Parks and Open Space Maintenance

Employee Training Series Green Country Stormwater Alliance August 26, 2015

6. Pollution Prevention/Good Housekeeping For MS4 Operations

A. Permit Requirements

- "You must develop new elements, as necessary, and continue to implement and enforce the operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from MS4 operations."
- (1) "Your program must include employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance;"

(2015 Draft Permit)

Parks and Grounds Maintenance

- This presentation provides suggestions and ideas for controlling pollutants in stormwater runoff for the following activities:
 - Plant Selection
 - Watering
 - Debris Management
 - Soil Management
 - Pesticide and Herbicide Applications

Plant Selection

Native or adapted perennial vegetation will be better suited to local climates and require less water, fertilizer and fewer pesticides.



Plant Selection

Consult the following sources to determine which plants will do well in your situation:

- Master Gardner
- Local Nursery
- OSU Extension Service
- County Conservation Districts





Watering

- Avoid over-watering to prevent excess runoff.
- Avoid runoff by adjusting watering time, direction and volume of spray heads.
- Check soil moisture and water only when the top 4" to 5" of soil is dry.





Watering

- Monitor rainfall and turn off sprinklers during rainy weather.
- Install rain and freeze sensors on automated sprinkler systems whenever possible.





Debris Management

- Use a mulching mower, leave clippings on the lawn and cut grass as high as possible.
- Compost leaves for use as a soil amendment or shred and add to flower beds as mulch.





Debris Management

• Sweep paved surfaces or blow clippings and trimmings onto grass. Do *not* hose them down the storm drain.



Debris Management

- Never dispose of grass clippings, leaves or other debris in the storm drain.
- Remove accumulated litter and debris from storm drain inlets.





Soil Management

- Aerate and add compost to the soil to reduce fertilizer needs, improve drainage and promote root growth.
- Have soil tested well before the application season to determine fertilizer needs.



Soil Management

Limit soil erosion by planting vegetation on bare areas and using mulch or matting for landscaped areas.

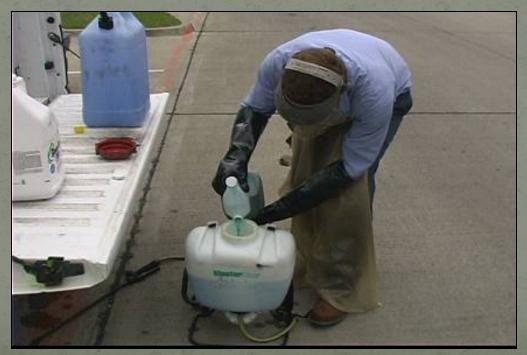




- Follow manufacturer's recommended safety, storage and disposal procedures for pesticides and herbicides.
- Follow label directions precisely when mixing or applying pesticides or herbicides.



- Mix pesticides and herbicides where spills will not soak into the ground or enter the sanitary sewer or storm drainage system.
- Promptly clean up any spills.



- Use landscaping pesticides and herbicides only as needed.
- Use non-toxic substitutes for chemicals when possible.
- Carefully time your applications to achieve maximum results.



- Carefully select the most appropriate product for the problem requiring treatment.
- Apply pesticides and herbicides to the problem area only. Spot applications will save time, money and

introduce fewer toxins to the environment.



 Do not spray impervious surfaces where the spray could be washed into the storm drain system.

• Don't apply chemicals directly to sensitive areas including streams, lakes, wetlands or drainage areas.





- Don't apply during windy conditions or when rain is predicted within 24 hours.
- Report suspected pollution problems regarding pesticide or herbicide applications to your supervisor.





Parks and Open Space Maintenance

Protecting water quality requires that all employees do their part to prevent storm water pollution.







