

Department of Entomology, Michigan State University
Exposure to Health Risks and Safety Training

(updated April 2019 by CDD)

Start Date: _____/_____/_____

Employee Name: _____ Net ID# _____

Position: _____

P.I. _____ Supervisor: _____

It is the responsibility of the Principle Investigator to require appropriate training of new employees and to be sure training is complete before they perform the activities covered in this document. Employees will be compensated for the time to study, attend required training, and take exams. The PI or supervisor should review this form with the employee and check conditions that apply to the job, then work with the employee to schedule trainings or obtain the necessary certifications.

Most trainings are available online through the following the following system:

Ability Training Compliance system <https://ora.msu.edu/train/>



Individuals login to Ability using their NetID. Then click on the “Extra Courses” button and search for trainings via a key word or by clicking on a specific category. To start a specific course, click the LAUNCH button. At the end of the training, employees can print or email a certificate. The system logs which trainings are complete and sends reminders when certificates expire.

The items checked in this document are the activities I foresee the employee / student performing during their employment in my program. I discussed these items, and the plan to complete all needed trainings, with the employee:

Supervisor signature: _____

Principal Investigator’s Signature: _____

The items checked in this document are activities related to my position with the PI/ Supervisor above. I discussed these items, and the plan to complete all needed trainings, with my supervisor.

Employee Signature: _____

Check and discuss items that will apply to the employee's position

RIGHT-TO-KNOW STATEMENT – MANDATORY FOR ALL EMPLOYEES

All Employees must be made aware of the provisions of the 1986 State of Michigan Right-To-Know Law which consists of four primary items. Right-to-Know may also be covered in other trainings in this list.

- A. Employees who handle, work with or can be potentially exposed to hazardous chemicals must be provided with safety education and training.
- B. Employees cannot be discharged or discriminated against for exercising their rights including the request for information on hazardous chemicals.
- C. Employees must be notified and given direction (by employer posting) for locating Safety Data Sheets and the receipt of new or revised SDS(S).
- D. All Containers of hazardous chemicals must be labeled.

TRAVEL FOR A SPECIFIC BUSINESS PURPOSE (Conference, etc)

DOMESTIC TRAVEL

- A specific **travel authorization** must be filled out for the employee before they can travel.

INTERNATIONAL TRAVEL

- A specific **travel authorization** must be filled out for the employee before they can travel overseas.
- The employee must register with the **MSU Global Travel Registry** before departure
<https://oihs.isp.msu.edu/international-travelers/registration/travel-registry/>
- The MSU Travel Clinic provides **health information** by country, and plus vaccines & prescriptions for medications that might be needed. See <https://travelclinic.msu.edu/>

VEHICLES and DRIVING

RIDE IN OR DRIVE A REGULAR UNIVERSITY VEHICLE

- A **blanket in-state travel authorization** must be filled out for the employee before they can ride in or drive any vehicle for the University.
- An **Employee Driver Certification** form, with proof of a valid driver's license, must be filled out before driving.
- Both forms are available from the Entomology Business Office. Completed forms are maintained in the employee's employment folder in the Entomology Business Office.

DRIVE A VEHICLE OR VEHICLE+TRAILER WITH A GROSS VEHICLE WEIGHT (GVW) >10,000 LBS

- Heavy duty field trucks or truck + trailer combinations that weigh >10,000 lbs require the driver to carry a **medical certificate**.
- The physical exam can be done at the Olin Occupational Health Office on campus. See <https://occhealth.msu.edu/resources/reproductive-health> or call 517-353-9137.

DRIVE A VEHICLE OR VEHICLE+TRAILER WITH A GROSS VEHICLE WEIGHT (GVW) >26,000 LBS

- Operating a vehicle >26,000 lbs requires a Michigan Commercial Driver License (CDL). More information is available at <https://occhealth.msu.edu/resources/new-employees>

LAB RELATED FORMS AND TRAINING

WORK IN A LABORATORY OF ANY KIND

- Employees working in a laboratory must get annual **site-specific training** from their supervisor covering aspects unique to the lab's space and activities, for example, proper use of chemicals or equipment, storage, inventory, waste, safety, security, and response to accidents / emergencies.
- EHS provides a site-specific **training checklist** that can be used in training, but supervisors are encouraged to use this as a template to create their own more-specific document as needed: https://ehs.msu.edu/_assets/docs/lab/lab-site-specific-training-checklist.pdf
- **Keep site-specific training records** someplace handy (in a binder or post to a folder online) to show EHS inspectors.
- A **Lab Security Awareness course** is available on the Ability Training system. This is not required, but may be useful for new employees.

USE A SPECIFIC HAZARDOUS CHEMICAL, CHEMICAL REACTION, OR PIECE OF EQUIPMENT

- For procedures and equipment that are particularly hazardous, a **Standard Operating Procedures (SOP)** pertinent to the activity must be discussed with the employee.
- An SOP is written analysis detailing the steps to work safely with a hazardous chemical or to do a task. EHS provides ready-to-use SOPs for some hazardous processes, as well as a template for supervisors to create their own SOPs. EHS reviews and approves lab-created documents. See this web site for details and the templates: <https://ehs.msu.edu/lab-clinic/chem/sop.html>
- Similar to site-specific training records, **keep SOP training records** handy ((in a binder or post to a folder online) to show EHS inspectors.

WORK AROUND CHEMICALS (in general) AND/OR GENERATE HAZARDOUS WASTE

- Hazardous chemicals include just about everything, including ethanol.
- New employees: Take the "Chemical Hygiene, Lab Safety, & Hazardous Waste Initial" course in the Ability Training system
- Returning or continuing employees: Take the "Hazardous Waste Refresher", annually, in the Ability Training system. An email reminder is sent when the training is due.

WORK AROUND RADIOACTIVE MATERIALS

- *New employees:* Radiation training is done live at the EHS main office at 4000 Collins Rd. Register for the "Radiation Safety Initial" course on the Ability Trainings site.
- *Returning or continuing employees:* Take the "Radiation Safety Refresher", annually, in the Ability Training system. An email reminder is sent when the training is due.

WORK AROUND BIOLOGICAL MATERIALS (BIOSAFETY 1 OR HIGHER)

- New employees: Take the "Biosafety Principles" course in the Ability Training system
- Returning or continuing employees: Take the "Biosafety Waste Refresher", annually, in the Ability Training system. An email reminder is sent when the training is due.

WORK AROUND BLOODBORNE PATHOGENS OR HUMAN CELL LINES

- *New employees:* Take the "Bloodborne Pathogen Initial" course in the Ability Training system
- *Returning or continuing employees:* Take the "Bloodborne Pathogen Refresher", annually, in the Ability Training system. An email reminder is sent when the training is due.

LAB RELATED FORMS AND TRAINING, continued

_____ USE AN AUTOCLAVE

- Complete the “Autoclave Safety” course in the Ability Training system

_____ USE OR WORK AROUND COMPRESSED GAS (SUCH AS A CO₂ TANK)

- Complete the “Compressed Gas Cylinder Safety ” course in the Ability Training system

_____ WORK WITH LIVE ANIMALS OR ‘UNFIXED’ ANIMAL TISSUE (I.E. DEAD ANIMALS OR PARTS)

- For raising, handling, or working with live animals, take the “IACUC Tutorial” in the Animal Care section of the Ability Training system. There are also species specific trainings that must be done after the IACUC course. Note - Research animals include mammals, fish, birds, reptiles, & amphibians - not insects!
- Additional requirements to work with live or dead animals depend on the type of animal and the type of contact. To determine how to comply, go to the ‘Animal Contact’ page on the Olin Occupational Health Office website to fill out and submit a questionnaire.
<https://occhealth.msu.edu/resources/animal-contact>

FIELD-RELATED FORMS AND TRAINING

WORK IN THE FIELD (MSU facility or farm, ag fields, garden, woods, natural area, etc)

- Employees working in the field (i.e. outside of a lab) must get annual **site-specific training** from their supervisor covering aspects unique their research locations and activities, for example, safety while working in remote locations, weather precautions, and response to accidents / emergencies.
- Because fieldwork is so varied at MSU, there is no EHS template for field based site-specific training. Supervisors are encouraged to develop an in-house checklist based on their research program, sampling locations, and activities.
- **Keep site-specific training records** someplace handy (in a binder or post to a folder online) to show EHS inspectors.

USE A SPECIFIC HAZARDOUS CHEMICAL, TASK, OR PIECE OF EQUIPMENT IN THE FIELD

- For procedures and equipment that are particularly hazardous, a **Standard Operating Procedures (SOP)** pertinent to the task must be discussed with the employee.
- An SOP is written analysis detailing the steps to work safely with a hazardous chemical or to do a task. EHS provides ready-to-use SOPs for some hazardous processes, as well as a template for supervisors to create their own SOPs. EHS reviews and approves lab-created documents. See this web site for details and the templates: <https://ehs.msu.edu/lab-clinic/chem/sop.html>
- Similar to site-specific training records, **keep SOP training records** handy (in a binder or post to a folder online) to show EHS inspectors.

WORK, STORE ITEMS, OR PARK AT THE ENTOMOLOGY RESEARCH FARM ON COLLINS RD.

- There is NO farm manager at the Entomology Farm. Individual labs are responsible for overseeing their own activities and storage areas, and to assist in the upkeep of the building and grounds.
- A **mandatory facility walk-thru** is held in the spring using a farm checklist. Employees missing the walk-thru may be trained individually by a member of the farm committee (their time permitting)
- Note: Any employee requesting a **key to the farm building** must have current training on-file.

OPERATE A GATOR, A GOLF CART, OR OTHER SMALL UTILITY VEHICLE

- Complete the “Non-regulated Vehicles” course in the Ability Training system

OPERATE A LAWNMOWER

- Complete the “Tractor Safety Tutorial” in the Ability Training system

OPERATE AN AGRICULTURAL TRACTOR

- Complete the “Tractor Safety Tutorial” in the Ability Training system
- Pass a driving and implement test given by an MSU Farm Manager. If the employee does not know how to operate a tractor, they will have to ‘apprentice’ with someone who does. There is no Entomology Dept farm manager, so arrangements for training or testing need to be made with another facility.

USE POWERED HAND TOOLS (SUCH AS A DRILL OR NAIL GUN) OR A TABLE SAW:

- Complete the “Hand & Portable Power Tools” course in the Ability Training system

FIELD-RELATED FORMS AND TRAINING, continued

HANDLE or APPLY PESTICIDES

- Anyone applying agricultural pesticide as part of their employment must be **certified as a Commercial Applicator** through the Michigan Department of Agriculture & Rural Development (MDARD). Employees who carry private certification to apply pesticide on their own farm must still be certified as a commercial applicator to work with pesticides in their MSU position.
- Commercial certification involves taking a core plus one or more category exams, given by appointment by MDARD. Cost: \$75. (Supervisors may be willing to reimburse this fee).
- Visit the website below for details and forms. For questions, contact MDARD at 517-282-5771. https://www.michigan.gov/mdard/0,4610,7-125-1569_16988_35289---,00.html
- Note that there is an advantage to long term employees being certified, even if they do not spray pesticides, from the Worker Protection Standard perspective. See the WPS requirement.

WEAR A RESPIRATOR TO APPLY PESTICIDES OR WORK IN CERTAIN ENVIRONMENTS

- To be cleared to wear a respirator, visit the 'Respirators' page on the Occupational Health Office website to submit a questionnaire: <https://occhealth.msu.edu/resources/respirator-clearance>
- After being cleared, the employee must schedule a respirator fit test with Environmental Health & Safety Office at 517-355-3879.
- **Fit testing** must be repeated annually; an email reminder gets sent when the testing is due.

WORKER PROTECTION

Employees working in / around crops that may have been treated with pesticide are classified as "Workers" by EPA, and must have **annual Worker Protection Standard (WPS) training**. As of Spring 2019, MSU is implementing a new system for worker protection training so the info below may change over time. Note that **the easiest way to comply with WPS is simply to become a certified applicator**. This option is recommended for longer term employees (techs & grad students)

ENTER OR WORK IN THE MSU PLANT SCIENCE GREENHOUSE COMPLEX

- Contact Plant Science Greenhouse staff directly (main office - the building facing Farm Lane) to schedule WPS training in the complex. Employees watch several **WPS training videos** and then receive a **site-specific walk-thru** of the greenhouse complex. Employee names will be entered into an EHS database so that annual training reminders can be generated.
- Note that Michigan certified applicators do not need to undergo WPS training, but must show their applicator card to greenhouse staff to obtain door access.

WORK IN OR AROUND MSU RESEARCH FARMS (ON OR OFF CAMPUS) OR ENTER COMMERCIAL FIELDS THAT MAY HAVE BEEN TREATED WITH PESTICIDES

- Live training sessions will be offered in the spring 2019 by MSU.
- Training can be also be done in-house by a certified applicator who is an authorized trainer.
- Note that the WPS training from the Plant Science Greenhouse also fulfills the WPS training requirement for the field. However, **site-specific training must still be done at individual MSU farms**. MSU Farm Managers will record the site specific training in an EHS database.
- Note that Michigan certified applicators do not need to undergo WPS training, but are still required to have site-specific training at individual MSU farms.