

University of Wisconsin - Green Bay

# Illicit Discharge Detection and Elimination Program

WPDES Permit No. WI-S050075-1

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## University of Wisconsin – Green Bay

### Illicit Discharge Detection and Elimination Program

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#### Attachment 1: University of Wisconsin – Green Bay Illicit Discharge Inspection Report

##### 1.0 Introduction

This document describes UW-Green Bay's illicit discharge detection and elimination program and serves to fulfill condition 2.3 of WPDES Permit No. WI-S050075-1. The illicit discharge program consists of an ordinance that will prohibit illicit discharges on campus, a field screening program designed to detect illicit discharges, and procedures for responding to known illicit discharges. Education of the campus community is also part of an effective illicit discharge detection and elimination program. The education component of the illicit discharge program is included in UW-Green Bay's Public Education and Outreach program, which is available at:

[http://www.uwsa.edu/capbud/documents/stormwater/gby/stormwater\\_gby.htm](http://www.uwsa.edu/capbud/documents/stormwater/gby/stormwater_gby.htm))

UW – Green Bay's illicit discharge program is designed to detect and eliminate illicit connections and improper disposals to the storm sewer system. An illicit discharge is defined as any discharge to the storm sewer system that is not composed entirely of stormwater, except for discharges allowed under a WPDES permit or other discharges not requiring a permit such as landscape irrigation, lawn watering, individual residential car washing, diverted stream flow, uncontaminated groundwater infiltration, foundation drains, discharges from potable water sources, waters used for firefighting operations and similar discharges. Illicit discharges can contain pollutants such as sediment, nutrients, pathogens or toxics. These discharges can result in contaminated stormwater entering into storm drains or directly into local waters. Illicit discharges can occur from either illegal dumping or illegal connection to the storm drain system or may be inadvertent, unknown or unintended. Examples of illicit discharges might include: paint being poured into a storm drain, changing oil or anti-freeze over or into a storm drain; discarding yard waste into a storm drain or ditch, spills, litter etc. Potential sources of illicit discharges on the UW-Green Bay campus could be from illegal dumping practices, disposal of grass clippings into ditches, broken sanitary sewer lines, and possible connections of floor drains to storm sewers.

## 2.0 Ordinance

Chapter UWS 18 of the Wisconsin Administrative Code contains a section that will serve as the ordinance to regulate illicit discharges to the storm sewer system on the four year UW System campuses, including UW-Green Bay. Specifically, s. UWS 18.06(1)(b) prohibits discharge of pollutants to storm water or into storm sewers on university lands by stating that “No person may discharge pollutants to storm water or into storm sewers on or serving university lands, except where authorized by the chief administrative officer and in conformance with state law.” Penalties for violation of this section of the code are specified in s. UWS 18.07, Wis. Admin. Code. Unless otherwise specified, the penalty for violating any of the rules in s. UWS 18.06 shall be a forfeiture of not more than \$500.

Compliance with the above statute will be enforced by UW-Green Bay Public Safety. Public safety officers will incorporate illicit discharge enforcement into their routine campus inspection rounds. Officers will survey the campus for any violations of s. UWS 18.06(1)(b) by looking for things such as individuals dumping or pouring material into storm drains or ditches; leakage into a storm drain; or any evidence of recent dumping such as staining around storm drains. Officers will fill out an incident report and the offending individual(s) will be assessed a fine. If the discharge is inadvertent or if it is a first offense, the offenders will be referred to the Facilities Management section for stormwater education in place of being fined.

As of August 19, 2009, illicit discharge enforcement training has been incorporated into the Public Safety officer training program. The training includes information on what stormwater is and how it becomes polluted; information on the campus stormwater conveyance system (including what storm drains look like); examples of what to look for (i.e. person pouring something down a storm drain or leakage into a storm drain; discoloration around a storm drain etc) and what is permitted to go down the storm drain (i.e. lawn watering etc). Maintenance and grounds crews will assist in illicit discharge enforcement. If any of these crews notice any illegal dumping during their normal activities, they are to report the incident to Public Safety, as they would an incident of vandalism. In addition, evidence of illicit discharge to storm sewers (staining, etc. around storm drains or inlets) will be reported to Public Safety. Public Safety will provide copies of all illicit discharge incident reports to the Facilities Management department.

### *Measurable goals:*

1. *Provide annual training on general stormwater education and illicit discharge enforcement to Public Safety officers*
  - a. *Document training in annual report*
2. *Keep record of illicit discharge incident reports*
3. *Provide stormwater education to first-time or inadvertent offenders*
  - a. *Document education in annual report*

### 3.0 Field Screening

Monitoring storm sewer outfalls for flows during dry periods is the most effective way to locate non-stormwater discharges. The intention of the field screening program is to identify sources of non-stormwater to the UW-Green Bay campus storm sewer system.

UW-Green Bay's field screening program will consist of an initial field screening at all major outfalls during a dry weather period and a subsequent on-going dry weather field screening at selected outfalls on a regular schedule for the term of the permit. That program is outlined in this section.



Figure 1: Location of outfalls on UW-Green Bay campus

An outfall is defined in s. NR216.002(19) as the point at which stormwater is discharged to waters of the state or to a storm sewer. A major outfall is defined as a single pipe with an inside diameter of 36 inches or an equivalent cross-sectional area of 1018 square inches associated with drainage area of more than 50 acres. Although UW-Green Bay technically owns and operates only one outfall on the campus that meets this definition, four outfalls will be included in the initial and ongoing field screening. Another outfall on campus is part of a storm sewer for which an easement was granted to the City of Green Bay years ago, and this outfall is screened by the City of Green Bay as part of their illicit discharge detection program. The outfalls that will be

included in UW-Green Bay's field screening programs are shown in Figure 1 and are described below:

- **Outfall 1:** Twin 28" (total cross-sectional area of 1230 sq. in) corrugated metal outfalls running under the arboretum path on the north side of the golf course
- **Outfall 2:** One 60" elliptical CMP on the northwest side of the golf course located east of the arboretum path bridge.
- **Outfall 3:** One 36" circular concrete outfall with concrete apron discharging into Mahon Creek on the southwest side of campus.
- **Outfall 4:** One 42" circular CMP outfall that discharges to the Hwy 54/57 ditch on the south side of campus.

There is a 54 inch circular concrete outfall that discharges to the bay of Green Bay in the UW arboretum to the west of the end of Main Entrance Drive. This outfall is at the end of a storm sewer that extends from the central area of campus and drains an area of approximately 76 acres of campus that receive minimal treatment. Although this outfall is on the UW-Green Bay campus and drains a significant portion of campus, the City of Green Bay claims that they received an easement for a portion of this storm sewer and its outfall in the mid 1960's. The outfall is included in Green Bay's illicit discharge field screening program as outfall 280441 (see Figure 1). For this reason, that outfall is not currently included in UW-Green Bay's illicit discharge field screening.

Initial field screening and ongoing field screening will be conducted at the outfalls listed above. These outfalls were selected for the ongoing field screening program because they drain a large area of campus and carry the majority of stormwater off the UW-Green Bay campus. These outfalls are located at the farthest accessible downstream location in the UW-Green Bay stormwater conveyance system. Ongoing field screening will be completed once per year in mid-summer (July-August) during dry weather conditions. At each of these outfalls, the attached illicit discharge inspection report will be completed. The form contains general information and a characterization and estimation of flow, if any is observed (including color, odor, sedimentation, floatables and turbidity). Field screening inspections will be performed by UW-Green Bay Grounds department staff.

If dry weather field screening reveals flow from any outfall, a description of the discharge color, odor, sedimentation, floatables and turbidity shall be recorded and a sample shall be collected for field analysis. The sample will be analyzed for pH, total chlorine, total copper, total phenol, and detergents. Analysis will be performed either by taking the sample to a local Wisconsin commercial certified laboratory (Pace Analytical Services, Inc.) or by using a commercially available field test kit that uses analytical methods approved under 40 CFR 136.

The campus will notify the WDNR, in accordance with NR 706 of Wisconsin Administrative Code, immediately upon discovering a spill or hazardous substance which may result in discharge of pollutants to waters of the state. The WDNR can be reached at 1-800-943-0003. In addition, UW-Green Bay has a Spill Prevention Control and Countermeasures (SPCC) plan that was prepared by BT<sup>2</sup> Inc. of Madison,

Wisconsin to comply with SPCC regulations as outlined in 40 CFR 112. The goal of these regulations is to prevent the discharge of oils and significant materials into navigable waterways by implementing release prevention measures and to formulate action plans for spills. The SPCC plan specifies material handling procedures and storage requirements for significant materials as well as spills reporting procedures, equipment and procedures necessary for cleaning up spills and preventing the spilled materials from being discharged into the environment. Appropriate campus staff are trained on and follow the spill control and countermeasures recommendations in the SPCC plan.

In the case of an illicit discharge that originates from the UW-Green Bay campus and discharges to a surrounding municipality (either the City of Green Bay or the Town of Scott), UW-Green Bay will notify that municipality of the discharge within one working day.

*Measurable goals:*

1. *Conduct initial and on-going dry weather field screening as described above*
2. *Keep record of outfall inspections and field screening inspections*
  - a. *Enter inspections into the UW-Green Bay maintenance management system (TMA Systems) as routine work orders*

#### **4.0 Illicit discharge response procedures**

Procedures for illegal dumping to the storm sewer system are outlined in section 2.0 above. If flow is revealed at any of the outfalls during the dry weather field screening, and results of the sample analysis indicate the presence of pollutants, the following protocol shall be followed to determine (trace) the source of the discharge:

1. Consider investigating areas of campus that have a reasonable potential for containing illicit discharges
  - a. For example, consider current activities occurring on campus such as materials delivery, grease transfer or other activities that could produce leakage or non-stormwater discharges
2. Use available MS4 map to assist in tracking the incident upstream
3. Conduct manhole to manhole surveillance upstream to identify source of flow
4. Use additional samples and tests as needed to isolate potential source areas.
  - a. Compare grab sample of discharge from outfall with discharge from suspected source
5. Implement procedures to eliminate illicit discharges:
  - a. If source is determined to be illegal dumping or inadvertent discharge:
    - i. Follow ordinance and enforcement procedures as in section 2.0
  - b. If source is determined to be illicit connection
    - i. Take action to correct connection as needed

*Measurable goals:*

1. *Follow response procedures outlined above to determine sources of illicit discharges*
  - a. *Keep record of illicit discharge incidents*

## **6.0 Contact Information**

The individual responsible for responding to spills of any nature on the UW-Green Bay campus is Risk Management Officer Mike Mentzel. He can be reached at (920) 465-2273.

The Department of Public Safety and Police is responsible for responding to reports of illegal dumping and illicit discharges on campus. Whichever officer is performing routine rounds at the time that an incident is discovered is responsible for responding to that incident. Public Safety can be reached at 465-2300, press 1.

