

8.0 PESTICIDE, HERBICIDE AND FERTILIZER APPLICATION AND MANAGEMENT

8.1 OVERVIEW

This section pertains to the use of pesticides, herbicides, and fertilizer application and management. This would be chemicals that are stored or used at an MS4 facility by employees of the facility or under their supervision. This section explains how to determine if the chemical is restricted, training that should be completed, application, storing, and necessary documentation.



Provided by the Hancock County Surveyor.

8.2 SITE ASSESSMENT

8.2.1 Use of Restricted Chemicals

Regulation: 327 IAC 15-13-17 (b) (2) (G)	Minimization of pesticide and fertilizer use. Pesticides shall be used, applied, handled, stored, mixed, loaded, transported, and disposed of via the Office of the Indiana State Chemist's (OISC) guidance requirements.
Implementation BMPs	<ul style="list-style-type: none"> • Restricted chemicals cannot be applied without a license. • Create and maintain written documentation /procedures. This could be SOPs, SWPPPs, P2&GHMs, or other applicable format. • Identify restricted pesticides, herbicides, fertilizer, etc. used at municipal facilities. • Refer to Section 9.2.2 for disposal measures. • Identify personnel appropriately licensed with the OISC to apply chemicals. Only licensed personnel may apply restricted chemicals. Departments that apply chemicals may include: highway or street, parks, water & sanitary, health, Sherriff or police, and surveyor. • Identify locations where restricted chemicals are applied. Areas could include: road right-of-ways, culverts, bridges, parks, golf courses, open ditches, manholes, shooting range, fairgrounds, cemeteries, lawns around buildings, and sidewalks. • Identify contractors used to apply restricted chemicals (if applicable). • Implement appropriate secondary containment for restricted pesticides as identified in 355 IAC 5-2 if the stored amount exceeds 55 gallons. Otherwise, follow recommended storage practices as described on the container label (i.e. containment, heating/cooling conditions) • Implement stormwater general training for chemical application contractors (refer to Section 2.0 for more information on training requirements). Content should include: stormwater basics, litter collection, proper storage of chemicals, spill notification, and waste disposal. • Licensed employees are to follow the OISC requirements for continuing education for chemical application.
Programmatic Indicator	Estimated or actual acreage or square footage, amount, and location where restricted pesticides and fertilizers are applied by a regulated MS4 entity to places where stormwater can be exposed with in the MS4 area.

Possible Measurable Goals	<ul style="list-style-type: none"> Track the amount of restricted chemicals applied, chemical name and the locations. Track the number of sites treated. Document the locations where restricted chemicals are stored.
Documentation	<ul style="list-style-type: none"> Document chemical application according to OISC requirements and the regulations (355 IAC 4-4-1 or 1.5) that includes, but is not limited to, dates, applicator name and license number, location, chemical name and amount. Document fertilizer application according to OISC requirements and the regulations (355 IAC 8-5-2) that includes, but is not limited to, dates, applicator name and license number, location, chemical name and amount. Maintain a copy of each employee's valid OISC license.
Advanced BMPs (optional)	<ul style="list-style-type: none"> Store pesticides in drums or smaller containers and store indoors to prevent contact with stormwater. Store restricted chemicals in a secured/locked area. Provide training for golf course ground crews. Educate employees on proper application. Restrict application of herbicides in drainage ditches to promote natural vegetation that filters stormwater.
Additional Resources:	<ul style="list-style-type: none"> Office of Indiana State Chemist – information on training and licenses USEPA - Restricted Use Products Report (identifies restricted chemicals) Pesticide Use and Application (355 IAC 4) Fertilizer Material Use (355 IAC 8) Storage and Secondary Containment of Pesticides (355 IAC 5) Natural Resources Conservation Service - Pest Management IDEM - Integrated Pest Management

8.2.2 Use of Non-Restricted Chemicals

Regulation:	Chemicals purchased at a retail, hardware, or home improvement store are non-restricted use pesticides, herbicides and fertilizers. Non-restricted chemicals can be applied without a license.
Implementation BMPs	<ul style="list-style-type: none"> Implement employee training for non-restricted chemical application and handling (refer to Section 2.0 for more information on training requirements). Training should include: reading, understanding, and following the chemical label, not applying before a storm or in high winds, waste disposal, and spill/chemical handling. Refer to Section 9.2.2 for disposal measures. Identify non-restricted pesticides, herbicides, fertilizer, etc. used at municipal facilities. Identify personnel/departments that apply non-restricted chemicals. Identify general locations where non-restricted chemicals are applied. Areas could include: road right-of-ways, culverts, bridges, parks, golf courses, open ditches, manholes, shooting range, fairgrounds, cemeteries, lawns around buildings, and sidewalks.
Programmatic Indicator	None.
Possible Measurable Goals	<ul style="list-style-type: none"> Track the amount of non-restricted chemicals applied, chemical name and the locations. Track the number of sites treated. Document the locations where non-restricted chemicals are stored.

Documentation	<ul style="list-style-type: none"> • Track the amount of non-restricted chemicals purchased through log sheets or receipts/invoices. • Record and track amounts applied and location of application.
Advanced BMPs (optional)	<ul style="list-style-type: none"> • Educate the community on how to apply and when to apply, including: not to applying in certain weather conditions, only using the amount needed for an area, disposal of unused chemicals, safety concerns, etc. • Educate the community on the effects of over using pesticides and fertilizer. • Promote non-chemical pest control options to the community. • Prevent or restrict chemical application around waterways. • Train employees specifically on pesticide, herbicide, or fertilizer application.
Additional Resources:	<ul style="list-style-type: none"> • USEPA Pesticides - http://www.epa.gov/pesticides/health/safely.htm • USEPA Using Pesticides Safely - http://www.epa.gov/pesticides/health/safely.htm • USEPA Citizen's Guide to Pesticide Control and Safety - http://www.epa.gov/oppfead1/Publications/Cit_Guide/