Landscaping

The following information provides Best Management Practices (BMPs) that are recommended for companies that grow and sell plants and conduct other landscaping activities.

POTENTIAL POLLUTANT SOURCES

The following activities are potential sources of pollutants:

- Irrigation
- Garden waste disposal
- Chemical usage

Pollutants may include:

- Nutrients (fertilizers, plant wastes)
- Pesticides
- Heavy metals (copper, lead, and zinc)
- Sediments

POLLUTION PREVENTION

Using pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most facilities:

- Use alternative, safer, non-toxic, and/or recycled products;
- Reduce storm water flow across the site and redirect flows away from storm drains, gutters, and streets;
- Reduce the use of water and/or use dry methods;
- Recycle and reuse waste products and waste flows

GENERAL GOOD HOUSEKEEPING PROCEDURES

- Maintain your facility grounds. Move or cover activities and materials to prevent contact with storm water.
- Promote native plants when possible to help conserve water filter impurities, reduce the need for toxic pesticides, fertilizers, and herbicides.
- Label on-site storm drains.

IRRIGATION

- Use intermittent (pulse) or drip irrigation to conserve water and prevent discharges.
- Regularly inspect irrigation systems for leaks to prevent excessive runoff from occurring.
- Convert paved or bare soil areas to vegetation that will slow runoff (turf grasses or other comparable plant materials), if feasible.
- Group plants with similar water needs together to improve irrigation efficiency.
- During warm summer months (May to October), irrigate only before 11 a.m. and after 6 p.m. to reduce evaporation.

GARDEN WASTE DISPOSAL

- It is illegal to place green waste in the street.
- Do not dispose of garden wastes in streets, gutters, waterways, or storm drains.

CHEMICAL USAGE

Storage and Disposal

- Implement storage requirements for pesticide, herbicide, and fertilizer products with guidance from the local fire department and/or County Agricultural Commissioner.
- Provide secondary containment for chemical storage.
- Dispose of empty containers according to the instructions on the container label.

Pesticide Usage

- Read the label and follow manufacturers' recommendations and directions.
- Use the minimum amount of chemicals needed for the job. Consider using less toxic alternatives when possible.
- Promote Integrated Pest Management Program (IPM) using an array of non-chemical, structural, biological controls to reduce and eliminate pests.
- Use pesticides only if there is an actual pest problem (not on a regular preventative schedule). Avoid the use of copper-based pesticides.
- Do not apply pesticides if rain is expected or if wind speeds are above 5 mph.
- Do not mix or prepare pesticides within 100 feet of any well, stream, or pond.
- Do not dispose of unused pesticides by washing them down the interior or outside sewer or storm drains. Dispose of unused pesticides as hazardous waste.
- Employ techniques to minimize off-target applications (i.e., spray drift) of pesticides, including consideration of alternative application techniques.
- Careful soil mixing and layering techniques using a topsoil mix or composted organic material can be used as an effective measure to reduce herbicide use and watering.

Fertilizer Usage

- Periodically test soils to determine proper fertilizer use.
- If feasible, spread out applications of controlled-release fertilizers and use split applications of soluble fertilizers over the growing season.
- Work fertilizers into the soil rather than dumping or broadcasting them.

- Transition from the use of soluble fertilizers to controlled-release fertilizers. Use slow release fertilizers whenever possible to minimize leaching. Reduce or eliminate routine leaching of crops.

SPILL CONTROL

- Develop and maintain a spill response plan.
- Place an adequate stockpile of spill cleanup materials where it will be readily available.
- Spot clean leaks and drips routinely.
- Clean leaks, drips, and other spills with as little water as possible. Use rags for small spills, a damp mop for general cleanup, and dry absorbent material for larger spills.
- Sweep pavement and sidewalk if chemicals are spilled on these surfaces before applying irrigation water. Do not wash into either sanitary sewer or storm drains
- Keep spills from entering the street, gutter, or storm drain.
- Do not use bleach or disinfectants if there is a possibility that rinse water could flow into a street, gutter, or storm drain.

EMPLOYEE TRAINING

- Train employees on these practices.
- Train staff on the proper maintenance of your facility.
- Train employees on your facility's spill control plan, proper spill containment and cleanup procedures.
- Establish a regular training schedule, train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

Sources:
The Texas Commission on Environmental Quality (www.tceq.state.tx.us)
The United States Environmental Protection Agency (www.epa.gov)