URC0026VW	60-29-7	ethyl ether	1.00 L	Test User 1 /Under Fume Hood	08/01/2015
☐	URC0026VZ	60-29-7	ethyl ether	1.00 L	Test User 1 /Under Fume Hood	09/05/2015
☐	URC001ADV	67-64-1	Acetone	1.00 L	Test User 1 /Under Fume Hood	01/01/2017
☐	URC0026VY	60-29-7	ethyl ether	1.00 L	Test User 1 /Under Fume Hood	02/01/2016
☐	URC0008	64-19-7	Acetic Acid	1.00 L	Test User 1 /Undefined	
☐	URC0026	67-63-0	Isopropanol	100.00 mL	Test User 1 /Under Fume Hood	09/01/2015
☐	URC004A	7440-23-5	Sodium	100.00 g	Test User 1 /Undefined	
☐	URC001X	50-00-0	J'Quan's Formaldehyde	100.00 mL	Test User 1 /Under Fume Hood	
☐	URC0026	94-36-0	Benzoyl peroxide	100.00 mL	Test User 1 /Under Fume Hood	03/15/2016
☐	URC001K	67-64-1	acetone	4.00 L	Test User 1 /Under Fume Hood	04/28/2016

Dropdown menu options shown:
- Discarded as solid waste
- Wastecard Pickup Requested
- Treated as Liquid Waste
- Landfill
- Landfill empty
- Recycle
- D/I - Disposal or Incineration
- T/S - Treatment or Storage
- B/ER - Burning for energy recovery
- R/R - Recycling or reuse
- Unk - Not Specified

[Toggle Select] ... Missing

Container(s): [Discarded as solid waste ▼] [Mark as Discarded]

12. **Misplaced Containers** are containers which are associated with a different laboratory that is assigned to the same Principal Investigator (i.e. correct PI – wrong room).

- **Transfer to My Lab** – This button will transfer the selected containers to the lab being reconciled. This is an internal transfer, which will be recorded in the Transfer History of the container (visible from the Containers Details screen). Once this button has been selected, the marked containers will be removed from the list of Misplaced Containers. **Remember:** In order to indicate which container(s) should be **Transfer to My Lab**, you must first click the small box(es) next to the appropriate barcode(s). Then click the **Transfer to My Lab** button.

- **Return to Original Lab** – This button will mark the containers as having been returned to the last laboratory location it was associated with in Chematix. Once this button has been selected, the marked containers will be removed from the list of Misplaced Containers. **The container must be physically returned to room listed in Chematix. Remember:** In order to indicate which container(s) should be **Return to Original Lab**, you must first click the small box(es) next to the appropriate barcode(s). Then click the **Return to Original Lab** button.

Misplaced Containers

Barcode	CAS #	Container Description	Container Size	Registered Lab/ Storage Unit	Expiration Date
☐ URC001EB5	1344-28-1 Alumina		1.00 kg	Testuser 2/fume hood	10/31/2105
☐ URC001EB6	7647-14-5 Roberta's Sodium chloride		500.00 g	Testuser 2/Undefined	

Toggle Selection | Transfer to My Lab | Return to Original Lab

13. **Containers Not Registered to You** are containers that were uploaded as part of the reconciliation process but which belong to another (different) Principal Investigator.

- **Request Transfer to My Lab** – This button will send a request to the other laboratory (the one which lists the container in its inventory) for a container transfer. Both parties must agree to the transfer. Once this button has been selected, the marked containers will be removed from the list of Containers Not Registered to You. **Remember:** In order to indicate which container(s) should be **Request Transfer to My Lab**, you must first click the small box(es) next to the appropriate barcode(s). Then click the **Request Transfer to My Lab** button.

- **Return to Owner's Lab** – This button marks the container as having been returned to the last laboratory location associated with Chematix. You can determine where the container belongs by clicking directly on the barcode number. The **Container Details** screen will pop-up. On this pop-up window, you'll see to which Principal Investigator and in which room the container belongs. **The container must be physically returned to room listed in Chematix.** Once this button has been selected, the marked containers will be removed from your list of **Containers Not Registered to You**. **Remember:** In order to indicate which container(s) should be **Return to Owner's Lab** you must first click the small box(es) next to the appropriate barcode(s). Then click the **Return to Owner's Lab** button.

Containers Not Registered to You

Barcode	CAS #	Container Description	Container Size	Contact Details	Expiration Date
☐ URC001ADZ	7647-14-5 Sodium chloride (exempt from inventory)		500.00 g	Robert Passalugo, 5852753016	
☐ URC001AE0	7647-14-5 Sodium chloride (exempt from inventory)		500.00 g	Robert Passalugo, 5852753016	
☐ URC001AE1	7647-14-5 Sodium chloride (exempt from inventory)		500.00 g	Robert Passalugo, 5852753016	
☐ URC001EB4	120068-37-3 Fipronil		108.00 g	Robert Passalugo, 5852753016	

Toggle Selection | Request Transfer to My Lab | Return to Owner's Lab

14. **Inactive Containers** – These are the containers associated with barcodes in Chematix that have been marked as consumed or wasted. Occasionally, barcoded containers are not removed from inventory when they are wasted or consumed.

- **Mark as Reconciled** – This button will remove the containers from "active" inventory to the "Used/Waste" inventory. It will also remove the container from the list of Inactive Containers. **Remember:** In order to indicate which container(s) should be **Mark as Reconciled** you must first click the small box(s) next to the appropriate barcode(s). Then click the **Mark as Reconciled** button. (If a container has been marked Inactive but is still in use in your laboratory please contact Abby Davis abby.davis@rochester.edu

Inactive Containers

Barcode	CAS #	Container Description	Container Size	Status	Expiration Date
☐ URC0008J5	77-92-9	Citric Acid (exempt from inventory)	500.00 g	Consumed by experiment	
☐ URC0026W0	60-29-7	ethyl ether	1.00 L	Consumed by experiment	08/01/2015

Toggle Selection | Mark as Reconciled

15. **Unassigned Barcodes** – These are valid Chematix barcodes that have been uploaded during the reconciliation, but which are not associated with any chemical container in Chematix. This happens occasionally when using pre-printed barcodes; the user is interrupted and does not finish the process of assigning the barcode to the container. These containers must be added to the inventory. Once the barcode has been properly assigned and uploaded as noted above in steps 6 and 7, the containers will be removed from the list of Unassigned Barcodes.

Unassigned Container Barcodes

None

16. Once all of the container discrepancies have been resolved the **Reconciliation Complete** button will become active. Clicking this will mark the reconciliation as complete. A green banner will appear once the lab is complete.

17. The date of completion is stored as visible in the **Laboratory Summary Page**.

18. Repeat this process for each individual lab room.

- Labs with multiple rooms containing an overall small to moderate number of chemical containers may opt to reconcile all their lab rooms at one time. This procedure is called **Reconciling Chemical Inventory with Chemicals in the Lab --- Multiple Rooms Simultaneously**. **(add link)**

- If your lab is in possession of a large number of chemicals, it will be easier to reconcile by storage unit. This procedure is called **Reconciling Chematix Inventory with Chemicals in the Lab --- One Storage Unit at a Time.** **(add link)**