

# NEW ALBANY ILLICIT DISCHARGE DETECTION AND ELIMINATION PLAN



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## **SECTION 1.0 Introduction**

This document outlines the processes that the City of New Albany (City) is taking to control the introduction of pollutants into their Municipal Separate Storm Sewer System (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit regulated by the Ohio Environmental Protection Agency (OEPA). This document focuses on Minimum Control Measure (MCM) III as defined in their NPDES permit and takes into consideration pollutants specifically identified through Total Maximum Daily Loads (TMDL), also regulated by OEPA. This document is to supplement current regulations established by the City to provide for the health, safety, and general welfare of the citizens of the City of New Albany and is keeping with the spirit of the Federal Water Pollution Control Act (also known as the Clean Water Act) and Ohio's Pollution Control Act.

The City is entering into its third 5-year permit, and as such, has completed the basic requirements outlined in MCM III. While the initial mapping and Dry Weather Screening has been completed, there continues to be ongoing efforts to both monitor for and address any illicit discharge issues identified as well as undertaking a variety of public education activities.

## **SECTION 2.0 General Permit Information**

This document was produced in accordance with the NPDES Small MS4 Stormwater General Permit (OHQ000003) issued to the City by the Ohio Environmental Protection Agency (OEPA). This permit was made effective on September 11, 2014, and is to remain in effect until September 19, 2019. This document is subject to periodic updates as progress is made with the various requirements of the permit and as OEPA clarifies or modifies the language of the permit.

*“As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches.... Since its introduction in 1972, the NPDES permit program is responsible for significant improvements to our Nation's water quality.”* (Source: <http://cfpub.epa.gov/npdes/index.cfm> )

In addition to MCM III the Small MS4 Stormwater General Permit requires the development of a Stormwater Management Program (SWMP) which outlines the comprehensive approach the City is taking to address stormwater practices covered by the permit. The permit and SWMP are developed around the following six Minimum Control Measures:

- 1) public education and outreach
- 2) public participation / involvement,
- 3) illicit discharge detection and elimination (IDDE)
- 4) construction site runoff control
- 5) post-construction runoff control
- 6) pollution prevention / good housekeeping for municipal operations

This document is required as specified in MCM III, Section 3.e of the NPDES Small MS4 Stormwater General Permit, with Section 3 being the Illicit Discharge Detection and Elimination (IDDE) minimum control measure.

## **SECTION 2.1     *Supporting Documents and Programs***

This document does not stand in isolation. It is part of a larger stormwater management effort, and as such, should be considered in coordination with the following documents and programs:

Federal Clean Water Act

NPDES Small MS4 Stormwater General Permit (OHQ000003)

City of New Albany Stormwater Management Plan

Ohio Pollution Control Act (Ohio Revised Code 6111)

ODNR Rainwater Manual

## **SECTION 2.2.     *Coordinating Agencies and Departments***

This document reflects the cooperative effort between three agencies dedicated to addressing public health issues and protecting and managing water resources. The following partner agencies are involved with this effort:

City of New Albany & New Albany Service Department

Franklin County Public Health (FCPH)

Franklin Soil and Water Conservation District (FSWCD)

Note: Please reference the organizational chart in the SWMP for points of contact.

## **SECTION 3.0     *Illicit Discharge: Definition***

Stormwater regulations define an "illicit discharge" as:

*"any discharge to a municipal separate storm sewer (MS4) that is not composed entirely of stormwater."*

Common sources of non-stormwater, dry weather discharges in urban areas include: apartments and homes, car washes, restaurants, airports, landfills, and gas stations, to name but a few. These so-called "generating sites" discharge sanitary wastewater, septic system effluent, vehicle wash water, washdown from grease traps, motor oil, antifreeze, gasoline and fuel spills, among other substances. Although these illicit discharges can enter the storm drain system in various ways, they generally result from either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the storm drain system, spills, or "midnight dumping"). Illicit discharges can be further divided into those discharging continuously and those discharging intermittently. (Source: EPA.

[http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=factsheet\\_results&view=specific&bmp=111](http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=factsheet_results&view=specific&bmp=111) )

## **SECTION 3.1     *Municipal Separate Storm Sewer System (MS4): Definition***

The regulatory definition of an MS4 (40 CFR 122.26(b)(8)) is:

"a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(i) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created to or pursuant to state law) including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an

authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges into waters of the United States.

(ii) Designed or used for collecting or conveying stormwater;

(iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2."

### **SECTION 3.2    *Illicit Discharge Exemptions***

Illicit Discharge: as defined in the Code of Federal Regulations (C.F.R.) at 40 C.F.R. 122.26 (B)(2) means any discharge to an MS4 that is not composed entirely of storm water, except for those discharges to an MS4 pursuant to a NPDES permit.

The following discharges are exempt until such time as they are determined by the City of New Albany to be significant contributors of pollutants to the MS4. Additionally, other water sources not containing pollutants may be considered at the discretion of the City Engineer.

- line flushing
- landscape irrigation
- diverted stream flows
- rising water ground waters
- uncontaminated ground water infiltration
- uncontaminated pumped ground water
- discharges from potable water sources
- foundation drains
- air conditioning condensate
- irrigation water
- springs
- water from crawl space pumps
- footing drains
- lawn watering
- individual residential car washing
- small charity car washes
- flows from riparian habitats and wetlands
- dechlorinated swimming pool discharges
- street wash water
- discharges or flows from fire-fighting activities

In addition, the following are not to be deemed as illicit discharges:

Discharges specified by the City of New Albany as being necessary to protect public health and safety.

Discharges from off-lot household sewage treatment systems permitted by the Franklin County Public Health District for the purpose of discharging treated sewage effluent unless such discharges are deemed to be creating a public health nuisance by Franklin County Public Health.

### **SECTION 3.3    *Decision Process and Rational***

Managing municipal stormwater is required by amendments to the Clean Water Act and can be an asset to a community's sustainability efforts. New Albany is a master planned community and takes a sophisticated approach to sustainable development and ongoing public-private partnerships. It is a community built on unparalleled commitment to lifelong learning, healthy living, culture, leisure and commerce. From inspiration to innovation, New Albany works closely with residents and businesses as well as the best land planners, developers, architects, builders and engineers to achieve a shared vision. It is within this context that New Albany effectively addresses stormwater in its community.

Stormwater runoff is generated when precipitation from rain and snowmelt events flows over land or impervious surfaces and does not percolate into the ground. As the runoff flows over the land or impervious surfaces (paved streets, parking lots, and building rooftops), it accumulates debris, chemicals, sediment and other pollutants that could adversely affect water quality if the runoff is discharged untreated. In addition to many other advantages, managing the quantity and quality of stormwater is a key component for: safe water-based recreation, affordable drinking water, the protection of health, and protecting public and private property from heavy rainfall events and the threat of subsequent flooding.

The intent of the Stormwater Management Program and the IDDE Plan are to provide for the health, safety, and general welfare of the citizens of the City of New Albany by protecting (and improving when possible) surface water resources within its community. To this end, the objectives of this IDDE Plan are: to prohibit illicit discharges and illegal connections to the MS4; and to utilize legal authority to carry out inspections, monitoring procedures, and enforcement actions necessary to ensure compliance with this regulation. These regulations apply to all residential residences and businesses which discharge to the MS4 or on any lands in the City of New Albany, except for those discharges exempted from regulation.

While keeping in mind pollutants identified in TMDLs for streams which pass through New Albany, the most prevalent pollutant identified through DWS is partially treated effluent from off-lot discharging HSTS. The highest concentration of these discharging systems is in the Cedar Brook neighborhood. Multiple instances of public outreach and education about these systems and their impact have been made to these residents. The City maintains an active relationship with Franklin County Public Health for the inspection of these systems and enforcement measures consistent with their legal authorities.

Knowing that HSTS are the most prevalent source of illicit discharges in New Albany and that Cedar Brook has the highest concentration of these systems, this area is targeted for long-term monitoring in addition to the yearly inspections that FCPH undertakes. This area, as well as other locations previously identified as having illicit discharges (HSTS or other) during DWS, will be focus areas for ongoing monitoring of the City's MS4 and outreach to residents.

## **SECTION 4.0    *Enacted Stormwater Legislation and Legal Authority***

### **Clean Water Act (Federal law)**

A complete copy of Chapter 26 of Title 33 of the United States Code, also known as the Clean Water Act, is available through Cornell University: <http://www.law.cornell.edu/uscode/33/ch26.html>. In addition, a brief history is provided by United States Environmental Protection Agency: <http://www2.epa.gov/laws-regulations/summary-clean-water-act>

### **Ohio Revised Code (State laws)**

The following is a list of Ohio Revised Code chapters related to programs in the Division of Surface Water. These chapters can be referenced or downloaded from <http://codes.ohio.gov/>.

#### [ORC Chapter 3745: Environmental Protection Agency](#)

Creates and establishes powers of the Ohio EPA

#### [ORC Chapter 6111: Water Pollution Control](#)

Specifies powers of the Ohio EPA with regard to water pollution control

#### [ORC Chapter 6117: Sewer Districts; County Sewers](#)

Authorizes the establishment of sewer districts

#### [ORC Chapter 6119: Regional Water and Sewer Districts](#)

Authorizes the establishment of regional water and sewer districts



## **Local Controls Related to Stormwater**

City of New Albany Ordinance O-02-2011; [Chapter 931 "Protection of Storm Sewer"](#)

Ohio Revised Code; Chapters:

3707

3709

3718

3767

Untreated sewage - see Ohio R.C. 3701.59

Interference with sewage flow - see Ohio R.C. 4933.24

Local law enforcement as defined in ORC 2935.03 can enforce ORC 6111

Franklin County Public Health Regulation 720

Franklin County Public Health staff has the authority to enforce Franklin County Public Health Regulation 720 ( <http://myfcph.org/pdfs/regs/720Sewage.pdf> ) and Ohio Revised Code 3718.011 and 6111 for the resolution of illicit discharges. Also see <http://myfcph.org/npdes.php> for more information and resources.

## **SECTION 5.0 MS4 Mapping**

The City has worked cooperatively with Franklin Soil and Water Conservation District (FSWCD) to develop comprehensive mapping as required by the permit. The City maintains a city-wide GIS that includes MS4 components, post construction BMPs and surface water features. FSWCD has provided in-field verification and mapping of outfalls, Dry Weather Screening (DWS) of these features, and in-field verification of some MS4 components as additions or corrections are needed.

These mapping and screening efforts have led to a comprehensive dataset of MS4 components and surface water features for the City. In addition, the compilation of these elements has allowed for an easier system-wide prioritization for future DWS efforts and tracking of dry weather flows. The integration of this surface and subsurface drainage allows for a holistic view of both the interaction of the two as well as identifying the locations where flows move between adjacent municipalities.

## **SECTION 6.0 Dry Weather Screening (DWS)**

To identify illicit discharges, a process known as DWS is utilized. This process requires field inspection of drainage features (components of the MS4) during periods of dry weather. Dry weather for this screening is defined as having a maximum of 0.1" of rain during the previous 72 hours. This 'dry weather' protocol helps to minimize flows due to rain or snow melt events and highlights illicit discharges.

DWS entails recording a variety of characteristics for each feature screened, including a physical description of the drainage feature, any indicators suggesting an illicit discharge, and a digital photograph of the feature. GPS data loggers are used to record the location and descriptive information of the features. This data is then processed, analyzed, and mapped utilizing GIS. The analysis assists in determining which drainage features are likely to contain illicit discharges.

The groups of features screened during this process are:

**Flowing Pipes:** outfalls with flow at the time of screening

Note: outfalls with flow within catch basins are included in this group

**Non-Flowing Pipes:** outfalls with no flow at the time of screening

Note: outfalls without flow within catch basins are included in this group

**Flowing Channels:** constructed or man-made channels with flow at the time of screening

**Non-Flowing Channels:** constructed or man-made channels without flow at the time of screening

**Catch Basins:** catch basins with or without flow at the time of screening

**Generic Points:** locations not fitting into the above categories, but which are of interest to stormwater management and illicit discharges: i.e. seeps, unknown water sources, dump sites, etc.

In addition to the features dry weather screened, the locations of crossovers (drainage passing under roadways or structures), and manholes are collected to assist in verifying the MS4 components and the flow direction within the system. To allow efficient referencing and tracking of the features dry weather screened, a nomenclature was developed for the various types of features screened which associated each feature with the year it was screened and the type of feature screened.

## ***SECTION 6.1 Identifying Potential Illicit Discharges***

Features are categorized by their potential to be a source of an illicit discharge and whether or not they are an obvious (severe) source of an illicit discharge. The criteria used to identify potentially illicit discharges are considered stand-alone indicators. These are odor, color, floatables, poor pool quality, benthic growth, and deposits and stains. The presence of at least one of these criteria can designate the outfall as potentially illicit.

It is important to identify obvious (severe) sources of illicit discharge during dry weather screening, because the presence of obvious indicators (e.g. raw sewage) allows that feature to be prioritized for future follow-up investigation and resolution. For a location to be determined as an obvious (severe) source of an illicit discharge, it must have at least one of several specific, pre-defined stand-alone indicators. Sewage related instances are reported to FCPH for investigation. All observations are summarized and reported to the City. If actionable at the time of investigation, contact is made with the City or other local municipality, as in the case with water main leaks.

Guidelines followed during DWS were developed from material provided by the Center for Watershed Protection, Cuyahoga County, OEPA and others. With the extensive mapping of the MS4 including directionality of flow, tracing of illicit discharges is done by referencing mapping and working the way up the system to the point that the discharge is found. Initial in-field investigations are normally conducted by FSWCD staff. If blind taps are encountered the use of cameras by City personnel can be implemented. When investigating sources of sewage from households, FCPH undertakes their process which can include the use of trace dyes.

## ***SECTION 6.2 Effluent Sampling***

To better understand what was being observed during dry weather screening and to verify the accuracy of the dry weather screening effort, follow-up effluent sampling of potential illicit discharges were done for the first several years of dry weather screening as funding and planning allowed. These water samples were processed at an OEPA certified lab to determine the amounts of pollutants such as Ammonia, Ammonia Nitrogen, E.Coli, Fecal Strep, Fecal Coliform, Methylene Blue Active Substances (MBAS), and Ortho Phosphates. These lab results were included in the GIS and provided to FCPH.

This additional step confirmed the accuracy of the dry weather screening process and due to this has been discontinued as part of the screening process.

The following is a brief description of the substances evaluated from samples:

**E. coli** - Escherichia coli, is a species of fecal coliform bacteria that is specific to fecal material from humans and other warm-blooded animals. Results reported in colony forming units per 100 milliliters (cfu/100 mL).

**MBAS** - Methylene Blue Active Substances (surfactant): detergent indicator. Results reported in milligrams per liter (mg/L).

**NH3** - Ammonia: pollutant and an indicator of sewage. Results reported in milligrams per liter (mg/L).

**NH3N** - Ammonia Nitrogen: pollutant and an indicator of sewage. Results reported in milligrams per liter (mg/L).

**Total Plate Count** - The number of bacterial colonies that develop on a medium in a petri dish seeded with a known amount of inoculum. Results reported in colony count (#CC).

### ***SECTION 6.3 Dry Weather Screening and Mapping Schedule***

As of 2015, an initial Dry Weather Screening (DWS) of MS4 outfalls and system outlets had been completed and an evaluation of the system was completed to allow for a prioritization of future DWS for the City. Future DWS will be concentrated in areas where discharging HSTS still exist and at strategic system locations which will allow for detection of possible illicit discharges for significant portions of the City at one location.

In addition, detailed mapping of HSTS was performed in the Cedar Brook subdivision by FSWCD. This mapping includes the location of systems, outlet locations (when able to confirm) and the routing of the discharge piping from the system. Upon Completion of this mapping, New Albany worked with its residents to install new inspection boxes on all properties where permission was granted. This will allow for easier monitoring of the systems and tracking of illicit discharges if they are identified.

### ***SECTION 6.4 Identifying HSTS Connected to the MS4***

FCPH Water Quality Program staff have been verifying whether aeration systems are connected to the MS4 using various investigation methods. Staff use a current billing list of all aerators on the FCPH annual operational inspection program. They review permit records for notations regarding the discharge point of the aeration system (storm sewer, ditch, stream, waterway, etc.). Staff field verify any aeration systems that they cannot be 100% certain are connected to the MS4. To field verify these potential connections, staff use dye tests, probing for discharge pipes, and sampling results from the Dry Weather Screening of storm sewer outfalls. Upon the determination that an aeration system is connected to the MS4, staff from FCPH will update current lists and mapping as necessary.

## **SECTION 7.0 Mapping HSTS Connected to the MS4**

FCPH has the authority to regulate sewage treatment systems ("STS") under both Revised Code Chapter 3718.011 and Franklin County Public Health Regulation 720 (<http://myfcph.org/pdfs/regs/720Sewage.pdf>). FCPH conducts yearly investigations of all aeration systems which are part of their Operations and Maintenance Plan to ensure they are operating as intended. For those systems which do not contract with FCPH, FCPH requires yearly inspections of the systems by a qualified/approved independent contractor. Through this inspection process and as needed, FCPH determines where the STS outlet and maintains and updates records including if the STS is connected to the City's MS4.

## **SECTION 8.0 Prioritized Areas**

The City contains pockets of unsewered areas. These areas were targeted early during the Dry Weather Screening efforts as they were more likely than the sewerred areas to produce illicit discharges. The City continues their working relationship with Franklin County Public Health in working with residents in the unsewered areas to educate them on the importance of proper maintenance of their systems.

The largest concentration of STS exist in the Cedar Brook neighborhood. In this area, the City was given permission from several residents to install inspection boxes to assist with accurately assessing the operation of their STS. This area, as well as other smaller clusters of STS, will be monitored closely to assure the systems are consistently operating as intended.

### **SECTION 8.1 Prioritized Areas - Abatement of Issues**

Confirmed by the Dry Weather Screening throughout the City, it was determined that the most significant contributors to non-stormwater flows with public health risks are discharging HSTS and that the highest concentration of these systems are in Cedar Brook. While Franklin County Public Health (FCPH) conducts yearly inspections of these systems, some of the systems periodically do not operate as intended either due to improper management of the systems, or due to the age of the systems. City staff and FCPH staff outreach to the homeowners with these systems and provide guidance and assistance in attempts to bring the systems back into proper operating condition.

FCPH follows a standard protocol for the investigation and abatement of public health nuisances, which discharging HSTS are covered by when they are not operating as intended. Please reference *Appendix ii, Franklin County Public Health HSTS Public Health Nuisance Abatement*, for a flow diagram of this process.

## **SECTION 9.0 Communication and Outreach**

Success of the IDDE Program depends, in part, on communicating to the stakeholders and the public affected, and on providing the opportunity for community participation and input from various venues. The goal of this communication and outreach is for the community to understand the IDDE program, why it is required and its purpose, who is responsible for its implementation, how it will be implemented, and how they can become part of the solution to stormwater issues.

Communication and Outreach efforts are defined in detail in the City's Stormwater Management Program plan within the sections outlining activities for MCM 2 and MCM3. Examples of activities are not limited to, but include making documents available on New Albany's website for viewing and comment, articles in newsletters and papers, educational material in water bills, and workshops and programs.

## **SECTION 10.0 Reporting Illicit Discharges**

The IDDE Program benefits from citizen reports regarding spills, illegal dumping, sewage and other observed pollution. There are various avenues available to the community for reporting pollution complaints, depending on the material or liquid involved.

New Albany's Service Department performs a very broad range of services including documenting and following up on pollution and stormwater concerns from citizens. New Albany's service department phone number is: 614.855.0076. Additional information can be found at:

<http://www.newalbanyohio.org/links/contact-us> .

OEPA maintains a task force of responders for complaints of chemical spills into the waters of the state. The toll-free 24/7 hotline is 800-282-9378. More information can be found at

<http://www.epa.ohio.gov/derr/ersis/er/er.aspx>.

FCPH has an after-hours emergency phone number for emergency calls outside of business hours for chemical spills affecting MS4s at 614-525-3965. FCPH also provides an online form for sewage related complaints which can be found at: <http://www.fcbhforms.org/view.php?id=31>

Citizens are encouraged to report any water pollution related complaint or concern outside of HSTS and emergency spills to Franklin Soil and Water Conservation District, (614) 486-9613.

Non-emergencies can also be reported to the Ohio EPA Central District Office, 1-800-686-2330.

## **SECTION 11.0 Definitions and Initialisms Associated with this document**

**BMP:** Best Management Practices: means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of surface waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**CWA:** Clean Water Act (33 U.S.C. §1251 et seq. (1972)): establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in 1972. The "Clean Water Act" became the Act's common name with its amendments in 1977 (US EPA). The CWA provides the statutory basis for the NPDES permit program and the basic structure for regulating the discharge of pollutants from point sources to waters of the United States. Section 402 of the CWA specifically requires EPA to develop and implement the NPDES program.

**DWS:** Dry Weather Screening; the in-field process undertaken to fix the geospatial location of outfalls, record basic characteristics of the outfalls, and screen for illicit discharges and their relative severity. This field work is conducted only during periods of dry weather.

**E.coli:** An indicator often screened for during IDDE programs; *Escherichia coli*, is a species of fecal coliform bacteria that is specific to fecal material from humans and other warm-blooded animals. EPA recommends *E. coli* as the best indicator of health risk from water contact in recreational waters. Ohio's surface water quality standards are in the process of being revised. In the Draft Revisions to Water Quality Standards Ohio Administrative Code (OAC) Chapter 3745-1 *E. coli* will be used as the sole indicator for public health nuisances.

**FCPH:** Franklin County Public Health

**Fecal coliform:** An indicator often screened for during IDDE programs; Subset of total coliform bacteria which are more fecal-specific in origin. In current Water Quality Standards Ohio Administrative Code (OAC) Chapter 3745-1 fecal coliform is use in conjunction with E. coli to determine public health nuisances.

**FSWCD:** Franklin Soil and Water Conservation District

**HSTS - also referred to as STS:** Home Sewage Treatment System; a means of treating waste water and sewage on site. These systems do not connect into municipal sanitary sewer systems. Types of systems include: aeration units, septic tanks, leach fields, mound systems and drip systems. There are 2 general classifications of HSTS systems Off-Lot and On-Lot.

**Off-Lot Home Sewage Treatment Systems** are designed to treat home sewage on-site and discharges treated wastewater off-lot. **On-Lot Home Sewage Treatment Systems** are designed to treat home sewage on-lot with no discharges leaving the lot

**IDDE:** Illicit Discharge Detection and Elimination; a program mandated by the NPDES program developed to detect and eliminate illicit discharges

**Illicit Connection:** any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer (MS4)

**Illicit Discharge:** defined at 40 CFR 122.26(b)(2) and refers to any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except discharges authorised under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire fighting activities.

**MBAS:** An indicator often screened for during IDDE programs; Methylene Blue Active Substances, (surfactant) detergent indicator.

**MEP:** Maximum Extent Practicable; the technology-based discharge standard for Municipal Separate Storm Sewer Systems to reduce pollutants in storm water discharges that was established by CWA '402(p). A discussion of MEP as it applies to small MS4s is found at 40 CFR 122.34.

**MS4:** Municipal Separate Storm Sewer System; a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters,ditches, man-made channels, or storm drains) that are:

- Owned or operated by the federal government, state, municipality, township, county, district, or other public body (created by or pursuant to state or federal law) including special district under state law such as a sewer district, flood control district or drainage districts, or similar entity, or a designated and approved management agency under section 208 of the act that discharges into surface waters of the state; and

- Designed or used for collecting or conveying solely storm water,

- Which is not a combined sewer, and

- Which is not a part of a publicly owned treatment works

**MS4 Outfall:** a point source at the point where a municipal separate storm sewer discharges to surface waters of the State and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances that connect segments of the same stream or other surface waters of the state and are used to convey waters of the state.

**NH3:** An indicator often screened for during IDDE programs; Ammonia, pollutant and an indicator of sewage.

**NPDES:** National Pollutant Discharge Elimination System, Federal regulation implemented at the state and local level to regulate point sources of pollution into surface waters. The Franklin SWCD assists the county in regulating soil and erosion sediment control from construction sites. The authority to regulate this comes from the NPDES Program. For more information, refer to: <http://cfpub.epa.gov/npdes/index.cfm>

**OEPA:** Ohio Environmental Protection Agency

**Orthophosphate:** An indicator often screened for during IDDE programs; sewage, detergent, and fertilizer indicator.

**Sanitary Sewer:** a pipe or conduit (sewer) intended to carry wastewater or water-borne wastes from homes, businesses, and industries to the POTW.

**Storm Water:** defined at 40 CFR 122.2(a)(1)(ii) as storm water runoff, snow melt runoff, and surface runoff [ Page Intentionally Left Blank ]

**SWMP:** Storm Water Management Program; refers to a comprehensive program to manage the quality of storm water discharged from the municipal separate storm sewer system.

**TMDL:** Total Maximum Daily Loads, Federal regulation implemented at the state and local level to identify and reduce non-point source pollutants. This program is still being developed at the state level and is not yet being enforced.

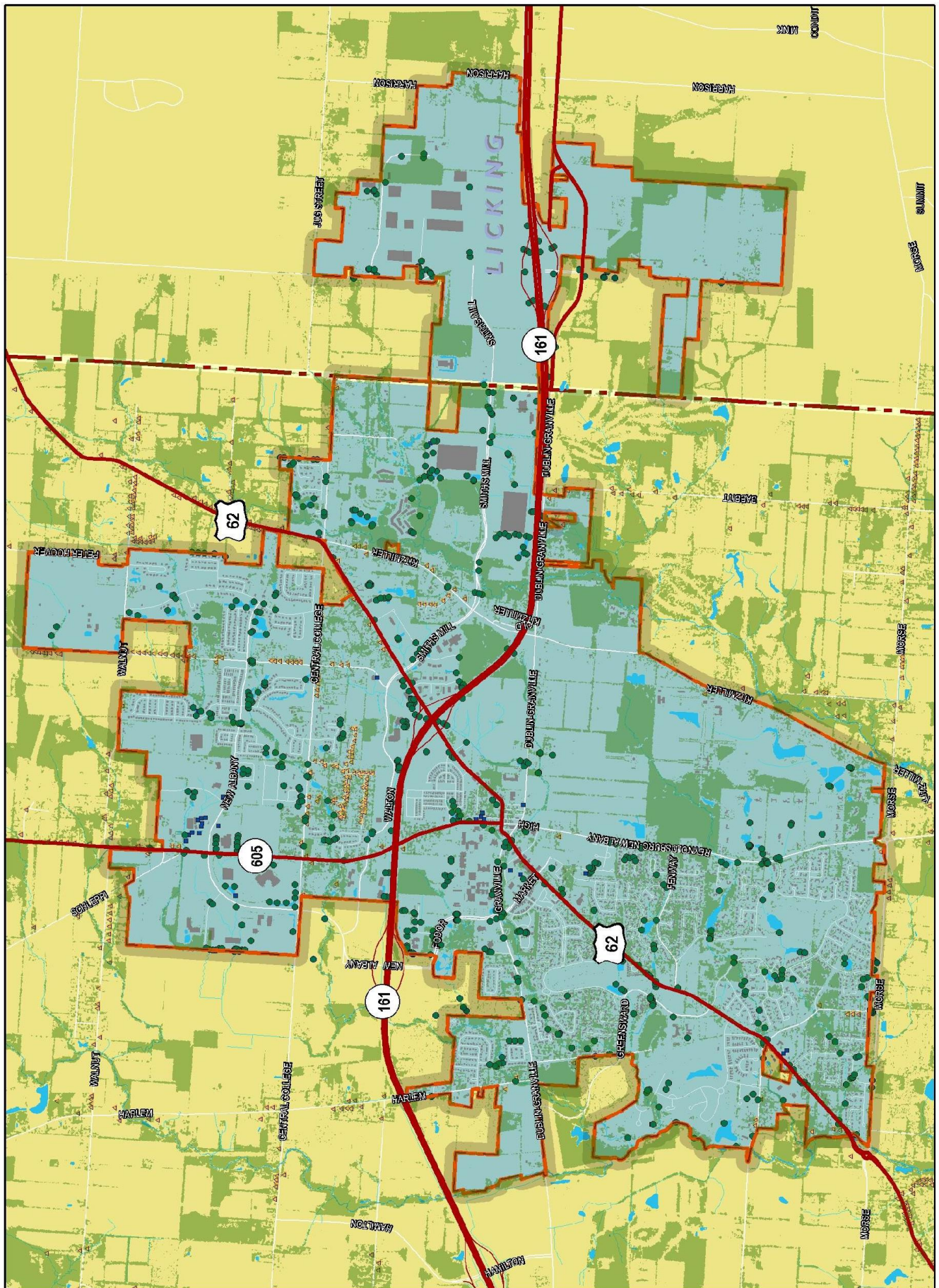
**Waters of the United States (receiving waters):** All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide. Waters of the United States include all interstate waters and intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. [See 40 CFR 122.2 for the complete definition.] The NPDES permit regulates flows to the Waters of the United States.

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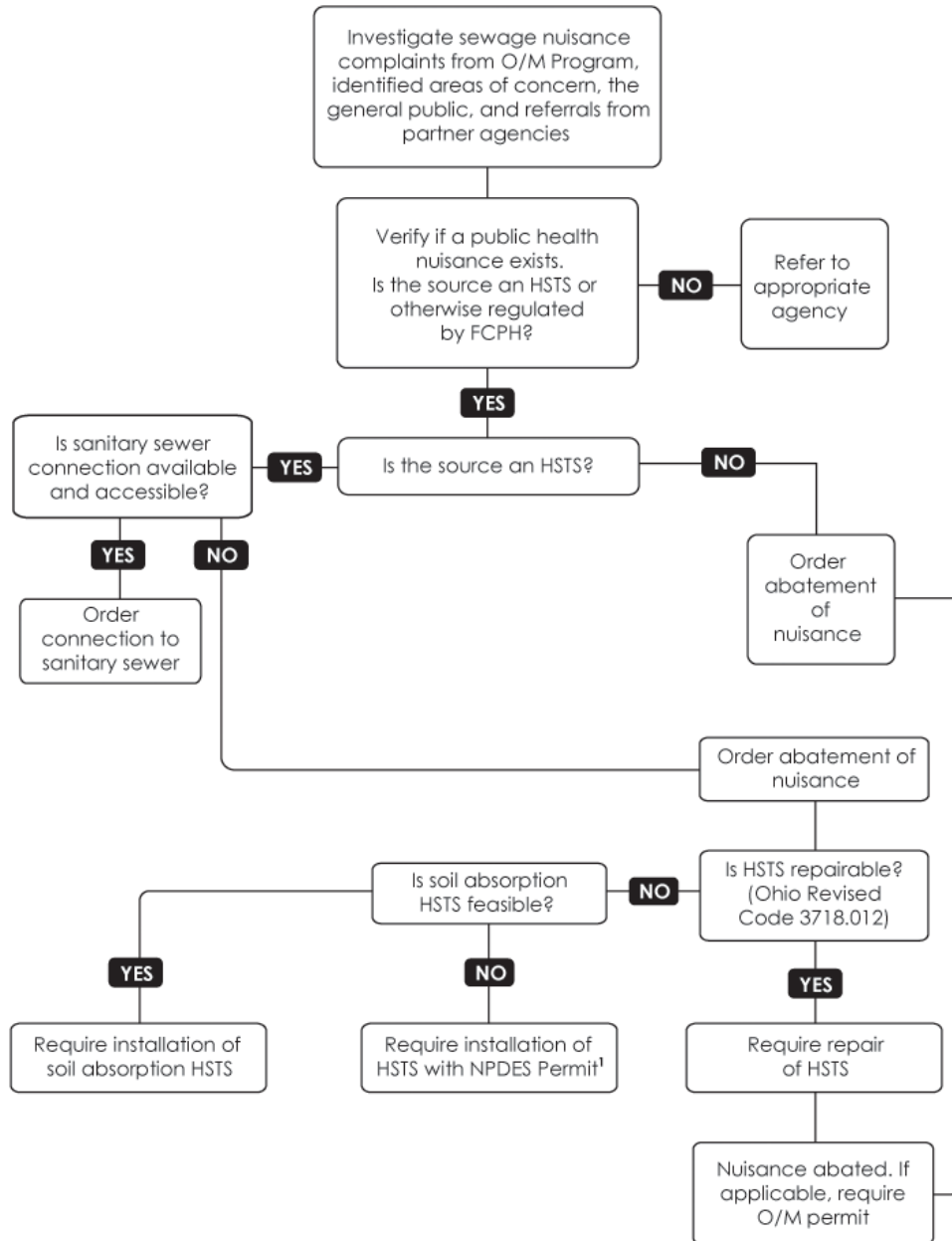
# ***New Albany Illicit Discharge Detection and Elimination Plan Appendix***

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*Mapping of Aeration Units, waters of the state and MS4 Outfalls*

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<sup>1</sup> NPDES: National Pollutant Discharge Elimination System