Lab Safety Evaluation Instructions

Please complete each of these 10 items before the in-person walkthrough:

- For more details on each item, see the longer instructions on the following pages

Items to complete online using OESO’s Lab Safety and Waste Management System:

☐ 1. Update list of lab members (if needed)

☐ 2. Ensure that all lab members have been assigned the appropriate safety trainings, and check that their online training is up-to-date (or ask them to complete it)

☐ 3. Update the room numbers for your lab (if needed)

☐ 4. Submit the lab’s annual Targeted Chemical Report
   ➔ This is required for every lab, every year, even if no targeted chemicals are used or stored.

☐ 5. Submit the lab’s annual Biological Materials Report
   ➔ This is required for every lab, every year, even if no biological materials are used or stored.

Items to send to OESO via e-mail:

☐ 6. Lab Safety Checklist (required; attached to your invitation email, in addition to this document)

☐ 7. Chemical Hygiene Plan (required; updated for the current year)
   ➔ If your particularly hazardous substances are not listed within the Chemical Hygiene Plan, please send a separate document listing them.
   ➔ OESO updated the template for Lab-Specific Chemical Hygiene Plans in March 2023. Please use the new template from this point forward (linked above).

☐ 8. If you have one, a complete chemical inventory, ideally using the GHS Lookup Tool (copy and paste the CAS numbers for each chemical in your lab into the tab named “Multiple CAS Lookup”).
   ➔ Using the GHS tool will identify which SOPs are needed for your lab.

☐ 9. Any required lab-specific Chemical SOPs/Guidelines (as indicated by the GHS tool)

☐ 10. Any required Biosafety SOPs
    ➔ Send the OESO-approved version, if you have one. If not, see details below.
Detailed instructions for items to complete using OESO’s online Lab Safety and Waste Management System (before walkthrough):

1. Login to OESO’s Lab Safety and Waste Management System to update lab members and verify their training.
   a. Go to https://www.safety.duke.edu and click on “Applications” at the top:

   ![Image of Applications](image1)

   b. Next, click on “Lab Safety and Waste Management”

   ![Image of Lab Safety and Waste Management](image2)

   c. Log in using your Duke NetID and password.
   d. Click “Lab Contacts” at the top to update the list of lab personnel (if needed).

   i. Click “Add Contact” or “Add Personnel” > enter their Duke Unique ID
   o FYI: Lab “Contacts” will have access to this system, but Lab “Personnel” will not.
   ii. To remove people, click the red “X” on the row with their name.
2. After the list of lab members is up-to-date, please verify the online training requirements for each person.
   a. All laboratory members who enter wet lab spaces need the following:
      i. Fire/Life Safety
      ii. Laboratory Safety - General
      iii. Hazard Communication for Lab Personnel
   b. Any lab members working with infectious agents or human blood, tissue, or cell lines (even immortal cell lines purchased from a vendor) should also have the following:
      i. Biosafety Level 2 and BBP for Lab Workers
   c. Any lab member who prepares shipping papers and/or packages containing biological materials and/or dry ice should have the following:
      i. Shipment of Biological Materials

Training assignments for the above modules (as well as hearing protection, ladder safety, and lab ergonomics training) can all be assigned using the Lab Activities feature (see detailed instructions). Let us know if any additional training adjustments are needed.

If personnel are overdue for training, ask them to complete the training requirements at www.safety.duke.edu (click on “Online Training”).

3. While logged in to OESO’s Lab Safety and Waste Management System, please verify and/or update any changes in Room Numbers for your lab (if needed).
   a. Click “Manage Rooms” at the top to Edit Rooms and to enter details for each room.

4. While logged in to OESO’s Lab Safety and Waste Management System, complete the lab’s annual Targeted Chemical Report as follows:
   a. Click on “Chemical Reporting” at the bottom left of the screen.
b. Click the red button “Click Here to Report Your Targeted Chemicals”, and follow the prompts to submit the Targeted Chemical Report.

i. Please note that there are several tabs in this report:

Please be sure you go all the way through each tab, until you reach the final “Submit” button at the end.

If you have trouble accessing the Targeted Chemical Reporting Function, let us know. The Report may not open if last year’s report includes a room that is no longer associated with the lab, but we can help fix this.

c. Please note that this Targeted Chemical Report is not the chemical inventory (which you can email to OESO, as described in Step 7 below).

5. While logged in to OESO’s Lab Safety and Waste Management System, complete the lab’s annual Biological Materials Report.
   a. See detailed instructions on how to submit your lab’s annual Biological Materials Report on our Biological Materials Reporting System webpage.
Detailed list of documents to send OESO before walkthrough (please send the following to the OESO staff member who contacted you about the evaluation):

6. A filled-out Lab Safety Checklist for this year (attached to your invitation email, with this document).

7. **Chemical Hygiene Plan** (CHP) -- updated for the current year
   a. OESO updated the template for Lab-Specific Chemical Hygiene Plans in March 2023. Please use the new template from this point forward (linked above).
   b. If your particularly hazardous substances are not listed within the Chemical Hygiene Plan, please send them in separate list.
   c. The CHP should be a word document, although a pdf (or scan) will work.
   d. Please make sure the CHP has been reviewed and updated to be reflective of the current year before you send it.
   e. For the signature pages, you can use digital signatures or a scan of a physical copy/signature.

8. If you have one, a complete chemical inventory, ideally using the GHS Lookup Tool (copy and paste in the CAS numbers for each chemical in your lab, on the tab named “Multiple CAS Lookup”). The CAS number is a unique identifier for each chemical in format xxxxxx-xx-x. (If you will be copy/pasting CAS numbers into the GHS Lookup Tool, it will work best if you omit the dashes. Otherwise, Excel may reformat some CAS numbers as dates!)
   
   f. Using the GHS Lookup Tool will identify which SOPs are required for your lab.
      i. Instructional videos for the GHS Lookup Tool can be found [here](#), if needed.
   
   g. If the lab already has a filled-out copy of the GHS Lookup Tool from previous years, please add any new chemicals obtained within the past year to the “Multiple CAS Lookup” Tab (if needed). Note that the most updated version of the GHS Lookup Tool may have updated information about some of the lab’s chemicals, so you may want to copy/paste the CAS numbers from the previous version of the tool into the latest one.
   
   h. Once your lab’s GHS Lookup Tool is up-to-date, please send us a copy of the filled-out tool.
   
   i. If you do not have a filled-out copy of the GHS Lookup Tool yet, the easiest way to create one is to make a Chemical Inventory in Excel. Please be sure to create a column containing the CAS number for each chemical in the lab.
We have a Sample Chemical Inventory form on our website available, if desired.

i. The CAS numbers can then be pasted into the GHS Lookup Tool. Enter them on the tab named “Multiple CAS Lookup”.

ii. If you have problems with the GHS Lookup Tool, please send us the Excel version of your Chemical Inventory. Please be sure it includes a column containing the CAS number for each chemical in the lab.

j. If you do not have a chemical inventory with CAS numbers in Excel, and will not have a chance to create one before the walkthrough, please send us your chemical inventory by the means you already have (a list or Word doc, etc.).

9. Any required lab-specific Chemical SOPs/Guidelines for Action A and B substances (as indicated by the GHS tool).

k. After you have entered all of your CAS numbers, use the Sort-by-Action button to bring all of the Action A and Action B chemicals (which require SOPs) to the top of the list:

![Image of chemical inventory form]

Action A and Action B chemicals will now be listed at the top of the form:

![Image of chemical inventory form with actions]

Create lab-specific SOPs as needed (specified in the ‘Action’ column, as shown in the image above), using the SOP Creation Guidelines, SOP template, the GHS Lookup Tool, supplier’s SDS, and possibly a chemical- or hazard-specific template from OESO’s website (if available for the chemical in question). Please send us all of the lab-specific chemical SOPs alongside the rest of your documentation.
10. Any required **Biosafety SOPs**.
   
   i. Send the most recent **OESO approved** Biosafety SOPs you have on file (the OESO approved versions will be PDFs with a certified signature stamp).
   
   m. If you do not have a signed / OESO approved version from within the last 3 years, please send us the most recent Biosafety SOP(s) you have as a word document (with any changes tracked), and we will review and work with you on updates / approval.