

2.3 Illicit Discharge Detection & Elimination (IDDE)

An Illicit Discharge, as defined by the WPDES Permit, is any discharge to a municipal separate storm sewer system that is not composed entirely of storm water except discharges authorized by a WPDES permit or other discharge not requiring a WPDES permit such as landscape irrigation, individual residential car washing, fire fighting, diverted stream flows, uncontaminated groundwater infiltration, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, lawn watering, flows from riparian habitats and wetlands, and similar discharges. However, the occurrence of a discharge listed above may be considered an illicit discharge on a case-by-case basis if the permittee or the Department identifies it as a significant source of a pollutant to waters of the state.

Chippewa County Highway and Chippewa County Land Conservation and Forest Management (LCFM) Department oversees the Illicit Discharge Detection and Elimination (IDDE) Program for County owned Highway segments located within the urbanized area. The Illicit Discharge section of Chippewa County Code of Ordinance Chapter 12 is attached. IDDE procedures and Forms are also attached.

Measurable Goals:

1. Develop an Illicit Discharge Detection and Elimination section to be implemented in the ordinance.
2. Adopt the Illicit Discharge Detection and Elimination section into the ordinance.
3. Conduct on going dry weather field screening for all total major outfalls at least once per permit term.
4. Establish written procedures for responding to known or suspected illicit discharges.

Attachment 2.3 (A)- Chippewa County IDDE Ordinance

Sec. 12-67 Illicit Discharges

(a) Prohibitions:

(1) Discharges.

a. Except for storm water and other discharges specifically exempted under 12-67 (c)., no discharge, spilling or dumping of substances or materials shall be allowed into receiving water bodies or onto driveways, sidewalks, parking lots, or other areas that drain into the storm drainage system.

b. No discharges shall be in violation of Chapter 62, or any other local, state or federal law.

(2) Connections. The construction, use, maintenance or continued existence of illicit connections to the storm drainage system is prohibited. This prohibition expressly includes, without limitation, illicit connections made prior to the adoption of this ordinance, regardless of whether the connection was permissible under law or whether the practice was applicable or prevailing at the time of connection.

(a) Exemptions. The following activities are exempt from the provisions of this section unless found to have an adverse impact on the storm water or design functionality of any proposed BMP:

(1) Discharges authorized by a permit issued by the Wisconsin Department of Natural Resources.

(2) Discharges resulting from firefighting activities.

(3) Discharges from clean runoff, as defined in 12-10 (8).

(b) Notice of Violation. Whenever Chippewa County or the Municipality discovers a violation under 12-67, Chippewa County or the Municipality may order compliance by written notice of violation to the responsible party. Such notice may require without limitation:

(1) The elimination of illicit connections or discharges;

(2) That violating discharges, practices, or operations shall cease and desist;

(3) The abatement or remediation of storm water pollution or contaminated hazards and the restoration of any affected property;

(4) Any responsible party that fails to comply with a notice of violation under this section shall be subject to further enforcement action under the provisions of 12-21. (Ord. 158-26, 2015)

Attachments 2.3 (B) - IDDE Field Screening Procedure

An illicit discharge program is used to detect and remove illicit discharges to the road ditch network inside the MS4 permitted area. This program is jointly implemented by Chippewa County and the permitted municipalities. The specific responsibilities of each municipality for the illicit discharge detection and elimination program are incorporated in the Chapter 66.03 intermunicipal agreement.

Identification of Major and Minor Outfalls

Current outfall inventory shows 21 major outfalls and 25 minor outfalls. The location of all major and minor outfalls in the project area, and the extent of the contributing ditch network (MS4) is shown on labeled Outfalls in MS4 Area. Of the 46 outfalls identified in the permitted MS4 area, 8 are in the County road rights-of-way.

The location of all road ditch surface water connections and points of potential storm water discharge within the MS4 permitted area are identified on a map based on aerial photography and LiDAR data. Points of potential stormwater discharge (outfalls) are categorized major and minor.

Major outfalls mean a municipal separate storm sewer outfall that meets one of the following criteria:

1. A single pipe with an inside diameter of 36 inches or more, or from an equivalent conveyance (cross sectional area of 1,018 square inches) which is associated with a drainage area of more than 50 acres.
2. A municipal separate storm sewer system that receives storm water runoff from lands zoned for industrial activity that is associated with a drainage area of more than 2 acres or from other lands with 2 or more acres of industrial activity, but not land zoned for industrial activity that does not have any industrial activity present.

All other outfall features are considered as minor outfalls. These minor outfalls receive direct discharge from existing storm water ponds, or have the immediate potential to become major outfalls based upon anticipated development.

Field Review of Ditch lines and Outfalls

After classification, County and municipal staff conduct field reviews of the mapped road ditch line and discharge locations. The County inspects all major outfalls at least once per permit term. There are annual inspections of the minor outfalls. These outfalls selected by assessing the size of the drainage areas, the type of development, and accessibility. For an example, minor outfalls that are in a more urban setting with higher traffic use will be more likely chosen to be inspected annually compared to a rural minor outfall with a flatter fallow field.

Field reviews of outfalls characterize and document the size, physical construction, and condition outfall. All mini Field reviews of road ditch lines document and identify if there was an illicit discharge detected or if there is a suspected discharge.

The field reviews for ditch line and outfalls are conducted during periods of annual dry weather. If flow is observed, a field analysis shall be conducted to determine the presence of illicit non-storm water discharges or illicit dumping. The field analysis shall include sampling for pH, total

chlorine, total copper, total phenol and detergents, unless the permittee elects instead to use detergent, ammonia, potassium and fluoride as the indicator parameters.

During the screening process, information is collected to describe the characteristics of each outfall using photographs and a standardized data collection form. When present, the volume and properties of the dry weather discharge are documented using a narrative description. Also, each of the contributing reaches of the road ditch networks are inspected to detect any observable sources of illicit discharge.

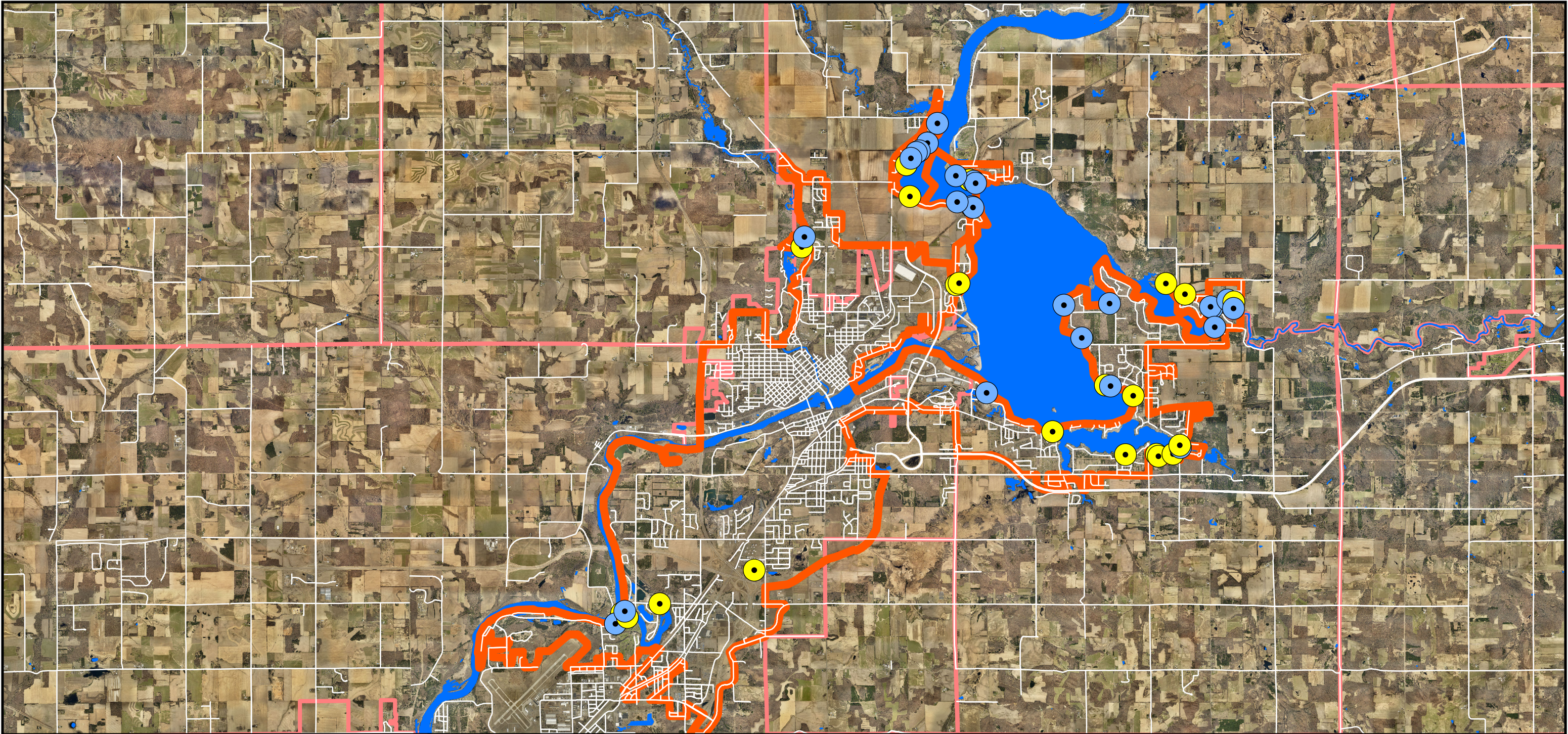
Results of Illicit Discharge and Outfall Screening

A free-standing database is used to track each major and minor outfall for illicit discharge monitoring and outfall screening. Each municipality conducts routine inspection of road ditch lines to detect illicit discharges. Inspections coincide with annual ditch line maintenance schedule. Results of these illicit discharge detection inspections are recorded and these records should be filed annually to meet the MS4 permit reporting.

Ongoing Detection and Outfall Monitoring





Results from the field screening are reviewed for its potential to discharge pollutants. Minor outfalls may be removed given small drainage area, low pollutant discharge potential, and field screening points that are not accessible due to its containment of private parcels.

Outfalls in the MS4 Area




Photobase: 2020


Legend

-  MS4 (2021)
-  Lakes
-  TOWN
-  Municipal Roads

N



0 1.5 3 Miles



1 in = 1.5 miles

Date: 3/30/2023



Attachment 2.3 (C) - Illicit Discharge Detection Procedure

Spill Notification Procedure:

LCFM staff that detect a spill are to notify the LCFM Project Engineer. All MS4 municipality staff that detect a spill are to notify their direct supervisor and LCFM of the spill. Procedure on how to address the site of a spill is in Attachment 2.3 (D).

All spill notifications (both emergency and non-emergency) shall be documented with the Spills / Illicit Discharge Initial Contact Form (Attachment 2.3 (E)) and reported to LCFM.

Current LCFM Staff for Spills reporting:

Name: Trenton Shutter

Phone #: (715) 720-3644

Phone #: (715) 726-7920

Email: tshutter@co.chippewa.wi.us

Emergency Spills:

If the spill is risking human health and safety or if there is an accident, call 911. If the spill is in large quantity or if its hazardous material, the **spill shall be reported immediately by calling the WI DNR 24-hour emergency hotline # 1-800-943-0003**. All other spills that do not require an emergency response will be reported to the LCFM Project Engineer. LCFM will work with the municipality staff to determine the next steps to remediate the environmental contamination.

Steps may include but not limited to: notifying the municipality, determining if the spill is above the reporting threshold of the WDNR, contacting the DNR, and determining if further coordination is needed with the WDNR Remediation & Redevelopment Program.

Current Spill Coordinator for the West Central Region

Name: Jayson Schrank

Phone #: (715) 410-8841

Email: Jayson.Schrank@wisconsin.gov

Attachment 2.3 (D) - Spill Response Plan

Step 1: Approach the Incident

- When responding to a spill always approach with safety first mentality. If the incident is a hazardous, do not endanger yourself or others by entering environment. If there is a fire or need for medical attention, immediately call 911.
- To avoid exposure to fumes, smoke and vapor, approach the spill from upwind and stay clear of any spills.

Step 2: Secure the Area

- Isolate the spill.
- Keep people away from the spill and divert traffic as needed.
- If possible, stop the source of the spill.
- Eliminate any ignition sources.

Step 3: Identify the Spill

- Attempt to identify the spill by its characteristics (odor, color, sheen), labels or markings, container, activities, hazard warning, etc.
- A identifying spill could be used to help expedite the identification process and help in pursuing the proper response and clean up method.

Step 4: Assessing the Area

- Determine the appropriate response actions and if additional help is needed.
- The actions will be dictated by:
 - Size of the spill
 - Hazards
 - Is there a fire or leak?
 - Is there potential for it to leave the site or mix with other substances?
- Observe the surroundings:
 - Is someone or something at risk?
 - Should the area be evacuated?
 - Is there any resources or material readily available to contain the spill?

Step 5: Report the Spill

- Report the spills as soon as possible and within 24 hours if the spill may cause pollution, such as toxic, flammable, corrosive, and dangerous industrial chemicals.
 - Wisconsin's reporting thresholds can be found in Attachment 1 below.
- Wisconsin DNR Spill Hotline is: (800) 943-0003

Step 6: Contain the Spill

- Always wear appropriate personal protective equipment (gloves, boots, safety glasses) when addressing the spill.
- Appropriate spill containment shall be placed around the perimeter. The goal is to stop the spill from spreading.
 - If the spill has potential of reaching any stormwater conveyance systems, like street gutters, storm drain or inlet, swales, ditches, or river, place absorbent between the spill and conveyance device.

- When applying absorbent materials, start applying downhill of the spill and work around the outside edge.

Step 7: Clean Up the Spill

- If you have the proper training, small spills may be cleaned up in accordance with the chemical label and your training.
 - Do not hose down the spill into any stormwater conveyances.
 - If the spill is a flammable liquid, ventilate the area and eliminate any sources of ignition.
 - Clean up the spill, leak, and drips quickly. Use “dry” clean up methods, such as sweeping or shoveling. If the spill can be moved by wind, cover the spill with sheeting to prevent spreading.
 - Place all clean up waste in appropriate containers. If the spill is hazardous, the material will need to be placed in a hazardous waste container.
 - Dispose any spill material in accordance with all Federal, State, and Local regulations.
- If you do not have the proper training or if the spill is large, leave the area and notify 911 emergency responders. Be able to give the operator the spill location, chemical/material spilled, and the approximate amount.
- If a discharge is unable to be contained to the land surface and it reaches the waters of the state, immediately call the WI DNR to report the discharge (Phone #: 1(800) 943-0003). Discuss with the WDNR the type of material, the actions that have been taken, and the recommended actions to further prevent the spill. If the discharge has reached the water, mechanical containment and recovery equipment are preferred. Boom, barriers, and skimmers are all acceptable methods to collect and contain the spilled material. Attachment 2.3 (G) is the WDNR Mechanical and Chemical/Biological Spill Response Methods.

Step 8: Complete Spill Documentation and Follow-up

- Clean and decontaminate all reusable spill clean up equipment.
- Be sure to restock any spill response materials and PPE as soon as possible.
- Update the spill records.
- Notify the proper regulatory agency that were apart of the spill event and provide the necessary spill documentation.

Attachment 2.3 (E) – Illicit Discharge Reporting Form

Illicit Discharge Detection Spill Reporting Form			
Date of Inspection:		Time of Report:	
Name of Reporter:			
Phone # of Reporter:			
Is anyone hurt? (if so, describe)			
Description of Discharge: (color, odor, solid, liquid, semi solid, floatables, noticeable conditions)?			
Location of Spill (Address, Landmarks, Closest Intersection, Municipality)			
Property Owner Info (Name, Address. Contact Information if known)			
Follow-Up Action (what, by whom)			

FOR OFFICE USE:

Name of Person:	
Department:	
Phone #:	
Email:	

Attachment 2.4 (F) - Wisconsin DNR Hazardous Substance Spill

Immediate Reporting Required for Hazardous Substance Spills

If you are aware of a hazardous substance spill notify the Department of Natural Resources (DNR). State law requires the IMMEDIATE reporting of hazardous substance spills and other discharges to the environment.

**CALL 800-943-0003
TO REPORT SPILLS**

Use **DNR Form 4400-225** to report other hazardous substance discharges.



Other hazardous substance discharges discovered during an environmental assessment or laboratory analysis of soil, sediment, groundwater or vapor samples, including historical contamination and contamination caused by an ongoing long-term release, should be reported to the DNR by submitting the DNR web form *Notification for Hazardous Substance Discharge Form – Non-Emergency Only* (Form 4400-225). Directions for accessing and submitting web form 4400-225 are available at <https://dnr.wisconsin.gov/topic/Brownfields/Submittal.html>.

- ✓ Report hazardous substance discharges as soon as visual or olfactory evidence confirms a discharge or laboratory data is available to document a discharge. Do not wait to complete a Phase II environmental assessment, or other similar report, to notify the DNR.

Reporting is everyone's responsibility

Individuals and entities that cause a hazardous substance spill or discharge to the environment are required by state law to notify the DNR immediately - as soon as the spill or discharge is identified. Individuals and entities that own or control property where the spill or discharge occurred must report the discharge immediately if it is not reported by the person or entity that caused the discharge.

For public health and safety, the DNR encourages everyone to report known hazardous substance discharges. Reporting a spill or other discharge, in itself, does not make a person or entity liable for the contamination.

Proper spill containment, cleanup, and disposal is always required

Every person/entity (including lenders and local governments) that causes a hazardous substance discharge, or owns or controls property at which a discharge occurred, must comply with the response action requirements in [Wis. Admin. Chs. NR 700 to 799](#). No spill or discharge is exempt from the duty to properly contain, clean up and dispose of the substance and associated contaminated media, such as soil, water and other affected materials.

Spill reporting exemptions

All spills must be cleaned up, but it is generally not necessary to report recent spills that are:

- less than 1 gallon of gasoline
- less than 5 gallons of any petroleum product other than gasoline
- any amount of gasoline or other petroleum product that is completely contained on an impervious surface
- individual discharges authorized by a permit or program approved under Wis. Stat. Chs. 289 - 299
- less than 25 gallons of liquid fertilizer
- less than 250 pounds of dry fertilizer
- pesticides that would cover less than 1 acre of land if applied according to label instructions
 - * NOTE: Reporting is required if the ongoing, long-term release or application of a permitted pesticide, fertilizer or other substance accumulates to levels that exceed current health or safety standards.
- less than the federal reportable quantities listed in 40 C.F.R. §§ 117 or 302
 - * NOTE: U.S. EPA (federal) spill reporting requirements are outlined on the internet at <https://www.epa.gov/emergency-response/when-are-you-required-report-oil-spill-and-hazardous-substance-release>.

Spill reporting exemptions do not apply (and reporting is required) when:

- the spilled substance has not evaporated or been cleaned up in accordance with Wis. Admin. chs. NR 700–799 the spilled substance is a potential fire, explosion or safety hazard
- the spilled substance causes, or threatens to cause, chronic or acute human health concerns
 - * NOTE: If you are unsure about potential human health effects, consult with local or state health officials.
- the spilled substance adversely impacts, or threatens to impact, the air, lands or waters of the state (as either a single discharge or when accumulated with past discharges) - even if the degree of the impact has not yet been thoroughly evaluated
 - * NOTE: If the substance causes sheen on surface water, has entered or is on the verge of entering the waters of the state, DNR will consider the spilled substance a threat to impact, or to have adversely impacted, waters of the state and reporting is required.

Terms, definitions, statutes and rules

Hazardous substance — Any substance that can cause harm to human health and safety, or the environment, because of where it is spilled, the amount spilled, its toxicity or its concentration. Even common products such as milk, butter, pickle juice, corn, beer, etc., may be considered a hazardous substance if discharged to a sensitive area.

Discharge — Spilling, leaking, pumping, pouring, emitting, emptying, dumping, etc., to land, air or water.

Spill — A discharge that is typically a one-time event or occurrence, and usually inadvertent.

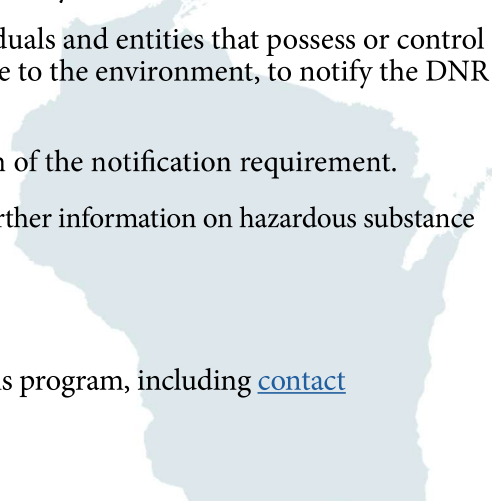
Wis. Stat. § 292.11(2) and Wis. Admin. § NR 706.05 — Require individuals and entities that possess or control a hazardous substance, or that cause the discharge of a hazardous substance to the environment, to notify the DNR immediately about the discharge.

Wis. Stat. § 292.99 — Authorizes penalties up to \$5,000 for each violation of the notification requirement.

Consult [Wis. Stat. Ch. 292](#) and [Wis. Admin. §§ 700 – 799](#), and dnr.wi.gov for further information on hazardous substance spill and discharge reporting, investigation and cleanup.

DNR contact information

To report a discharge call 1-800-943-0003. For more information on the spills program, including [contact information](#), visit dnr.wi.gov, search “Spills”.



Attachment 2.3 (G) - WI Mechanical/Chemical Spill Response Methods



Remediation and Redevelopment Program

Mechanical and Chemical/Biological Spill Response Methods

When a spill occurs, there are a number of response actions that can be taken to mitigate the spill. These actions can vary depending on whether the spill is on land or on water, and include mechanical as well as chemical and/or biological methods. For most spills, regardless of whether they are on land or water, mechanical containment and recovery of the spilled material is the typical response.

Spills on Water

When spills reach the water, **mechanical** containment and recovery equipment used to collect spilled material include:

- booms (which contain and absorb the spilled materials);
- barriers (which prevent the movement and dispersal of spilled materials); and
- skimmers (which collect the spilled materials from the top of the surface water).

Chemical and biological methods are also marketed for use in conjunction with mechanical means for containing and cleaning up certain types of spills. These methods are most commonly used for oil spills in marine environments, not fresh water environments. Chemical and biological agents are federally regulated for use on oil spills in the water. These regulations are found in Subpart J of the National Contingency Plan (NCP), which is available on the Environmental Protection Agency's (EPA) website: www.epa.gov/oem/content/ncp/index.htm. The NCP establishes the process for authorizing the use of the following:

- dispersants
- surface washing agents;
- surface collecting agents;
- bioremediation agents; and
- miscellaneous oil spill control agents.

The NCP Product Schedule is the federal government's listing of chemical countermeasures (please note that the federal government does not authorize the use of dispersants in freshwater environments). During or after a specific spill, a responder may request approval from state and federal agencies for use of one of these countermeasures. As the trustee for the state of Wisconsin, the Wisconsin Department of Natural Resources (DNR) is the agency which must grant approval for the use of any chemical or biological agent for spill response on water.

In Wisconsin, as in many other states, approval has not been granted for the use of a chemical or biological countermeasure. Responders may not use a chemical or biological countermeasure without site specific state and federal approval, and the product must be listed on the Product Schedule. The NCP Product Schedule does *not authorize or pre-approve* use of any of the listed products, nor does inclusion on the Product Schedule mean the product will work. It simply means that the required data was provided to the EPA by the chemical's manufacturer.

Hazardous Substances are defined in s. 292.01(5), Wis. Stats., as "any substance or combination of substances including any waste of a solid, semisolid, liquid or gaseous form which may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or which may pose a substantial present or potential hazard to human health or the environment because of its quantity, concentration or physical, chemical or infectious characteristics."

Spills on Land

For spills that are contained on land, responders may use mechanical and/or chemical/biological methods they determine necessary when an emergency involves fire or imminent threats to human health. There is no specific law in Wisconsin that addresses the use of these types of products. However, the department urges caution in the use of chemical and/or biological agents as these materials are considered *hazardous substances* (see adjacent box) if allowed to enter the waters of the state (including storm sewers). Any chemical or biological agent used must be contained and collected along with the spilled material for proper disposal.

Mechanical methods, including booms, absorbents, and physical barriers are the most frequently used response tools for cleanup and containment of spills on land. Containment of the spill to prevent it from reaching the water is typically the most effective action to reduce the spread of contamination and minimize overall threats to the environment.

State Statutory Exemptions

The spill law, Section 292.11(9), Wis. Stats, states that *law enforcement officers or member of a fire department* using hazardous substances in carrying out their responsibility to protect public health, safety and welfare **are exempted from the penalty requirements of the statute**. They are not, however, exempted from complying with the spill law requirement to report a release of a hazardous substance occurring within the performance of their duties to the DNR and to restore the environment to the extent practicable. In addition, they are not exempted from federal regulations regarding chemical and biological countermeasures.

DNR Support

The department has staff (wardens and regional spill coordinators) who can provide technical assistance in responding to the spill as well as assessing the appropriateness and potential impacts of the application of specific countermeasures. Remember, you need DNR approval to use any chemical or biological agent as part of your spill response protocol. Contact your regional spill coordinator for more information (see below).

The department cautions that all parties involved in the use of a chemical or biological countermeasure be aware of the liabilities associated with the use of that product in a spill response. Those who use a chemical or biological countermeasure are responsible for any environmental impact caused by the use of that product. The restoration of the environment is required for any discharge to the environment of a hazardous substance, regardless of whether the discharge occurred as a result of responding to another discharge. In most situations, mechanical methods of response are adequate to contain and control a spill.

DNR contact Information

To report a discharge call 1-800-943-0003. For more information on the spills program, including [contact information](#), visit dnr.wi.gov, search “Spills.”