



CITY OF BELLEVUE
STORM WATER MANAGEMENT PROGRAM:

ILLICIT DISCHARGE DETECTION AND
ELIMINATION (IDDE)
STANDARD OPERATING PROCEDURES (SOP)

Prepared for:

City of Bellevue
MS4 Storm Water Program

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1.0 Purpose

In order to comply with requirements, set forth in the City of Bellevue's (City) National Pollution Discharge Elimination System (NPDES) Stormwater Phase II Permit, the City is required to develop and implement Illicit Discharge Detection and Elimination (IDDE) Standard Operating Procedures (SOPs). The procedures described in this report outline steps to be taken upon discovery of a likely illicit discharge and should be used in order to document the occurrence, sample the discharge, identify the likely source and eliminate it.

An illicit discharge is any discharge that does not originate from stormwater, or any other approved source as defined in the City of Bellevue Municipal Code § 27.5-21. Some of these allowable discharges may originate from:

- Firefighting activities, where such discharges or flows contain no significant sources of pollutants
- Diverted stream flows
- Rising groundwaters
- Uncontaminated groundwater infiltration as defined at 40 CFR 30.2005(b)(20)
- Uncontaminated pumped groundwater
- Discharges from potable water sources
- Foundation/footing drains
- Air conditioning condensation
- Irrigation water
- Water from crawl space pumps
- Individual residential car washing
- Dechlorinated swimming discharges
- Flows from riparian habitats and wetlands
- Sources specifically authorized by the City of Bellevue
- Sources authorized by a NPDES permit issued by the United States Environmental Protection Agency (EPA) or the Nebraska Department of Environment and Energy (NDEE)

Often the source of illicit discharge is from connections into the stormwater network that are illicit in nature. These illicit connections are as such defined as any connection (either surface or subsurface) that allows for an illegal discharge to enter the Municipal Separate Storm Water System (MS4).

2.0 Responsibility

It is the primary responsibility of the City of Bellevue Public Works Director to oversee the IDDE program and the assignment of the inspectors to evaluate received complaints, as well as the further actions taken by the City's Public Works Department to address issues uncovered throughout the investigation.

Additionally, it is the responsibility of the Director of Public Works of the City of Bellevue to ensure that all employees that could feasibly interact with illicit discharges are properly trained

so as to detect and document the occurrence in accordance with the procedures laid out herein. Education and training are summarized in Attachment F.

3.0 Procedures

3.1 Storm Sewer Inspection and Maintenance Procedures

Upon the receipt of complaints of localized flooding relating to the municipal storm sewer, the City of Bellevue Department of Public Works (Department) will investigate proper system functioning, including potential illicit discharges. When the Department conducts routine maintenance of its storm sewer network it will also check for illicit discharges in the area of the storm sewer. Outfall location maps are found in Attachment A to assist Department Staff with locating and identifying outfalls being investigated or inspected during routine maintenance.

Initial testing for illicit drainage may be as simple as a visual inspection of the watershed; however, should any reasonable evidence of illicit discharge be uncovered (See *Table 1: Potential Indicators of Intermittent Illicit Discharge* for examples of indicators of Illicit Discharge that do not include illicit effluent), maintenance workers should immediately inform their supervisor and/or the City of Bellevue's Director of Public Works, complete an Outfall Inspection Form (Attachment C) and then follow procedures outlined in Section 3.5 Sampling Procedures.

3.2 Sanitary Sewer Inspection and Maintenance Procedures

When the City of Bellevue Department of Public Works performs routine maintenance on sanitary sewer segments, it will also check for signs of illicit drainage. Should any evidence be uncovered (See *Table 1: Potential Indicators of Intermittent Illicit Discharge* for examples of indicators of Illicit Discharge that do not include illicit effluent), the City employee should immediately alert their supervisor and/or the City of Bellevue's Director of Public Works, complete an Outfall Inspection Form (Attachment C) and then follow procedures outlined in Section 3.5 Sampling Procedures.

3.3 Receipt of Complaint

Upon the receipt of a complaint from the public regarding a potential illicit discharge, the City employee who received the complaint shall complete the Citizen Complaint of Illicit Discharge Reporting Form (Attachment B) and transmit the completed document to the Director of Public Works. Upon receipt of the Citizen Complaint of Illicit Discharge Reporting Form, the assigned City inspector shall have 30 days to investigate the illicit discharge complaint. The inspector will then follow the Field Investigation Procedures in Section 3.4.

3.4 Field Investigation Procedures

In response to credible reports of suspected illicit discharges, the City will conduct dry weather field screening(s). These screenings shall be performed no less than 72 hours following a precipitation event (either snow or rain). The City will document dry weather field screenings with the Outfall Inspection Form (Attachment C). This form will be utilized for the initial site visit, and further follow up actions may be required should evidence of illicit discharge be

Illicit Discharge Detection and Elimination Operating Procedures

discovered. If illicit discharge is discovered, the assigned City inspector will complete the Illicit Connection Inspection Report Form (Attachment C).

3.41 Obstructions of Physical Observation

If the outfall suspected of having illicit discharge is partially or completely submerged, dry weather flow observation must be made at the next upstream point (generally a manhole) above the influence of the receiving body of water. This secondary observation point should be noted on the Outfall Inspection Form (Attachment C).

3.42 Indications of Intermittent Illicit Discharges

If at the time of field observation there is no illicit discharge present, but there is reasonable suspicion of intermittent illicit discharges and a previous illicit discharge at the same outfall location has not been resolved, the City should proceed with the completion the Illicit Connection Inspection Report Form (Attachment C). Possible indications of intermittent illicit discharge are shown below in *Table 1: Potential Indicators of Intermittent Illicit Discharge*.

Table 1: Potential Indicators of Intermittent Illicit Discharge

Potential Indicators of Intermittent Illicit Discharge
Soil Discoloration Lingering Odor Discolored Staining on Pipe or Channel Wall Evidence or Presence of Unusual Floating Matter

Additional follow up inspections may be prescribed as needed by the City of Bellevue's Director of Public Works, in accordance with the severity of the illicit discharge.

3.5 Sampling Procedures

When an illicit discharge has been identified, the City will proceed with sampling the effluent. The City will complete an Illicit Connection Inspection Report Form (Attachment C) and then collect a sample of the discharge from the associated outfall. In addition to sampling the discharge, field inspectors will test the discharge for pH, the presence of chlorine and the presence or iron or copper, by using department furnished test strip. Results of these tests will then be recorded on the bottom half of the Citizen Complaint of Illicit Discharge Reporting Form (Attachment B). While sampling the outfall, the inspector will also note if the discharge has any attributes from *Table 2: Causes for Concern in Discharge*. If the discharge has one or more attributes, the inspector will immediately notify their supervisor and/or the City of Bellevue's Director of Public Works.

Illicit Discharge Detection and Elimination Operating Procedures

Table 2: Causes for Concern in Discharge

Property	Method of Determination	Should be Noted if
Odor	In-Person Observation	Discharge has Suspicious or strong scent
Turbidity	In-Person Observation	Discharge is not clear
Petroleum Contaminate	In-Person Observation	Discharge has a Rainbow sheen is present
Floating mater	In-Person Observation	Discharge contains particles that are not reasonably expected
pH	Test Strip	pH < 6 or pH > 9
Total Chlorine	Test Strip	Discharge has any present
Iron and Copper	Test Strip	>0 mg/L

The sample will be tested, following guidance provided by the United States Environmental Protection Agency (EPA), for all possible contaminates shown in *Table 3: Common Contaminates in Illicit Discharge*.

Table 3: Common Contaminates in Illicit Discharge

Parameter	Potential Discharge Type (EPA Guidance)
Ammonia	Sewage, wash water
Potassium	Sewage, industrial or commercial liquid waste
Boron	>0.35 mg/L Likely indicates sewage or wash water
Chlorine	Industrial or commercial liquid waste
Conductivity	Sewage, wash water, and industrial or commercial liquid waster
E. Coli	>12,000 Count / 100 mL is likely Sanitary Wastewater
Enterococci	>5,000 Count/100 mL is likely Sanitary Wastewater
Fecal Coliform	Sewage
Fluoride	Distinguishes potable water from natural or irrigation water
pH of Dry Weather Discharge	Wash water

Illicit Discharge Detection and Elimination Operating Procedures

3.6 Procedures for Identification of Illicit Connection

Once all laboratory testing has been completed and any contaminants within the illicit discharge are identified, the City shall attempt to locate the illicit connection by examining laboratory results and interpreting data collected during the field investigation against *Table 3: Common Contaminates in Illicit Discharge* and *Table 4: Overserved Discharge Attributes and Possible Upstream Causes*. This information, when compared to available maps detailing the operations of businesses in proximity to the outfall, will be used to predict the location of the illicit connection.

Table 4: Overserved Discharge Attributes and Possible Upstream Causes

Attribute	Descriptor	Possible Upstream Cause
Odor	Sewage	Septic / sanitary wastewater
	Petroleum/gas	Petroleum Refineries, Vehicle maintenance, Gas Stations
	Rancid / Sour	Food Preparation Facilities (Restaurants, hotels)
	Sulfide	Meat Packers, canneries, dairies
Color	Brown	Meat Packers, Printing plants, Metal Works, Concrete or Stone Works, Oil Refineries
	Gray	Dairies, Sewage
	Yellow	Chemical Plants, Textile plants and Tanneries
	Red	Meat Packers
Turbidity	Cloudy	Sanitary Wastewater, Concrete or stone works, fertilizer facilities, automotive dealers
	Opaque	Food processors, Lumbermills, metal works, pigment plants
Floating Matter	Sewage	Sewage
	Suds	Car washes, chemical plants / heavy manufacturing
	Oil Sheen	Gas stations, car maintenance areas, car dealers

3.61 Confirmation of Illicit Connection

Confirmation of a suspected illicit connection will be accomplished through the utilization of additional methods. Methodology for confirming illicit connections will consist of one or more of the following methods, as directed by the City of Bellevue's Director of Public Works.

- Visual inspection of the watershed (if possible)
- Inspection or sampling of manholes both downstream and upstream of the suspected illicit connection
- Dye testing
- Smoke testing
- Televising the line

Should there be sufficient evidence to conclusively conclude that a connection is illicit prior to implementing additional methods as those mentioned above, the Department of Public Works may elect to deem it illicit based on the results and evidence from laboratory testing and field observations.

3.7 Classification of Illicit Connections

Illicit connections are classified in two categories that are differentiated based on the threat to the public and overall operation of the MS4. This classification affords the City the ability to either take immediate action to resolve illicit connections that pose a threat to the safety of the public (Class A Illicit Connections) or remediate illicit connections within a reasonable timeframe (Class B Illicit Connections).

- **Class A Illicit Connections** includes severe connections such as from septic tank effluents, industrial discharges, radiator flushing disposals, corrosive fluids that could damage the system, sewer connections where sanitary sewage is discharged into the storm sewer, and other ongoing discharges of toxic or potentially toxic materials. This includes connections that could pose an imminent threat to the public, environment or MS4.
- **Class B Illicit Connections** includes connections that require a permit, but do not pose an imminent threat to the public, environment or MS4. Class B illicit connections warrant corrective action from the City of Bellevue's Department of Public Works or person(s) responsible for the illicit discharge resulting from a private property but are not so urgent as to require immediate intervention in the name of public safety.

Class A illicit connections must be corrected immediately, as they pose an active threat to the public. Class B illicit connections must be addressed within 30 calendar days, unless otherwise approved by the City (the City may, for example, delay the selected corrective action, such as a removal or a repair, of a Class B illicit connection if winter conditions prohibit reasonable corrective action).

4.0 Enforcement

The Director of Public Works and the Department's staff are tasked with the enforcement of the provisions and requirements of the City ordinances related to illicit discharge and/or illegal dumping to the City's MS4. The Director of Public Works will coordinate with the appropriate staff members of the departments of Waste Water, Code Enforcement, and Streets. Assigned staff members will be responsible for verbal and written contact to the responsible party(ies), issuance of Notice of Violations (NOVs), and tracking documentation of the illicit discharge and/or illegal dumping case as further explained herein.

Once an illicit discharge is found, the City of Bellevue Director of Public Works will immediately notify the responsible party and may assign the appropriate Public Works staff to the case. The Public Works Director or assigned department staff will verbally inform the responsible party that they must stop the illicit discharge. The request to stop the illicit discharge will also be made in writing (see Attachment D for sample letter to discharger). If the party willingly stops the illicit discharge, the assigned department staff will document the removal of the illicit discharge by completing Section 7 of the Illicit Connection Inspection Report Form (Attachment C). If the party fails to correct the illicit discharge within the specified response time, the Public Works Director or assigned department staff will issue a Notice of Violation (NOV) to the responsible party.

Should the illicit connection be classified as a Class A Illicit Connection, the City may, at the discretion of the Director of Public Works, serve the offending party with a Notice of Violation immediately in the interest of public safety and expediting the process of eliminating the illicit discharge.

The NOV will require the elimination of the discharge and may provide a schedule for its elimination. Time frames and actions to be taken may be included in the NOV (see Attachment E for sample NOV). Should the offending party not resolve the illicit discharge within the timeframe specified by the NOV, the City of Bellevue Director of Public works shall repair the offending illicit connection, and seek damages from the property owner per City of Bellevue Municipal Code Section § 27.5-23:

“If any person fails to disconnect an illicit connection upon 30-days’ prior notification by the director, the director may cause the removal of such connection from the municipal storm sewer system. The city may pursue the recovery costs by appropriate means including a suit of law against the person or persons responsible or from the present owner or occupant”

If the City Council determines additional enforcement action is required after an NOV has been sent to the responsible party, the City Council may forward the illicit discharge documentation to the City Attorney to pursue further legal action.

Once the party has removed the illicit discharge, staff designated by the City of Bellevue Director of Public Works shall investigate to verify that the illicit discharge has been removed.

5.0 Documentation

Documentation of illicit discharge follow-up activities is a vital part of the program in order to pursue enforcement actions if needed and to document illicit discharge activities to the State. As a result, the following documentation should occur:

- The City should document all field activities using the Forms found in Attachment C
- The City should document all progress and results of any illicit discharge enforcement in an enforcement tracking file (digital and/or hard copies)

Other actions taken, especially fines, NOV letters, and legal resources, should be documented not only through the Illicit Connection Inspection Report Form, but also through copies of all correspondence between the City and the responsible illicit discharger. Special care should be taken to document all inspection activities undertaken by the City. Inspectors should keep record of all interactions with parties linked to an illicit discharge.

ATTACHMENT A
BELLEVUE OUTFALL MAPS

ATTACHMENT B

COMPLAINT REPORTING FORM

ATTACHMENT C
INSPECTION FORMS

Outfall Inspection Form

This form is provided to assist MS4 permittees with appropriate recordkeeping for their routine outfall inspections as required by the current MS4 NPDES permit. Initial illicit connection inspection must be performed during dry weather, which is at least 72 hours after the previous precipitation or snowmelt event.

It is recommended to attach photo(s) of the inspection of the outfall to this form.

Upon discovery of stream scouring, you may use “Stream Scouring Investigation Record Keeping Form” for required documentation.

Upon discovery of any possible illicit connection, you MUST use “Illicit Connection Inspection Report Form” for required documentation

SECTION 1: OUTFALL SUMMARY INFORMATION

Outfall ID: _____ Outfall Location Description: _____

Municipality: _____ County: _____

Receiving Waterbody: _____

Describe the type of conveyance(s) that delivers the storm water to the receiving waterbody (concrete, corrugated pipe, concrete channel, etc.): _____

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is any part of the end of the pipe fully or partially submerged? NEVER SOMETIMES* ALWAYS

* If ‘sometimes’ or ‘always,’ describe submerged conditions and conditions at the time of inspection:

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft): _____

SECTION 2: INSPECTION CONDITIONS

Date of current inspection: ___ / ___ / _____ Date of Previous Inspection: ___ / ___ / _____

Latest precipitation / snowmelt event: ___ / ___ / _____ Amount of precipitation (in.): ___ / ___ / _____

Outfall condition: PROPER CONDITION NEEDS MAINTINENCE NEEDS REPAIR

If applicable, describe the type of maintenance or repair needed: _____

Bank stability around outfall: GOOD FAIR NEEDS STABILIZATION

If applicable, describe the problem and word needed to stabilize the outfall: _____

Is there a dry weather flow present at the outfall or other evidence that a previous illicit discharge may have occurred? *(If the outfall is partially or fully submerged, dry weather flow observation must be made at the next upstream point (e.g., manhole) above the influence of the receiving surface waterbody.)*

PRESENT EVIDENCE NEITHER

If applicable: Manhole ID: _____ Approximate distance upstream from outfall (ft.): _____

If a dry weather flow is present at the outfall or there is other evidence that a previous illicit discharge may have occurred, the permittee must document the illicit discharge investigation by completing an **“Illicit Connection Inspection Report Form”**.

SECTION 3: STREAM SCOURING

Is stream scouring present? YES* NO

* If ‘YES’, describe the scouring, including where the scouring is occurring relative to the outfall:

*If you answered ‘YES’, you must document sources of stormwater that contribute to the outfall. The permittee shall complete the **“Stream Scouring Investigation Record Keeping Form”**. *

SECTION 4: INSPECTOR INFORMATION

Inspector’s Name: _____

Title: _____

Signature: _____ Date: _____

Illicit Connection Inspection Report Form

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the record keeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

Attach photos of the investigation to this form.

Section 1: Outfall Summary Information

Outfall ID: _____ Outfall Location Description: _____

Municipality: _____ County: _____

Receiving Waterbody: _____

Describe the type of conveyance(s) that delivers the storm water to the receiving waterbody (concrete, corrugated pipe, concrete channel, etc.): _____

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is any part of the end of the pipe fully or partially submerged? NEVER SOMETIMES* ALWAYS

* If 'sometimes' or 'always,' describe submerged conditions and conditions at the time of inspection:

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft): _____

SECTION 2: OUTFALL INSPECTION

Date of current inspection: ___ / ___ / _____

Latest Precipitation / snowmelt event: ___ / ___ / _____ Amount of Precipitation (in.): _____

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: ___ / ___ / ___

List the date(s) of previous inspection(s) and describe the actions taken, if applicable: _____

SECTION 3: PHYSICAL OBSERVATIONS

If the outfall is partially or fully submerged, dry weather flow observation must be made at the next upstream point (e.g., manhole) above the influence of the receiving surface waterbody.

If applicable: Manhole ID: _____ Approximate distance upstream from outfall (ft.): _____

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) where there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses)

<p>Odor</p>	<p><input type="checkbox"/> None</p> <p><input type="checkbox"/> Sewage (stale/septic/ sanitary wastewater)</p> <p><input type="checkbox"/> Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage)</p> <p><input type="checkbox"/> Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.)</p> <p><input type="checkbox"/> Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.)</p> <p><input type="checkbox"/> Other: _____</p>
<p>Color</p>	<p><input type="checkbox"/> Clear</p> <p><input type="checkbox"/> Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities)</p> <p><input type="checkbox"/> Gray (dairies, sewage)</p> <p><input type="checkbox"/> Yellow (chemical plants, texting and tanning plants)</p> <p><input type="checkbox"/> Red (meat packers)</p> <p><input type="checkbox"/> Other: _____</p>
<p>Turbidity</p>	<p><input type="checkbox"/> Clear</p> <p><input type="checkbox"/> Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers)</p> <p><input type="checkbox"/> Opaque (food processors, lumber mills, metal works, pigment plants)</p>
<p>Floatable Matter (Does not include litter)</p>	<p><i>Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins and condoms.</i></p> <p><input type="checkbox"/> None</p> <p><input type="checkbox"/> Sewage (toilet paper, etc.)</p> <p><input type="checkbox"/> Suds</p> <p><input type="checkbox"/> Petroleum (oil sheen)</p> <p><input type="checkbox"/> Other: _____</p>
<p>Deposits and Stains within outfall</p>	<p><i>Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge</i></p> <p><input type="checkbox"/> None</p> <p><input type="checkbox"/> Grayish Black (leather tanneries)</p> <p><input type="checkbox"/> White crystalline powder (Nitrogenous fertilizers)</p> <p><input type="checkbox"/> Excessive sediments (construction sites)</p> <p><input type="checkbox"/> Oily residues (petroleum refineries, storage facilities, vehicle service areas)</p> <p><input type="checkbox"/> Other: _____</p>
<p>Vegetation</p>	<p><i>As compared to surrounding Riparian bank and/or stream vegetation</i></p> <p><input type="checkbox"/> Normal</p> <p><input type="checkbox"/> Excessive growth and/or algal presence (food processing plants)</p> <p><input type="checkbox"/> Inhibited growth (industrial operation effluent, CAFOs)</p>

If the Physical Observations have been conducted and it was determined there was no odors, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the “Field Monitoring” section below must still be completed for verification. Prior to conducting the analyses in Sections 4 & 5, the sources may be traced back upstream, in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye or smoke tests

SECTION 4: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer’s instructions prior to testing

<p>Estimated Dry Weather Flow Rate</p>	<p>The Tier A guidance document recommends taking the estimate flow rate during the physical observations. Measurement: _____ GPM</p>
<p>Detergents Examples include surfactants and methylene blue active substances (MBAS)</p>	<p>Potential discharge types include sewage, wash water, industrial or commercial liquid waste Measurement: _____ mg/L</p>
<p>Temperature of dry weather discharge</p>	<p>Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: _____ mg/L</p>

SECTION 5: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

Based on the potential discharge types determine in the ‘Physical Observation’ and ‘Field Monitoring’ sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA’s Illicit Discharge Detection and Elimination guidance document ([Illicit Discharge Detection and Elimination \(IDDE\) Guidance Manual \(epa.gov\)](http://www.epa.gov))

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

(Provide a drawing if necessary)

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, wash water	_____ mg/L
Potassium	Sewage, industrial or commercial liquid waste	_____ mg/L
Boron	>0.35 mg/L Likely indicates sewage or wash water	_____ mg/L
Chlorine	Industrial or commercial liquid waste	_____ mg/L
Conductivity	Sewage, wash water, and industrial or commercial liquid waster	_____ S/m
E. Coli	>12,000 Count / 100 mL is likely Sanitary Wastewater	_____ Count/100 mL
Enterococci	>5,000 Count/100 mL is likely Sanitary Wastewater	_____ Count/100mL
Fecal Coliform	Sewage	_____ Count/100mL
Fluoride	Distinguishes potable water from natural or irrigation water	_____ mg/L
pH of Dry Weather Discharge	Wash water	_____ SU

SECTION 6: ILLICIT DISCHARGE INVESTIGATION

The investigation is not completed until the source of the dry weather flow is found, and any illicit discharge is eliminated

Based on the latest results from the investigation, including the results in Sections 3, 4 and 5, is/was this dry weather flow from an illicit connection? YES NO INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

Describe the Investigation, including the methods that were/will be used to identify the suspected source of the illicit discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

SECTION 7: ILLICIT DISCHARGE ELIMINATION

If it was illicit discharge, has the source been eliminated? YES NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 8: INSPECTOR INFORMATION

Inspector's Name: _____

Title: _____

Signature: _____ Date: _____

Stream Scouring Investigation Recordkeeping Form

This form is provided to assist MS4 permittees with appropriate recordkeeping throughout the investigation process of outfall stream scouring. This form is to be kept with the permittee's SPPP, as per the recordkeeping requirements of the MS4 NPDES permit. It is recommended to attach photo(s) of the outfall and scouring to this form.

SECTION 1: OUTFALL SUMMARY INFORMATION

Outfall ID: _____ Outfall Location Description: _____

Municipality: _____ County: _____

Receiving Waterbody: _____

Describe the type of conveyance(s) that delivers the storm water to the receiving waterbody (concrete, corrugated pipe, concrete channel, etc.): _____

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is any part of the end of the pipe fully or partially submerged? NEVER SOMETIMES* ALWAYS

* If 'sometimes' or 'always,' describe submerged conditions and conditions at the time of inspection:

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft): _____

SECTION 2: INSPECTION CONDITIONS

Date of current inspection: ___ / ___ / ____ Date of Previous Inspection: ___ / ___ / ____

Latest precipitation / snowmelt event: ___ / ___ / ____ Amount of precipitation (in.): ___ / ___ / ____

Provide a description of the stream scouring and outfall condition: _____

Describe investigation and findings, including suspected sources and action(s) being taken to reduce the volume or rate of flow from the sources contributing stormwater to the outfall, including dates of actions taken:

Was stream scouring identified during the previous inspection? YES* NO

*If 'YES', describe previous action taken: _____

Since the date of the last inspection, has the stream scouring worsened? YES* NO

*If 'YES', describe any potential causes, including new source(s) contributing stormwater to the MS4 discharging at this outfall since previous inspection (e.g. new housing developments, commercial plazas, etc.):

SECTION 3: SCHEDULING OF STREAM REMEDIATION

Description of the remediation project: _____

List milestones and dates of remediation (i.e. applied for permit, advertised for bid, awarded bid for project, completed project, etc.): _____

SECTION 4: PERMITS OBTAINED

Permit Type	Permit Authorization #	Application Date	Authorization Date
_____	_____	___ / ___ / _____	___ / ___ / _____
_____	_____	___ / ___ / _____	___ / ___ / _____
_____	_____	___ / ___ / _____	___ / ___ / _____
_____	_____	___ / ___ / _____	___ / ___ / _____
_____	_____	___ / ___ / _____	___ / ___ / _____
_____	_____	___ / ___ / _____	___ / ___ / _____

SECTION 4: INSPECTOR INFORMATION

Inspector's Name: _____

Title: _____

Signature: _____ Date: _____

ATTACHMENT D

SAMPLE LETTER TO DISCHARGER

John Doe
Property Manager
XYZ Inc.
1000 Example Street
Bellevue, NE 68005

Subject: Notice of Illicit Discharge Into Storm Sewer

Dear Mr. Doe:

This letter is a follow-up to the City inspection of your property on Month Date, Year. It was determined during the inspection that the floor drains carrying non-process wastewater from the current building expansion are connected to the storm sewer on Example Street at lateral #420. This connection is in violation of City of Bellevue ordinance § 27.5-22.

XYZ, Inc. has 30 calendar days to remove the discharge from the stormwater system by either the removal of the illicit connection, or the modification of procedures preventing illicit discharge from entering the sewer system.

It is the sole responsibility of XYZ, Inc. to ensure that it complies with all environmental regulations, both at the state and local levels. XYZ, Inc. must comply with all appropriate stormwater, pretreatment and other NPDES regulations and standards.

If you have questions regarding this matter, please contact the City of Bellevue Department of Public Works at (402) 293-3030.

Sincerely,

City of Bellevue

Doug Clark
Director, City of Bellevue Department of Public Works

ATTACHMENT E
SAMPLE NOTICE OF VIOLATION

September 19, 2021

CERTIFIED MAIL

Jane Doe
XYZ, Inc
1000 Example Avenue
Bellevue, NE 68005

Dear Ms. Doe:

Subject: Notice of Violation

The City of Bellevue Department of Public Works has confirmed a violation against Title 27 of the City of Bellevue municipal code. Enclosed you will find an initial letter of notification regarding an illicit discharge to the City's municipal storm sewer system and requesting corrective action.

Following is a summary of the violation:

NOV Number	Date of Violation	Violation Description
SNV42069	08/17/2021	Discharge of sanitary waste to a natural outlet

This illicit discharge must be corrected within 30 calendar days, or the City of Bellevue will take action to remove the illicit connection and then file for damages in a Court of Law against the respondent, as allowed for in City of Bellevue Municipal Ordinance § 27.5-23.

Our division has classified the nature of the violation as a recurring, minor ordinance violation. The City of Bellevue shall evaluate if it is necessary for escalated enforcement on this violation. It is the sole responsibility of XYZ, Inc. to ensure that all wastewater is disposed of in a legal manner per local, state and federal regulations.

If you have any questions or comments on this issue, please contact the City of Bellevue Department of Public Works at (402) 293-3030.

Sincerely,

City of Bellevue

Doug Clark
Director, City of Bellevue Department of Public Works

ATTACHMENT F
EDUCATION & TRAINING

Recommended Regular Trainings:

- Illicit Discharge Detection and Elimination (IDDE)
 - A training course related to illicit discharges.
 - Staff will be required take a refresher course every 3 years and new hires will be required to take the course within the first 30 days of employment.
 - Recommended for Public Works Department staff.
 - In-house Training.

Additional trainings and informational webinars:

EPA WEBINARS

Conducting IDDE Investigations

EPA Stormwater Webinar

Dated 7/11/2007

Video Length 1 hour 58 minutes

Video Description: *Discusses the field and lab methods necessary to conduct IDDE investigations. The covered topics include: IDDE terminology, basic components of an effective IDDE program, desk top assessments of illicit discharge potential to prioritize field activities, outfall reconnaissance inventory, post-screening prioritization, and detailed field and lab analyses to confirm and identify illicit discharges.*

Hyperlink to Website: [Conducting Illicit Discharge Detection and Elimination Investigations \(IDDE 201\) - YouTube](#)

Finding & Fixing Illicit Discharges & Connections

EPA Stormwater Webinar

Dated 9/30/2009

Video Length 2 hour 0 minutes

Video Description: *Focuses on finding and eliminating illicit discharges. The covered topics include: methods for tracing illicit discharges to their sources via various methods and eliminating illicit discharges. A specific case study is also discussed.*

Hyperlink to Website: [Illicit Discharge Detection and Elimination IDDE 301 - YouTube](#)

Confined Space Entry Trainings for Sewer Maintenance (Good Housekeeping & IDDE)



ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) TRAINING STRATEGY

Adapted from City of Omaha Environmental Quality Control Division,
Public Works Department Plan



Goal

Provide training for municipal field staff whose primary job duties lend them to potentially come in contact with or otherwise observe an illicit discharge or illicit connection to the separate storm sewer system.

Target Audience

Municipal field staff originate from multiple City Departments. These can include:

- Parks, Recreation & Public Property
 - Park Maintenance
 - Code Enforcement
- Planning
 - Permits and Inspections
 - Community Development
- Public Works Department
 - Waste Water Department
 - Streets Department
 - Fleet Maintenance Department

Strategy

Each respective Department's potential to encounter illicit discharges varies, some are more likely to see them than others. The Public Works Department serves as a primary resource for stormwater-related topics, including illicit discharge detection and elimination. Training and training resources will be provided to these Departments commensurate with their potential to come in contact with an illicit discharge. Ultimately, each Department oversees the training curriculum for their staff. The primary approach for training of municipal field staff will include, but is not limited to:

1. Compliance level training to eliminate confirmed illicit discharges or connections.
2. Inspector level training on illicit discharge detection.
3. Awareness level training for facility or department wide training sessions.
4. Provide printed educational materials.
5. Offer education and guidance on a case by case basis.

Most Departments will receive awareness level training. Within the Public Works Department identified personnel will receive Inspector and Compliance level training. City of Bellevue will encourage personnel to attend various internal and external training opportunities throughout the year. The training session topics include good housekeeping practices, erosion control installation and inspection, storm water pollution prevention measures, and other MS4 related trainings.

Training Tracking

- Attendance and subject matter will be documented for each formal training coordinated and/or attended.
- As part of their Facility Runoff Control Plans (FRCPs), maintenance facilities are to document their trainings. Site supervisors are encouraged to review and incorporate stormwater related

topics, including IDDE, into less formal educational settings, including staff meetings, safety meetings, and employee orientation.

- Tracking for additional trainings are the responsibility of the respective Department.

Reporting

The MS4 annual report will provide details of the training events and the number of employees in attendance, and the distribution of outreach materials.

Evaluation

Providing education opportunities and materials relevant to municipal staff is an ongoing consideration. The City of Bellevue will continue to develop educational materials as needs are recognized and staff feedback identifies a relevant topic that could reduce the risk of stormwater pollution citywide.