ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM DESCRIPTION



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1. Introduction

This document describes Clean Water Services' Illicit Discharge Detection and Elimination (IDDE) program, which is designed to prevent, detect and eliminate illicit discharges to the Municipal Separate Storm Sewer System (MS4). The IDDE program is implemented by Clean Water Services (CWS) and the eight co-implementers and complies with the requirements of CWS's watershed-based NPDES permit (Permit), issued April 22, 2016.

As defined in the Permit, an illicit discharge is any discharge to an MS4 that is not composed entirely of stormwater except discharges authorized in the Permit, discharges permitted by an NPDES permit or other state or federal permit, or otherwise authorized by DEQ.

The IDDE program *prevents* illicit discharges by requiring permitted industrial dischargers to have spill control plans when necessary and requiring facilities with 1200-Z industrial storm water discharge permits to follow Best Management Practices (BMPs) to prevent discharges of pollutants. Facilities that discharge wash waters are required to discharge to the sanitary system, rather than the MS4 and must have a permit to do so. CWS's *Design and Construction Standards* require the use of color-coded pipe, stakes and locate tape to prevent cross connections between the sanitary sewer conveyance system and the MS4. CWS's program to reduce inflow and infiltration (I/I) into the sanitary system has the added benefit of preventing seepage from the sanitary conveyance system into the MS4 system. CWS educates and informs the public on the proper use and disposal of chemicals to prevent illicit discharges.

The IDDE program *detects* illicit discharges through inspection of permitted facilities, observations during routine maintenance on MS4 facilities, annual dry weather outfall inspections, and facilitating public reporting of spills and illicit discharges.

CWS and the co-implementers *eliminate* illicit discharges by implementing the Enforcement Response Plan included in this document.

CWS recognizes that sanitary sewer overflows (SSOs) that reach the MS4 are illicit discharges. CWS has a comprehensive program including capacity assurance, operation and maintenance to prevent SSOs, as well as procedures to respond to any SSOs that may occur. The operation and maintenance program is described in the *Sanitary, Storm and Surface Water Management Performance and Reporting Standards (Performance Standards)*. The response procedures are described in the *Sanitary Sewer Overflow Emergency Response and Public Notification Manual (SSO Response Manual)*.

CWS also recognizes that discharges of turbid or contaminated stormwater from construction sites that reach the MS4 are illicit discharges. CWS and the co-implementers regulate construction sites by issuing erosion control permits, performing site inspections, and taking appropriate enforcement action to achieve compliance. The responsibilities of co-implementers are set forth in the *Performance Standards*. Inspection procedures and graduated enforcement are described in the *Clean Water Services Construction Site Runoff Inspection Guidance*.

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2. Prohibition of Illicit Discharges into the MS4

Clean Water Services' Ordinance No. 27 prohibits the discharge of sanitary sewage, septic tank leakage or overflow, and animal waste to the publicly owned storm and surface water system within CWS's jurisdiction, which includes the MS4. Ordinance No. 27 also prohibits discharge of the following into the publicly owned storm and surface water system within CWS's jurisdiction: substances that may cause fire or explosion or be injurious to CWS operations; solid or viscous substances that may obstruct flow or otherwise interfere with the system; any acidic, alkaline, or corrosive wastewater capable of causing damage or hazard to equipment or personnel; any wastewater containing toxic pollutants or other wastes in sufficient quantity to injure or interfere with treatment processes or to constitute a hazard to humans or animals; any noxious or malodorous substance capable of creating a public nuisance or hazard to life or is sufficient to prevent entry into the system for maintenance and repair; any substance; any substance that may cause the system's effluent or treatment residues to be unsuitable for reclamation or to interfere with the reclamation process; any substance that may cause the system to be in noncompliance with sludge use or disposal criteria developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substances Control Act, the Comprehensive Environmental Response Compensation and Liability Act, or state standards applicable to sludge management; any substance in such strength as to potentially cause CWS to violate its NPDES permit or other disposal system permits; any ashes, antifreeze, cinders, sand, mud, straw, insoluble shavings, metal, glass, rags, feathers, tar, creosote, plastics, wood, animal paunch contents, offal, blood, bones, meat trimmings and waste, lard, tallow, baking dough, chemicals, paint residues, cannery waste bulk solids, hair and fleshings, plastic or paper dishes, cups, food or beverage containers, gasoline, motor oil, and petroleum products.

Unless the following non-stormwater discharges are identified as a significant source of pollutants to waters of the state by CWS or DEQ, they are not considered illicit discharges and are authorized by the Permit: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration, uncontaminated pumped ground water, discharges from potable water sources, start up flushing of ground water wells, potable groundwater monitoring wells, draining and flushing of municipal potable water storage reservoirs, foundation drains, air conditioning condensate, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, charity car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, street wash waters, discharges of treated water from investigation, removal and remedial actions selected or approved by DEQ pursuant to ORS Chapter 465, and discharges or flows from emergency fire fighting activities.

Where CWS or DEQ identifies non-stormwater discharges as being significant sources of pollutants, CWS must develop and implement a BMP to reduce the discharge associated with the source. The CWS Storm Water Management Plan (SWMP) notes which discharges have been designated as significant sources of pollutants and describes the associated BMPs.

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3. Procedures to Prevent Illicit Discharges

CWS and the co-implementers carry out the following activities to prevent illicit discharges:

A. Industrial Discharger Slug Control Plans

CWS issues industrial discharge permits to industries that discharge wastewater to the sanitary collection system under its Industrial Discharge (Source Control) program. Permit issuance requires an assessment of the necessity for a Slug Control plan to prevent spills and submittal of a plan if CWS determines a plan is necessary. CWS Source Control staff inspects every permitted industrial discharger every year for permit compliance, including compliance with a Slug Control plan, if any.

B. 1200-Z Storm Water Pollution Control Plans

As an agent of DEQ, CWS administers the NPDES 1200-Z general permit for discharge of stormwater from industrial facilities. All 1200-Z permittees are required to have a Storm Water Pollution Control Plan (SWPCP), which describes measures for preventing the exposure of pollutants to stormwater or to remove pollutants prior to discharge. The SWPCP must include BMPs, spill prevention and response procedures, preventive maintenance, and employee education. CWS inspects each 1200-Z permittee annually for compliance with its SWPCP, unless the facility meets established criteria for less frequent inspections.

C. Construction Site Runoff Control

Within the Tualatin River Basin, the Tualatin Basin Rule (OAR 340-041-0345(4)) regulates erosion control and stormwater quality related to land development. Under this rule, CWS regulates all land development activities that disturb more than 500 square feet. In addition, construction activities that affect areas greater than one acre are also regulated under NPDES Stormwater Discharge Permits (1200-C and 1200-CN Permits). CWS and the cities issue erosion control permits for sites that disturb 500 square feet and greater. As an agent of DEQ, CWS administers the NPDES 1200-C general permit for discharge of stormwater from construction activities.

All 1200-C permitees (except individual single-family home sites less than one acre) are required to have an Erosion Prevention and Sediment Control (EPSC) plan in place. The EPSC plans contain BMPs for preventing erosion and offsite transport of sediment as well as BMPs for preventing pollution of stormwater by fuels, concrete washing, paints, adhesives, sanitary wastes, litter, and other wastes typical of construction sites. Operators of individual single-family home sites less than one acre must use a site sketch and list of BMPs, including perimeter sediment control, inlet protection, and a construction site entrance. CWS (or the co-implementing city) performs initial site inspections and inspects active construction sites regularly (weekly for site development and monthly for single lots) to ensure that the EPSC plans and individual single-family home site minimum measures are being properly implemented. CWS and the cities keep records of inspections and enforcement actions.

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D. Washwater Permits

CWS issues washwater permits to facilities that generate washwaters. The permits require the washwaters to be discharged to the sanitary conveyance system rather than the MS4. The permits specify BMPs and require that maintenance records be kept. CWS inspects these facilities annually for compliance with their permit requirements.

E. Design and Construction Standards

The CWS *Design and Construction Standards* reduce the likelihood of illicit discharges caused by sanitary sewer cross connections by requiring the use of color coded pipe to differentiate stubouts for sanitary and storm sewers. In addition, the standard requires identifying the ends of stubouts with a color coded 2x4 post and the use of buried locate tape labeled for sanitary and storm sewer stubouts. CWS and co-implementer inspectors ensure that these standards are followed. The *Design and Construction Standards* are applicable throughout the geographic area that drains to the MS4.

F. Sanitary Sewer Overflow Prevention

CWS prevents illicit discharges from SSOs by designing and maintaining the sanitary collection system to ensure that it has sufficient capacity to convey design flows.

G. Municipal Facilities

Municipal facilities such as wastewater treatment plants and maintenance yards have the potential to expose pollutants to stormwater. CWS operates four wastewater treatment plants, three of which do not discharge stormwater from areas with industrial processes. The Rock Creek Advanced Wastewater Treatment Plant operates pursuant to a 1200-Z stormwater general permit administered by DEQ, which requires a SWPCP containing provisions to reduce the discharge of pollutants to the MS4.

The Rock Creek and Durham plants also have Spill Prevention, Control and Countermeasures plans to prevent and respond to spills of oil and fuels.

The CWS Field Operations yard and all co-implementer maintenance yards follow written SWPCPs to prevent, detect and eliminate discharges of pollutants to stormwater. The Washington County maintenance yard is under a 1200-Z general permit.

H. Seepage from the Sanitary Conveyance System

CWS implements a program to reduce inflow and infiltration to the sanitary conveyance system. By addressing the integrity of this system, outflow and seepage into the MS4 is also prevented.

I. Public Education

To help the public reduce illicit discharges caused by spills and improper disposal, CWS provides the public with information on the proper use and disposal of pesticides, herbicides, fertilizers and other household chemicals. This information is provided through various media,

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including billing inserts, electronic newsletters, web pages, and radio and television spots. These activities are described in the CWS *Strategic Communications Plan*.

4. Procedures to Detect Illicit Discharges

A. Routine MS4 Work

CWS and city crews inspect, maintain, and repair facilities and components of the MS4 as part of their day-to-day work routine. This work includes cleaning and TV-inspecting storm lines, cleaning sumped catch basins and water quality manholes, and maintaining water quality facilities. CWS's *Performance Standards* prescribe intervals for these tasks as well as standards for completing them. Storm lines are cleaned on a six-year cycle and TV-inspected every other cleaning. Catch basins are cleaned every year and water quality manholes are cleaned and inspected twice yearly. Various intervals apply to the different tasks involved in maintaining water quality facilities, but each facility is visited at least four times per year. The *Performance Standards* require crew members performing these tasks to inspect for signs of illicit discharges and to comply with this program description. CWS provides training opportunities for personnel involved in MS4 work to enable them to recognize and properly respond to signs of illicit discharges.

B. Inspection of Permitted Facilities

CWS Source Control staff annually inspects the facilities of permittees that hold industrial discharge permits, 1200-Z industrial storm water permits, and washwater permits. CWS or city staff inspect construction sites covered by erosion control permits weekly or monthly as applicable. During these inspections, staff check for evidence of past or on-going illicit discharges. See Section 5 A, B, and C, below, for details on elimination of illicit discharges discovered through permitted facility inspections.

C. Annual Dry Weather Inspection

i. Pollutant Parameter Action Levels

CWS uses the pollutant parameter action levels (PPALs) shown in the following table to determine whether to further investigate a suspected illicit discharge found through the Annual Dry Weather Inspection program, or through any other activity. These parameters and action levels were selected based on their inclusion in EPA's *Illicit Discharge Detection and Elimination (IDDE): A Guidance Manual for Program Development and Technical Assistance.* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf)

Parameter	Action level	Suspected Source
Surfactants (as MBAS)	>0.25 mg/l	Presence of surfactants likely
		indicates washwater or sewage.
		When MBAs > 0.25 mg/l, confirm
		which source is more likely using
		ammonia/potassium ratio.
Potassium	(see ratio below	Relatively high concentrations of
	under ammonia	potassium (>20 mg/l) may indicate
	nitrogen)	sewage or industrial process waters
Ammonia nitrogen	NH3/K > 1.0	Presence of ammonia >0.5 mg/l
		likely indicates sewage, industrial
		waste or pets/wildlife.
		Ammonia/potassium ratio >1.0
		indicates possible sewage
Total Chlorine	>0.25 mg/l	Presence of chlorine, absent other
		parameters that exceed action levels,
		likely indicates municipal treated
		water or discharge of municipal
		water or pool/hot tub water
Conductivity	$> 2000 \ \mu S$	Indicative of industrial discharge
pН	<5	Indicates industrial discharge. High
		pH values may also indicate an
		industrial discharge but residential
		washwaters can have a high pH as
		well.

ii. Priority Locations

CWS first selected the 205 locations shown in the Appendix for dry weather inspection. These locations were selected because of their status as "major outfalls" as defined at 40 CFR 122.26 (b)(5). Major outfalls are those that drain residential or commercial areas and that are 36 inches or greater in size and that drain 50 acres or more, and those that drain industrial land and that are 12 inches or greater in size and that drain two acres or more.

CWS will annually select a subset of 55 priority locations to inspect from the list of 205 major outfalls. The 55 priority locations will be selected to provide a stratified sample of the 205 major outfalls to include a range of drainage area sizes, land uses, and geographic locations. Each year of the Permit term a different subset will be inspected to ensure that

ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM DESCRIPTION CLEAN WATER SERVICES Revision date: June 1, 2016 Page 7 of 22 all priority locations will be inspected during the term of the Permit. The actual inspection points are at the manhole immediately upstream from the outfall, rather than the outfall itself.

CWS may inspect outfalls in addition to the priority locations and will use adaptive management to revise the list of priority locations over time. In compliance with the Permit, the total number of priority locations will not be reduced. The priority locations are maintained in GIS so that maps showing their locations can be generated.

iii. Inspection and Field Screening

a. CWS annually inspects the 55 selected priority locations for evidence of illicit discharge. Inspection takes place after an antecedent dry period of at least 72 hours with less than 0.1 in of rain during any 24 hr period. Inspections are performed during periods when groundwater levels are low, generally July, August and September. Inspection is performed by CWS Field Operations personnel.

b. Inspectors make general visual observations, including presence of flow, turbidity, oil sheen, trash, debris or scum, condition of conveyance system or outfall, color, odor and other observations to potential illicit discharges. If observations suggest the potential presence of an illicit discharge and the source is unknown, Field Operations staff contacts CWS Source Control to conduct a field screen. A field screen must include either sampling for pollutant parameters that are likely to be found based on the suspected source of the discharge, or other effective investigatory methods to identify the source of the suspected discharge. If any PPAL is exceeded or there are other indications of illicit discharge, Source Control attempts to trace the source of the suspected illicit discharge by observation, TV inspection, business record research, and other investigatory techniques. If there is evidence that the illicit discharge is due to a sanitary sewer cross connection, Field Operations will either continue the investigation and abatement, or refer the matter to the appropriate city for investigation and abatement, depending on the jurisdiction of the location.

c. Inspectors document each inspection of a priority location, recording the location, date, antecedent dry period, general visual observations, and any referral for further investigation. These records are maintained in Field Operations' Lucity asset management system.

iv. Sampling

a. If an illicit discharge is suspected and the field screen and other investigatory methods do not identify the source, Source Control collects a sample for analysis by the Water Quality Lab. The Water Quality Lab analyzes the sample for pollutant parameters or identifiers that will support the identification of the source of the discharge. Further responses are described below in Section 5, Enforcement Response Plan. If it is determined that the illicit discharge is sanitary sewage, the

ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM DESCRIPTION CLEAN WATER SERVICES Revision date: June 1, 2016 Page 8 of 22 investigation is transferred to Field Operations or the responsible city as appropriate for investigation and abatement under Section 5.D.i. and ii.

b. Source Control maintains records of investigations of suspected illicit discharges. These records include the date of the request from Field Operations for investigation, observations made, results of field screening, results of laboratory analysis, investigatory actions and their results, and the ultimate outcome.

D. Facilitation of Public Reporting of Spills and Illicit Discharges

In addition to observations during routine work, inspection of permitted facilities, and annual dry weather inspection of priority outfalls, CWS and the co-implementer cities facilitate the public reporting of suspected spills and illicit discharges by having published emergency telephone numbers and "Report a Problem" functions and contact information listed on their respective websites. CWS promotes public reporting through public education and outreach.

5. Enforcement Response Plan

If evidence is discovered of a potential illicit discharge through facility inspection, routine MS4 work, Annual Dry Weather Inspection, public report, or through any other source, CWS and the cities follow this Enforcement Response Plan to investigate and eliminate the discharge.

A. Permitted Facilities - Industrial Users

Illicit discharges discovered during inspection of permitted industrial user facilities are investigated by the CWS Source Control staff as permit compliance issues and eliminated by following the CWS Source Control Program Enforcement Response Plan.

B. Permitted Facilities - 1200-Z Permittees

Illicit discharges discovered during inspection of 1200-Z permitted facilities are investigated by the CWS Industrial Stormwater staff as permit compliance issues and eliminated by following the CWS Industrial Stormwater and Water Quality Investigations Enforcement Response Plan.

C. Permitted Facilities - Erosion Control Permittees

Illicit discharges discovered during inspection of permitted construction sites are investigated by CWS or city erosion control staff as permit compliance issues and eliminated by following the Clean Water Services Construction Site Runoff Inspection Guidance or other approved documented procedure. CWS's Construction Inspection group in the Development Services Division is responsible for inspection and enforcement in the unincorporated areas of the District and within the cities of Tigard and Tualatin. Responsibility for inspection and enforcement in the other cities is given below.

i. Beaverton

The Site Development Division of the Public Works Department is responsible for inspection and enforcement at construction sites.

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ii. Cornelius

The City Engineer's office is responsible for inspection and enforcement at construction sites.

iii. Forest Grove

The Engineering Department is responsible for inspection and enforcement at construction sites.

iv. Hillsboro

The Engineering Division of the Public Works Department is responsible for inspection and enforcement at construction sites.

v. Sherwood

The Engineering Department in the Community Development Department is responsible for inspection and enforcement at construction sites.

D. Sanitary Sewer Cross Connections

i. Clean Water Services

CWS's Field Operations staff investigates suspected illicit discharges due to cross connections between the sanitary conveyance system and the MS4 within the CWS area of responsibility, as defined in the Intergovernmental Agreements with the coimplementer cities. Field Operations identifies the origin of the cross connection, typically by using TV inspection and dye testing. Once the property is identified, the information is forwarded to the Conveyance Engineering Department, which sends a letter to the property owner requiring abatement of the cross connection within 15 days. If the property owner fails to eliminate the cross connection as required in the abatement letter, CWS is authorized under Ordinance 27 to abate the cross connection and bill the owner for the cost of the work, and to bring an administrative action for a monetary penalty. In cases of imminent threat to public health or safety, CWS may cause the condition to be abated, notify the property owner, and charge the owner for the abatement.

ii. Co-implementer Cities

City staff investigate suspected illicit discharges due to cross connections between the sanitary conveyance system and the MS4 within their respective areas of responsibility, as defined in the Intergovernmental Agreements with the co-implementer cities. Cities handle these matters as described below.

a. Beaverton

Cross connections are investigated by the Sanitary/Storm Maintenance Lead and abated by the Plumbing Department in the Building Division of Community and Economic Development.

ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM DESCRIPTION CLEAN WATER SERVICES Revision date: June 1, 2016 Page 10 of 22 The Beaverton City Code provides for the abatement of nuisances, including water pollution, within 10 days of notice. If the person responsible fails to abate the nuisance, the City may abate the nuisance and charge the person responsible, lien the property for unpaid charges and charge the person responsible with a class I civil infraction punishable by a monetary penalty. The City may summarily abate nuisances that imminently endanger human life or property.

b. Cornelius

Cross connections are investigated and remedied by the Public Works Foreman.

The Cornelius City Code provides for the abatement of nuisances, including water pollution, within 10 days of notice. If the property owner or agent fails to abate the nuisance, the City may abate the nuisance and charge the owner or agent and lien the property. The City may also charge the owner with a violation which carries a monetary penalty. Where public safety, health or welfare is endangered by the nuisance, the City may order summary abatement within 24 hours.

c. Forest Grove

Cross connections from residential property are investigated by the Public Works Crew Supervisor and remedied by the Building Department. Cross connections from commercial or industrial property are referred to CWS Source Control for abatement.

The Forest Grove Code provides for the abatement of nuisances, including water pollution, within 10 days of notice. If the person responsible fails to abate the nuisance, the City may abate the nuisance and charge the person responsible, and lien the property for unpaid charges. The City may summarily abate nuisances that imminently endanger human life or property. In addition to abatement, the enforcement officer may cite the responsible person for violations punishable by monetary penalties, unless the nuisance was abated by the person responsible within 10 days as ordered.

d. Hillsboro

Cross connections are investigated by the Public Works sewer crew and referred to the City's Building Department for resolution and to Code Enforcement if necessary. The City enforces remediation of cross connections through its municipal code.

The Hillsboro Municipal Code provides for the abatement of nuisances, including water pollution, within 15 days of notice. If the owner of the property does not abate the nuisance as ordered, the City may file an action in municipal court to effect abatement, seek other appropriate relief, and impose civil penalties. The City may summarily abate a nuisance that poses an imminent danger to public health, safety, peace and welfare.

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e. Sherwood

Cross connections are investigated by the Operations Supervisor and remedied by the Public Works Director.

The Sherwood Municipal Code adopts CWS Ordinance 27, which prohibits the discharge of sewage to the MS4.

f. Tigard

Cross connections are referred for investigation and abatement to the Building Official in the City's Community Development Department to be handled as a plumbing issue.

The Tigard Municipal Code incorporates CWS Ordinance 27 and provides that the City code enforcement officer may require immediate remedial action by a responsible party in cases of violation. The City may also impose monetary fines for violations. In addition, the municipal code defines water pollution as a nuisance, which may be abated following procedures provided in the Code.

g. Tualatin

Cross connections are investigated and remedied by the Street/Sewer/Storm Manager in Public Works, who informs Building Permits of the need for permit issuance and inspection.

The Tualatin Municipal Code provides for abatement of nuisances, including water pollution, within 10 days of notice. If the owner of the property does not abate the nuisance, the City may enter the property to abate the nuisance, charge the owner of the property and lien the property for unpaid abatement costs. The City may also summarily abate a nuisance which imminently endangers human life or property.

E. Non-Sanitary Illicit Discharges from Other than Permitted Facilities

i. General

Illicit discharges of non-sanitary wastes (commercial or industrial wastewaters, spills and dumping) from facilities that do not have industrial discharge, 1200-Z, or erosion control permits are investigated and eliminated by either CWS or a co-implementer city, depending on the circumstances as described below. These illicit discharges may be discovered through routine MS4 work, annual dry weather inspection, public report, or other means.

Reports of spills, dumping and signs of pollution in open portions of the MS4 and surface waters are followed up as water quality investigations by CWS or a city, based on the area of responsibility as defined in the Intergovernmental Agreement between CWS and the city. The aim of such investigations is to establish the source and responsible party. Once a responsible party is identified, the party is informed of the violation and the need

ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM DESCRIPTION CLEAN WATER SERVICES Revision date: June 1, 2016 Page 12 of 22 to cease the activity. Failure to cease can lead to a civil citation for a monetary penalty, clean up costs, and an order to cease. Dumping within city jurisdictions can also be addressed through city ordinances against nuisances and offensive littering.

ii. CWS

CWS Source Control investigates and eliminates suspected illicit discharges including spills, dumping, and "hard piped" or constructed sources (other than sanitary sewer cross connections) within its area of responsibility. Cities that discover evidence of illicit discharges within their areas of responsibility have the option of referring the matter to CWS Source Control for further investigation and enforcement.

CWS Source Control investigates illicit discharges by gathering and analyzing evidence including laboratory analytical results, field observations and investigations, TV inspection videos and reports, land use data, and system maps to identify the source of an illicit discharge. Once the investigation identifies a responsible party, Source Control staff contacts the responsible party and informs the party of the situation and the necessity to immediately cease the illicit discharge.

Enforcement responses to illicit discharges include education and verbal requests, warning letters, Abatement Orders, administrative compliance orders, Notices of Violation with monetary penalty and cost recovery, termination of sewer service, and referral for criminal prosecution. The level of initial enforcement response is education and an informal request to cease. If the responsible party fails to correct the violation in response to the initial level of enforcement, CWS sends the party a warning letter and continues to increase the level of enforcement in a graduated response until the illicit discharge is eliminated. Formal enforcement procedures are provided in CWS's Resolution and Orders 90-63, 98-26 and 98-35, as amended.

iii. Cities

a. Beaverton

The Sanitary/Storm Maintenance Lead investigates reported spills, dumping and other non-sanitary illicit discharges. Instances of spills and dumping are referred to Code Services in the Mayor's Office, and hard-piped illicit connections are referred to the Plumbing Department in the Building Division of Community and Economic Development for abatement. The City investigates residential and commercial illicit discharges and generally refers industrial discharges to CWS Source Control.

b. Cornelius

The Public Works Foreman investigates reported spills, dumping and other nonsanitary illicit discharges. Discharges originating on private property are referred to the City Building Department for abatement. Industrial discharges are referred to CWS Source Control.

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c. Forest Grove

The Public Works Crew Supervisor investigates spills, dumping and other nonsanitary illicit discharges and ensures that they are abated. Non-sanitary illicit discharges from industrial sources are referred to CWS Source Control.

d. Hillsboro

Spills and dumping in streets are investigated by the Street Section of the Operations Division of Public Works. Spills and dumping into catch basins or elsewhere in the MS4 are investigated by the Sewer and SWM Section. Abatement and enforcement are carried out by the Code Enforcement Division of the City police department. If an illicit discharge is from an industrial source, is on-going, or is causing significant pollution, it is referred to CWS for enforcement and abatement.

e. Sherwood

Spills, dumping and other non-sanitary illicit discharges are investigated by the Public Works Operations Supervisor. Illicit discharges from residences are referred to either Code Compliance or CWS Source Control for enforcement and abatement. Illicit discharges from commercial or industrial sources are referred to CWS Source Control.

f. Tigard

Spills, dumping and other non-sanitary illicit discharges are investigated by the Wastewater Supervisor. They are referred to Code Enforcement for enforcement and abatement. Illicit discharges from industrial sources are referred to CWS Source Control.

g. Tualatin

Spills, dumping and other non-sanitary illicit discharges are investigated by the Street/Sewer/Storm Manager and referred to Code Enforcement in the Police Department. If from a commercial or industrial source, the illicit discharge is referred to CWS.

F. All Illicit Discharges

The enforcing authority (CWS or a city) must eliminate illicit discharges within five working days of identification of the source. If the enforcing authority determines that the elimination of the illicit discharge will take more than five working days due to technical, logistical, or other reasonable issues, the enforcing authority must, within 20 days of identifying the source, develop an action plan for eliminating the discharge in an expeditious manner and must implement the plan according to its terms. For common types of illicit discharges, this Enforcement Response Plan and the referenced *CWS Source Control Program Enforcement Response Plan*, the *CWS Industrial Stormwater Program Implementation Manual, the SSO Response Manual, and* the *CWS Erosion Control Inspection Procedures Handbook* will serve in lieu of the individual action plan. For unique or unusual circumstances, the enforcing authority develops an individual action

ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM DESCRIPTION CLEAN WATER SERVICES Revision date: June 1, 2016 Page 14 of 22 plan. Any plan must include a timeframe for eliminating the discharge in an expeditious manner and must identify who is responsible for implementing the corrective action.

If a known illicit discharge that originates within the jurisdiction of a co-implementer city or CWS discharges directly to a storm sewer system or property under the jurisdiction of another municipality, the city or CWS notifies the affected municipality as soon as practicable and at least within one working day of confirming the origin of the discharge and documents this communication.

If a known illicit discharge that is identified within the jurisdiction of CWS or a co-implementer city is determined to originate from a storm sewer system or property under the jurisdiction of another municipality, CWS or the city notifies the contributing municipality or municipality with jurisdiction as soon as practicable, and at least within one working day of confirming the origin of the discharge and documents this communication.

In any investigation or abatement of an illicit discharge within the jurisdiction of a city, CWS and the city communicate and cooperate as needed to complete the investigation and abate the illicit discharge.

G. Recordkeeping

CWS maintains records of all investigations and enforcement of suspected illicit discharges necessary to comply with tracking system requirements in the Permit and to show progress toward Measurable Goals in the SWMP. Other records, such as field notes, photographs, field analytical results, correspondence, and enforcement documents are maintained by the enforcing agency.

6. Procedures to prevent, contain, respond to, and mitigate spills

CWS and the cities prevent spills at permitted facilities as described above under Sections 3.A, 3.B., and 3.C. CWS and the cities prevent spills at municipal facilities as described above under Section 3.G. CWS prevents spills by educating the public on the proper use and disposal of chemicals as described above in Section 3.I.

Response, containment, and mitigation activities are carried out by emergency first response agencies: Tualatin Valley Fire & Rescue (TVF&R), Hillsboro, Cornelius, and Forest Grove city fire departments, Banks Fire District #13, and Washington County Fire District #2. All firefighters in these agencies are trained to OSHA Operations level in hazardous materials response. Regular fire rigs are equipped with absorbents for quick responses. TVF&R has a regional hazmat team consisting of two dedicated hazmat rigs and 30 individuals available around the clock to respond to emergencies. Members of the regional hazmat team are trained to OSHA Specialist level. The hazmat rigs carry pumps, absorbents, overpack drums, and other specialized equipment for responding to spills. In addition to serving the TVF&R area, the regional hazmat team provides emergency response services to the three city fire departments and two fire districts. In addition, backup response is available from City of Portland and City of

ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM DESCRIPTION CLEAN WATER SERVICES Revision date: June 1, 2016 Page 15 of 22 Gresham fire departments. CWS is available to provide technical advice to these agencies as requested. CWS has an emergency environmental response company under contract to perform environmental cleanups.

CWS and the cities comply with all applicable federal and state laws regarding reporting of spills and other similar illicit discharges that endanger human health or the environment, including proper notification to the Oregon Emergency Response System.

Environmental cleanup is the responsibility of the owner or operator of the facility where the release occurred. If the responsible party cannot be established or is unable to respond as required, and the response effort is small, CWS or the city will typically perform the cleanup. If the cleanup requires extensive effort, CWS or the city may work with the DEQ cleanup program to remediate the environmental impact.

APPENDIX

Select Locations for Annual Dry Weather Inspection. Priority locations are selected from this list as described in Section 4.C.ii.

SSWO ID	Diameter (in)	Land Use	Area (Acre)	Public/Private	City
248815	36	SFR	4	Public	Beaverton
248536	48	SFR	4	Public	Beaverton
248823	36	SFR	3	Public	Beaverton
248820	36	SFR	65	Private	Beaverton
249292	36	СОМ	84	Private	Beaverton
249306	36	SFR	27	Private	Beaverton
248312	60	SFR	9	Private	Beaverton
248413	36	SFR	7	Private	Beaverton
249299	48	MFR	5	Private	Beaverton
248129	36	SFR	49	Private	Beaverton
248283	36	COM	50	Unknown	Beaverton
108565	36	SFR	118	Private	Beaverton
249216	36	SFR	84	Private	Beaverton
248713	38	SFR	9	Public	Beaverton
248790	42	SFR	88	Private	Beaverton
249247	36	SFR	5	Public	Beaverton
248941	60	IND	17	Private	Beaverton
248617	60	MFR	5	Public	Beaverton
112190	36	COM	2	Private	Beaverton
249096	72	COM	5	Private	Beaverton
156341	15	IND	16	Private	Beaverton
248501	36	COM	81	Private	Beaverton
241730	36	SFR	31	Private	Beaverton
120512	48	COM	71	Private	Beaverton
239949	60	SFR	69	Private	Beaverton
239961	42	SFR	123	Private	Beaverton
279574	36	MFR	24	Private	Beaverton
248061	24	IND	5	Private	Beaverton
116566	12	IND	3	Private	Beaverton
116568	24	IND	7	Private	Beaverton
248308	36	SFR	26	Public	Beaverton
220934	36	SFR	80	Private	Beaverton
241898	36	COM	9	Private	Beaverton
248263	36	VAC	69	Public	Beaverton
113714	30	PUB	179	Private	Beaverton
193609	54	SFR	158	Private	Cornelius
194241	36	SFR	173	Private	Cornelius

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SSWO ID	Diameter (in)	Land Use	Area (Acre)	Public/Private	Citv
189114	48	MFR	121	Private	Cornelius
171337	48	COM	91	Private	Cornelius
188990	30	VAC	47	Private	Cornelius
192388	36	COM	29	Public	Durham
102000	00	00111	20		Forest
259159	36	SFR	44	Private	Grove
					Forest
229235	36	COM	72	Private	Grove
					Forest
258940	42	SFR	308	Public	Grove
					Forest
259160	15	IND	59	Private	Grove
050040			00	Dist	Forest
259049	30	IND	62	Private	Grove
250155	15		26	Drivete	Forest
209100	15	IND		Flivale	Giove
258944	36	SFR	164	Unknown	Grove
200011		OIII	101	Children	Forest
229009	48	SFR	269	Public	Grove
		-			Forest
258937	36	SFR	102	Private	Grove
					Forest
228529	30	SFR	111	Private	Grove
213123	42	COM	79	Private	Hillsboro
208389	36	SFR	158	Private	Hillsboro
204807	42	COM	113	Private	Hillsboro
205636	99	SFR	6	Private	Hillsboro
195045	30	IND	10	Private	Hillsboro
203176	36	SFR	49	Private	Hillsboro
202850	42	COM	63	Private	Hillsboro
202849	36	SFR	80	Private	Hillsboro
272157	30	IND	8	Private	Hillsboro
205656	36	SFR	99	Unknown	Hillsboro
202840	99	SFR	29	Public	Hillsboro
210974	21	IND	15	Unknown	Hillsboro
219549	27	IND	13	Private	Hillsboro
210973	24	IND	54	Private	Hillsboro
209407	30	IND	58	Public	Hillsboro
197740	36	SFR	30	Private	Hillsboro
222000	18	SED	1/1	Private	Hilleboro
10021/	36	SED	212		Hilleboro
2105014	26		10		Lilleboro
210004	30	COM	42	Private	
210566	36	SFR	47	Public	Hillsboro

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SSWO ID	Diameter (in)	Land Use	Area (Acre)	Public/Private	City
209613	36	SFR	103	Private	Hillsboro
220038	48	MFR	48	Public	Hillsboro
197787	42	SFR	151	Private	Hillsboro
201603	18	IND	175	Private	Hillsboro
210308	36	IND	38	Private	Hillsboro
220075	36	IND	61	Public	Hillsboro
216915	48	IND	43	Public	Hillsboro
209850	60	IND	136	Private	Hillsboro
196870	36	SFR	62	Private	Hillsboro
216901	36	COM	76	Private	Hillsboro
210129	18	IND	31	Private	Hillsboro
210128	18	IND	28	Private	Hillsboro
210131	99	IND	63	Private	Hillsboro
217274	15	IND	6	Private	Hillsboro
217269	12	IND	3	Unknown	Hillsboro
195869	30	SFR	61	Private	Hillsboro
194756	30	SFR	75	Public	Hillsboro
195025	24	SFR	64	Public	Hillsboro
198995	30	UNK	209	Public	Hillsboro
201044	36	SFR	96	Public	Hillsboro
201587	30	SFR	51	Public	Hillsboro
199172	30	SFR	120	Private	Hillsboro
205234	30	SFR	135	Private	Hillsboro
202845	30	PUB	269	Private	Hillsboro
209387	36	PUB	61	Private	Hillsboro
209408	60	PUB	64	Public	Hillsboro
210972	72	VAC	221	Private	Hillsboro
214138	42	SFR	108	Public	Hillsboro
212356	30	SFR	69	Public	Hillsboro
274001	30	SFR	71	Public	Hillsboro
220607	54	COM	233	Private	Hillsboro
220311	45	UNK	83	Public	Hillsboro
248351	42	COM	70	Public	Hillsboro
191199	36	MFR	65	Public	King City
129128	48	SFR	413	Private	King City
070005				5.4	Lake
270965	21	IND	30	Private	Oswego
114549	48	COM	7	Private	
232615	42	SFR	74	Private	Sherwood
232594	36	SFR	140	Public	Sherwood
232739	36	SFR	120	Private	Sherwood
278544	18	IND	8	Private	Sherwood

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SSWO	Diameter (in)	Land Use	Area	Public/Private	City
259070	36	COM	62	Unknown	Sherwood
105965	36	SFR	22	Private	Sherwood
109251	48	SFR	125	Public	Tigard
167392	36	SFR	24	Private	Tigard
271061	24	IND	13	Unknown	Tualatin
271307	18	IND	16	Private	Tualatin
270943	12	IND	72	Private	Tualatin
270942	12	IND	2	Private	Tualatin
270971	36	SFR	96	Public	Tualatin
270982	42	MFR	23	Public	Tualatin
270912	15	IND	23	Private	Tualatin
271305	18	IND	11	Private	Tualatin
271323	36	IND	50	Private	Tualatin
270935	48	COM	63	Private	Tualatin
270934	36	SFR	262	Public	Tualatin
270898	48	RUR	12	Public	Tualatin
270925	15	IND	143	Private	Tualatin
270963	72	COM	62	Private	Tualatin
271095	48	СОМ	177	Public	Tualatin
271089	21	IND	103	Private	Tualatin
271185	36	SFR	109	Private	Tualatin
270932	36	IND	44	Private	Tualatin
271186	42	PUB	113	Public	Tualatin
270902	36	SFR	117	Public	Tualatin
113186	36	SFR	78	Private	WashCo
191327	42	SFR	181	Private	WashCo
121727	36	SFR	12	Public	WashCo
113374	42	SFR	3	Unknown	WashCo
114757	36	SFR	27	Private	WashCo
113379	42	SFR	20	Private	WashCo
108594	36	SFR	161	Private	WashCo
109020	36	SFR	43	Private	WashCo
110366	36	SFR	5	Private	WashCo
242295	18	IND	49	Unknown	WashCo
110344	54	COM	10	Private	WashCo
128639	48	SFR	13	Private	WashCo
226407	36	SFR	8	Private	WashCo
160949	36	SFR	192	Private	WashCo
275663	12	IND	3	Private	WashCo
109870	12	IND	19	Private	WashCo
187526	15	IND	3	Unknown	WashCo
112158	48	SFR	2	Private	WashCo

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SSWO	Diameter	Land	Area	Public/Privato	City
100/20	06	COM		Private	WashCo
187053	<u> </u>		12	Public	WashCo
115661	12	SER	2	Private	WashCo
121350	42	SER	1/	Private	WashCo
120364	40	SED	258	Linknown	WashCo
11/608	40		54	Drivato	WashCo
122220	12		10	Private	WashCo
118624	10		10	Private	WashCo
2/10/2	36	COM	137	Private	WashCo
120010	24		/7	Private	WashCo
131700	36	SER	67	Private	WashCo
11/2/5	36	SER	07 Q	Private	WashCo
11/157	36	SED	50	Private	WashCo
131701	36	SER	12/	Private	WashCo
105071	36	SFR	66	Private	WashCo
11/238	36	SER	16	Private	WashCo
11253/	36	SER	54	Private	WashCo
12//01	36	COM	0	Private	WashCo
124491	36	SED	73	Private	WashCo
105047	36	SED	64	Public	WashCo
115965	36		04	Privoto	WashCo
106155	30	OFN QED	67	Private	WashCo
106/6/	36	SED	10	Private	WashCo
106507	36	SER	53	Private	WashCo
105544	36	SER	17	Private	WashCo
116844	36	SFR	121	Private	WashCo
116739	36	SFR	95	Private	WashCo
116524	36	SFR	71	Private	WashCo
249065	36	MFR	41	Private	WashCo
119737	36	SFR	4	Private	WashCo
101487	36	SFR	29	Unknown	WashCo
116331	48	SFR	168	Private	WashCo
116318	48	SFR	116	Private	WashCo
110021	36	SFR	42	Private	WashCo
131341	36	SFR	199	Unknown	WashCo
274986	36	COM	34	Private	WashCo
123092	36	SFR	66	Public	WashCo
103546	36	SFR	63	Public	WashCo
123047	36	SFR	73	Private	WashCo
116954	36	SFR	145	Public	WashCo
104820	36	SFR	51	Public	WashCo
120675	36	SFR	92	Private	WashCo

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SSWO ID	Diameter (in)	Land Use	Area (Acre)	Public/Private	City
128032	30	SFR	90	Private	WashCo
114692	36	AGR	56	Private	WashCo
119720	36	SFR	94	Private	WashCo
105883	36	SFR	68	Private	WashCo
109315	30	SFR	60	Public	WashCo
101624	30	SFR	86	Private	WashCo
280205	36	VAC	74	Private	WashCo
126076	30	SFR	88	Private	WashCo
115305	30	SFR	263	Public	WashCo