Landscaping – Handling Pesticides, Herbicides and Other Chemicals Meeting Kit

WHAT’S AT STAKE

Landscaping often involves the use of various chemicals, including pesticides, herbicides, fertilizers, and cleaning agents. While these products can be effective tools for maintaining healthy landscapes, they also pose significant risks if not handled correctly. Improper handling can lead to health problems for workers, damage to the environment, and even legal consequences.

WHAT’S THE DANGER

The chemicals used in landscaping present a range of potential hazards, both immediate and long-term. One significant concern is the risk of acute poisoning, which can result from a single, high-level exposure. This type of exposure can cause immediate and often severe symptoms, such as nausea, vomiting, dizziness, headaches, and skin irritation. These reactions can be debilitating, requiring immediate medical intervention and potentially leading to lost work time.

Beyond the immediate effects of acute poisoning, there are also significant long-term health risks associated with repeated or prolonged exposure to certain landscaping chemicals. These chronic health effects can develop gradually over time, making them easy to overlook in the early stages. Potential long-term consequences include respiratory problems, such as asthma or bronchitis, neurological damage that can affect memory, coordination, and other cognitive functions, and even an increased risk of developing various forms of cancer.

In addition to the direct health effects on individuals, the

improper handling, storage, and disposal of landscaping chemicals can also have a detrimental impact on the environment. These chemicals can contaminate soil and water sources, harming local ecosystems and potentially impacting human health through contaminated water supplies or food chains. Remember that some of these chemicals are flammable or even explosive, posing a serious fire and explosion hazard if they are not stored and handled according to strict safety regulations. This risk is particularly heightened in hot weather or when working near open flames or other ignition sources.

HOW TO PROTECT YOURSELF

Safe chemical handling is essential. It requires careful planning, proper procedures, and consistent use of protective measures.

Before Using Chemicals:

- **Read the Label:** This is the most important step. Carefully read and understand the product label before using any chemical. The label contains crucial information about safe handling, application, storage, disposal, and first aid measures in case of exposure. Never use a chemical if you are unsure about any aspect of its safe handling.
- **Understand the SDS (Safety Data Sheet):** The SDS provides detailed information about the chemical's properties, hazards, first aid measures, and spill response procedures. Make sure you know where to find the SDS for each product you use.
- **Plan Your Application:** Consider weather conditions (avoid windy days to prevent drift), proximity to people and pets, and the surrounding environment (avoid application near water sources). Avoid applying chemicals when rain is expected, as runoff can contaminate the environment. If weather conditions change unexpectedly during application (e.g., wind picks up), stop immediately and reassess the situation.
- **Wear Appropriate Personal Protective Equipment (PPE):** Always wear the recommended PPE as specified on the label and SDS.

This may include gloves (chemical-resistant), eye protection (safety glasses or goggles), respirators (if necessary), and protective clothing (long sleeves, pants, and closed-toe shoes). If your PPE becomes damaged or contaminated during use, stop working immediately and replace it with clean PPE.

During Chemical Application:

- **Mix Chemicals Correctly:** Follow the label instructions precisely when mixing chemicals. Never mix different chemicals together unless specifically instructed to do so by the label. Incompatible chemicals can react dangerously, creating toxic fumes, explosions, or fires. If you accidentally mix incompatible chemicals, immediately evacuate the area and notify your supervisor. Do not attempt to clean up the mixture yourself.
- **Apply Chemicals Carefully:** Apply chemicals only in the recommended amounts and using the appropriate application methods (spraying, spreading, etc.). Avoid overspray and drift, which can expose unintended targets to the chemical.
- **Be Aware of Surroundings:** Be mindful of people, pets, and wildlife in the area during application. Post warning signs if necessary to alert others to the application.

After Using Chemicals:

- **Store Chemicals Properly:** Store chemicals in their original containers in a secure, dry, and well-ventilated area away from heat, open flames, and incompatible substances. Keep containers tightly sealed and labeled. If a container is damaged or leaking, transfer the contents to a new, properly labeled container and clean up any spills immediately.
- **Dispose of Chemicals and Containers Properly:** Follow local, state, and federal regulations for the disposal of unused chemicals and empty containers. Never pour chemicals down the drain or into the environment.
- **Clean Up Spills Immediately:** In case of a spill, contain the spill using appropriate absorbent materials (e.g., spill pads, kitty litter) and follow the spill cleanup procedures outlined in the SDS. Report significant spills to the

appropriate authorities.

- **Wash Hands Thoroughly:** After handling any chemicals, even if you wore gloves, wash your hands thoroughly with soap and water. This removes any residual chemicals that may have come into contact with your skin.

FINAL WORD

Safe chemical handling isn’t just about avoiding immediate injuries; it’s about protecting your long-term health and the health of the environment.