

Landscape and Open-Space Maintenance



Issue Date: August 2018

HERBICIDES / PESTICIDES / FERTILIZER APPLICATIONS

SCM-PP/GH-21



Description

The application of herbicides, pesticides, and fertilizers can introduce nutrients, such as nitrogen and phosphorous, and other pollutants to stormwater runoff. Use of control measures can help minimize the potential for introduction of these pollutants into the stormwater system and local waterways.

NYC MS4 SPDES Permit Requirement(s)	IV.A. Public Outreach/Education IV.E. Construction Site Controls IV.G. Pollution Prevention/Good Housekeeping for Municipal Operations IV.H. Industrial/Commercial Sources
KEY SELECTION CRITERIA	
Targeted Activities	<ul style="list-style-type: none"> • Herbicide, pesticide, and fertilizer application
Performance Goals	<ul style="list-style-type: none"> • Reduce application of herbicides/pesticides/fertilizers • Minimize nutrients from entering storm sewers or waterways • Implement good housekeeping practices
Most Effective Controls <small>(more detail on page 2)</small>	<ul style="list-style-type: none"> • Education of public employees • Integrated pest management • Application timing and management control
RELATED CONTROL MEASURES AND REGULATIONS	
Related SCMs	<ul style="list-style-type: none"> • SCM-PP/GH-4 • SCM-PP/GH-9 • SCM-PP/GH-22 thru 26
Other Regulatory Requirements*	<ul style="list-style-type: none"> • 6 NYCRR Parts 320.1, 325, 327.1 and 327.4 • 40 CFR Parts 150-189 • 40 CFR 455 • NYC Local Law 37 • NYS Environmental Conservation Law, Article 17, Title 21

EFFECTIVENESS FOR TARGETED POLLUTANTS / IMPAIRMENTS

	Floatables
	Sediments
✓✓	Nitrogen
✓✓	Phosphorus
	Pathogens
✓	Oxygen Demand
	PCBs
	Metals
	Petroleum Products/PAHs

✓✓ = Good ✓ = Fair = Poor

CONTROL STRATEGIES

✓	Cover/Contain
✓	Clean Up
✓	Reduce/Minimize
✓	Product Substitutions
	Manage Runoff
✓	Capture/Treat/Dispose

✓ = Yes

*Note: RCNY: Rules of the City of New York; NYCRR: New York Codes, Rules and Regulations; CFR: Code of Federal Regulations

Control Strategies/Suggested Practices

COVER/CONTAIN

- Store herbicides, pesticides, and fertilizers indoors or in covered storage areas.
- Store in tightly sealed containers.
- Cover ground where mixing or preparation occurs to contain spills.

CLEAN UP

- Clean up spills immediately and dispose according to manufacturer's recommendations.
- Frequently clean storage area using dry sweeping methods and dispose according to manufacturer's recommendations.
- Refrain from using water, when feasible, to clean herbicide, pesticide and fertilizer storage areas.
- Sweep and collect dry materials.

REDUCE/MINIMIZE

- Inspect chemical storage containers frequently for leaks and spills.
- Do not mix or prepare near storm drains or in areas that sheet flow directly into water bodies.
- Work fertilizers into soil when possible.
- Prepare the minimum amount needed for the job based on manufacturer's instructions and use the lowest rate that will provide effective control. Apply all prepared mixtures to avoid waste generation.
- Plan selection, rate, and timing of application of fertilizers, pesticides, and herbicides to minimize runoff contamination.
- Apply integrated pest management practices such as mulching to prevent weeds, using insect traps, disinfecting pruning equipment after removing diseased vegetation, and encouraging beneficial organisms.
- Select and use herbicides and pesticides to target only immediate pests of concern, not on a regular preventative schedule.
- Use proper fertilizer for specific nutrient applications at correct plant-life cycle.
- Do not apply herbicides, pesticides and fertilizer immediately before or during wet weather.

PRODUCT SUBSTITUTION

- Use organic herbicides or hand weeding where feasible.
- Use mulch to prevent weeds.

MANAGE RUNOFF

N/A

CAPTURE/TREAT/DISPOSE

- Any waste generated from unused product should be collected and disposed of properly.

References

- 1) NYSDEC, *Urban/Stormwater Runoff Management Practices Catalogue for Nonpoint Source Pollution Prevention in New York State, February 2002*
- 2) NYSDEC, *Construction Management Practices Catalogue for Nonpoint Source Pollution Prevention in New York State, June 2000*
- 3) NYSDEC, *SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, September 2012*
- 4) FDNY, *Contract for Landscaping Services, January 2011*