

# ILLICIT DISCHARGE DETECTION & ELIMINATION PROGRAM

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## On-Going Field Screening Program



Prepared For The

**VILLAGE OF ALLOUEZ**

Brown County, Wisconsin



**McMAHON**  
ENGINEERS ARCHITECTS

OCTOBER 9, 2009

McM. No. A0012-980747.02  
JMH:car

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### INTRODUCTION

The Village of Allouez developed an illicit discharge detection and elimination program to remove illicit connections and discharges from the municipal separate storm sewer system (MS4). Potential sources of illicit discharge include illegal business discharges, boat and marina discharges, overflows from sanitary sewer systems, illegal plumbing connections, illegal dumping of waste materials, and spills associated with roadway accidents and industrial activity. Illicit discharges can contribute high levels of pollutants, toxins, oil, grease, solvents, nutrients, viruses, and bacteria to receiving waterbodies. Pollutant levels from illicit discharges are concentrated and may be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

Discharges or flows that are NOT considered illicit discharges include water line flushing, landscape irrigation, diverted stream flows, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, fire fighting, and discharges authorized under a WPDES permit unless identified by the Village of Allouez as a significant source of pollutants to waters of the state.

Policies and procedures have been developed to assist with implementation of the illicit discharge detection and elimination program. The policies and procedures are describe in the 'Village of Allouez Technical Reference Guide for the: Illicit Discharge & Connection Ordinance', included herein as Appendix A. The policies and procedures include the following major components:

- Initial Field Screening
- On-Going Field Screening & Routine Inspections

- Responding to Illicit Discharges
- Enforcement Actions
- Information Submitted by the Public

The Village of Allouez conducted an initial field screening of major outfalls in October and November of 2008. The purpose of this report is to develop an on-going field screening program for the Village of Allouez's illicit discharge detection and elimination program.

### **INITIAL FIELD SCREENING SUMMARY**

The results of the initial field screening of major outfalls is summarized in a separate report, titled 'Village of Allouez Illicit Discharge Detection & Elimination Program – Summary of Initial Field Screening', October 9, 2009.

### **ON-GOING FIELD SCREENING PROGRAM**

The Village of Allouez's Public Works Department is responsible for coordinating on-going field screening of outfalls. In addition to the on-going field screening of outfalls, the Village of Allouez plans to search for illicit discharges, illegal connections, and sanitary leakage by conducting routine plumbing, sanitary sewer, and storm sewer inspections. The Building Inspector is responsible for performing the routine plumbing inspections. The Public Works Department is responsible for performing the routine sanitary sewer and storm sewer inspections.

The following is a summary of the Village of Allouez's On-Going Field Screening Program, including routine inspections, for its Illicit Discharge Detection and Elimination Program:

- On-Going Field Screening:

The Village of Allouez plans to screen major outfalls once every 3 years. The Village plans to conduct on-going field screening once a year for major outfalls at which the presence of one or more indicators of a potential illicit discharge were detected during a field screening within the prior 3 years. Major outfalls at which an indicator was not detected during the prior 3 years will be screened once every 3 years.

The Village of Allouez plans to screen minor outfalls once every 5 years. The Village plans to conduct on-going field screening once a year for minor outfalls at which the presence of one or more indicators of a potential illicit discharge were detected during a field screening within the prior 3 years. Minor outfalls at which an indicator was not detected during the prior 3 years will be screened once every 5 years.

The results of the initial field screening are summarized in Table 1 below. The "Outfall Field Screening Worksheet" for each outfall that has been screened can be found in Appendix B.

**Table 1: Initial Field Screening Results for Major Outfalls**

Outfall ID	Sub ID	Outfall Location	Outfall Description	Flow Observed	Indicators Present
E010	1	Southwest corner of the Longview Pond	36"	None	Oil sheen
E020	1	Northwest corner of the Longview Pond	48"	None	None
E030	1	North of Kiwanis Park, East of East River Dr	42'	None	None
E040	1	North side of E. Hoffman Road at East River	60"	None	Oil sheen
E052-1	1	Langlade Park, East of E. River Drive	48'	None	None
E053	1	East of East River Drive, Due south of STH 172	Ditch	None	None
E061	1	East of E. River Drive / E. Greene Ave	18"	None	None
E062	1	East of E. River Drive, North of STH 172	54"	None	None
E070	1	East of E. River Drive / Green Valley Ave	36"	None	None
E100	1	East of E. River Drive / E. Mission Road	30"	None	None
E110	1	South side of CTH O at East River	30"	Trickle	Detergents
E120	1	East of E. Daouphin Road at East River	36"	Trickle	None
E171	1	South side of Macco Pond	60"	None	None
E180	1	West side of Macco Pond (Approx. midway)	54"	None	None
E200	1	East side of E. River Drive, East of Optimist Park	48"	None	None
E205	1	Irwin Ave / Kalb Street	36" (Assumed)	None	None
E210	1	East end of Boyd Street	42"	None	None
F041	1	East of Riverside Drive / Stanton Court Area	60"	Major	Oil Sheen
F060	1	East of Green Bay Correctional Institution at Fox River	18"x18" (DOT)	Trickle	None
F080	1	West of Riverside Drive / North of STH 172	36"	None	None
F100	1	West of Riverside Drive / North of River Lane	18"	Trickle	None
F130	1	West of Riverside Drive between Miramar and W. Allouez Ave	24"	Trickle	None
F160	1	West of Riverside Drive under the pedestrian trail along Fox River	2 Culverts	Trickle	None
F171	1	West of Riverside Drive south of Railroad across Fox River	36"	Moderate	Detergents

The initial field screening included one outfall (F060-1) that is not part of the Village of Allouez's MS4. It is owned by the Wisconsin DOT. This outfall will not be screened in the future by the Village as the ongoing field screening will only be performed for outfalls owned by the Village and located within the Village's urban planning boundary.

■ **Routine Plumbing Inspections:**

The Village of Allouez conducts routine plumbing inspections when a building permit is issued, a building changes ownership, or a water meter or battery is changed. At a minimum, the goal is to inspect residential plumbing systems once every 10 years. Commercial customers are inspected every two years by a trained cross-connection specialist. The purpose of the routine plumbing inspections is to locate illegal connections and cross-connections. Examples of illegal plumbing connections include a washing machine discharging to the building's sump pump, a garage floor drain directly connected to

the building's storm lateral, a building's sanitary lateral cross-connected to the MS4, and lack of adequate cross-connection prevention devices.

■ Routine Sanitary Sewer Inspections:

The Village of Allouez conducts routine inspections of its sanitary sewer system during wet weather. Identifying infiltration and inflow (I & I) problems in the sanitary sewer system helps eliminate potential sanitary sewer leaks and overflows into the MS4 or waters of the state. The Village of Allouez televises 10% of its sanitary sewer system each year or 100% every 10 years. Conditions that may be discovered include cross connections with storm sewers, collapsed or blocked pipes, offset joints, root intrusion, etc. As I & I problems and sanitary leaks are identified, an implementation plan will be developed to remedy the problems. Each year 5% of the sanitary sewer manholes are cleaned and inspected. A report is maintained for each inspection.

■ Routine Storm Sewer Inspections:

The Village of Allouez conducts routine storm sewer inspections before a street is reconstructed and when a storm sewer is cleaned. Typically, large diameter pipes are visually inspected and small diameter pipes are televised. Conditions that may be discovered include illicit discharges, cross connections with sanitary sewers, collapsed or blocked pipes, offset joints, root intrusion, etc. As problems are identified, an implementation plan will be developed to remedy the problems. Each year 5% of the storm sewer manholes are cleaned and inspected. A report is maintained for each inspection.

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