



# **Chemical Reconciliation Guide**

## Overview

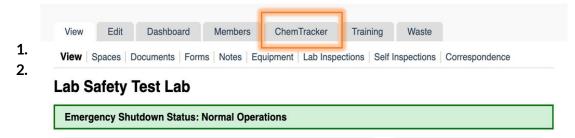
- Who should perform a reconciliation?
  Principal Investigators (PI), Group Compliance Liaisons (GCL), and lab members who are assigned to manage chemical inventories.
  When should I perform a shomical reconstiliation for my lab?
- II. When should I perform a chemical reconciliation for my lab?
  - When significant reorganization occurs.
  - When your lab relocates or expands.

#### III. How should a reconciliation be conducted? For the best results, take it one step at a time. When doing your reconciliation, focus on specific lab areas, like individual spaces or shelves.

IV. I need help! Who should I contact? Email Laboratory Safety team at <u>labsafety@northeastern.edu</u> or call us at 617-373-2769.

# Step-by-Step Guide

# riangle Locating the Reconciliation Tab







| View    | Edit     | Dashboard     | Mer    | mbers     | ChemTracker    | Training       | Waste       |              |                      |      |
|---------|----------|---------------|--------|-----------|----------------|----------------|-------------|--------------|----------------------|------|
| ChemTr  | acker    | Add Inventory | Totals | Bulk Edit | Reconciliation | Find Other Che | micals      |              |                      |      |
| View L  | _ab S    | afety Tes     | t Lab  | Inver     | ntory          |                |             |              |                      |      |
|         |          | 1.            |        |           | •              |                |             |              |                      | ď    |
| 30      |          |               |        |           |                |                | Di          | splaying 1 - | 16 of <b>16</b> resu | ilts |
| Chemica | al Name: |               | C      | AS Numb   | per:           | Ch             | emical Syr  | nonym:       |                      |      |
| Chemica | al Name  |               |        | CAS Numb  | per            | С              | hemical Syn | onym         |                      |      |
|         |          |               |        |           |                | Spa            | aces:       |              |                      |      |
|         |          |               |        |           |                | S              | elect one   |              | -                    |      |
|         |          |               |        |           |                |                |             | Show Ad      | vanced Filte         | rs   |
|         |          |               |        |           |                |                |             |              |                      |      |

3. Click on "Reconciliation".

# Starting a Reconciliation

On the reconciliation page, all previous chemical inventory reconciliations will be listed. Use the drop-down menus to make changes.

| "Spaces" is for labs<br>with multiple lab<br>spaces. |                                      | Dashboard<br>dd Inventory Totals<br>tion History |                              | onciliation Fin                      | d Other Chemica<br>Status: | is<br>is<br>id & In Progress ~       | "Status" will allow<br>the user to<br>see reconciliations<br>that are in specific<br>stages: |
|--|--------------------------------------|--|------------------------------|--------------------------------------|----------------------------|--------------------------------------|--|
| Use "Started After"<br>& "Started Before"            | 2022-07-01                           |  | Started Before               |                                      |                            | Displaying 1 - 9 of <b>9</b> re      | ✓ Finalized & In Progress<br>Finalized   |
| to input a time<br>range.                            | Space                                | Group Name 1                                     | Date Started 1<br>2023-01-23 | Started By 1                         |                            | ench ‡ Shelf ‡ View<br><u>View</u> / | In Progress<br>Abandoned   |
|  | Lake Hall - 100A<br>Lake Hall - 100A | Lab Safety Test Lab                              |                              | Burkhard, Collin<br>Burkhard, Collin | Finalized<br>Finalized     | <u>View/</u>                         |  |
|  |                                      | Lab Safety Test Lab                              |                              | Burkhard, Collin                     |                            | <u>View/</u>                         |  |
|  | <u>Lake Hall - 100A</u>              | Lab Safety Test Lab                              |                              | Burkhard, Collin<br>Burkhard, Collin | Finalized                  | <u>View/</u>                         |  |
|  |                                      | Lab Safety Test Lab                              |                              | Burkhard, Collin<br>Burkhard, Collin |                            | <u>View/</u>                         |  |
|  | Lake Hall - 100A                     | Lab Safety Test Lab                              | 2022-09-12                   | Donovan, Conor                       | Finalized                  | <u>View/</u>                         | Edit   |





1. Click "Start a New Reconciliation" on the bottom of the page.

#### **Step 1: Selecting Parameters**

- 1. Click the drop-down menu for "**Space**", all the spaces owned by the lab will appear.
- 2. Select the space that is being reconciliated. **Only one space can be reconciliated at once.**
- 3. To do more specific reconciliations, a specific bench and shelf can be selected.

#### **Chemical Reconciliation**

Use the filters below to select the parameters for a new reconciliation event. The parameters selected will generate the list of chemical containers to check. Building, space, bench, shelf, and group selected are additionally kept throughout the reconciliation for relocating containers as needed.

| Group: Lab Safety Test Lab                    | Space: *<br>Select one | <b>•</b> |                         |  |
|---|------------------------|----------|-------------------------|--|
| Bench:<br>Select one                          | Shelf:<br>Select one   | -        | Specific Location Note: |  |
| Enter Container IDs (Barcodes o<br>RFID tags) |                        |          | Specific Location Note  |  |
| Use Checklist (no Barcodes or R<br>tags)      | FID                    |          |                         |  |
| Submit  |                        |          |                         |  |

- 4. Select the option "Enter Container IDs (Barcodes or RFID tags)", even if you are not using barcodes.
- 5. Click "Submit" to move onto the next step.

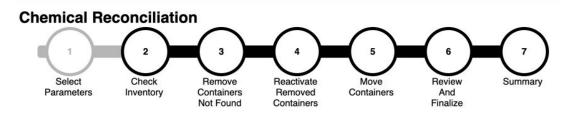




#### Step 2: Check Inventory

We suggest use a bar code scanner to check all the inventory present in the space. Contact lab safety team (<u>labsafety@northeastern.edu</u>) if your lab needs one.

- 1. Scan the barcode attached to the chemical or gas. It will auto-appear in the box highlighted below.
- 2. Click "Submit" to ensure the chemical is marked. "Auto-submit" may be checked if you want the chemical to be marked automatically after each scan.



▼ Selected Parameters for Reconciliation #340

| Space:                  | Lake Hall - 100A | Group: | Lab Safety Test Lab |
|-------------------------|------------------|--------|---------------------|
| Bench:                  |                  | Shelf: |                     |
| Specific Location Note: |                  |        |                     |

Parameters not correct? Click here to archive and abandon this reconciliation

If using barcode or RFID tags, enter the tag numbers for found containers below, then click "Submit" to mark these containers as "Confirmed". Separate IDs with commas or line breaks. The IDs can be entered individually or in batches.

All container IDs entered below and added with the "Submit" button will be logged as part of this reconciliation. Containers in the table below that match any of these IDs will be marked as "Found" on screen. Any container IDs entered that are not in the table below will be saved for the next steps in this reconciliation process. For example, if a container ID is scanned in though not listed in the space from the selected parameters (see above), that container will show up in step 5, "Move Containers".

| Auto-submit Submit |                          |
|--------------------|--------------------------|
| Quick Find Filters | Show Found Containers: 🔽 |

3. Further down the page, you can see a list of all chemicals currently listed in the space selected. Once scanned and submitted they will be auto checked.

| Found | Container ID 1 | Chemical Name ‡                                 | CAS Number 💲 | Amount ‡ | Units 🕽 | Benc |
|-------|----------------|---|--------------|----------|---------|------|
|       | NU00141501     | Acetic acid aqueous solution (10-80% by weight) |              | 100      | ml      |      |
|       | NU00141504     | Acetone   | 67-64-1      | 4        | L       |      |
|       | C-20128830     | Acetone   | 67-64-1      | 1        | I       | 1    |
|       | NU00139004     | Copper sulfate solution in sulfuric acid        |              | 911      | ml      |      |





Alternatively, if you choose to check inventory manually without a bar code scanner, here is the instruction:

| Found | Container ID 1 | Chemical Name 1                                 | CAS Number 🗅 | Amount 1 | Units 🗘 | Bend |
|-------|----------------|---|--------------|----------|---------|------|
|       | NU00141501     | Acetic acid aqueous solution (10-80% by weight) |              | 100      | ml      |      |
|       | NU00141504     | Acetone   | 67-64-1      | 4        | 1       |      |
|       | C-20128830     | Acetone   | 67-64-1      | 1        | 1       | 1    |
|       | NU00139004     | Copper sulfate solution in sulfuric acid        |              | 911      | ml      |      |
|       | NU00141507     | Ethanol   | 64-17-5      | 4        | T       |      |
|       | NU00141508     | Ethanol   | 64-17-5      | 4        | 1       |      |
|       | NU00141509     | Ethanol   | 64-17-5      | 4        | 1       |      |
|       | C-20128831     | ETHANOL, 2-(BUTYLNITROAMINO)-, 1-<br>NITRATE    | 82486-82-6   | 1        | 1       | 2    |
|       | NU00141512     | Lithium   | 7439-93-2    | 100      | g       |      |
|       | NU00141506     | Potassium permanganate                          | 7722-64-7    | 500      | g       |      |
|       | NU00141510     | Potassium phosphate dibasic                     | 7758-11-4    | 1        | kg      |      |
|       | NU00141505     | Sodium bicarbonate                              | 144-55-8     | 1        | kg      |      |
|       | NU00141511     | Sodium chloride                                 | 7647-14-5    | 500      | g       |      |
|       | NU00139001     | Sodium chloride                                 | 7647-14-5    | 50       | kg      |      |

Next

- 1. Scroll down towards the bottom of the page, you will find a list of all the chemicals currently listed in the selected parameters.
- 2. Check the boxes next to the present and accurate chemical inventory.
- 3. Click "**Next**" to move on.

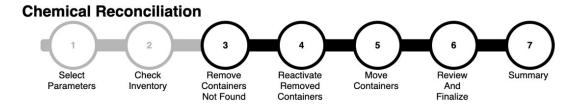




#### Step 3: Remove Containers Not Found (Remove Missing Chemicals)

Chemicals that are determined to **no longer be present** in the parameters of the laboratory will show up on this list.

- 1. Verify if the list is accurate. If it is not, click "**Back**" to go back to the previous step and correct it.
- 2. If the list is accurate, click "Next" to move on. **Once the "next" button is clicked**, you CANNOT return to this step.



#### ▼ Selected Parameters for Reconciliation #340

| Space:                  | Lake Hall - 100A | Group: | Lab Safety Test Lab |
|-------------------------|------------------|--------|---------------------|
| Bench:                  |                  | Shelf: |                     |
| Specific Location Note: |                  |        |                     |

Parameters not correct? Click here to archive and abandon this reconciliation

The containers listed below were listed in the area set by the initial parameters, but were not confirmed during the process.

Select below any containers which should be removed from inventory.

Quick Find Filters

Displaying 1 - 4 of 4 results

3

| Select All | Container ID 🗅 | Chemical Name 1                              | CAS Number 🗘 | Amount 🛟 | Units 🕽 |
|------------|----------------|--|--------------|----------|---------|
|            | C-20128830     | Acetone                                      | 67-64-1      | 1        | I.      |
|            | NU00139004     | Copper sulfate solution in sulfuric acid     |              | 911      | ml      |
|            | NU00141509     | Ethanol                                      | 64-17-5      | 4        | 1       |
|            | C-20128831     | ETHANOL, 2-(BUTYLNITROAMINO)-, 1-<br>NITRATE | 82486-82-6   | 1        | 1       |

Changes to this page and previous steps cannot be made once clicking Next.

You will have the opportunity to view the changes before finalization.



Next





### Step 4: Reactivate Removed Containers (Add Back Chemicals)

On this page, you can add back chemical inventory that was deleted during previous reconciliation.

For example, if sodium chloride was completely used up and deleted from the chemical inventory, but you found it during this reconciliation, you can add it back from the list.

- 1. Check the box next to any chemicals that were previously deleted and need to be added back to the inventory.
- 2. Once completed, click "Next" to move on. **Once the "next" button is clicked, you CANNOT return to this step.**

#### **Chemical Reconciliation**



▼ Selected Parameters for Reconciliation #357

| Space:                  | Lake Hall - 111 | Group: | Lab Safety Test Lab |
|-------------------------|-----------------|--------|---------------------|
| Bench:                  |                 | Shelf: |                     |
| Specific Location Note: |                 |        |                     |

Parameters not correct? Click here to archive and abandon this reconciliation

The containers listed below were previously marked as "Removed" (deleted) from ChemTracker. Select below any containers which should be reactivated.

Displaying 1 - 2 of 2 results

X

| Select All | <b>~</b> | Container ID 🗅 | Chemical Name                         | CAS Number 🗘 | Amount 🗅 | Units 🕽 |
|------------|----------|----------------|---------------------------------------|--------------|----------|---------|
|            |          | NU00139003     | Oxalic acid dihydrazide               | 996-98-5     | 302      | kg      |
|            |          | NU00141755     | Potassium 2-cyanoethyltrifluoroborate | 1159919-79-5 | 3        | kg      |

Changes to this page and previous steps cannot be made once clicking Next.

You will have the opportunity to view the changes before finalization.

Next





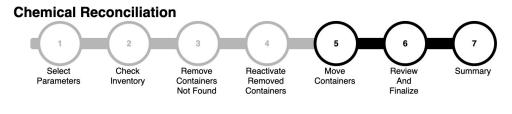
#### Step 5: Move Containers

If you found any chemicals that weren't originally listed for the location but are found in nearby parameter (lab space, bench, or shelf) or in another lab group's inventory, you can move them to the selected parameter.

For example, if during the reconciliation of Room 100A in Lake Hall, you find Calcium Nitrate, which wasn't initially part of Room 100A's inventory but is listed in Room 100B's inventory, you can move Calcium Nitrate from Room 100B's list to Room 100A's list.

This ensures that the chemical inventory accurately reflects the current distribution of chemicals within the lab, making it easier to manage and locate specific materials.

- 1. Check the box next to any chemicals that need to be moved.
- 2. Once completed, click "Next" to move on. Once the "next" button is clicked, you CANNOT return to this step.



▼ Selected Parameters for Reconciliation #357

| Space:                  | Lake Hall - 111 | Group: | Lab Safety Test Lab |
|-------------------------|-----------------|--------|---------------------|
| Bench:                  |                 | Shelf: |                     |
| Specific Location Note: |                 |        |                     |

Parameters not correct? Click here to archive and abandon this reconciliation

The containers listed below were found during the process, but are listed in a different location or under different group ownership than indicated during the beginning of this reconciliation process.

Select below any containers which should be moved to: Lake Hall - 111

The containers will be assigned to the group: Lab Safety Test Lab

Displaying 1 - 2 of 2 results

| Select All | <b>~</b> | Group                     | Space                  | Container ID 🗅 | Chemical Name   | CAS Number 🗘 | A |
|------------|----------|---------------------------|------------------------|----------------|---|--------------|---|
|            |          | Lab<br>Safety<br>Test Lab | Lake<br>Hall -<br>100A | NU00141758     | Styrene   | 100-42-5     | 6 |
|            |          | Lab<br>Safety<br>Test Lab | Lake<br>Hall -<br>100A | NU00141756     | Acetic acid (90%) solution with acetic<br>anhydride (1-5%) and perchloric acid (1-5%) |              | 1 |

Changes to this page and previous steps cannot be made once clicking Next.

You will have the opportunity to view the changes before finalization.

Next

3





#### Step 6: Review and Finalize

- 1. Review the selected parameters and confirm that they are correct. If they are not, click on "**Click here to archive and abandon this reconciliation**" and restart the reconciliation.
- 2. Click on "**Download reconciliation data**" to download and view a MS Excel sheet of the information collected during this reconciliation.
- 3. If the data must be double checked, click on "Save and return later".
- 4. If all the data is accurate, then click on "**Finalize reconciliation**" to complete the reconciliation. **Once this is done, the reconciliation cannot be edited.**

# Chemical Reconciliation

Remove

Containers

Not Found

#### ▼ Selected Parameters for Reconciliation #341

Check

Inventory

| Space:                  | Lake Hall - 100A | Group: | Lab Safety Test Lab |
|-------------------------|------------------|--------|---------------------|
| Bench:                  |                  | Shelf: |                     |
| Specific Location Note: |                  |        |                     |

Reactivate

Removed

Containers

Move

Containers

Parameters not correct? Click here to archive and abandon this reconciliation

Changes made to inventory data in this reconciliation process have not yet been completed. At this stage, you may review the changes before finalizing this reconciliation and queuing up the inventory updates in the system.

Download below a copy of the data from this reconciliation. This download will also be available on the next page after finalization.

After finalization, any additional changes would need to be made with a new reconciliation event or using the bulk edit tool. It may take up to 30 minutes for all changes to be completed.

Finalization cannot be undone.

Select

Parameters

Not sure yet? Save and return later

Finalize Reconciliation

6

Review

And

Finalize

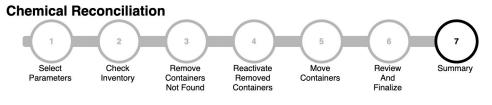
Summary





#### Step 7: Summary

- 1. Click on "**Download reconciliation data**" to view the finalized reconciliation data and to keep a record of the reconciliation.
- 2. Read the report of the amount of chemicals that were altered or noted during the reconciliation process.
- 3. Under "**Container IDs Not in SciShield ChemTracker or Without Access**", you will see a list of containers that were added during the reconciliation but were not edited, or containers that you are not permitted to edit. If any new inventory needs to be added, please add it to the inventory for the lab.



#### ▼ Selected Parameters for Reconciliation #357

| Space:                  | Lake Hall - 111 | Group: | Lab Safety Test Lab |
|-------------------------|-----------------|--------|---------------------|
| Bench:                  |                 | Shelf: |                     |
| Specific Location Note: |                 |        |                     |

The changes logged in this reconciliation have been queued for completion in the system. It may take up to 30 minutes for all of the inventory updates to be completed.

Download reconciliation data

#### Report

| 1 | Measure                                | Value |
|---|--|-------|
|   | Containers Originally Expected         | 3     |
|   | Expected Containers Found              | 3     |
|   | Containers Reactivated                 | 2     |
|   | Containers Moved                       | 2     |
|   | Total Containers Marked as Found       | 7     |
|   | Containers Not Found, Removed          | 0     |
|   | Containers Ignored                     | 0     |
|   | Percent Accuracy of Original Inventory | 42.9  |
| - |  |       |

#### Container IDs Not in SciShield ChemTracker or Without Access

The containers IDs listed below were scanned during the process, but were not edited during the reconciliation steps. These container IDs were not found in ChemTracker, the person performing the reconciliation is not permitted access, or they were not selected for editing or confirmation during earlier steps. The list below is provided for reference. If applicable, please enter the data for these containers using the "Add Chemical" process in the main ChemTracker menu.

ID Exists in ChemTracker

There are currently no containers to list.

Container ID