



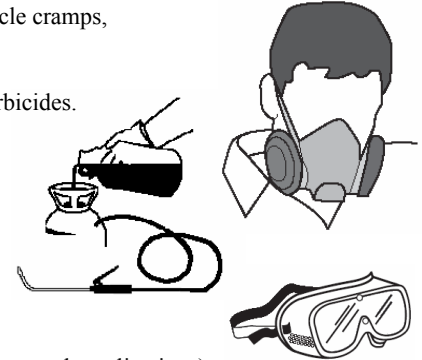
Company Name: \_\_\_\_\_ Job Site Location: \_\_\_\_\_

Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ Finish Time: \_\_\_\_\_ Foreman/Supervisor: \_\_\_\_\_

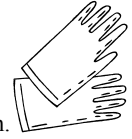
## **Topic 351: Safe Handling and Use of Herbicides**

**Introduction:** Herbicides, also known as chemical weed killers, have widely replaced mechanical methods of weed control in operations where intensive and mechanized agriculture is practiced. Selective herbicides are also practical alternatives to more labor intensive methods of weed control in residential and commercial landscaping operations. Herbicides provide a more effective and economical means of weed control than hoeing and hand pulling. Most herbicides are not as dangerous as insecticides, however, the handling and application of herbicides presents potential hazards to the user which must be addressed. Following are safety guidelines for the handling and use of herbicides:

- **Herbicides can cause:** Burning/irritation in eyes, nose, and throat, as well as nosebleeds, coughing, muscle cramps, muscle weakness, blisters, and stomach cramps.
- **Chemicals can enter your body by the following methods:**
  - \* **Ingestion** – Swallowing the herbicide directly or contamination of food, drink, cigarettes, etc. by herbicides.
  - \* **Absorption** – Through contact with the skin or eyes.
  - \* **Inhalation** – By breathing the fumes or overspray of the chemical.



- **Signs of serious exposure:**
  - \* Pupils becoming very small
  - \* Drooling and/or a runny nose
  - \* Breathing difficulty
- **Personal protective equipment (PPE) for mixing, handling, and using herbicides:**
  - \* Eye/face protection to prevent splash or spray hazards
  - \* Respiratory protection for spray applications (review MSDS for appropriate respiratory protection)
  - \* Long sleeve shirt and pants to prevent skin contact
  - \* Medium to heavy duty chemical resistant gloves (surgical type latex gloves are prone to tearing during work applications).
  - \* Rubber or chemical resistant boots to prevent absorption of chemicals
- **Safe practices for handling hazardous chemicals:** Overexposure to some chemicals may take a long time for adverse effects to become apparent. Limiting exposure by following safe work practices will prevent such adverse effects.
  - \* Wear protective clothing.
  - \* Wash gloves and boots before removing.
  - \* Wash your work clothes separately from other laundry. Use detergent and hot water before wearing them again.
  - \* Wash your hands and arms after putting work clothes into the wash.
  - \* Wash with soap, water, and shampoo after each work day.
  - \* Always wash face and hands with soap and water before eating, drinking, smoking, or using the toilet.
  - \* Wash picked food before you eat it.
- **Residue:** Residue is the trace amount of chemical that remains after the fields have been treated. Hazardous residue can be on plants, in soil, and in water systems near application sites. Residue can also be carried by the wind. Cover as much of your skin as possible when in treated areas to prevent skin irritation and/or overexposure. Wear proper personal protective equipment while near these areas.



**First Aid**

- **If an accident** happens when using any hazardous chemical, contact emergency medical assistance immediately and locate label and MSDS (Material Safety Data Sheet). If medical assistance is not available, and you are properly trained in first aid procedure, administer first aid by following the directions on the label and/or MSDS. Remember to take the chemical label or MSDS to the doctor, health clinic, or emergency room.
- **Immediately wash** with clean water if pesticides are spilled or sprayed onto your body. Then shower, shampoo, and change into clean clothing as soon as possible. Seek immediate medical attention if any signs of overexposure are present.
- **Swallowing a hazardous chemical** can cause poisoning and even death. If you swallow a hazardous chemical, get immediate medical treatment.
- **Eye damage** can happen quickly from some types of hazardous chemicals (eyes absorb hazardous chemicals faster than any other part of the body). If your eyes are exposed to any chemicals, rinse your eyes immediately for 15 minutes with clean water and seek medical attention.



**Conclusion:** Always follow manufacturer’s directions when mixing, handling, or using herbicides. Read and understand the MSDS for any chemical used.

### **Work Site Review**

Work-Site Hazards and Safety Suggestions: \_\_\_\_\_

Personnel Safety Violations: \_\_\_\_\_

Material Safety Data Sheets Reviewed: \_\_\_\_\_ (Name of Chemical)

**Employee Signatures:** \_\_\_\_\_  
 (My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

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**Foreman/Supervisor’s Signature:** \_\_\_\_\_  
 These guidelines do not supersede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.