



Pierce County
Planning & Public Works

2020 Stormwater Management Program Plan

Prepared in compliance with the 2019 Phase I Municipal Stormwater National Pollutant Discharge Elimination System and State Discharge General Permit for discharges from Large and Medium Municipal Separate Storm Sewer Systems (effective August 1, 2019)

Permit #WAR044002

PIERCE COUNTY PLANNING AND PUBLIC WORKS
 2020 Stormwater Management Program Plan
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1.0 | INTRODUCTION: 2020 SWMP PLAN (S5.A.1)

Pierce County's 2020 Stormwater Management Program Plan (2020 SWMP Plan) complies with the 2019 Phase I Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) and State Discharge General Permit (Permit) Pierce County permit #WAR044002.

The 2020 SWMP Plan describes Pierce County's programs that support compliance with our Permit and planned Permit activities for the upcoming calendar year. These efforts protect water quality and satisfy the applicable requirements of the Clean Water Act and State Water Pollution Control Act. This document also provides a brief description of Permit-required efforts undertaken in 2019.

The Permit initially expired on July 31, 2018 and was extended by Ecology for one year. The current Permit was reissued on July 1, 2019 and became effective on August 1, 2019.

During 2020, SWM will work with our new communications team on the SWM Department's website to make it easier for citizens to comment on the SWMP and get help for stormwater and water quality concerns.

1.1 Background

NPDES (*Section 402 of the federal Clean Water Act*) is a federal program that requires the issuance of permits for the discharge of pollutants into the nation's water ways. USEPA delegates the administration of this permit to the state agency (Ecology). Additionally, under Washington State Water Pollution Control Act (Chapter 90.48 RCW), Ecology has authority to issue "State Waste Discharge Permits."

Ecology combines both federal NPDES and State Waste Discharge requirements into a single permit. The State Permit covers discharges from municipal separate storm sewer systems (MS4) that Pierce County owns and operates. It also requires the use of stormwater best management practices (BMPs) to reduce the discharge of pollutants to the maximum extent practicable.

The Phase I MS4 permit (Permit) is a General Permit that Ecology issues to jurisdictions including Pierce County Snohomish, King and Clark counties, and the cities of Tacoma and Seattle. The Permit has an effective date of August 1, 2019.

1.2 County Coordination and Responsibilities

Pierce County has the following responsibilities under the Permit:

1. As the local land use authority for the unincorporated area, the County must have appropriate codes, regulations, enforcement, and education capacity to reduce water-polluting practices and to increase or promote practices that protect water quality.
2. As a landowner and property manager, the County must ensure that its own practices meet regulatory standards.
3. As a regional government, the County coordinates between various departments within the County, and other permittees, to achieve compliance with permit requirements.
4. On an annual basis, the County pays into a statewide monitoring program, or may elect to conduct monitoring within its jurisdictional boundaries.

Pierce County's Planning and Public Works (PPW) Department, Surface Water Management Division (SWM) coordinates the annual development of this SWMP Plan as well as annual reporting required by the permit. SWM works with other departments to implement permit compliance activities including maintenance and source control inspections, structural stormwater control, response to illicit discharges monitoring, training and public education elements of the Permit.

All Departments and Divisions in the County that own property, store materials or vehicles, conduct pollution generating activities or are in a position in the field to observe any of these activities have responsibilities under the Permit.

Development Sections of the County's Planning and Public Works Department is responsible for the proper application of stormwater requirements for new development and re-development through site design, permitting, and inspections. Requirements can be found in the Stormwater Management and Site Development Manual and related County codes. Other Pierce County departments and divisions also have a significant role in the implementation of the SWMP Plan through managing properties, facilities, and programs covered under the Permit. These departments and divisions include: Facilities Management Department, Parks and Recreation Department, and Sustainable Resources Division (solid waste services). The Permit requires County-owned facility Stormwater Pollution Prevention Plans to be prepared where necessary.

During 2020, SWM staff will continue to coordinate with these departments to ensure their staff are aware of requirements under the permit and identify staff responsible for implementing requirements of the permit.

1.3 SWMP Plan Components

Organization of the SWMP Plan follows the established format of the NPDES Phase I MS4 Permit:

- Legal Authority (S5.C.1)
- MS4 Mapping and Documentation (S5.C.2)
- Coordination (S5.C.3)
- Public Involvement and Participation (S5.C.4)
- Control of Runoff from New Development, Redevelopment and Construction Sites (S5.C.5)
- Stormwater Planning (S5.C.6)
- Structural Stormwater Controls (S5.C.7)
- Source Control Program for Existing Development (S5.C.8)
- Illicit Connections and Illicit Discharges Detection and Elimination (S5.C.9)
- Operation and Maintenance Program (S5.C.10)
- Education and Outreach Program (S5.C.11)
- Compliance with Total Maximum Daily Load Requirements (S7)
- Monitoring and Assessment (S8)

2.0 LEGAL AUTHORITY (S5.C.1)

2.1 Summary of Permit Requirements

Minimum performance measures to demonstrate control of discharges into and out of the MS4 include a combination of codes, regulations, statutes, ordinances, permits, contracts, orders, inter-agency agreements, or similar means. These measures authorize or enable the County, at a minimum, to authorize the following:

- Prohibit through ordinance, order, or similar means, illicit discharges to the MS4 owned or operated by the permittee.
- Control through ordinance, order, or similar means, the discharge of spills and disposal of materials other than stormwater into the MS4s owned or operated by the permittee.
- Control through inter-agency agreements among co-applicants, the contribution of pollutants from one portion of the MS4 to another portion of the MS4
- Require compliance with conditions in ordinances, permits, contracts, or orders; and, within the limitations of state law, carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions, including the prohibition on illicit discharges to the MS4 and compliance with local ordinances.

2.2 Permit Compliance Actions and Activities

Pierce County has established the following to comply with the Legal Authority section of the Permit:

√ Codes and regulations to control discharges into and out of the MS4 (S5.C.1.a. and b.)

Legal authority enabling the County to control discharges to and from the MS4 is established by the following:

- Pierce County Code: Illicit Stormwater Discharges (PCC 11.05) (*Appendix A*)
 - » Provides minimum requirements for reducing and controlling the discharge of pollutants to stormwater conveyance systems owned and maintained by Pierce County.
- Pierce County Stormwater Management and Site Development Manual" (PCSWMSDM), (Ordinance No. 2015-48s). (*Appendix B*)
 - » Provides requirements on how to control the quantity and quality of stormwater runoff.
 - » Executive Order Concerning Effective Stormwater Management, Pierce, County Washington (EO 2017-01). (*Appendix C*)
 - » Allows County Departments to fully implement all applicable provisions of the Permit.
 - » Coordinate, track, and report specific Permit actions.
 - » Protect surface and groundwater resources by reducing polluted runoff from County drainage systems, facilities, and properties.

The County will continue to utilize these documents during 2020 to manage and control discharges to and from the MS-4. Pierce County reviews the documents listed above in accordance with Permit requirements, and updates as needed.

3.0 MS4 MAPPING AND DOCUMENTATION (S5.C.2)

3.1 Summary of Permit Requirements

MS4 mapping data is a tool for stormwater protection and enhancement planning during economic development, inter-jurisdictional communication, internal County decision-making, and public education. The MS4 Mapping and Documentation section of the Permit helps Pierce County manage resources, during development planning and is available for tracing stormwater pollution sources. The minimum performance measures of this program include:

ONGOING MAPPING DATA FOR FEATURES SUCH AS:

- Known MS4 outfalls and discharge points
- Receiving waters, other than ground water
- Stormwater treatment and flow control BMPs/facilities owned or operated by the county
- Geographic areas served by the County's MS4 that do not discharge stormwater to surface water
- Tributary conveyances to all known outfalls and discharge points with a 24-inch nominal diameter or larger.
- Connections between the MS4 owned or operated by the Permittee and other municipalities or other public entities
- Existing, known connections greater than or equal to 8 inches in nominal diameter to tributary conveyances

NEW MAPPING DATA FOR FEATURES INCLUDING:

- Collect size and material for all known MS4 outfalls and update records (begin no later than January 1, 2020)
- Complete mapping of all known connections from the MS-4 to privately-owned stormwater systems (by August 1, 2023)
- Complete mapping tributary conveyances for 50% of the areas outside the previously mapped urban/higher density rural sub-basins
- Mapping shall be in an electronic format with fully described mapping standards
- The County shall make available, to the extent appropriate and consistent with national security laws and directives, available maps depicting information to Ecology, federally recognized Indian Tribes, municipalities and other permittees

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3.2 PERMIT COMPLIANCE ACTIONS AND ACTIVITIES

Pierce County has established the following components in compliance with the MS4 Mapping and Documentation section of the Permit:

√ Ongoing and new efforts to map required features (S5.C.2 a and b)

The County continues to implement a comprehensive program to map the MS4, including newly found or constructed MS4 features.

Drainage features are collected in the field by trained staff using Geographic Positioning System (GPS) collections system, which includes a drainage dictionary to ensure consistency. The drainage dictionary was updated during the previous permit cycle to match definitions in the permit.

Pierce County collects size and material for all known MS4 outfalls during field screenings during 2019. This information will continue to be collected during 2020 and these records are being updated in EAM.

During routine field screenings and inspections beginning in 2020, the County will be collecting data and mapping all known connections from the MS4 to privately-owned stormwater systems.

This information will be submitted to Ecology no later than August 1, 2023.

Pierce County GIS data is available publicly via the Internet through the following link:

<https://gisdata-piercecowa.opendata.arcgis.com/>

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4.0 COORDINATION (S5.C.3)

4.1 Summary of Permit Requirements

In order to eliminate barriers to compliance with the terms of this Permit, the County is required to implement internal coordination of municipal stormwater activities among County departments, and external coordination with outside agencies. Minimum performance measures include:

- Update or Implement a written intra-governmental (internal) coordination agreement or Executive Directive to facilitate compliance with the terms of the permit.
- Coordination mechanisms among entities covered under and MS-4 NPDES permit to encourage coordinated stormwater-related policies, programs and projects within adjoining or shared areas including:
 - » Clarifying roles and responsibilities for the control of pollutants between physically interconnected MS4s covered by a municipal stormwater permit.
 - » Coordinating stormwater management activities for shared water bodies, or watersheds among permittees to avoid conflicting plans, policies, and regulations.

4.2 Permit Compliance Actions and Activities

Pierce County has established the following components to comply with the Coordination section of the Permit:

√ Implementing a written intra-governmental (internal) coordination agreement (S5.C.3.a)

Executive Order 2017-01 (Appendix C) clarifies SWM as the policy and administrative lead for implementation of the Permit. Under this Order, SWM coordinates and conducts inspections of County-owned facilities, permit-required staff trainings, and prepares periodic department-level director briefings regarding compliance activities. This order directs all Departments to understand and comply with permit requirements. SWM staff provide technical assistance to County Departments and staff requesting compliance assistance.

√ Coordination of mechanisms and clarification of roles and responsibilities for the control of pollutants between physically interconnected MS4s (S5.C.3.b.i and ii)

The County has established ongoing relationships with other Permittees to clarify roles and responsibilities.

Pierce County implements coordination with jurisdictions having physically interconnected MS4s.

Coordination work occurs through the County's participation in many different regional forums including:

- Phase I Permit Group meetings
- South Sound NPDES Stormwater Permit Coordinators' Committee
- Stormwater Outreach for Regional Municipalities (STORM)
- Regional Operations and Maintenance Program
- Stormwater Action Monitoring Stormwater Work Group (SAM)
- Puget Sound Ecosystem Monitoring Program Freshwater Workgroup

(4.2 Continued)

Additionally, the County coordinates pollution control activities with other entities (including Ecology, Tacoma-Pierce County Health Department, Pierce Conservation District, City of Tacoma and Pierce County Code Compliance) as needed.

The county has set up a workgroup consisting of representatives from SWM and M&O to discuss permit compliance and coordination. Meetings are held on a quarterly basis.

√ Coordination of stormwater management activities for shared water bodies (S5.C.3.b.ii)

In an effort to coordinate stormwater management activities within shared water bodies, the County provides staff and financial support to the following watershed councils:

- Puyallup River Watershed Council
- Chambers-Clover Watershed Council

Key Peninsula/Gig Harbor/Islands (KGI) Watershed Council, Pierce County will also continue to provide staff to participate on the following groups:

- Ecosystem Coordination Board of the Puget Sound Partnership
- Nisqually River Council
- Puyallup – White River Local Integrating Organization
- West Sound Partners for Ecosystem Recovery
- Puget Sound Salmon Recovery Council
- Puget Sound Ecosystem Monitoring Program
- Stormwater Action Monitoring
- American Public Works Association Stormwater Management Committee
- Alliance for a Healthy South Sound
- WRIA 10/12 Salmon Recovery Lead Entity

5.0 PUBLIC INVOLVEMENT AND PARTICIPATION (S5.C.4)

5.1 Summary of Permit Requirements

The Permit Public Involvement section requires the County to provide ongoing opportunities for public involvement and participation in the SWMP development including the following components:

- Creation of opportunities for the public, including overburdened communities, to participate in the decision-making processes involving the development, implementation and update of the County's SWMP and Stormwater Management Action Plan (SMAP).
- Post of the SWMP Plan and the MS4 Permit Annual Report on the County's website no later than May 31, each year.

Inspections are conducted at a variety of businesses and residential communities that may be impacted by stormwater pollution. Pierce County staff work directly with workers and residents, including conversation and providing contact information on how citizens may become engaged in the process of developing the SWMP and permit compliance. The County coordinates with other programs, including watershed councils and other groups that support salmon recovery, who may have a more direct involvement with overburdened communities.

5.2 Permit Compliance Actions and Activities

Pierce County has established the following components to comply with the Public Involvement section of the permit:

√ Creating opportunities for public involvement (S5.C.4.a)

The County budget process provides opportunities for public input regarding SWM funding for the implementation of NPDES-related stormwater management programs. A current version of the SWMP Plan is available on the County's webpage for public review and comment. SWM presents current work and planned work to the Puyallup Watershed Council to encourage public participation in directing SWM activities during 2019. A presentation to the Clarks and Clover Creek Watershed council is scheduled during March 2020. SWM managers are developing a presentation that can be used by anyone in SWM, so that staff at any level have resources to develop and present at public meetings. The goal is to increase public understanding and involvement in water quality improvement programs and understand their ability to influence priorities in their watersheds.

√ Posting of SWMP Plan and Annual Report (S5.C.4.b)

The 2019 SWMP and 2018 Annual Report were posted at the following link on SWM's website:

<https://www.piercecountywa.org/1855/Managing-Stormwater-Runoff>

The 2020 SWMP Plan and 2019 Annual Report will be posted on the County's SWM website no later than May 31, 2020.

6.0 CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITES (S5.C.5)

6.1 Summary of Permit Requirements

The Controlling Runoff from New Development, Redevelopment and Construction Sites section of the Permit requires implementation of specific programs to prevent and control the impacts of stormwater runoff. Minimum performance measures include the following:

- For applications submitted prior to July 1, 2021, which have not started construction by July 1, 2026 and applications submitted prior to December 5, 2015 which have not started construction by July 1, 2021, the County will continue to implement the following programs approved under the 2013 Phase I Municipal Stormwater Permit until July 1, 2021:
 - » Pierce County Code Title 17A, as effective on December 5, 2015
 - » Pierce County Code Title 17B, as effective on December 5, 2015
 - » Pierce County Stormwater Management Manual and Site Development Manual, as effective December 5, 2015
 - » Pierce County Memorandum "Policy to Buy Into Regional Stormwater Ponds," as effective October 27, 2015

Site and Subdivision Scale Requirements:

- Minimum requirements, thresholds, and definitions in *Appendix 1* of the Permit for new development, redevelopment, and construction sites shall be included in ordinances or other enforceable documents adopted by the local government.
- Local requirements shall include the following requirements, limitations, and criteria: Site planning requirements, BMP selection criteria, BMP design criteria, BMP in-feasibility criteria, LID competing needs criteria and BMP limitations.

Submit draft enforceable requirements, technical standards and manuals that correspond to updates identified in (*Appendix 10, Part 2*) of this Permit to Ecology (*no later than July 1, 2020*). Pierce County is on schedule with the update to our Stormwater Management and Site Development Manual to meet requirements in the 2019 permit and expect to meet the submittal deadline of July 1, 2020

Adopt and make effective a local program that meets the requirements listed in S5.C.5.b.i through ii. (*No later than July 1, 2021*)

Include legal authority to inspect private stormwater facilities and enforce maintenance standards for all new development and redevelopment approved under the provisions of this section of the permit.

Include permitting process with, site plan review, inspection, and enforcement capability to meet permit conditions for both private and public projects.

Make Ecology's electronic Notice of Intent (NOI) documents for construction and industrial activities available, as applicable, to project proponents.

Ensure training of staff whose primary job duties are implementing the program to control runoff from new development, redevelopment and construction sites, and document the training.

6.2 Permit Compliance Actions and Activities

Pierce County Planning and Public Works Department, Development Engineering, leads the development, administration, and enforcement of development standards. The following describes permit-required actions and activities pursuant to the "Controlling Runoff from New Development, Redevelopment and Construction Sites," section of the Permit:

√ Adopt and make effective a local program with ordinances or other enforceable documents (S5.C.5.b.i, ii, iii and iv)

The adoption of ordinances and other enforceable documents enables the County to control runoff from new development, redevelopment and construction sites. Runoff control occurs through implementation of permit requirements and achieving equivalency with Department of Ecology's Stormwater Management Manual for Western Washington. The following regulations and rules apply:

- Pierce County Code Title 11.05, Illicit Stormwater Discharges.
- Pierce County Code Title 17A, Construction and Infrastructure Regulations – Site Development and Stormwater Drainage
- Executive Order Concerning Effective Stormwater Management, Pierce County Washington (EO 2017-01)
- "Pierce County Stormwater Management and Site Development Manual"

√ Legal authority to inspect private stormwater facilities and enforce maintenance standards for all new development and redevelopment approved by the local program (S5.C.5.b.v.)

The Pierce County Stormwater Management and Site Development Manual updated and approved as equivalent by Ecology for the 2013-2019 permit is still in effect. Ordinance No. 2015-48s., This manual is currently undergoing revisions to meeting equivalency requirements of the 2019-2024 Permit. These codes define the County's legal authority for the inspection of private stormwater facilities and enforcement of maintenance standards.

- Pierce County Code Title 17A, Construction and Infrastructure Regulations – Site Development and Stormwater Drainage. The regulations are equivalent to SWMMWW in mitigating stormwater impacts from development. They make low impact development principles and low impact development best management practices the preferred and commonly used approach.
- Pierce County Code Title 17B, Construction and Infrastructure Regulations – Road and Bridge Design and Construction Standards. This code contains uniform technical requirements for the design and construction of roads, bridges, shared accesses, alleys, driveway approaches, gates and associated appurtenances. They establish minimum infrastructure construction requirements, including adequate access to facilities to allow maintenance.

√ A process of permits, site plan review, inspections, and enforcement capability to meet permit conditions during and post construction for public and private new development and redevelopment. (S5.C.5.b.vi.)

Pierce County's formal program to prevent and control the impacts of runoff from new development, redevelopment and construction activities includes many specific elements.

During 2019, the County completed the following:

- Stormwater plans reviewed during the reporting period: 2,130
- Construction sites inspected during the reporting period: 2,845
- Enforcement actions during the reporting period: 128

Pierce County will continue to review stormwater plans, inspect construction sites during pre-construction and construction, and impose enforcement as needed during 2020. During 2020, the County will manage maintenance activities to inspect all permanent stormwater treatment and flow control BMPs/facilities, and catch basins, in new residential developments every six months, until 90% of the lots are constructed (or when construction has stopped and the site is fully stabilized) to identify maintenance needs and enforce compliance with maintenance stands as needed.

Process for Permitting

Pierce County has incorporated a system of codes and permits addressing construction and development activities (residential, commercial, industrial, subdivisions, roadways, utilities, etc.). Permit Technicians and/or Development Engineering staff review permit applications and related scopes of work (reference Title 17A Construction and Infrastructure Regulations – Site Development and Stormwater Drainage, sections 17A.10.050 Exemptions, 17A.10.070.B Site Development Permit Required, and 17A.10.070.C Site Development Permit Not Required).

Pierce County's permit process links permits/applications for a project site together in the PALS+ permit tracking database. The link benefits the project proponent by allowing progress tracking. It also benefits the regulatory process. Reviewers can more easily understand the scope of the project and apply appropriate development standards. including pollution control, inspection access, implementation of low impact development BMPs for controlling stormwater runoff and stormwater quality, grading, and permanent stabilization of a site are addressed under the site development permit. Site development permits may not be issued until after approval of other permits or applications – including wetland review, landslide hazard review and/or SEPA.

Fees cover the Planning and Land Services Department's costs (*Title 2, Section 2.05 Planning and Land Services and Assessor-Treasurer Development Review, Inspection and Application/Processing Fees*), including site plan review, inspection, and performance monitoring for larger projects.

Process for Site Plan Review

The Stormwater Site Plan Review process occurs during the review of a site development permit. This process begins when complete plans are submitted. The plans must include site development drawings, the construction SWPPP narrative, a maintenance and source control manual, and a drainage report. An incomplete submittal will not be accepted. Plans that do not provide sufficient stormwater control and maintenance require revision before approval.

Site development submittals are reviewed for conformance with Title 17A, the Stormwater Management and Site Development Manual, Title 17B Construction and Infrastructure Regulations – Road and Bridge Design and Construction Standards and Title 18E Development Regulations – Critical Areas).

(6.2 Continued)

At a minimum, the review determines the following:

- Applicable Minimum Requirements
- Plan level (Abbreviated, Advanced Abbreviated, or Drainage Control)
- Proper selection of BMPs
- Integration of the BMPs in the proposed project grading, access, parking, road building, and storm facility construction as reflected in the site development drawings.
- Integration of the selected BMPs in the SWPPP, and implementation of selected BMPs into the maintenance covenant and maintenance and source control manual.

Site disturbance may not occur before permit approvals are final. A complete permit for development includes development drawings, drainage reports, and plan documents, drainage reports and financial guarantees and easements.

Recordkeeping

PALS+ is a permitting system that stores and links site development permit documents. Site development submittals, reviews, inspections and enforcement actions as well as easements and bonding are tracked in this system.

Inspection/Enforcement

Pierce County Planning and Public Works Department, Development Engineering, has developed a General Site Development Construction Inspection Process Policies and Procedures Manual describing inspection authority, maintenance of files, inspection process, inspection criteria, pre-acceptance review, re-inspection, enforcement, and project approval processing.

A series of additional policies has also been developed regarding inspections and enforcement:

- PALS De Performance Monitoring Inspection Process DE POL 5100 (*Appendix D*) – Describes the Performance Monitoring Inspection Process applicable to all permitted site development projects of sufficient scale to require any form of Maintenance Guarantee. The policy describes the process and procedures for scheduling, completing, tracking, and administering all inspections required throughout the Maintenance Bonding period.
- PALS De Enforcement Strategy for Permitted Projects, DE POL 5200 (*Appendix E*) – Describes the enforcement strategies and mechanisms used with respect to any permitted site development project found to be in non-compliance with the terms and conditions of the project permit(s), their parent regulations, or the approved plans associated with the project.
- PALS DE Residential Site Development Inspection Process DE POL 5301 (*Appendix F*) – Specifies the requirement for a separate Site Development Permit for each single-family residential building site unless exempt per section PCC 17A.10.050.
- PALS General Site Development Construction Inspection Process (*Appendix G*) – Prescribes inspection procedures except for those permitted as single family residential.

√ Make Ecology's Notice of Intent (NOI) documents for construction and industrial activities available, as applicable, to project proponents (S5.C.5.b.vii)

Information concerning NPDES Construction and Industrial General Stormwater Permits, including a link to the NOI, is provided during the applications process.

√ Ensure training of staff whose primary job duties are implementing the program to control runoff from new development, redevelopment and construction sites, and document the training. (S5.C.5.b.viii.)

All Development Engineering review engineers are trained and experienced with the requirements mandated under the current stormwater management manual. Likewise, our site development inspectors maintain current CESCL certifications, all inspectors hired since 1998 have been required to complete the Development Engineering Inspector Training Program and all are qualified and experienced inspectors. Ongoing Stormwater Manual and NPDES training is provided to Development Engineering Technical Staff as opportunities arise.

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7.0 STRUCTURAL STORMWATER CONTROLS (S5.C.7)

7.1 Summary of Permit Requirements

The County is required to implement a Structural Stormwater Control program to prevent or reduce impacts to waters of the state caused by discharges from the MS4 in areas where stormwater discharges from existing development, where insufficient stormwater controls are in place and in areas of new development, where development-related stormwater impacts are anticipated. This permit term a minimum level of effort defined with a point metrics has been introduced.

Minimum performance measures include:

A program to control stormwater impacts not adequately controlled by other required actions of the SWMP including new flow control facilities, new water quality treatment facilities, new LID BMPs, retrofits of existing facilities, property acquisition to provide water quality or flow control benefits, and maintenance with capital construction costs >\$25,000.

A description of Structural Stormwater Control Program goals in the SWMP Plan that include: geographic scale of the planning process, issues and regulations addressed, steps in the planning process, types of characterization information considered, budgets, the public involvement process, and a description of the prioritization process, procedures and criteria used to select the Structural Stormwater Control projects.

The preparation of a list of planned individual structural stormwater control projects scheduled for implementation during the term of the Permit and submitted with each Annual Report

Achieve 300 SSC Program points, calculated as follows (no later than December 31, 2022):

- 225 design-stage retrofit incentive points
- 75 complete or maintenance stage incentive points

7.2 Permit Compliance Actions and Activities

Pierce County implements a Structural Stormwater Controls Program addressing the prevention and reduction of impacts to waters of the state caused by discharges from the County's MS4. Project prioritization relies on assessments regarding receiving water body conditions, anticipated benefits of the project, and regulatory compliance needs.

Pierce County Ordinance No. 2006-115s directed the SWM Utility to produce an annual six-year Surface Water Improvement Plan (SWIP). The SWIP serves to inform the County Council, their staff members, other departments, and the public about the scope, cost, funding and status of surface water improvement projects. This includes proposed SWM structural stormwater control projects. The project ranking criteria considers; flooding, water quality, habitat, and other factors.

The SWIP outlines Pierce County's 2016-2021 capital project accomplishments and a six-year plan for these projects, including information detailing funding sources. The annually updated SWIP is the primary budget work plan for surface water improvement capital projects in Pierce County.

Information regarding Surface Water Management (SWM) project plans and may be found at this link:

<https://www.co.pierce.wa.us/1827/Our-Projects>

SWM capital projects have three local funding sources that are significantly augmented with grant funding. Internal funds come from SWM Utility Service fee, Pierce County Real Estate Excise Tax, and the Flood Control Zone District. Projects identify funding during planning. Project descriptions include proposed funding sources. Projects identified for grant funding will not move into final stages, or construction, if the County's grant applications are unsuccessful. The project will remain on the list and be proposed for additional grants in subsequent years. Larger projects may be phased to allow funding to be spread over several budget years.

The County maintains a list of Permit-related structural stormwater control projects. The project tracking system includes the technical information outlined in Appendix 12 of the NPDES permit. Updates to Appendix 12 and final data submittals to Ecology occur as part of the County's Annual Report.

Appendix I of this document includes the updated 2020-2025 Project List. The following Structural Stormwater Control Projects are in the planning-design-construction phase through 2020:

- **1. Brookdale Road/Clover Creek Outfall Retrofit, (Project #D442)**
This \$530,000 project involves a new treatment facility (retrofit installation of Contech Cartridge Filter Vaults at two outfall locations) of an older stormwater system without water quality treatment that discharges directly to the North Fork of Clover Creek. Presently in design and permitting phase. Initiation of construction is dependent upon the availability of grant funding.
- **2. Diru Creek Water Quality Retrofit at 67th Ave. Ct. E., (Project #D810)**
This \$172,000 project includes the installation of a water quality vault on 67th Ave. E. between 104th St. E. and Pipeline Road. Engineered plans meet Basic Treatment Menu Standards.
- **3. Diru Creek Water Quality Retrofit at 64th Ave Ct. E., (Project #D811)**
This project involves the installation of a water quality vault on 64th Ave E between 104th St. E. and Pipeline Road. The project cost is estimated to be \$119,000. Engineered plans meet Basic Treatment Menu Standards.
- **4. Woodland Creek 104th St. E. Stormwater Treatment System, (Project #D411)**
This project will involve construction of an additional detention facility to reduce flooding on Woodland Creek and adjacent roads and property. Location is along Woodland Ave from approximately 128th St E to 84th St E. The \$1.7M project is grant dependent and may be found at this link: <https://www.co.pierce.wa.us/5353/Woodland-Creek-at-104th-Street-East-Retr>

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8.0 SOURCE CONTROL PROGRAM FOR EXISTING DEVELOPMENT (S5.C.8)

8.1 Summary of Permit Requirements

The Source Control Program for Existing Development section of the Permit requires the County to implement an ongoing program to reduce pollutants from areas of existing development in areas that discharge to the MS4. Permit requirements for this section include:

- Enforcement of ordinances, or other enforceable documents (*updated and made effective no later than August 1, 2021*), require applicable operational source control BMPs for pollutant generating sources associated with existing land uses and activities. This subsection requires the use of source control BMPs in Volume IV of the Stormwater Management Manual for Western Washington, or a functionally equivalent manual approved by Ecology.
- Identification of publicly and privately owned institutional, commercial and industrial sites which have the potential to generate pollutants to the MS4. A generated source control inventory of businesses and/or sites identified based on the presence of pollutant-generating activities (*refer Appendix 8 in the Permit*). The list also includes additional sites identified by complaint response (including home-based businesses and multi-family sites). This inventory shall be updated at least once every 5 years.
- The implementation of an inspection program for sites listed on the inventory and provide information (*by mail, telephone, electronic communication or in person*) about activities that may generate pollutants and the source control requirements applicable to those activities.
- Annually, complete inspections of 20% of the inventoried sites. Follow-up compliance inspections may count toward this requirement. Sites identified by legitimate complaints must also undergo inspections.
- Implement a progressive enforcement policy requiring sites to be compliant with stormwater requirements within a reasonable time period.
- Staff responsible for implementing the source control program shall receive training to conduct these activities. This ongoing training shall cover legal authority, source control BMPs and their proper application, inspection protocols, lessons learned, typical cases and enforcement procedures.
- The County will document and maintain records of the training provided and staff trained.

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8.2 Permit Compliance Actions and Activities

Pierce County has established the following components to comply with the Source Control Program for Existing Development section of the Permit:

✓ Enforcement of local ordinances (S5.C.8.b.i.)

The enforcement of ordinances, or other enforceable documents enabling the County to implement a source control program for existing development, is established by three distinct means:

- Pierce County Code, Illicit Stormwater Discharges (*PCC 11.05*)
- Executive Order Concerning Effective Stormwater Management, Pierce County Washington (*EO 2017-01*)
- Pierce County Ordinance, Revising Manual Titled "Pierce County Stormwater Management and Site Development Manual (PCSMSDM), specifically Volume VI, Source Control. For equivalency with Ecology's WWSWMMM

The County will continue to use these documents during 2020 to enforce the source control program. Staff in the Inspections and IDDE sections will be working together to update and streamline the enforcement program during 2020. This will include reviewing current policies, drafting enforcement documents and writing a policy to make the enforcement process consistent. Staff will also meet with other jurisdictions to review how they have implemented an enforcement policy.

✓ Implement program and develop/maintain inventory of inspection sites (S5.C.8.b.ii.)

The County continues to implement its program to identify commercial and industrial sites which have the potential to generate pollutants to the MS4. Under this program SWM maintains a source control inventory of businesses and/or properties identified as conducting activities that are pollutant generating and may impact the MS4. The inventory includes governmental sites, mobile or home-based businesses, and sites identified through field observations or complaints as potential pollutant generating.

The Standard Industrial Codes (SIC) and North American Industry Classification System (NAICS) in Appendix 8 of the Permit (along with County Assessor assigned Land Use Codes) is used to generate the original source control inventory. Bond release notice and ongoing field observation by inspectors is used to routinely and continuously update this list.

The inventory includes sites that discharge to the County's MS4 as well as directly to ground. In total, the inventory includes approximately 2,000 sites. The inventory undergoes review and update from bond releases and inspector reports on a routine and continuous basis. Potential pollution generating sites identified through complaint calls are added to the source control inspection inventory in EAM.

✓ Implementation of inspection program (S5.C.8.b.iii.)

Residential, commercial and industrial sites identified by Pierce County Source Control Program undergo inspections targeting both operational BMPs and onsite drainage facilities. This process ensures the proper implementation and maintenance of operational and structural source control BMPs.

Detailed standard operating procedures for source control inspection include references within the Water Quality Inspector's Manual and SWM Source Control Policy, POL-2011-03 (*Appendix L*).

The presence of insufficient BMPs or maintenance requirements trigger verbal or written notices. Correspondence provide details regarding goals of compliance, including implementation of source control measures described in the PCSMSDM to reduce pollutants in runoff from areas that discharge to the MS4.

In 2019, Pierce County conducted source control inspections at approximately 1,384 sites listed in the source control inventory. This figure includes all sites identified through legitimate complaints.

During 2019, the County fully migrated from Maintenance Connection to EAM (*Enterprise Asset Management*) for tracking of source control work. EAM provides a more powerful source control management and documentation tool by linking source control sites and inspection information with GIS. During 2020, the County will continue using EAM to track all source control and inspection site information.

✓ **Implementation of a progressive enforcement policy (S5.C.8.b.iv.)**

Per SWM Water Quality Inspection Response Procedures Flow Chart, December 2, 2016 (*Appendix J*), each inspector uses prescribed criteria in rating status of compliance pollutant-generating sites for the determination of compliance. These procedures provide a mechanism of formal enforcement that includes the application of education, technical assistance and other follow up notifications. These procedures also establish progressive enforcement procedures utilizing PCC 11.05, EO 2017-01, and Ordinance No. 2015-48s.

PCSMSDM Volume IV (*Source Control*) and Volume V (*Runoff Treatment BMPs*) provide compliance guidance for the program. Maintenance Connection®, Public Works Road Management System®, and Enterprise Asset Management® (*web-based facilities maintenance applications*), allow tracking, documentation, and maintenance of all source control inspection and enforcement efforts.

Sites inspected in 2019 that were not adequately implementing required BMPs received written follow-up letters. In addition to technical assistance letters, follow-up: phone calls, reminder letters, inspections, warning letters and Notices of Violations were used as needed. Records of inspections, investigations, technical assistance and escalating enforcement actions will be tracked in the EAM database. These records include site maps, documentation site visits, inspection reports, warning letters, notices of violation, and site information related to owner denial of property entry.

During 2020, the County will re-evaluate the current enforcement program, and determine if additional policies or code language is needed to effectively address stormwater pollution sources This will involve coordination between SWM, code enforcement, legal, and other departments.

✓ **Training program for inspection staff (S5.C.8.b.v.)**

Pierce County Staff implementing the source control program participate in an annual training. Records of training are maintained by the county and available upon request. Supplemental source control training is provided as needed during staff meetings and occasional field visits. Topics include permit applicability, inspection procedures, legal authority, PCSMSDM, and review of pertinent case studies. See SWM Procedures for Documenting and Tracking NPDES Stormwater Training, POL-2013-01 (*Appendix M*).

9.0 ILLICIT CONNECTIONS AND ILLICIT DISCHARGE DETECTION AND ELIMINATION (S5.C.9)

9.1 Summary of Permit Requirements

The Illicit Connections and Illicit Discharge Detection and Elimination (IDDE) section of the Permit requires the County to continue implementing an ongoing program designed to prevent, detect, characterize, trace, and eliminate illicit connections and illicit discharges into the MS4. The minimum performance measures include:

- Procedures for reporting and correcting or removing illicit connections, spills and other illicit discharges when suspected or identified, including pollutants entering the MS4 from an interconnected, adjoining MS4.
- Continue to evaluate, and update if necessary, an existing ordinance or other regulatory mechanism to effectively prohibit non-stormwater illicit discharges into the City's MS4.
- Implement procedures for conducting investigations of the Permittees MS4 including field screening and methods for identifying potential sources. Field screening methodology applies to the characteristics of the MS4 and water quality concerns. Conduct field screening of, on average, 12% of the known conveyance systems each calendar year. Track the total percentage of the MS4 screened annually beginning on August 1, 2019.
- Properly train staff who are responsible for identification, investigation, termination, cleanup and reporting of illicit discharges, including spills and illicit connections, to conduct these activities.
- Participate in a regional emergency response program or develop and implement procedures to investigate and respond to spills and improper disposal into the MS4 owned or operated by the County.
- Track and maintain records of the IDDE activities conducted to meet the requirements of the Permit.

9.2 Permit Compliance Actions and Activities

Pierce County has established the following compliance components to comply with the Illicit Connections and Illicit Discharge Detection and Elimination (IDDE) section of the Permit:

- Procedures for reporting and correcting or removing illicit connections, spills and other illicit discharges when suspected or identified (S5.C.9.a.)
- Program for detecting and identifying illicit connections and non-stormwater discharges to the MS4 (S5.C.9.c.i, ii, iii.)
- Response to illicit connections and illicit discharges including spills (S5.C.9.d.)
- Program to investigate and respond to spills or improper disposal into the MS4 (S5.C.9.f.)

SWM Staff respond to Illicit stormwater discharge reports received via field screening e-mail, internal County staff communication, after-hours reports, in-person communication, personal observation, inspection program referrals, and through the IDDE Hotline (253) 798-4274.

The Pierce County Surface Water Management (SWM) Illicit Discharge Detection and Elimination Field Procedures and Response Plan (IDDE Plan) details the on-going program to address illicit discharges, including spills and illicit connections, into the MS4 and natural drainage systems. The IDDE Plan addresses Section S5.C.9.d permit requirements, including internal procedures for enforcement and a penalty matrix described in the SWM Water Quality IDDE Response Procedures Flow Chart (Appendix K).

To meet Permit requirements (*S5.C.9.c.i*), Pierce County inspects, evaluates, and investigates MS4 drainage basins and targeted watersheds to identify and eliminate potential sources of stormwater pollution using two primary field screening protocols:

- IDDE Watershed Field Screening
- Road Operations Stormwater Catch Basin/Inlet Field Screening

The IDDE Watershed Field Screening component assesses IDDE problems using desktop and field-implemented procedures to determine the presence of illicit discharges and illicit connections impacting the MS4. Documented water quality concerns are then addressed through educational and/or enforcement efforts aimed at preventing or reducing polluting behaviors and operations. During 2020, SWM will review the IDDE program and plan for most effective way to address all permit screening requirements, including TMDL screening requirements.

Planning and Public Works Maintenance & Operations Division has established an annual program for the assessment and cleaning of County-owned or operated catch basins (CB) and inlets in rights-of-way to reduce stormwater impacts. Assessments and cleaning efforts use schedules which meet and exceed minimum maintenance standards that are as protective, or more protective, of facility function than those specified in the PCSMSDM. During CB assessment work crews field screen for the presence of illicit discharges or illicit connections and reports them to the IDDE section which generates IDDE investigations.

✓ **Implement enforcement of ordinances and regulations to prohibit IDDE (S5.C.9.b.)**

County staff reference the following documents as enforcement tools in the IDDE program:

- Pierce County Code, Illicit Stormwater Discharges (*PCC 11.05*)
- Executive Order Concerning Effective Stormwater Management, Pierce, County Washington (EO 2017-01)
- Pierce County Stormwater Management and Site Development Manual (*PCSMSDM*), (*Ordinance No. 2015-48s*), specifically Volume VI, Source Control.

✓ **Training program for IDDE Staff (S5.C.9.e.)**

IDDE staff receive training in proper investigations, recordkeeping, and notification of IDDE. County staff responsible for IDDE investigations receive training through at least one of the following:

- Pierce County's on-going IDDE training program.
- Certified Erosion and Sediment Control Lead (CESCL) curriculum including a IDDE component.

- Facility SWPPP-based Spill Prevention & Emergency Cleanup Plans (SPECP) documents
- Surface Water Management Division’s Spill Response Policy and Procedures (POL-2011-002A), Appendix N.

Trainings deliver IDDE awareness, assessment, response, notification, and cleanup protocols. Refresher classes are scheduled as needed based on inspection results or when processes/procedures change at SWPPP facilities; annual SPECPs overview; review of case studies; and CESCL recertification classes to appropriate Road Operations and/or SWM Water Quality staff (see Appendix M).

√ Procedures to investigate and respond to spills or improper disposal into the MS4 (S5.C.9.f.)

Pierce County Spill response procedures achieve the following:

- Detail procedural framework for spill responses.
- Define roles and responsibilities (both internal and external).
- Provide mechanisms for the coordination with emergency responders and outside agencies.
- Standardize reporting procedures, investigations, documentation, and follow up procedures, and outline training requirements.

Maintenance and Operations spill response procedures are outlined in SWM Spills Response Procedure, POL-2011-002A (Appendix N).

√ IDDE inspection, response and enforcement recordkeeping (S5.C.9.g.)

IDDE program recordkeeping includes tracking the number and type of identified illicit stormwater discharges, spills, inspections, investigations. During 2019, SWM spill response procedures were updated to incorporate the ArcGIS Online (AGO) Survey 123 application (see below). The ArcGIS Online (AGO) Survey 123 application was designed to collect IDDE data via web or mobile devices replaced the previous system in 2019. Standardized information, consistent with the IDDE informational fields necessary to complete annual permit reports, is provided. Additionally, other case-related details imported into AGO may include photo documentation and progress notes as needed. SWM and Maintenance staff will continue to use Survey123 during 2020 to track IDDE discharges.

10.0 OPERATIONS AND MAINTENANCE PROGRAM (S5.C.10)

10.1 Summary of Permit Requirements

The *Operations and Maintenance (O&M)* section of the Permit requires the County to implement and document a program to regulate maintenance activities and to conduct maintenance activities by the Permittee to prevent or reduce stormwater impacts. The minimum performance measures include the following components:

- Implementation of maintenance standards that are as protective, or more protective, of facility function than those specified in the Stormwater Management Manual for Western Washington, or a Phase I program approved by Ecology (S5.C.10.a).
- Evaluate and, if necessary, update existing ordinances or other enforceable documents requiring maintenance of all stormwater treatment and flow control BMPs/facilities regulated by the County; implementation of an on-going inspection program to annually inspect all stormwater treatment and flow control BMPs/facilities regulated by the County to enforce compliance with adopted maintenance standards as needed based on inspection; and cleaning of catch basins regulated by the County if they are found to be out of compliance with established maintenance standards (S5.C.10.b).
- Implementation of a program for the maintenance of stormwater facilities owned or operated by the County (S5.C.10.c).
- Implementation of a program to perform maintenance of catch basins owned or operated by the County (S5.C.10.d).
- Implementation of practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of Pierce County. Document the practices, policies, and procedures by December 31, 2022 (S5.C.10.e).
- Implementation of an ongoing training program for employees of Pierce County who have primary construction, operations, or maintenance job functions may impact stormwater quality (S5.C.10.f).
- Preparation of Stormwater Pollution Prevention Plans (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by Pierce County in areas subject to this permit that are not required to have coverage under the General NPDES Permit for Stormwater Discharges associated with Industrial Activities or another NPDES permit that authorizes stormwater discharges associated with the activity. As necessary, update SWPPPs no later than December 31, 2022 (S5.C.10.g).
- A process of maintaining records of inspections and maintenance or repair activities conducted by the County (S5.C.9.f).

10.2 Permit Compliance Actions and Activities

Pierce County Compliance has established the following components to comply with the Operations and Maintenance (O&M) section of the Permit:

√ Adopting maintenance standards equivalent to the Washington Department of Ecology's Stormwater Management Manual of Western Washington (SWMMWW) (S5.C.10.a.i.)

The Pierce County Stormwater Management and Site Development Manual (PCSMSDM) provides operations and maintenance standards which are as protective, and in some cases more protective, than those specified in the SWMMWW.

√ Implementing operation and maintenance standards during annual inspections (S5.C.10.a.ii.)

Unless there are circumstances beyond Pierce County's Control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:

1) Within one year for typical maintenance (except catch basins).

2) Within six months for catch basins.

3) Within two years for maintenance that requires construction of less than \$25,000.

Circumstances beyond Pierce County's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each exceedance of the required timeframe, Pierce County documents the circumstances by describing how they were beyond the Permittee's control.

√ Maintenance of private stormwater facilities regulated by the County (S5.C.10.b)

The requirements of this section involve combined efforts. Stormwater treatment and flow control BMPs/facilities regulated by Pierce County per S5.C.10.b.ii undergo inspections by the SWM Water Quality Inspection Unit. Facilities associated with new residential developments undergo inspections by Planning and Land Services. A series of County policies outline this work:

- PALS Development Engineering Policy DE POL 5100 Performance Monitoring Inspection Process (Appendix D)
- PALS Development Engineering Policy DE POL 5200 Enforcement Strategy for Permitted Projects, (Appendix E)
- Surface Water Management Water Quality Inspection Response Procedures Flow Chart, December 2, 2016 (Appendix J)

Migration from Maintenance Connection to EAM (Enterprise Asset Management) for tracking of stormwater treatment and flow control BMPs/facilities regulated by Pierce County was completed in 2019. EAM is a data base system linked to GIS and will provide a more powerful source control management, documentation tool for Permit compliance. During 2020, Pierce County will use EAM exclusively to track inspections and maintenance of stormwater treatment and flow control BMPs and facilities regulated by the County.

√ Maintenance of stormwater facilities owned or operated by the County (S5.C.10.c.)

In 2019, the Permit-required O&M program (as implemented by PPW SWM and Maintenance and Operations) establishes a known inventory of approximately 830 County-owned permanent stormwater treatment and flow control BMPs/facilities (by deeded ownership or by easements granted and conveyed to the County). Of this total, inspections involved 830 facilities (100%). Required maintenance impacted approximately 637 of these facilities in 2019 (77%).

Per SWM Significant Storm Event Procedure, POL-2015-001A, (Appendix O), spot checks will be performed to assess potential damage and determine maintenance needs after major storm events during 2020 (per S5.C.10.c.ii).

SWM performs facility Stormwater Needs Assessments of stormwater treatment and flow control BMPs/facilities on properties managed by various County departments and divisions to determine priorities and timing of maintenance needs (Facilities Management, Parks and Recreation, Sustainable Resources, and Ferries and Airports). Pierce County will continue PCSMSDM standards are followed when performing Needs Assessments performed on these sites.

✓ **Maintenance of catch basins owned or operated by the County (S5.C.10.d.)**

PPW SWM and Maintenance and Operations (M&O) implements principles of asset management based on years of practical experience maintaining and operating public infrastructure and records. This program uses modified and expanded baseline asset management criteria to meet sustained Permit requirements and compliance.

PPW SWM and Maintenance and Operations (M&O) complete annual inspections of over 24,000 municipally-owned stormwater catch basins. Efforts help to identify facilities needing maintenance, and they provide baseline data for drainage features asset management program. CB inspections include verifying applicable attributes for each feature to correct and make changes where needed. This effort also gathers operational and structural condition information.

✓ **Reduce stormwater impacts from lands owned and maintained by the County and road maintenance activities (S5.C.10.e)**

The requirements of this section are completed through combined efforts implemented by several County departments and divisions to reduce stormwater impacts:

- The County owns and manages approximately 1,000 properties, which support flood risk reduction and storm drainage facilities, as well as buildings and structures. PPW M&O implements practices, policies, and procedures to reduce stormwater impacts associated with runoff from these County-owned permanent stormwater treatment and flow control BMPs/facilities.
- Activities necessary to manage these properties often involve the application of both temporary and permanent erosion and sediment control BMP's outlined in the Pierce County Stormwater Management and Site Development Manual and the Regional Road Maintenance Program Guidelines.

- M&O employees who have primary construction, operations or maintenance job functions that may impact stormwater quality adhere to the Regional Road Maintenance ESA Program Guidelines and the Pierce County Stormwater Management and Site Development Manual (SWMSDM), whichever one contains the most up to date BMP requirements. The guidance describes physical, structural, and managerial best management stormwater pollution prevention practices, and addresses the importance of protecting water quality. Implementation of these practices (either singularly or in combination), cause a reduction to water and habitat impacts.
- Annual Stormwater Needs Assessments, performed by the SWM Water Quality Inspection Unit on additional lands owned or maintained by the County (Appendix O), provide detailed technical assistance information and guidance to those employees conducting maintenance on permanent stormwater treatment and flow control BMPs/facilities. Pierce County maintains Stormwater Pollution Prevention Plans (SWPPP) for affected sites to address these concerns.

√ Ongoing training program for employees with primary construction, operations or maintenance job functions (S5.C.9.f)

Pierce County will continue to implement an ongoing training program for all employees who have primary construction, operations or maintenance job functions that may impact stormwater quality. Pursuant to Executive Order No. 2012-1 (Appendix B), various departments are responsible for coordinating, implementing, tracking, and reporting permit-required training components.

The NPDES Stormwater Permit Training Coordinator helps to deliver and track required training specified by this section. Annual trainings delivered at their designated facilities provides both field and site-specific information affected O&M employees.

In 2019, approximately 300 employees received onsite training related to NPDES Permits, SWPPPs, Spill Response and Reporting and Illicit Discharge identification and reporting procedures. Additionally, 24 new employees completed an introductory level course covering the identification and reporting of spills and illicit discharges to Pierce County's MS4. Pierce County received an Oil Spill Response Grant which funded training for 160 employees to Operations Level Spill Response and 139 employees to an Awareness Level in Spill Response. In 2020, there will be at least 10 onsite trainings scheduled at 10 different facilities. Training sessions will focus on NPDES Permits (Municipal, Industrial, and Sand & Gravel), SWPPPs, Site Management Plans, spill procedures, notification, and illicit discharge identification and reporting activities. Additional training and follow-up sessions will be conducted if staff, processes or procedures change through-out the year.

Maintenance & Operations provides ongoing training to all affected personnel. This training includes CESCL recertification courses and quarterly safety meetings that cover Regional Road Maintenance ESA Program Guidelines topics and other stormwater pollution prevention BMP issues, including SWPPP related issues.

All affected Development Engineering staff receive PALS+ training as necessary in their assigned duties. Training modules cover application review, application processing, site plan review, inspections, enforcement, and record keeping duties. (Training Outline, Appendix H).

√ **Implement SWPPPs for County heavy equipment maintenance or storage yards and material storage facilities (S5.C.10.g)**

SWM will continue to prepare and update Stormwater Pollution Prevention Plans (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the County in areas subject to this permit that are not required to have coverage under the General NPDES Permit for Stormwater Discharges Associated with industrial activities or another NPDES permit that authorizes stormwater discharges associated with the activity.

Phase I Municipal General SWPPPs for the following County facilities are reviewed and updated annually:

- Sewer and Traffic Operations (STOP)
- Heritage Recreation Center
- Sprinker Recreation Center
- Spanaway Lake Park Maintenance Facility
- Central Maintenance Facility (CMF)
- East County Maintenance Facility (ECMF)
- West County Maintenance Facility (WCMF)
- Mid-County Maintenance Facility (MCMF)
- Chambers Creek Regional Wastewater Treatment Plant
- Tacoma Narrows Airport
- Orting Quarry Site Management Plan
- Pit Sites Site Management Plan

√ **Inspection and maintenance records (S5.C.10.h)**

O&M inspection and cleaning efforts associated with stormwater facilities owned or operated by the County capture information recorded within various databases. These data include asset identifications, inspection ratings, inspector names, dates/times of inspection, structure, and damage notes. Maintenance Checklists contained within PCSMSDM Volume I (Minimum Technical Requirements and Site Planning) also contribute to compliance documentation.

PPW M&O documents and retains inspection and maintenance records within a Computerized Maintenance Management System (MMS). Inspections involve tracking through work orders. Within each work order, inspection tasks align with specific defect categories unique to each feature type. Each task undergoes a numerical rating per established level of service thresholds. The MMS stores all associated condition data in the form of, "asset specifications".

EAM (Enterprise Asset Management), a web-based facilities maintenance application, allows tracking of Permit-required O&M inspection, maintenance and enforcement efforts. Maintenance and repair activity documentation includes generation of work orders, and additional categorization through the assignment of function codes unique to each type of work. MMS also tracks work order status, date of issuance or closure, inspector information, labor reports, and production information.

11.0 EDUCATION AND OUTREACH PROGRAM (S5.C.11)

11.1 Summary of Permit Requirements

The Education and Outreach section of the Permit requires the County to implement a program designed to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. The program also encourages the public to participate in stewardship activities. The education program may involve development and implementation at a local or regional level. The minimum performance measures include the following primary components:

- Implementation or participation in an education and outreach program that uses a variety of methods to target the audiences and topics listed below. The outreach program helps to educate each target audience about the stormwater problem and provides specific actions they can follow to minimize the problem.
- Build general awareness targeting the following audiences and subject areas: general public (including school age children and overburdened communities), and businesses (including home-based and mobile business); general impacts of stormwater on surface waters; impacts from impervious surfaces; hazards associated with illicit discharges and improper disposal of waste.
- Build general awareness targeting at least one of the following audiences and subject areas: residents, landscapers, property managers/owners, school-age children, and businesses (including home-based and mobile); LID principles and LID BMPs; and stormwater treatment and flow control BMPs/facilities.
- To effect behavior change targeting the following audiences and BMPs for the general public, (which may include school age children), and businesses (including home based and mobile businesses) use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps, and other hazardous materials; equipment maintenance; and prevention of illicit discharges.
- To effect behavior change targeting the following audiences and BMPs for residents, landscapers and property managers/owners: yard care techniques protective of water quality; use and storage of pesticides and fertilizers and other household chemicals; carpet cleaning and auto repair and maintenance; vehicle, equipment, and home/building maintenance; pet waste management and disposal; LID principles and LID BMPs; stormwater facility maintenance; and dumpster and trash compactor maintenance.
- Create stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities such as stream teams, storm drain marking, volunteer monitoring, riparian plantings and education activities.

11.2 Permit Compliance Actions and Activities

Pierce County Compliance has established the following components to comply with the Education and Outreach section of the Permit:

✓ **Implementation or participation in an education and outreach program to build general awareness and effect behavior change (S5.C.11.a.)**

✓ **Creation of stewardship opportunities and/or partner with existing organizations to encourage resident participation (S5.C.11.b.)**

Pierce County has an education and outreach program aimed at multiple audiences. The goals of which are to increase awareness about stormwater impacts, effect behavior change, and encourage resident participation. Outreach and Communications staff coordinate with other regional efforts to improve effectiveness of implemented programs. Please refer to additional education and outreach program details provided in the matrix spreadsheet, Appendix P.

The following describes continuing 2020 education and outreach programs:

- Promotion of the Puget Sound Starts Here campaign aimed at the impacts of stormwater on surface waters (Building Awareness).
- Environmental education programs for school age children introducing curriculum and community service projects related to stormwater impacts on surface waters, the impacts of impervious surfaces and illicit discharges and low impact development (Building Awareness, Behavior Change).
- Providing free workshops for residents on topics such as edible gardens, sustainable living, and composting (Building Awareness, Behavior Change).
- Maintenance of the Let the Rain Soak In program via webpage and publications to provide information concerning installing simple retrofits and reducing impervious surfaces to limit runoff from residential properties (Building Awareness, Behavior Change).
- Implementation of permit-required illicit discharge detection and elimination program (Building Awareness, Behavior Change).
- Partnership with Pierce Conservation District to identify neighborhoods appropriate for the installation of storm drain markers by volunteers (Building Awareness, Behavior Change, Stewardship).
- Inspection of more than 1,000 private and public stormwater facilities annually (Building Awareness, Behavior Change).
- Promotion of household hazardous waste alternatives through programs implemented by Pierce County Sustainable Resources (Building Awareness, Behavior Change).
- Implementation of the Don't Drip and Drive Program (Building Awareness, Behavior Change, Stewardship).
- Development of Natural Yard Care outreach strategies, technical support, and training with City of Tacoma, Tacoma Public Utilities, and WSU (Building Awareness, Behavior Change, Stewardship).
- Implementation of a neighborhood pet waste station program (Building Awareness, Behavior Change, Stewardship).
- Implementation of a tree workshop and sale program with City of Tacoma and Pierce Conservation District (Building Awareness, Behavior Change, Stewardship).
- Maintenance of a fish-friendly car wash webpage for residents of Pierce County (Building Awareness, Behavior Change).
- Implementation of water quality monitoring program (Building Awareness, Behavior Change).

- Participation in four watershed councils (Puyallup River, Nisqually River, Chambers-Clover Creek, Key Peninsula-Gig Harbor-Islands) to provide a public forum for watershed-based issues (Building Awareness, Behavior Change).
- Implementation of a solid waste dumpster maintenance program and a moss removal program to reduce stormwater pollution (Building Awareness, Behavior Change).
- Partnered with local conversation district to hold rain barrel workshops for residents (Building Awareness, Behavior Change).

√ Measuring the understanding and adoption of the targeted behaviors. (S5.C.10.c)

Pierce County is in the process of implementing the following elements of the Don't Drip and Drive program:

- Spanish language outreach
- Expanded repair shop partnerships to include quick lube shops, who will detect leaks and provide customers with program resources to fix leaks
- Improved event format to advertise events widely allowing drivers who suspect they have a leak to attend the events.
- Expanded advertising to multiple advertising formats using successful messaging.
- Expanded workshops to Pierce, Snohomish and Thurston counties.

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12.0 COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS (S7)

12.1 Summary of Permit Requirements

The Total Maximum Daily Load (TMDL) Permit section requirements apply when EPA approval of TMDLs for stormwater discharges from the County MS4 occur on or before the issuance date of the Permit (or prior to the date that Ecology issues coverage under the Permit, whichever is later). The minimum performance measures include the following components:

- For applicable TMDLs listed in Appendix 2, Pierce County shall comply with the specific requirements identified in Appendix 2. The County shall keep records of all actions required by the Permit relevant to applicable TMDLs within its jurisdiction. The status of the TMDL implementation includes annual report submittals. Each annual report shall include a summary of relevant SWMP and Appendix 2 activities conducted in the TMDL area to address the applicable TMDL parameter(s).

12.2 Permit Compliance Actions and Activities

Pierce County has established the following components which comply with the TMDL section of the Permit:

✓ Compliance with specific requirements for applicable TMDLs listed in Appendix 2. (S7.A)

The 2018 Annual Report provides a summary of Total Maximum Daily Load (TMDL) activities conducted and associated parameters of concern (including those actions required by S7.A, Appendix 2). The required actions included high priority field screening for the following TMDL areas:

- Puyallup River– Swan Creek, Salmon Creek, Alderton Creek, and Upper Deer Creek
- South Prairie Creek – Tributary 1 upstream of SR162; and upstream of SR162 along Spiketon Road, Mundy Loss Road and Spiketon Ditch Road
- Nisqually River – Ohop Creek and Lynch Creek

In summary, the completion of all Appendix 2-required high priority field screening involved a combination of 1) IDDE Watershed Field Screening, and 2) Maintenance & Operations Stormwater Catch Basin/Inlet Field Screening per Pierce County's SWM 2016 IDDE Field Screening Procedures. Additional TMDL-relevant field screening utilizing these two methodologies continues through the permit period.

✓ Provide status of TMDL implementation and summary of relevant SWMP and Appendix 2 (S7.A) activities.

On June 30, 2015 Pierce County and Ecology entered into a Dispute Resolution Agreement (DRA) to guide the development of the Clarks Creek Restoration Plan (TMDL Implementation Plan). The DRA directs the Plan to include: capital stormwater projects, enhanced inspection and maintenance procedures, and an advanced street sweeping program along with a pollutant load reduction crediting system designed to track compliance with the assigned sediment and dissolved oxygen Waste Load Allocations (WLA). The Plan includes both capital projects and programmatic actions specifically aimed at reducing sediment loads, and improving dissolved oxygen deficits by treating previously untreated stormwater originating in the Clarks Creek.

The County's Plan received final approval from Ecology on July 15, 2019 however its future implementation depends on biennial appropriations from the County Council and the successful procurement of other grant-based funding. The Plan also includes a comprehensive 5-Year reassessment monitoring and modeling program and an Adaptive Implementation system aimed at reexamining the program's metrics at the five-year milestone.

At the end of 2017, Ecology announced a cooperative approach for developing an Alternative Water Quality Implementation Plan for Clover Creek which is listed as a 303d impaired waterbody for temperature, dissolved oxygen and fecal coliform. Pierce County began the planning and coordination with other stakeholders in early 2018. The County, its stakeholders (the City of Lakewood, Joint Base Lewis McChord, Tacoma Pierce County Health Department, the Pierce Conservation District) and Ecology continue to meet in order to develop the Plan's content and its implementation strategy for meeting Clover Creek's water quality standards. The County's draft Alternative Plan is scheduled to be submitted to Ecology by August 2020.

In 2017, Pierce County worked closely with Ecology through the Policy 1-11 Review and Public Workshop process. This included the submittal of comments and recommendations for Ecology's consideration.

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13.0 MONITORING AND ASSESSMENT (S8)

13.1 Summary of Permit Requirements

Provide, in each annual report, a description of any stormwater monitoring or stormwater-related studies conducted by the County during the reporting period. This requirement does not apply any monitoring, studies, or analyses conducted as part of the Regional Stormwater Monitoring Program (RSMP).

Choose no later than December 31, 2019, one of two options for regional status and trends monitoring that the County decides to carry out during this permit cycle: Option #1, make annual payments into a collective fund to implement RSMP small streams and marine near shore status and trends monitoring in Puget Sound; or (2) conduct stormwater discharge monitoring per requirements in S8.C.

Choose no later than December 31, 2019, one of three options for effectiveness studies monitoring that the County decides to carry out during this permit cycle: (1) pay into a collective fund to implement RSMP effectiveness studies; (2) conduct stormwater discharge effectiveness monitoring in accordance with Appendix 9 and S8.C. or (3) both pay into a collective fund to implement RSMP effectiveness studies and independently conduct an effectiveness study that is not expected to be undertaken as part of the RSMP.

13.2 Permit Compliance Actions and Activities

✓ Regional Status and Trends Monitoring (S8.A)

During 2019, Pierce County elected Option 1 under Permit Section S8.A.2 and will pay into the collective fund for status and trends monitoring. Pierce County will continue to pay \$66,242 into the collective fund during 2020.

✓ Management Program Effectiveness and Source Identification Studies (S8.B)

During 2019, Pierce County elected Option 1 under Permit Section S8.B.1 and will pay into the collective fund for status and trends monitoring. Pierce County will continue to pay \$121,059 into the collective fund during 2020.

APPENDIX A
Pierce County Code (PCC) 11.05, Illicit Stormwater Discharges

Chapter 11.05 ILLCIT STORMWATER DISCHARGES

Sections:

- 11.05.010 Purpose.**
- 11.05.020 Authority.**
- 11.05.030 Definitions.**
- 11.05.040 Stormwater Discharges.**
- 11.05.050 Stormwater Management and Site Development Manual.**
- 11.05.060 Administration.**
- 11.05.080 Enforcement.**
- 11.05.090 Penalties.**
- 11.05.100 Records Retention.**
- 11.05.110 Construction – Intent.**
- 11.05.120 Severability.**

11.05.010 Purpose.

The purpose of this Chapter is to protect Pierce County's surface and ground water quality by providing minimum requirements for reducing and controlling the discharge of pollutants to stormwater conveyance systems owned and maintained by Pierce County. The County recognizes that water quality degradation can result either directly from one discharge or through the collective impact of many small discharges. Therefore, this Chapter prohibits the discharge of pollutants into drainage facilities and outlines preventive measures to restrict pollutants from entering such facilities. These measures include the implementation of Best Management Practices (BMPs) by the property owners of Pierce County.

The County finds this Chapter is necessary to protect the health, safety, and welfare of the residents of Pierce County and the integrity of the County's water resources for the benefit of all by: minimizing or eliminating water quality degradation; preserving and enhancing the suitability of waters for recreation, fishing, and other beneficial uses; and preserving and enhancing the aesthetic quality and biotic integrity of the water.

Implementation of this Chapter is required under the Federal Clean Water Act, [33 U.S.C. 1251](#) et seq. In meeting the intent of the Clean Water Act by these provisions, the County also recognizes the importance of maintaining economic viability while providing necessary environmental protection.

(Ord. [2010-106s](#) § 1 (part), 2011; Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.020 Authority.

Under the provisions of the Federal Clean Water Act, [33 U.S.C. 1251](#) et seq., Pierce County is required to establish rules and regulations to control the discharge of pollutants into Pierce County's separate storm sewer system and to prevent and control the impacts of runoff. The County recognizes that clean water enhances the quality of life and has long-term economic benefits. The County intends to protect environmentally-sensitive areas, and the public benefits derived from clean water, and to implement the goals of the Clean Water Act, the state Water Pollution Control Act (Chapter [90.48](#) RCW), the Puget Sound Water Quality Protection Act (Chapter [90.71](#) RCW), the Growth Management Act (Chapter [36.70A](#) RCW), and the County's Comprehensive Plan. Because water quality issues cannot be resolved by independent jurisdictions, the County Council requests that the County Executive work on these issues on a regional basis. The County also recognizes that by enacting this Chapter, the County will avoid the severe financial penalties established in the Clean Water Act. (Ord. [2010-106s](#) § 1 (part), 2011; Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.030 Definitions. Revised 6/15

The following definitions shall apply in the interpretation and enforcement of this Chapter:

- A. "Act" means the Federal Clean Water Act, [33 U.S.C. 1251](#), et seq, as amended.
- B. "Best Management Practices" or "BMPs" mean the best available and reasonable physical, structural, managerial, or behavioral activities, that when used singly, or in combination, eliminate or reduce the contamination of surface and/or ground waters of the County.
- C. "Chapter" means this Chapter.
- D. "Clean Water Act" means [33 U.S.C. 1251](#) et. seq., as amended.
- E. "County" shall mean Pierce County, Washington, or as indicated by the context, County Executive, Director, or authorized designee.
- F. "Dangerous Waste" means any solid, liquid, or mixed waste defined according to WAC [173-303-080](#) through -110, as amended.
- G. "Director" means the Director of the Pierce County Public Works Department or any duly authorized representatives of the Director.
- H. "Discharge" means to throw, drain, release, dump, spill, empty, emit, or pour forth any matter or to cause or allow matter to flow, run, or seep from land to be thrown, drained, released, dumped, spilled, emptied, emitted, or poured into water.
- I. "Drainage Facility" means the system that collects, conveys, and stores surface and stormwater runoff. Drainage facilities shall include, but not be limited to, all surface and stormwater conveyance and containment facilities owned or operated by Pierce County included pipelines, channels, ditches, infiltration facilities, retention/detention facilities, erosion/sedimentation control facilities, and other drainage structures and appurtenances, and natural systems including rivers, streams, swamps, lakes,

wetlands, marine waters, closed depressions, and groundwater flooding areas within unincorporated Pierce County.

J. "Ecology" means the Washington State Department of Ecology.

K. "Farm Management Plan" means a comprehensive site-specific plan developed by the farm owner in cooperation with the Pierce County Conservation District and the Conservation Districts of the State of Washington, that takes into consideration the land owner's objectives while protecting water quality and related natural resources.

L. "Forest Practices" means any activity conducted on or directly pertaining to forest land and relating to growing, harvesting, or processing timber, as defined in Chapter [222-16](#) of the Washington Administrative Code.

M. "Ground Water" means all waters that exist beneath the land surface or beneath the bed of any stream, lake, or reservoir, or other body of surface water, whatever may be the geological formation or structure in which such water stands or flows, percolates, or otherwise moves.

N. "Hazardous material" means any material potentially harmful to life and/or property.

O. "Illicit Discharge" means the discharges defined by Section [11.05.040](#).

P. "May"/"Shall" -- "May" is permissive, "Shall" is mandatory.

Q. "Manual" means the current Pierce County Stormwater Management and Site Development Manual.

R. "National Pollutant Discharge Elimination System" or "NPDES" means the national program for controlling pollutants from non-point and point source discharges directly into waters of the United States under the Clean Water Act.

S. "National Pollutant Discharge Elimination System Permit" means an authorization, license, or equivalent control document issued by the Environmental Protection Agency or the Washington State Department of Ecology to implement the requirements of the NPDES program.

T. "Owner of Record" means a property owner, as reflected in the public title records.

U. "Person" means an individual, their agents or assigns; municipality; political subdivision; government agency; partnership; corporation; business; or any other entity.

V. "Pierce County Stormwater Management and Site Development Manual" means the latest version of the manual describing design, maintenance, best management practices, procedures, guidance for stormwater systems for new development and redevelopment, and guidance for preventing or treating pollutants in stormwater, to be utilized by businesses, industries and private residences, which has been approved by the Pierce County Council.

W. "Pollutant/Pollution" means such contamination, or other alteration of the physical, chemical, or biological properties, of any waters of the County, State or United States, including change in temperature, taste, color turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters as will or is likely to create a nuisance or render such waters harmful, detrimental, or injurious to the public health, safety, or welfare, or to domestic,

commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish, or other aquatic life.

X. "Sewage" means water-carried human waste or a combination of water-carried wastes from residences, business buildings, institutions, and industrial establishments, together with such ground, surface, storm, or other waters that may inadvertently enter the sanitary sewer system.

Y. "Shall"/"May" -- "Shall" is mandatory; "May" is permissive.

Z. "Source Control" means a BMP intended to prevent pollutants from entering surface and storm water and/or ground water including the modification of processes to eliminate the production or use of pollutants. Source control BMPs can be either structural or non-structural. Structural source control BMPs involve the construction of a physical structure on site, or other type of physical modification to a site; for example, building a covered storage area. A non-structural source control BMP involves the modification or addition of managerial or behavioral practices; for example, using less toxic alternatives to current products or sweeping vehicle parking lots.

AA. "State", when used as a noun, means the State of Washington.

BB. "State Waste Discharge Permit" means an authorization, license, or equivalent control document issued by the Washington State Department of Ecology in accordance with Chapter [173-216](#) of the Washington Administrative Code.

CC. "Surface and Stormwater" means water originating from rainfall and other precipitation that is found in drainage facilities, rivers, streams, springs, seeps, ponds, lakes, and wetlands, as well as shallow ground water.

DD. "Treatment" means the reduction or elimination of pollutants in stormwater prior to or in lieu of discharging or otherwise introducing such pollutants into the stormwater system.

EE. "Treatment BMP" means a BMP intended to remove pollutants once they are already contained in stormwater. Examples of treatment BMPs include: oil/water separators, biofiltration swales, and wet-settling basins.

FF. "Toxic Pollutants" means those pollutants, or combination of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the Director, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including reproductive malfunctions), or physical deformations in such organisms or their offsprings.

GG. "Waters of the State/Waters of the United States" means:

1. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters, including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect interstate or foreign commerce, including any such waters:
 - a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - c. Which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs 1. through 6. of this definition;
6. The territorial sea;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs 1. through 6. of this definition;
8. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (other than cooling ponds as defined in [40 CFR 423.11\(m\)](#) which also meet the criteria of this definition), are not waters of the United States;
9. The following guidelines can also help determine the status of a particular drainage conveyance:
 - a. If flow is year-round and of natural origin, it is a Water of the United States.
 - b. If the flow is intermittent but flows seasonally (not just during storm events), it is a Water of the United States.
 - c. If Federal or State in-stream water quality standards apply, it is a Water of the United States.
 - d. Naturally occurring drainage ditches are considered tributaries thereof to Waters of the United States.
10. Waters of the State shall include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and watercourses within the jurisdiction of the state of Washington.

(Ord. [2015-25s](#) § 2 (part), 2015; Ord. [2010-106s](#) § 1 (part), 2011; Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.040 Stormwater Discharges. Revised 6/15

A. **Illicit discharges.** It is unlawful for any person to discharge any pollutants into drainage facilities.

Pollutants include, but are not limited, to the following:

1. trash or debris;
2. solid waste;
3. construction materials;
4. petroleum products including but not limited to oil, gasoline, grease, fuel oil, heating oil;
5. antifreeze and other automotive products;
6. fixed and mobile vehicle washes, including home car washing;
7. metals in either particulate or dissolved form, in excess of naturally occurring amounts;
8. flammable or explosive materials;
9. radioactive materials;
10. batteries;
11. acids, alkalis, or bases;
12. paints, stains, resins, lacquers, or varnishes;
13. degreasers and/or solvents;
14. drain cleaners;
15. commercial and household cleaning materials;
16. carpet cleaning wastes;
17. pesticides, herbicides, or fertilizers;
18. steam cleaning wastes;
19. laundry waste;
20. soaps, detergents, or ammonia;
21. swimming pool backwash (diatomaceous earth);
22. chlorine, bromine, and other disinfectants;
23. heated water;
24. chlorinated swimming pool or hot tub water greater than 0.1 ppm chlorine;
25. human and animal wastes;
26. domestic or sanitary sewage;
27. recreational vehicle waste;
28. animal carcasses;
29. food and food wastes;
30. yard waste;
31. bark and other fibrous materials; does not include large woody debris (LWD) in approved restoration projects;
32. collected lawn clippings, leaves, or branches;

33. wastes associated with building construction;
34. concrete and concrete by-products;
35. silt, sediment, including dirt, sand, and gravel;
36. dyes and ink (except as stated in subsection C.1. of this Section);
37. chemicals, not normally found in uncontaminated water;
38. runoff from lawn/landscaping watering;
39. practice firefighting activities;
40. any hazardous material or waste not listed above.

B. Illicit Connections. Any connection identified by the Director that could convey anything not composed entirely of surface and stormwater directly into drainage facilities is considered an illicit connection and is prohibited with the following exceptions: connections conveying allowable discharges, or connections conveying discharges pursuant to an NPDES permit or a State Waste Discharge Permit. When the Director has reason to believe that an illicit connection is resulting in an illicit discharge, the Director may sample and analyze the discharge and recover the costs from a person in an enforcement proceeding. When the discharge is likely to contain illicit discharges on a recurring basis, the Director may conduct, or may require the person to conduct ongoing monitoring (including sampling and testing) at the person's expense. Illicit connections must be removed or obtain permits at the discretion of the Director.

C. Requirements for Discharges and Land Uses. For all existing discharges that drain directly or indirectly to a drainage facility, persons shall implement and maintain non-structural and, if necessary, structural BMP's, to comply with Pierce County's Municipal NPDES permit requirements and this Chapter. Non-structural BMP's shall include, but not be limited to, maintenance and housekeeping practices, sweeping of parking lots, storing oil barrels and other contaminant sources out of the rain, covering material stockpiles, and proper use and storage of hazardous materials. Structural BMP's include, but shall not be limited to, constructed facilities such as detention tanks, wet ponds, oil/water separators, grassed swales, roofing and berms for container storage areas, and revised piping systems.

All commercial and industrial facilities with a potential to pollute shall take measures to prevent spills or other accidental introduction of illicit discharges into a drainage facility. Such measures shall include:

1. Establishment and implementation of plans and procedures to prevent spills and accidental releases of materials that may contaminate stormwater;
2. Implementation of procedures for immediate containment and other appropriate action regarding spills and other accidental releases to prevent contamination of stormwater;
3. Provision of necessary containment and response equipment on-site, and training of personnel regarding the procedures and equipment to be used.

The provisions of this subsection may be satisfied by a Stormwater Pollution Prevention Plan prepared in compliance with a NPDES industrial stormwater permit for the site. The persons shall make the plan and procedures required by this subsection available to the Director when requested.

A person must, at the earliest possible time, but in any case within 24 hours of discovery, report to the Director a spill, release, dumping, or other situation that has contributed or is likely to contribute pollutants into waters discharged to a drainage facility. This reporting requirement is in addition to, and not instead of, any other reporting requirements under federal, state, or local laws.

D. **Allowable Discharges.** The following types of discharges shall not be considered illicit discharges for the purpose of this Chapter unless the Director determines that the type of discharge, whether singly or in combination with others, is causing significant contamination of drainage facilities and is causing or contributing to a violation of the County's NPDES stormwater permit:

1. potable water;
2. potable water line flushing, provided the water is not chlorinated in excess of 0.1 ppm total chlorine and will have no detectable total chlorine residual upon reaching waters of the State or United States;
3. uncontaminated water from crawl space pumps or footing drains;
4. dechlorinated swimming pool water; however, Pierce County Surface Water Management must be notified in advance to ensure release is not in excess of drainage system capacity;
5. materials placed as part of a County approved habitat restoration or bank stabilization project;
6. natural uncontaminated surface water or ground water;
7. flows from riparian habitats and wetlands; and
8. other uncontaminated water as determined by the Director.

When BMPs are outlined for these activities in the Manual, said BMPs, or BMPs of equivalent effectiveness, shall be followed.

E. **Exceptions to Illicit Discharges.**

1. Dye testing is allowable but requires verbal notification to the Pierce County Public Works Storm Drainage and Surface Water Management Utility at least one working day prior to the date of the test. The Tacoma-Pierce County Health Department is exempt from this requirement.
2. If a person can demonstrate that there are no additional pollutants being discharged from the site above the background conditions of the water entering the site, that person shall not be in violation of subsection A. of this Section.
3. Emergency response activities or other actions that must be undertaken immediately or within a time too short to allow full compliance with this Chapter to avoid an imminent threat to public health or safety, shall be exempt from this Section. The person responsible for emergency response activities should take steps to ensure that the discharges resulting from such activities are minimized to the greatest extent possible. In addition, the person shall evaluate BMPs and the site plan, where applicable, to prevent reoccurrence.

(Ord. [2015-25s](#) § 2 (part), 2015; Ord. [2010-106s](#) § 1 (part), 2011; Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.050 Stormwater Management and Site Development Manual. Revised 6/15

A. **General.** The Pierce County Stormwater Management and Site Development Manual contains requirements and guidelines to assist persons discharging into municipal drainage systems to stay in compliance with this Chapter. The Manual shall present best management practices, procedures and guidance for existing facilities and activities and for new development activities. The Manual is available for inspection and sale through Pierce County Public Works. In addition, the Pierce County Public Works Storm Drainage and Surface Water Management Utility will provide, upon reasonable request, available technical assistance materials and information, and information on outside financial assistance options to persons required to comply with this Chapter.

B. **Exemptions.** Persons implementing BMPs through other federal, state, or local programs will not be required to implement the BMPs prescribed in the Manual, unless the Director determines that the alternative BMPs are ineffective in reducing the discharge of pollutants. If another program requires the development of a plan, the person shall make their plan available to Pierce County Public Works Storm Drainage and Surface Water Management Utility upon request. Persons who qualify for exemptions include, but are not limited to, those:

1. Required to obtain or permitted under a general or individual NPDES permit for stormwater discharges from the Washington State Department of Ecology or Environmental Protection Agency;
2. Implementing and maintaining, as scheduled, a farm management plan approved by a Conservation District;
3. Engaged in forest practices, with the exception of Class IV, and Class IVA Special general forest practices. This Section will apply to Class IV general forest practices on lands platted after January 1, 1960, or on lands being converted to another use, or where the activity is taking place in areas designated by the Washington State Department of Natural Resources as lands with a likelihood of future conversion.

(Ord. [2015-25s](#) § 2 (part), 2015; Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.060 Administration.

A. **General.** The Director is authorized to implement and enforce the provisions of this Chapter. The Director will coordinate the implementation and enforcement of this Chapter with other departments of Pierce County government.

B. **Treatment BMPs.** In the event that a person discharges stormwater into a Municipal Drainage Facility that is not of a quality that complies with County, State, and Federal technology-based requirements, or where determined necessary, water quality-based requirements, the person shall provide necessary source control/stormwater treatment BMPs as required to comply with these requirements. The Manual shall be used to select acceptable technologies. Any facility required to treat stormwater to an acceptable level shall be provided and shall be properly operated and maintained at the

user's expense. Detailed engineering plans and specifications showing the treatment facilities shall be submitted to the County for review, and must be acceptable to the County before construction of the facility. The person shall obtain all necessary construction/operating permits from the County. Depending upon size and complexity of the treatment facility, the County may find it necessary to require that the facility be run by a qualified operator. Necessary qualifications shall be determined by the County in each individual case. The review of such plans shall in no way relieve the person from the responsibility of modifying its facility as necessary to produce a stormwater effluent acceptable to the County under the provisions of this Chapter. Upon completion of the treatment facility, the person shall furnish its operations and maintenance procedures to the County for review and approval. Any subsequent significant changes in the treatment facilities or operation and maintenance procedures shall be reported to and be accepted by the County prior to the person's initiation of the changes.

C. Inspection and Sampling. The County may inspect the facilities of any person to determine compliance with the requirements of these regulations. The person shall allow the County to enter upon the premises of the person at all reasonable hours for the purposes of inspection, sampling, or records examination. The County shall have the right to inspect and copy any of the person's records that are required by, or that relate to, compliance with the terms and conditions of these regulations. The County shall have the right to set up on the person's property such devices as are necessary to conduct sampling, inspection, compliance monitoring, and/or metering operations.

D. Confidential Information. Information and data furnished to the County with respect to the nature and frequency of discharge into the stormwater system shall be available to the public or to other governmental agencies without restriction unless the person specifically requests and is able to demonstrate to the satisfaction of the Director that the release of such information would divulge information, processes, or methods of production entitled to protection as trade secrets or proprietary information of the person. When requested by a person furnishing a report, the portions of a report or other information which may disclose trade secrets or secret processes shall not be made available for inspection by the public but shall be made available upon written request to governmental agencies for uses related to these regulations, NPDES Permit and/or other programs as amended; however such portions of a report or other information shall be available for use by the County, the State, or any other public agency in enforcement proceedings involving the person furnishing the report. The constituents and characteristics of the stormwater will not be recognized as confidential information. Information accepted by the County as confidential shall not be transmitted to any governmental agency or to the general public by the Director until and unless a ten day notification is given to the person.

(Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.080 Enforcement.

A. **Authorization.** The Director is authorized to enforce this Chapter and any permit, order or approval issued pursuant to this Chapter, against any violation or threatened violation thereof. Violations of this Chapter shall constitute a public nuisance. The Director is authorized to take enforcement actions against persons responsible for illicit discharges and connections, as well as dumping as described in this Chapter.

B. **Compliance.** The Director shall attain compliance with this Chapter by requiring the implementation of BMPs and maintenance of BMPs. The Director shall initially rely on education and informational assistance to gain compliance with this Chapter, unless the Director determines a violation poses a hazard to public health, safety, or welfare, endangers any property, or adversely affects the safety and operation of County right-of-way, utilities and/or other property owned or maintained by the County, that should be addressed through immediate penalties. The Director may demand immediate cessation of discharges and assess penalties for violations that are an imminent or substantial danger to the health or welfare of persons or danger to the environment.

(Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.090 Penalties. Revised 6/15

A. **Enforcement Actions.** The County shall be responsible for enforcing this Title. The County is authorized to issue violation notices, orders, levy fines, recover costs, issue notices of civil infraction, and/or institute both civil and criminal actions in the court. Recourse to any single remedy shall not preclude recourse to any other remedies available to the County.

B. **Notice and Order to Correct.** The County is authorized to issue a Notice of Violation and Order to Correct for violations of this Chapter to the individuals who own or maintain the property where the violation occurred. The order shall include the following:

1. **Description of Violation.** The Notice of Violation and Order to Correct shall describe the violation and shall order appropriate corrective action(s) to be taken within a specified time period.
2. **Compliance.** Every order shall require appropriate corrective action(s) to be completed within a specified time period.
3. **Service.** The Notice and Order shall be served by any one or combination of the following methods:
 - a. by both first class and certified mail with a return receipt requested; or
 - b. by posting the order in a prominent location on the property where the violation occurred, or
 - c. by personal service.
4. **Appeals.** Appeals of written orders shall proceed according to PCC [1.22.090](#), Pierce County Hearing Examiner Code, as an appeal of an administrative decision. The notice of the appeal shall be submitted at the Pierce County Development Center along with payment of the required appeal fee within 14 days

of the date of the order. After hearing said matter, the Examiner shall issue a decision upholding, revoking, or modifying the order.

C. **Civil Infraction.** Failure to comply with the terms of a written order shall constitute a class 1 civil infraction to be prosecuted in accordance with Chapter [1.16](#) PCC. Each day that a person fails to comply with the terms of a written order issued under this Chapter shall constitute a separate violation.

D. **Civil Penalty.** The provisions of this Section are in addition to and not in lieu of any other penalty, sanction or right of action provided by law. The purpose of this penalty is to encourage compliance with this Chapter and to obtain redress for ecological, recreational, and economic values lost or damaged due to the unlawful action. Any person who fails to obtain a necessary permit for discharge into a drainage facility shall be assessed a civil penalty as follows:

1. The Director may assess the violator a civil penalty not to exceed \$1,000.00 for each violation. Each violation or each day of continued unlawful activity shall constitute a separate violation.
2. Any person who, through an act of commission or omission, aids in a violation shall be considered to have committed the violation for purposes of the civil penalty.
3. The penalty provided for in this Section shall be imposed by the Director in writing, either by certified mail with return receipt requested or by personal service, to the person incurring the penalty, describing the violation with reasonable particularity and ordering appropriate corrective action to be taken within a specified time.
4. Within 30 days after the notice of penalty is received, the person incurring the penalty may apply in writing to the Director for remission or mitigation of such penalty. Upon receipt of the application, the Director may remit or mitigate the penalty upon whatever terms is deemed proper to bring about compliance with this Chapter.
5. Any decision(s) regarding remission or mitigation of the penalties imposed pursuant to this subsection may be appealed to the Pierce County Hearing Examiner under Chapter [1.22](#) PCC as an appeal of an administrative decision. The appellant shall submit a notice of appeal at the Pierce County Development Center along with payment of the required appeal fee within 14 days of the date of the decision.
6. If the penalty is not appealed, the violator will have up to 30 days after receipt of notice for payment of the penalty, unless a written request is made to the Director and granted for a longer payment period.
7. All civil penalties recovered during the enforcement of this Section shall be deposited into a fund of the division taking the enforcement action and shall be used for the protection of surface and stormwater or groundwater as set forth in this Chapter.

E. **Recovery of Costs Incurred by the County.** Any person violating any of the provisions of this Chapter, who discharges or causes a discharge which violates the County's NPDES permit and/or produces a deposit or obstruction or causes damage to or impairs a drainage facility, or causes damage to physical, chemical, or biological systems, of waters of the State or waters of the United States, shall be

liable to the County for any expense, loss, or damage caused by such violation or discharge, including the costs for bringing the County back into compliance with its NPDES permit associated with the violation of these regulations, and any fines levied for violations of the County's NPDES permit.

F. Appeal Rights of Recovery of Cost Assessments. A Billing Statement issued by the Director or designee is appealable within 14 days from the date of the letter. Appeals may be filed by submitting a \$300.00 appeal fee along with written statement identifying the basis for disputing County claim to the Public Works Department.

G. Violators Punishable by Fine and Imprisonment. Any person who, without authorization, discharges pollutants into a drainage facility, uses an unapproved connection to discharge into a drainage facility, submits false information in permitting and reporting requirements, violates the terms and conditions of a permit, fails to comply with an order issued by the Director or designee, fails to pay a civil penalty or cost recovery assessment, or obstructs or damages a drainage facility shall be deemed guilty of a misdemeanor, and shall be punished by fine not to exceed \$1,000.00 or by imprisonment not to exceed 90 days, or by both such a fine and imprisonment. Each person found guilty of a violation shall be deemed guilty of a separate offense for every day during any portion of which the violation is committed, continued, or permitted by such person and shall be punishable as provided for in this Chapter. Any person who, through an act of commission or omission, procures, aids, or abets in violation shall be considered to have committed a violation for the purpose of this Section.

H. Injunction and other Civil Remedies. In addition to any other penalty or method of enforcement, the prosecuting attorney may bring civil actions and suits for damages, injunctive relief and/or for other civil remedies as necessary. Any violation of this Chapter shall constitute a public nuisance, and may be enjoined as provided by the Statutes of the State of Washington.

(Ord. [2015-25s](#) § 2 (part), 2015; Ord. [2010-106s](#) § 1 (part), 2011; Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.100 Records Retention.

All Persons subject to these regulations shall retain and preserve for no less than three years any records, books, documents, memoranda, reports, correspondence, and any and all summaries thereof, relating to operation, maintenance, monitoring, sampling, and chemical analysis made by or on behalf of a person in connection with its discharge. All records which pertain to matters which are the subject of Administrative Adjustment or any other enforcement or litigation activities brought by the Director pursuant to this Chapter shall be retained and preserved by the Person until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired. (Ord. [96-47](#) § 1 (part), 1997)

11.05.110 Construction – Intent.

This Chapter is enacted as an exercise of the County's power to protect and preserve the public health, safety, and welfare. Its provisions shall be liberally construed to give full effect to the objectives and purposes for which it was enacted. This Chapter is not enacted to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefitted by the terms of this Chapter.

The primary obligation of compliance with this Chapter is placed upon the person holding title to the property. Nothing contained in this Chapter is intended to be or shall be construed to create or form a basis for liability for the County, the Department, its officers, employees or agents for any injury or damage resulting from the failure of the person holding title to the property (owner of record) to comply with the provisions of this Chapter, or by reason or in consequence of any act or omission to act in connection with the implementation or enforcement of this Chapter by the County, the Department, its officers, employees, or agents.

(Ord. [96-47](#) § 1 (part), 1997)

11.05.120 Severability.

If any Section, clause, or provision of this Chapter is declared invalid by the courts, the same shall not affect the validity of the Chapter as a whole or any part thereof, other than the part declared invalid. (Ord. [96-47](#) § 1 (part), 1997)

APPENDIX C
Pierce County Executive Order EO 2017-01



EXECUTIVE ORDER NO. 2017-01,
Concerning Effective Stormwater Management
Pierce County, Washington

This Order requires and empowers Pierce County Departments to fully implement all applicable provisions of the NPDES Phase I Municipal Stormwater Permit issued to Pierce County. It is the intent of this Order that Pierce County departments coordinate, implement, track, and report specific actions required by the Permit. It is further the intent of this Order that Pierce County exercises its role in reducing polluted runoff into and out of County drainage systems, facilities and properties to the maximum extent practicable to protect Pierce County's surface and ground water resources and to continue to be a leader for water quality in the Puget Sound Region.

WHEREAS, polluted runoff is a leading cause of impairment of Pierce County's waterbodies; and

WHEREAS, waterbody impairment negatively affects beneficial uses of surface waters, including people, fish, shellfish, and wildlife, and hinder sustainable and livable communities; and

WHEREAS, effective control and reduction of polluted runoff is essential for ecological and economic health; and

WHEREAS, Pierce County has operated under a federal Clean Water Act, National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Stormwater Permit since 1995 which requires a program to reduce negative effects of polluted runoff; and

WHEREAS, Pierce County invests millions of dollars annually towards implementation of the NPDES Permit and implements other local programs aimed at improving water quality; and

WHEREAS, Pierce County intends to fully meet its NPDES Stormwater Permit responsibilities and immediately take actions to enhance its implementation as needed;

NOW THEREFORE, I, Bruce Dammeier, Pierce County Executive, do hereby order and direct all Pierce County departments to implement the following to ensure Pierce County's full and continuing compliance with its municipal stormwater permit, to prevent or reduce polluted runoff into and out of County drainage systems, facilities, and properties, and to continue to be a leader for water quality in the Puget Sound Region:

1. Organization

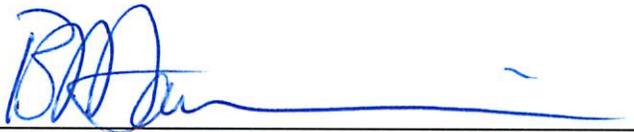
- a. The Surface Water Management Division of Planning and Public Works shall be County policy and administrative lead on the NPDES Stormwater Permit and shall also be responsible for reporting, including the County's overall annual report to the Department of Ecology, and evaluating permit compliance as well as lead for monitoring, inspections, training, outreach, internal technical assistance, maintenance and development standards, illicit stormwater discharge response, and intra- and inter-jurisdictional coordination.
- b. Each affected department of the County that owns assets or conducts actions regulated under the Permit or whose activities or programs could support its water quality goals shall be responsible for understanding and fully implementing the requirements of the municipal stormwater Permit and for integrating compliance activities into departmental programs and plans.
- c. Each department engaging in any activity or program that may be subject to or could support the municipal stormwater Permit shall designate a municipal Permit lead who will assist Surface Water Management in analyzing the Permit for its applicability to the department's programs and activities.
- d. Each department having assets or activities regulated by the Permit shall fully comply with all applicable Permit requirements, including, but not limited to, site development, construction oversight, source control, record keeping, tracking and reporting, and staff training.
- e. Each department having assets or activities regulated by the Permit shall fully coordinate and respond to reports, records, policies and procedural inquiries conducted by Surface Water Management in fulfilling its duties as County Permit lead.

2. Oversight of County Construction Projects

- a. Every County department or division that conducts construction activities regulated under the NPDES Phase I Municipal Stormwater Permit or under the NPDES Construction Sites Permit shall continue to fully implement all applicable requirements for onsite Erosion and Sedimentation Control (ESC) lead designation and Stormwater Pollution Prevention Plan development, training, onsite inspection, and monitoring report requirements.
- b. Each County department or division that conducts construction activities regulated under the NPDES Phase I Municipal Stormwater Permit or under the NPDES Construction Sites Permit shall exercise provision 1-09.9 (page 1-94, WSDOT 2012 Standard Contract Specifications), or equivalent, to withhold payment in the event the contractor fails to fully meet terms of the NPDES Phase I Municipal Stormwater Permit or the NPDES Construction Sites Permit for the County's construction project.

3. Pollution Prevention and Source Control
 - a. Every County department or division that owns lands, structures or portions of the County's municipal separate stormwater sewer system shall implement pollution prevention and operational source control best management practices and if necessary, structural source control best management practices.
4. Designation of County NPDES Stormwater Permit Training Coordinator
 - a. There is hereby designated a full time NPDES Stormwater Permit Training Coordinator in Surface Water Management Division. The duties of the Training Coordinator shall be to develop, deliver, evaluate, track, and report NPDES Stormwater Permit related training for County staff, tenants of County facilities, and others as applicable.
5. This Executive Order supersedes EO 2008-01 and EO 2012-01

Effective Date: July 13, 2017



Bruce F. Dammeier, Pierce County Executive

APPENDIX B
Pierce County Code (PCC) 2015 48S

1 Sponsored by: Councilmembers Connie Ladenburg and Derek Young
2 Requested by: County Executive/Public Works Department
3
4
5

6 **ORDINANCE NO. 2015-48s**

7
8
9

10 **An Ordinance of the Pierce County Council Amending Pierce County Code**
11 **Title 17A, "Construction and Infrastructure Regulations –**
12 **Site Development and Stormwater Drainage," and Title 17B,**
13 **"Construction and Infrastructure Regulations – Road and**
14 **Bridge Design and Construction Standards"; Repealing the**
15 **"Pierce County Stormwater Management and Site**
16 **Development Manual" Adopted Pursuant to Ordinance No.**
17 **2008-59s, as Amended; Adopting a New Manual Titled**
18 **"Pierce County Stormwater Management and Site**
19 **Development Manual"; Amending Pierce County Code**
20 **Chapter 2.05, "Planning and Land Services and Assessor-**
21 **Treasurer Development Review, Inspection and Application/**
22 **Processing Fees," and Chapter 18.25, "Definitions"; and**
23 **Setting an Effective Date.**
24

25 **Whereas**, Pierce County is a Phase 1 National Pollutant Discharge Elimination
26 System (NPDES) permittee operating a municipal separate storm sewer system under a
27 permit (hereinafter referred to as the "Phase 1 MS4 General Permit") issued by the
28 Washington State Department of Ecology (Ecology) as directed by the Federal Clean
29 Water Act (CWA) and the State Water Pollution Control Law (Chapter 90.48 RCW); and
30

31 **Whereas**, in accordance with schedules mandating periodic approval of Phase 1
32 MS4 General Permits, a new NPDES Permit for Pierce County was issued on August 1,
33 2012, with an effective date of August 1, 2013, and subsequently modified on
34 January 16, 2015, by Ecology; and
35

36 **Whereas**, a requirement of the Phase 1 MS4 General Permit is that Pierce
37 County adopt a Stormwater Manual which has been determined by Ecology to be
38 equivalent to the Ecology "Stormwater Management Manual for Western Washington"
39 for controlling the quantity and quality of stormwater runoff; and
40

41 **Whereas**, the Pierce County Council recognizes that stormwater is an important
42 part of the hydrologic cycle and directly impacts streams, wetlands, lakes, creeks,
43 potholes, groundwater, the Puget Sound, and is a primary component responsible for
44 aquifer recharge; and
45
46



1 **Whereas**, the Pierce County Council recognizes that appropriate controls for
2 stormwater are necessary to protect public and private property from the impacts of
3 runoff such as flooding, erosion, and sedimentation due to runoff from development,
4 redevelopment, and land disturbing activities; and

5
6 **Whereas**, the adoption of an Ecology equivalent Stormwater Manual will add an
7 incremental level of complexity to the permit process, will require initial procedural
8 development, also additional staff time to review an application, and continued training
9 to assure that development activity is reviewed consistently and correctly; **Now**

10 **Therefore,**

11
12 **BE IT ORDAINED by the Council of Pierce County:**

13
14 Section 1. Title 17A of the Pierce County Code, "Construction and Infrastructure
15 Regulations – Site Development and Stormwater Drainage," is hereby amended as
16 shown in Exhibit A attached hereto and incorporated herein by reference.

17
18 Section 2. Title 17B of the Pierce County Code, "Construction and Infrastructure
19 Regulations – Road and Bridge Design and Construction Standards," is hereby
20 amended as shown in Exhibit B attached hereto and incorporated herein by reference.

21
22 Section 3. The Pierce County Council hereby repeals updates "Pierce County
23 Stormwater Management and Site Development Manual" adopted pursuant to Ord.
24 2008-59s, as amended, and adopts a new manual titled "Pierce County Stormwater
25 Management and Site Development Manual", attached hereto as Exhibit C and
26 incorporated herein by reference.

27
28 Section 4. Chapter 2.05 of the Pierce County Code, "Planning and Land
29 Services and Assessor-Treasurer Development Review, Inspection and Application/
30 Processing Fees," is hereby amended as shown in Exhibit D, which is attached hereto
31 and incorporated herein by reference.

32
33 Section 5. Chapter 18.25 of the Pierce County Code, "Definitions," is hereby
34 amended as shown in Exhibit E, which is attached hereto and incorporated herein by
35 reference.

36
37 Section 6. The Pierce County Council hereby directs the Department of Public
38 Works and the Planning and Land Services Department to create procedural
39 development aides along with appropriate training to implement the new Manual.

40
41 Section 7. The Council recognizes that formatting, numbering, and citation
42 modifications to Exhibit C may be necessary as a result of amendments made during
43 the legislative process. To this extent, the Clerk of the Council is hereby authorized to
44 modify Exhibit C prior to final printing so that any Council amendments are accurately
45 reflected throughout the document and formatting, numbering, and citations are
46 correctly shown. The Clerk of the Council is also authorized to correct spelling and
47 punctuation errors as necessary.



1 Section 8. This Ordinance shall become effective on December 5, 2015.

2
3
4 PASSED this 28th day of October, 2015.

5
6 ATTEST:

7 **PIERCE COUNTY COUNCIL**
8 Pierce County, Washington

9 Denise D. Johnson
10
11 **Denise D. Johnson**
12 Clerk of the Council

13 Dan Roach
14
15 **Dan Roach**
16 Council Chair

17 Pat McCarthy
18 **Pat McCarthy**
19 Pierce County Executive
20 Approved Vetoed , this
21 9 day of November,
22 2015.

23 Date of Publication of
24 Notice of Public Hearing: October 14, 2015

25 Effective Date of Ordinance: December 5, 2015
26
27
28
29
30
31
32



APPENDIX D
PALS DE Performance Monitoring Inspection Process
DE-POL-5100

PIERCE COUNTY

Planning and Land Services

Development Engineering

Effective Date: April 26, 2012

Supersedes: NA – First Edition

POLICY

DE POL 5100 Performance Monitoring Inspection Process

Prepared By: Scott Murdock, Inspection Supervisor *SM*

Approved By: Mitchell Brells, P.E., Development Engineering Manager *MAB*

See Also:

- 2007 Phase I Municipal Stormwater Permit Section S5.C.9.b.ii (3)&(4)
- Development Engineering Inspectors' Meeting Notes
- Dev Eng Industry Notice 4 – Performance Phase Monitoring Fees
- Maintenance Checklists, PC Stormwater Mgmt & Site Development Manual, Appendix 1B

Applicability: Prescribes the Performance Monitoring Inspection Process applicable to all permitted site development projects of sufficient scale to require any form of Maintenance Guarantee (aka Maintenance & Defect Guarantee, 18 month bond, 24 Month Bond, 42 Month Bond, etc.). This policy will describe the process and procedures for scheduling, completing, tracking and administering all inspections required throughout the Maintenance Bonding Period. These will typically include Performance Monitoring Inspections conducted throughout, and Bond Release Inspections conducted at the end of, the Maintenance Bonding Period.

Purpose: The Performance Monitoring Inspection Process is intended to insure that;

- Permitted storm drainage systems continue to function properly throughout the Maintenance and Defect bonding period.
- That the responsible party is completing necessary maintenance or repairs in a timely manner.
- That the system is properly protected from adverse impacts related to ongoing development activities (i.e. home building in plats).
- That any necessary maintenance or corrective work is completed and all known issues resolved prior to the release of any form of Maintenance Guarantee associated with the project.

This is the process by which Development Engineering meets our NPDES Permit obligation to conduct ongoing monitoring of permitted development projects from the time of final construction approval until the last financial guarantee associated with the project is released or forfeited. Once the last financial guarantee is released or forfeited, the project has finished the development process and the responsibility for any ongoing inspections transitions to the Surface Water Management Division of the Public Works and Utilities

DE POL 5100 Performance Monitoring Inspection Process

Department.

Process: Effective January 1st, 2010 all general site development projects seeking final approval, and of sufficient scale to require any form of Maintenance Guarantee, have been required to obtain a Performance Monitoring Permit. This permit is used to establish responsible party contact information, to schedule and track all inspections and follow up activities required throughout the maintenance bonding period, and to fund the Performance Monitoring Inspection Process.

The Development Engineering Inspection Supervisor is responsible for managing this process. Performance Monitoring Inspections will be conducted semi-annually for subdivisions and annually for all other projects. Additional Performance Monitoring Inspections will be scheduled and completed as necessary when and/or if the Inspection Team has any reason to believe there may be a maintenance, design or performance related issue affecting any project in the maintenance bonding phase.

Routine periodic Performance Monitoring Inspections will be scheduled using the Permit Monitoring Report in PALS+. Performance Monitoring Inspections will be scheduled in PALS+ for projects returned on the report as being due for inspection. The report will be run and inspections scheduled on or about the 1st of every month. The assigned inspector will subsequently receive an inspection worksheet and will be expected to complete the required inspection within 21 days of the request.

Performance Monitoring Inspections – When a project has been properly constructed and is being properly maintained, Performance Monitoring Inspections should be relatively brief inspection visits. The Inspector will complete these inspections keeping the objectives listed in the 'Purpose' section above in mind. The following specific items will be checked:

1. Overall cleanliness of the storm drainage system. The underground storm drainage system will be spot checked starting with the roadway catch basin(s) first upstream from the primary drainage facility.
2. Physical integrity of the required road and storm drainage improvements. Have any defects developed or any damage occurred that is not directly attributable to another permitted project?
3. Site Stability/Erosion and Sediment Protection. Are there exposed or disturbed areas either within this project or adjacent to it which drain to the project's storm drainage system? If so, have adequate measures been put in place to protect the storm drainage system?
4. Operational effectiveness. Does the water level in the wet, detention and/or infiltration facilities appear reasonable considering recent weather conditions? Is there any visible evidence of overflowing or uncontrolled discharge? Does the control structure remain in place and intact and is the clean out gate closed? Does the storm drainage system appear to be functioning properly as far as you can tell?
5. Water Quality. What is the condition/clarity of the water in the primary drainage facilities? What is the condition/clarity of any water being discharged from the site?

DE POL 5100 Performance Monitoring Inspection Process

6. **Vegetation Management.** Is there undesirable vegetation taking hold in open drainage facilities? Are bioswales being properly mowed & maintained? Is required vegetation in wet ponds and/or rain gardens intact and alive?
7. **Safety Concerns.** Are fences, trash racks and other required safety measures still in place and intact? Are there any obvious or known safety concerns on site?

Extensive guidance on inspecting various types of drainage systems and passing judgment on their condition is available in the Maintenance Checklists of the Pierce County Stormwater Management and Site Development Manual.

Once the inspector has completed the inspection, he or she will need to classify any deficiencies into one of two categories. The first category would be items or deficiencies that require immediate attention. Correction of any actual or potential off site water quality impact or safety concern, and routine maintenance that should be ongoing, will all normally fall in this category. A 30 day deadline and follow up inspection will be scheduled for these items. The second category would be items that have been noted and must be corrected or resolved prior to release of the maintenance guarantee. Care should be taken when relating these items to be clear that they should not be interpreted as a Bond Release punch list.

The inspectors Performance Monitoring Inspection Report should include the following elements:

- A statement concerning the overall condition of the project.
- For plats, a statement concerning the built out status (i.e. 'Homes have been constructed and appear complete on ~30% of the lots').
- A list of items to be completed within 30 days (or a shorter period for safety or more significant concerns) and an explicitly stated deadline.
- A list of items to be completed or resolved prior to bond release and a statement that this is not a bond release punch list.

Therefore, a typical Performance Monitoring Inspection Report might read as follows;

Date: **1 Jan 2012** Inspection Type: **Performance Monitoring** Result: **Incomplete**

The roads and storm drainage improvements associated with Project X are relatively clean and appear to be functioning properly. There was approximately six inches of water in the pond at the time of my visit. Homes have been built and appear complete on ~50% of the lots.

The following deficiencies were noted and must be corrected within 30 days:

- 1. The insert in CB39 is nearly full and must be serviced.**
- 2. Excessively long grass and invasive weeds were noted in the bioswale. The**

DE POL 5100 Performance Monitoring Inspection Process

bioswale must be mowed & weeds removed.

The following deficiency was noted and must be corrected prior to release of the Maintenance Guarantee:

1. Graffiti has been painted over the pond facility sign. It must be removed, or the sign must be replaced.

Note: It is important to contact your inspector and make appropriate arrangements if the requirements listed can not be completed by the established due dates in order to avoid reinspection fees and other enforcement action. The items listed above should not be interpreted as a bond release punch list as the bonding period has not yet concluded and a Bond Release inspection has not yet been completed. It is important to keep records of your own inspections and maintenance activities as you will be asked to submit these at the end of the maintenance bonding period.

A predefined inspection comment has been set up in PALS+ to facilitate this reporting format.

It is the principal's responsibility to request a Bond Release Inspection at the end of the maintenance bonding period. Upon receiving a Bond Release Inspection request, the inspector will verify;

- That any outstanding fees associated with the Performance Monitoring Permit have been paid.
- That any build out requirements have been met.
- That the project is actually due for Bond Release Inspection based on the maintenance bonding period applicable to that particular project.
- That the principal has submitted the required maintenance and inspection records.
- That County inspection records show that the proponent has adequately responded to inspection requirements identified throughout the maintenance bonding period.
- That any known outstanding issues have been resolved.

If all of the above requirements have been met, the Inspector will accept the Bond Release Inspection request and work it into his or her existing workload on a first come/first serve basis.

Maintenance and Defect Bond Release Inspections – Bond Release inspections conducted at the end of the Maintenance Bonding Period are more thorough and time consuming than routine Performance Monitoring Inspections. These inspections are the County's last opportunity to insure that appropriate maintenance is completed and corrections are made to protect the Homeowners' Association, the future owners or the taxpayers from the undue burden of having to correct development related impacts or problems. The following specific items will be checked:

DE POL 5100 Performance Monitoring Inspection Process

1. Have all known issues/deficiencies associated with this project been properly corrected or resolved? Did any of these issues warrant extending the maintenance guarantee period, and if so, has the extension run out?
2. Cleanliness of the project storm drainage system. The entire underground storm drainage system will normally be checked with the exception that if an initial sampling reveals more than a couple isolated basins with significant sediment accumulation, the inspector may require that the entire underground storm system be cleaned. Storm drainage systems associated with public road projects are always expected to be thoroughly cleaned immediately prior to bond release.
3. Temporary Erosion Measures. Have all CB inserts, silt fences and other temporary erosion control measures not directly associated with another permitted project been removed?
4. Physical integrity of the required road and storm drainage improvements. Are the required improvements intact and remain free of defects and/or damage? Are all required fixtures (control assemblies, ladders, trash racks, fences, etc.) still in place and properly configured?
5. Operational effectiveness. Does the storm drainage system still appear to be functioning properly?
6. Water Quality. What is the condition/clarity of the water in the primary drainage facilities? What is the condition/clarity of any water being discharged from the site?
7. Vegetation Management. Is there undesirable vegetation in open drainage facilities? Are bioswales being properly mowed & maintained? Is required vegetation in wet ponds and/or rain gardens intact and alive?
8. Other Issues. Are there any other obvious issues which should be corrected or addressed prior to release of the maintenance guarantee?

If deficiencies are noted during the bond release inspection, the report will be entered into PALS+ with a clear and complete punch list and a copy will be provided to the Development Engineering OA in charge of Financial Guarantees. The punch list will be incorporated in the Maintenance Bond Deficiency Letter produced by the Development Engineering OA, and the inspector will be cc'd on this letter. Upon receipt of this letter, the inspector will schedule a follow up bond release inspection for the day after the deadline stated in the letter.

If deficiencies are not noted and the project passes the Bond Release inspection, the inspector will enter his report into PALS+ and conclude his report with a statement in the form 'I recommend release of the Maintenance & Defect Guarantee for the (specify Public Or Private) (specify Onsite or Offsite) Improvements associated with Project X'. The inspector will then add an Administrative Final – Approved entry to the Performance Monitoring Permit in order to close it out.

Bond Release Punch Lists – Once a Bond Release Punch list has been established and communicated to the principle, items may only be added to the punch list under the

DE POL 5100 Performance Monitoring Inspection Process

following circumstances;

1. An issue or deficiency is discovered which constitutes a safety hazard.
2. An issue or deficiency is discovered which constitutes a significant water quality or property damage hazard.
3. In the course of completing existing punch list work, a significant additional deficiency is exposed or discovered which could not reasonably have been observed at the time when the original bond release inspection was completed and the original punch list developed.
4. The principle leaves a punch list outstanding for so long (i.e. a year or more) that additional problems or deficiencies develop which did not exist at the time of the original bond release inspection.

Penalties & Enforcement – Reinspection Fees will be assessed and immediately posted to the permit whenever any of the following occurs:

1. An inspector visits a project site and finds that a failure to complete routine maintenance has resulted in obvious impacts to downstream drainage features, offsite properties or to required improvements associated with the project.
2. An inspector finds that a required correction has not been completed by the established deadline.
3. Whenever a second or subsequent reinspection of the same type is conducted and the inspector finds that punch list items established during the first inspection have not yet been completed.

If corrections have not been completed or satisfactory arrangements made within 30 days of the assessment of the first reinspection fee, the inspector will assess and post a second reinspection fee and initiate collection of the maintenance guarantee.

If corrections have not been completed, or satisfactory arrangements made, within 60 days of the first financial guarantee collection letter, the inspector will assess and post a third reinspection fee and consult with the Development Engineering Inspection Supervisor concerning what additional enforcement steps (if any) are appropriate given the nature, scale and potential impact of the outstanding requirements.

Suggestions/Revisions: To be fair to all applicants, inspection criteria must be applied uniformly throughout the County. Inspectors shall strive to be consistent with regard to the application of the criteria in this policy. Any difficulties interpreting or applying this policy, or any suggestions for improvements or changes should be brought to the attention of the Development Engineering Inspection Supervisor, or presented at an Inspectors' meeting.

N:\Development Engineering\Inspection Team\1- Team Shared Docs\Policies & Procedures\1 - GSDIP\DE POL 5100 Performance Monitoring Inspection Process.doc

APPENDIX E
PALS DE Enforcement Strategy for Permitted Projects
DE-POL-5200

PIERCE COUNTY

Planning and Land Services

Development Engineering

Effective Date: May 1, 2012

Supersedes: NA – First Edition

POLICY

DE POL 5200 Enforcement Strategy for Permitted Projects

Prepared By: Scott Murdock, Inspection Supervisor *SM*

Approved By: Mitchell Brells, P.E., Development Engineering Manager *MAB*

See Also:

- 2007 Phase I Municipal Stormwater Permit Section S5.C.5.b.vi
- Pierce County Code Chapter 18 Development Regulations – General Provisions, Section 140 Compliance.
- DE POL 5001 General Site Development Construction Inspection Process.
- DE POL 5301 Residential Site Development Inspection Process
- Development Engineering Inspectors' Meeting Notes

Applicability: The strategies and mechanisms described in this policy will be utilized as necessary with respect to any permitted site development project which is found to be in non-compliance with the terms and conditions of the project permit(s), their parent regulations or the approved plans associated with the project. For the purposes of this policy a project is considered to be a 'permitted project' when there is a valid site development application or permit for the project which has not been withdrawn, cancelled, revoked or finalled. In addition, projects with finalled or expired permits for which Development Engineering is still holding active financial guarantees may also be treated as 'permitted projects' under this policy.

Purpose: This Enforcement Strategy is intended to;

- Encourage and facilitate compliance with development regulations, permit conditions and approved plan specifications as inspected & administered by Development Engineering.
- To help protect adjacent property owners and downstream drainage features from undue impacts related to permitted development activity.
- To insure that transgressions or deviations are addressed & resolved quickly and effectively and therefore at the lowest possible cost for all parties involved.
- To insure that Pierce County Development Engineering meets our obligations as a local jurisdiction permitting agency with regard to overseeing the projects we permit and enforcing the regulations we administer.

This process is intended to provide a number of tools, or progressive enforcement steps,

DE POL 5200 Enforcement Strategy for Permitted Projects

which the Development Engineering inspector may utilize in order to obtain compliance on his or her project sites. The individual tools selected and the extent of enforcement action taken may vary somewhat from project to project based on a variety of factors including; the scale of the infraction or deviation, the presence or potential for offsite impacts, the presence or potential for any safety impacts, the responsiveness of the proponent, etc.

Process: Most site development permits are associated with a parent project application such as a building permit or subdivision. Our review staff are responsible to insure that site development permits are properly tied to the parent project application in PALS+ and that holds are placed on the final approvals of the parent project until all Development Engineering Requirements are met. Review staff are also responsible to insure that reclamation guarantees (and other applicable financial guarantees) are collected from the applicant prior to issuing site development permits for general projects. These two tools are generally sufficient to insure ultimate compliance on the part of the applicant. Therefore enforcement action against a permitted project, beyond the initial steps listed below is seldom necessary.

This being said, however, it is impossible to predict what cases will ultimately comply using the initial enforcement steps and which will require further enforcement action. Therefore documentation is important at every step in the enforcement process. Clear, complete inspection reports and good photos that convey the issue at hand should be provided every time a reinspection fee is imposed or any subsequent enforcement step taken.

Initial Enforcement Steps:

1. Deadline and Automatic Reinspection – The mildest of our enforcement steps to be used for minor transgressions or omissions when corrective work is required and must be completed expeditiously, however punitive action is not yet warranted. The inspector will explicitly state the deadline/scheduled reinspection date in his or her report. Deadlines will normally be established at 5 working days for active construction sites or 30 days for idle sites or sites in the performance monitoring phase. Shorter deadlines may be imposed for more critical corrections.

2. Reinspection Fees - Reinspection Fees will be assessed whenever any of the following occurs:

- An inspector visits a project site and finds that while significant land disturbing activities have commenced, the proponent has failed to make a reasonable attempt to install the necessary erosion and/or sediment control measures.
- An inspector visits a project site and finds it to be causing visually obvious erosion, sediment or water quality related impacts which the proponent is not aggressively working to correct.
- An inspector visits a project site and finds that erosion control measures have been removed or fallen into significant, obvious disrepair without the proponent taking reasonable action to maintain them and before the site has been permanently stabilized.
- An inspector visits a project site and finds that a required correction has not been

DE POL 5200 Enforcement Strategy for Permitted Projects

completed by the established deadline.

- And inspector completes a second or subsequent requested reinspection of the same type and finds that punch list items established during the first inspection have not yet been completed.

When an inspector imposes a reinspection fee, the inspector will always state in his or her report;

- That a reinspection fee has been assessed.
- The reasons why it was assessed.
- The total now due.
- The subsequent deadline for corrective work/scheduled reinspection date.

If corrections have not been completed or satisfactory arrangements made by the established deadline, the inspector will assess and post an additional reinspection fee and establish another deadline.

3. Suspension of the Site Development Permit – This step is always taken in conjunction with assessing a reinspection fee and serves to insure that the proponent can not obtain inspections or approvals on the site development permit until the inspection fees have been paid and/or the underlying issues resolved. An inspector may also suspend the permit without imposing a reinspection fee if he or she wishes to stop progress on a particular project until an issue is resolved, but does not feel that a reinspection fee is warranted.

4. Imposing a Stop Work/Cease and Desist Order – This action should be taken whenever necessary to prevent additional damage, impacts or hazards until the review engineer has an opportunity to look at the situation, require and obtain whatever plans and/or documentation is needed, and identify the appropriate course of corrective action. Posting a Stop Work Order may also be used to refocus a contractor or developer on site stability or erosion control requirements when the above listed measures have not succeeded in securing compliance.

5. Suspension of the Parent Building Permit – Development Engineering Inspection Support OAs (or the inspector if he or she is doing his or her own input) will automatically suspend the parent building permit whenever a third unpaid reinspection fee is assessed. When taking this step, the Inspection Support OA should also click on the 'Holds' tab while in the inspection folder for the Building Permit and verify that a Development Engineering Hold for Final Site Development Inspection has been properly activated on the Building Permit.

Follow Up Enforcement Steps: While these steps are rarely necessary they are important tools for use when full utilization of the above steps does not result in compliance. Some of these steps will not be applicable to every project. Please see the Inspection Supervisor or the project review engineer when the next appropriate step is unclear. Warnings and deadlines for compliance should always be issued before taking these steps as the warning may result in compliance which is the preferred outcome.

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1. Collecting Financial Guarantees – Initiating collection of financial guarantees can be an effective motivating step for the proponent. Reclamation guarantees are required for all General Site Development Projects except those being constructed by a public agency. Construction or maintenance guarantees may also be available. The object in initiating collection on a financial guarantee is not to actually collect the money, but rather to motivate compliance.

2. Direct Billing of Unpaid Fees & Enforcement Costs – An inspector may refer individual cases to PALS Accounting for collection of unpaid fees already posted to the permit as well as excess enforcement costs not posted to the permit but itemized for Accounting by the inspector. Once an applicant has been billed by PALS, Pierce County Budget & Finance will continue to bill them monthly until the bill is paid, and if necessary, refer the account to collections.

3. Assessment of Civil Penalties – A person who fails to comply with a valid, written order may be assessed a civil penalty up to \$1000.00 per violation. Each day of continued unlawful activity constitutes a separate violation. Civil penalties may be imposed by sending written notice, either by certified mail or personal service. See PCC 18.140.050 B. for specific guidance concerning civil penalties. Civil penalties are assessed by the Director, or the Director's designee.

4. Complete Building RFA to Suspend, Revoke or Condition the Building Permit – This step requires completing the Building Request for Action form. It is different from the 'Suspend the Parent Building Permit' listed in the above section in that it does not automatically get lifted when fees are paid. Documentation of previous enforcement action must be attached to the form.

5. Canceling the Site Development Permit – When it appears unlikely that an applicant will ever bring the site into conformance with applicable permit or regulatory requirements, the site development permit should be cancelled. This step will make it apparent that there is an unresolved issue on site, it should insure that the applicant has to submit a whole new permit application and fees to move forward AND it will make it clear that any continuing work on site is unpermitted, which will make other enforcement mechanisms available. The applicant must be informed of this step (and any additional anticipated enforcement steps) by certified letter, a copy of which must be uploaded into PALS+.

6. Activate an Alert on the Parcel(s) – When the above steps have not achieved compliance and the site remains in a physically non-conforming condition, a Site Development Violation Alert shall be activated on the parcel in PALS+. The Alert Comment shall include language to the following effect: 'Please status Development Engineering on any and all applications concerning this parcel. A site development violation remains unresolved on this site. Subsequent applications will not be approved until violation is resolved. Reference cancelled Site Development Permit No. XXXXXX, PCDE File XX-XXX and/or contact Inspector X at 253-798-XXXX for more information.'

7. Report Environmental Violations to DOE – Unresolved site development violations which are causing verifiable offsite environmental or water quality impacts will be reported to the Washington State Department of Ecology using their Environmental Incident Report Form

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located here;

http://www.ecy.wa.gov/programs/spills/forms/nerts_online/SWRO_nerts_online.html

Final Enforcement Steps

1. Recording a Notice of Non-Compliance – For most cases the recording of a Notice of Non-Compliance will be the last step taken in the enforcement process. When a Residential Site Development Permit is properly tied to a Building Permit, a Building Notice of Non-Compliance will automatically be recorded when the proponent fails to obtain final approval on his building permit and the building permit expires. In these cases it is not necessary to record a separate Notice of Non-Compliance for Development Engineering. For all other cases the Site Development Inspector will request, and the Inspection Support OA will prepare and have recorded a Certificate of Notice of Non-Compliance. A copy of the recorded notice will be uploaded into PALS+ and another will be mailed to the applicant.

2. Referral for Prosecution – When all other efforts to secure compliance have failed and the violation in question is causing or will cause a significant offsite environmental, water quality or safety related impact, the case may be referred to the Prosecuting Attorney's office for formal charging. The inspector must consult with the Development Engineering Inspection Supervisor and one of our Prosecuting Attorney representatives before formally referring a case for prosecution.

Suggestions/Revisions: Any difficulties interpreting or applying this policy, or any suggestions for improvements or changes should be brought to the attention of the Development Engineering Inspection Supervisor, or presented at an Inspectors' meeting.

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APPENDIX F
PALS DE Residential Site Development Inspection Process
DE-POL-5301

PIERCE COUNTY

Planning and Land Services

Development Engineering

Effective Date: January 2, 2006

Supercedes: v. March 9, 2005

POLICY

DE POL 5301 Residential Site Development Inspection Process

Approved By: Scott Murdock, Inspection Supervisor

See Also: Ordinance 2004-56S, PCC Title 17A, Section 17A.10.140 Inspections, Right of Entry, Access.

Applicability: Prescribes the site development inspection procedures pertaining to single family construction projects in Pierce County.

Permit Requirement: A separate Site Development Permit shall be required for every single family residential building site unless exempt per section 17A.10.050. Generally this could only occur if the project would expose less than 6000 square feet of the earth's surface and displace (excavate, fill and/or grade) less than 50 cubic yards of material. Only projects of an extremely limited scale, such as the replacement of an existing mobile home or the construction of a small detached garage or shed, would meet these criteria. The fees for all required inspections would be paid on the application for this permit. Projects proposing one or more new access(es) to a public road would require an additional driveway approach permit for each proposed access.

Application/Permit Process: Applicants will be required to apply for a Residential Site Development Inspection Permit at the time of application for their building permit. A Hold will be placed in PALS+ on the final inspection of any associated building permit(s) to insure that builders are required to comply with the Single Family Site Development inspection requirements. If a Development Engineer determines that additional requirements must be met before the final inspection a particular site, additional Holds will be entered on the appropriate permit(s).

Inspection Process: A minimum of two site development inspections, Erosion Control & Final, are required for all single family construction projects. Most will also require a Drainage inspection. The specific drainage construction and inspection requirement is determined at the time of application, and explanatory documents will be provided to the applicant and routed with the inspection packet.

The Erosion Control inspection will be scheduled automatically by PALS+ when the first building inspection is requested. The builder will be responsible to request Drainage and Final inspections at the appropriate points in construction. The inspector will receive printed inspection requests, and will be expected to complete inspections on the scheduled date to the extent that workload allows. When workload will prevent completion of all inspections on the scheduled date, Final and Residential Drainage inspection requests will

Residential Site Development Inspection Process (Continued)

be given priority. The inspector may complete additional 'in progress' or 'check compliance' inspections as his or her workload allows.

Inspection Criteria: The chart below lists the standard criteria to be employed with regard to each inspection. The inspector may find that more stringent criteria must be imposed at some sites in order to meet the intent of the parent regulations.

Inspection	Inspection Criteria
Erosion Control	<p>If a specific erosion control plan has been approved for the subject site, all measures specified on the approved plan have been properly installed and appear adequate. OTHERWISE</p> <ol style="list-style-type: none"> 1. Construction approach installed unless native material is free of fines and poses no erosion danger (extremely unusual). See standard detail. 2. Access limited to construction approach. The preferred method is a fence of standard orange construction netting with support posts at 4 foot maximum spacing. Tape barriers or other fragile methods which are unlikely to survive for the duration of construction will not be accepted. 3. Some form of sediment barrier properly installed unless site is a pothole and poses no erosion/sedimentation danger (extremely unusual). 4. Silt fence, if employed (even as access barrier only), substantially conforms to the detail approved by Pierce County. Silt fences must be securely keyed into the ground and supported by 2 x 2 (min) wooden stakes at 3 foot (max) spacing. Unreinforced prefabricated silt fence products are normally not adequate. Silt fence should be installed at the cut/fill slope setback line. See standard detail. 5. Effective inlet protection (normally a CB insert) has been provided for drainage structures on, adjacent to, or immediately downstream of the project site. 6. Any known buffers on the project site are properly posted (see applicable handout). 7. There is no visible evidence of significant erosion or sedimentation leaving the project site at the time of the inspector's visit. <p>See Detail No. 1 for an example of erosion control placement. Inspectors may eliminate the requirement for a sediment barrier at their discretion when it is reasonably expected all construction activity will take place during the dry season (May 1st to September 30th).</p>
Residential Drainage	<ol style="list-style-type: none"> 1. Individual lot drainage system/measures have been provided per the approved plan and/or Storm Drainage Requirement form. Specific elements to be checked include capacity, sump structure, setbacks, driveway basin connection, tightlines, splash blocks, miscellaneous fixtures, and any required grading. 2. Individual lot drainage system appears to be functioning as designed (infiltration systems not flooded). When splash blocks are allowed, particular attention will be paid to the intended destination for runoff (i.e. for a requirement that reads 'splash block & retain on site' it must be visibly obvious that runoff will be contained on site.) 3. Drainage is not routed in a manner which is likely to cause a significant nuisance or safety hazard, such as by creating a point discharge at the back side of a sidewalk.

Residential Site Development Inspection Process (Continued)

Inspection	Inspection Criteria
Final	<ol style="list-style-type: none"> 1. Ground surface around structures slopes away at 5% for 10' or to a point of positive drainage. 2. Permanent stabilization has been achieved – no unprotected, erosive surfaces are draining directly offsite. This measure is not intended to specifically require permanent landscaping except where absolutely necessary to prevent erosion. Measures which are obviously temporary and likely to be immediately removed by the purchaser are not an acceptable substitute for permanent stabilization. 3. Driveway has been poured or paved (unless served by a private or gravel road). 4. EV Access (when required) is constructed as depicted on the site plan and does not exceed a grade of 12% with a gravel surface, or 15% if paved. 5. Driveway culvert, if required, is the correct size and material and installed correctly. 6. Stormwater from driveway captured, routed, or tightlined as required by drainage plan (if applicable). 7. Gutters in place and downspouts routed or tightlined as required by drainage plan (if applicable). 8. Any construction materials stockpiled on the street and/or sidewalk in front of the subject lot have been removed. 9. Inlet protection has been removed from adjacent or downstream drainage structures IF this was the last exposed lot draining to the structure. 10. There is no evidence of exposed aggregate concrete slurry in project, adjacent and/or immediately downstream drainage facilities/structures. 11. Any impacts to County required improvements such as sidewalks, shoulders, bioswales, drainage systems, etc., have been corrected. 12. Any obvious impacts to adjacent properties have been corrected or resolved. 13. Site remains in compliance with cut and fill setback and slope requirements (2' min setback to PL for any cut or fill, ½ the height for cuts or fills greater than 5' w/max setback of 10') (Cut slopes ≤ 2:1, Fill slopes ≤ 1.5:1) 14. Any retaining walls on site over 4 feet in height, or retaining a surcharge, have been properly permitted. 15. Any Development Engineering administrative requirements (Private engineer certification, elevation certificate, etc) applying to this particular project and listed on the inspection worksheet have been met. If all construction requirements are met, but administrative requirements remain, only partial approval will be granted and building permit final will not be released.

Documentation, Reinspections & Enforcement: Whenever possible, written inspection results will be prepared on standard County 2-part inspection forms and a copy will be left at the project site. If the inspection result was not 'Approved', the inspector will clearly convey what work needs to be completed (numbered lists are preferred) prior to the next inspection. Development Engineering will normally allow one re-inspection (per permit)

Residential Site Development Inspection Process (Continued)

without penalty as long as the builder or proponent has made some effort to conform with the appropriate requirements. If for some reason a written copy of the inspection report can not be left at the project site, the inspector will be responsible to insure that the builder or proponent receives the results.

In the event that a builder does not pass an erosion control inspection, or an erosion control problem is noted during another inspection, the inspector will list the corrections required and the time permitted to make the corrections (normally allowing 3 full working days). The inspector will explicitly state on the inspection report the 'on or after' date when the site will be reinspected. The inspector or the inspection support OA will automatically schedule the reinspection when entering the inspection report.

If the site does not pass this reinspection, the permit will be immediately suspended and a reinspection fee will be assessed and a subsequent reinspection will be scheduled. This cycle will continue until compliance is achieved. Whenever two or more unpaid reinspection fees accrue on a given site, the building permit will be suspended also until all fees are paid. If at any point three or more reinspection fees have accrued and it is not clear that the builder is aware of the failed inspections and associated requirements, the inspector will contact the builder by phone.

If an owner or builder fails to respond to the measures above, the following additional procedures will be followed;

1. The inspector will post and photograph a stop work notice on the subject site.
2. The inspector will stamp both copies of the inspection report with the 'Site Development Enforcement Notice to Correct' stamp, insure that the form specifies the corrective action to be completed and a deadline for this action to be completed by.
3. Accurately and clearly document the violation on the inspection report and with photos.
4. The inspector will submit a Building Division Request for Action form requesting suspension or revocation of the associated building permits.
5. The inspector will send a certified letter to the property owner and applicant informing them of the action taken against the projects permits, the specific corrective action that is required and the deadline for these actions to be completed.
6. Input an inspection request or set up some other mechanism to remind you to follow up on or after the deadline.
7. If significant unreimbursed costs have been incurred in attempting to obtain compliance, the inspector will inform the Accounting Section of the specific costs (in time & materials) and request that the applicant be invoiced. The subsequent invoice must be paid before any permit suspensions can be lifted.

Each inspector is responsible to insure that his or her inspection reports are clear and complete and that any significant issues are properly documented and resolved prior to final

Residential Site Development Inspection Process (Continued)

inspection approval. Inspectors are also responsible to insure that any project specific understandings or agreements both conform with policy, and are clearly documented in the inspection comments for the subject permit in PALS+.

Suggestions/Revisions: To be fair to all applicants, inspection criteria must be applied uniformly throughout the County. Inspectors shall strive to be consistent with regard to the application of the criteria in this policy. Any difficulties interpreting or applying this policy, or any suggestions for improvements or changes should be brought to the attention of the Development Engineering Inspection Supervisor, or presented at an Inspectors' meeting.

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APPENDIX G
PALS General Site Development Construction Inspection Process

SUBJECT: General Site Development Construction Inspection Process

Applicable Codes/Regulations

- Title 17A PCC Construction and Infrastructure Regulations – Site Development & Storm Drainage
- Title 17B PCC Construction and Infrastructure Regulations – Road & Bridge Design & Construction Standards
- WSDOT Standard Specifications for Road, Bridge and Municipal Construction

Effective Date: January 18, 2002

Revised:

By: Scott Murdock
Development Engineering
Inspection Supervisor

Applicability: Prescribes the site development construction inspection procedures pertaining to all permitted site development projects EXCEPT for those permitted as single family residential projects.

Inspection Authority: Title 17A PCC Section 10.140 and Section 10.070 E.5.d.(6). Title 17B PCC Section 30.050 A. and Sections 30.050 D. 3., 4. & 6.

Inspection Files: Inspectors will maintain inspection files for their projects in an organized and generally consistent manner. Inspection files for projects with private improvements will be set up and maintained in yellow file folders. Files for projects with public improvements will be set up and maintained in red file folders. File folders will be labeled in the following basic manner;

File No.	Project Name	App/Permit No.	S/T/R & Sub Area
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Where there is no file number, the project name will shift to the far left position. The use of a 'P' in front of a permit number will differentiate it from the application number listed alone when the permit has not yet been issued. At the far right corner, the inspector may add his or her own brief 'sub area' indicator to help sort inspections geographically.

Inspection files will normally be organized with documents relating to the project approval, permit and plans filed on the right side. A copy of the site development permit will be the bottommost document and the approved plans with any changes will normally be filed on top. All inspection related documents will be filed on the left hand side, in chronological order with the most recent document on top. All documents will actually be punched and bound in the file.

Inspection Process: Project proponents are expected to arrange a preconstruction meeting with the assigned inspector after the site development permit is issued and prior to beginning construction. The preconstruction meeting may be held on site, or in a mutually agreeable office environment. At a minimum, the following persons will participate; the project proponent/developer, the private engineer, the contractor's superintendent or foreman and the erosion control lead (when applicable). For projects of any significant scale, the assigned inspector will conduct the meeting using the current, approved preconstruction meeting notes form.

A minimum of four site development inspections are required for most projects. These inspections are; Erosion Control, Completion of Clearing, Completion of Earthwork and Final. Public road projects also require a Paving in Progress inspection. Several visits to larger projects may be required to complete a single inspection. In this case, the inspector will use the inspection status code "Incomplete" and note the progress made in body of the report until the entire project covered by the permit in question meets the criteria to pass the subject inspection. Additional inspections may be required if necessary to insure compliance with the parent regulations.

The inspector will be expected to complete requested inspections within 5 working days. The inspector may complete additional 'in progress' inspections as his or her workload allows.

The inspector is responsible to provide a written copy of the inspection results to the project proponent for every recorded inspection. This copy may be provided, posted or left on the project site if it is reasonable to expect that the proponent will receive it. If not, the inspector will fax, or have the report mailed, to the proponent. Project engineers will be provided courtesy

General Site Development Inspection Process (Continued)

copies of inspection reports on request, or anytime a report identifies an issue that the inspector believes the private engineer needs to know about. The inspector is also responsible to insure that all inspection reports are entered into DCIS in a timely manner, normally the following morning. All inspection reports are to be clearly written and self explanatory. The inspection report form must be completely filled out and it must be signed and dated. The inspector's name and phone number will be clearly printed on the report for any inspection not passed.

Inspection Criteria: The chart below lists the standard criteria to be employed with regard to each inspection. The inspector may find that more stringent criteria must be imposed at some sites in order to meet the intent of the parent regulations. If any of the criteria listed in this procedure are found to conflict with a specific note or detail on the approved plans, the approved plans shall govern. If any of the criteria listed in this procedure are found to conflict with any portion of County or State regulations, the actual regulation shall govern.

Inspection Type	Type Code	Criteria
Erosion Control	EC	<ol style="list-style-type: none"> 1. A trained E.C. Lead has been appointed in writing (except abbreviated plan projects) (SMSDM 4.4). 2. All measures depicted on the approved plan have been properly installed and appear adequate. The inspector may approve reasonable and appropriate adjustments to the E.C. plan provided these adjustments do not conflict with the intent of the ordinance or any other part of this policy. 3. Silt fence substantially conforms with the detail approved by Pierce County. Unreinforced prefabricated silt fence products are normally not adequate. Silt fence should be installed outside any cut/fill slope setback. 4. Any buffers and/or clearing limits are adequately marked. 5. Effective inlet protection has been provided for drainage structures on, adjacent to or immediately downstream of the project site (SMSDM 8.10.1). 6. There is no visible evidence of significant erosion or sedimentation leaving the project site at the time of the inspector's visit. 7. Contractor has adequate E.C. materials on site to immediately stabilize all disturbed areas OR contractor has provided Action Plan to be implemented during inclement weather (SMSDM 8.5.1 – 8.5.3). 8. The issued permit is posted in a prominent location, accessible to the general public.
Completion of Clearing	CL	<ol style="list-style-type: none"> 1. Proponent has not exceeded the clearing limits depicted on the approved plans. 2. During the dry season (May 1 – Sep 30), the contractor has not cleared more area than he has the capacity to stabilize by September 30. During the wet season (Oct 1 – Apr 30), the contractor has not cleared more area than he has the capacity to stabilize within 24 hours (SMSDM 8.5.1 & 8.5.2). 3. Future impervious areas have been thoroughly stripped of organic material. 4. EC measures remain adequate and are properly maintained. 5. ESC Lead's inspection reports submitted or available for review.
Completion of Earthwork	EW	<p>The inspector will normally begin inspecting earthwork when the contractor begins grading, or installing the storm drainage system, whichever activity begins first. The earthwork inspection will normally be passed/approved when the crushed rock is prepared, but prior to paving, and when the following criteria are met;</p> <ol style="list-style-type: none"> 1. All indicated excavation, cutting and filling is complete and finished grades appear to comply with the approved plans. 2. All storm drainage pipes are bedded per the detail on the approved plans, or per PC detail PC.B9 or WSDOT Standard Plan B-11 in that order of preference. Pipe bedding material shall be 5/8" minus CSTC, or shall strictly conform with WaSS 9-03.16 for plastic pipes or 9-03.15 for rigid pipes. 3. Required cut & fill setbacks are maintained. 4. The top two feet of constructed embankments compacted to 95%, remainder compacted to 90% (WaSS 2-03.3(14)C). 5. Adequate grade control staking has been provided for regulated roads and accesses. This normally means that hubs will be set at the surface elevation of the crushed rock along the centerline and at both outside edges of asphalt, at 50 foot intervals in straight road sections and lesser intervals in curves, and at the beginning, end and sag points of vertical curves (WaSS 1-05.4) 6. Prepared road sections appear to conform with respect to materials, dimensions, slopes, compaction (top 6 inches compacted to 95% WaSS 2-06.3(1)6.), etc. 7. There are no protruding utilities or obstacles in any part of any regulated road section (outside of shoulder to outside of shoulder) (17B.30.020 G.2. & MoAU 5-5.1.2)

General Site Development Inspection Process (Continued)

		<ol style="list-style-type: none"> 8. All storm drainage pipes and structures are in place. 9. Methods and materials used in construction conform with the approved plans OR changes appear acceptable AND proponent has submitted a written request for approval of changes. 10. Failing or irregular existing paved edges are sawcut at new approaches and intersections to provide smooth and structurally sound transitions. 11. Any required testing results or materials acceptance lists relating to earthwork have been submitted to and approved by the County (17B.30.050 E. & F.) 12. Proponent has presented evidence of earthwork approval by the private engineer. 13. EC Measures remain adequate and are properly maintained. 14. ESC Lead's inspection reports submitted or available for review.
Paving in Progress	MR	<p>A paving in progress inspection is required for projects with public improvements and recommended for all projects with regulated roads (17B.30.050 D.4.)</p> <ol style="list-style-type: none"> 1. Road sections to be paved remain properly prepared as required above. 2. The surface temperature must be at least 45 degrees for a two inch surface course of asphalt, 35 degrees for a two inch sub surface course of asphalt or 55 degrees for a one inch asphalt overlay (WaSS 5-04.3(16)). 3. Asphalt concrete shall not be placed on any visibly wet surface (WaSS 5-04.3(16)). The inspector may exercise some judgement during intermittent periods of light rain, however in no case will paving over standing water be permitted. 4. Asphalt must be compacted to at least 91% and must not be compacted with a vibratory roller at temperatures less than 175 degrees (WaSS 5-04.3(10) A & B). Compaction must be accomplished with a pneumatic tired roller between October 1 and April 1 (WaSS 5-04.3(10)A). 5. The asphalt surface conforms with respect to compacted depth, width and crown/slope. 6. Any raised edges or other significant features conform with respect to dimensions called out on the approved plans. 7. The completed surface is of uniform texture, smooth (does not vary more than 1/4 inch from the bottom edge of a 10 foot straight edge) and free from defects of all kinds (WaSS 5-04.3(13)). <p>When the inspector approves the Paving in Progress inspection, but is not available to remain on site for the duration of paving, the report will specifically note that the paving conforms "to this point".</p>
Paving in Progress (Continued)		
Final	FN	<ol style="list-style-type: none"> 1. Project roads, parking areas, sidewalks, paths and other impervious areas have been paved and/or surfaced per the approved plans. 2. Any remaining ladders, fixtures and/or assemblies have been installed in the drainage structures as required. Note – Arrangements will be made with contractor to verify configuration of control assemblies before they are installed. Inspector will check all orifice and connecting pipe sizes and relative elevations. 3. All pipe joints or other openings through the walls of drainage structures are grouted and watertight (WaSS 7-05.3) 4. All storm drainage structures are exposed and available for maintenance. 5. Frames are permanently affixed to structures outside the project roads. 6. Required shoulders are properly graded, compacted, surfaced and free of protruding utilities or obstacles. 7. All required signs and/or traffic controls are in place. 8. All required fences and monuments are in place. 9. The storm drainage system is clean and appears to be functioning correctly. 10. Bioswales and/or filters strictly conform with regard to dimensions, slope, and surface smoothness and are thoroughly vegetated. 11. Project approaches conform with the appropriate detail. 12. Gutters in place and downspouts routed or tightlined as required by drainage plan (if applicable). 13. Any offsite improvements permitted under the same application are complete and have been accepted. 14. Site remains in compliance with cut & fill setback & slope requirements. 15. Permanent stabilization has been achieved – no unprotected, erosive surfaces are draining directly offsite or into the project storm drainage system – this measure is not intended to specifically require permanent landscaping except where absolutely necessary to prevent erosion. 16. Any impacts to County R/W or required improvements such as sidewalks, shoulders, bioswales, drainage systems, etc. have been corrected. 17. Approval has been granted for all noted changes.

Pre-Acceptance Reviews: In the case of projects with proposed public improvements, the inspector is responsible to invite a representative of Pierce County Maintenance Engineering to participate in a Pre-Acceptance Review prior to issuing a final punch list of any sort. The purpose of the Pre-Acceptance Review is to allow those who will be responsible for maintaining these improvements to have input into the final punch list. The invitation will be extended by e-mail, using the standard format provided by the inspection supervisor. The invitation will ask the recipient to respond in a specified period, normally 7 – 10 days. If a response is not received in the specified period, the inspector will note this fact on the original invitation, complete the final site development inspection and approve it or issue the final punch list. If the inspector does receive a timely response, he or she will meet the representative of Maintenance Engineering at the project site, complete a final inspection and discuss the final punch list. The meeting will be documented on a Pierce County Public Improvements Inspection Report Form. The Development Engineering Inspector will consider all input received, but will make the final determination concerning the items to be incorporated into the final project punch list.

Reinspections & Enforcement: General Site Development projects will normally be allowed as many site development inspections as the scale of the project warrants. Reinspection fees or other cost recovery mechanisms will only be employed if a proponent fails to meet a deadline to conform with a County Code requirement, or if the proponent requests a final inspection for which previously established punch list items have not yet been completed.

In the event that a project does not pass an erosion control inspection, or an erosion control, safety or potential offsite impact problem is noted during another inspection, the inspector will list the corrections required and the time permitted to make the corrections (normally 2-3 working days). The inspector will explicitly state on the inspection report the 'on or after' date when the site will be reinspected. The inspector will then automatically reinspect the site as soon as possible after the time allowed for corrections expires. If the site does not pass this reinspection, and in the inspector's judgement, the proponent is not making a reasonable effort to comply, the following procedures will be followed;

1. The inspector will stamp both copies of the inspection report with the 'Site Development Enforcement Notice to Correct' stamp, insure that the form specifies the corrective action to be completed and a deadline for this action to be completed by.
2. Accurately and clearly document the violation on the inspection report and with photos.
3. Suspend the family of permits associated with the project.
4. Provide for the recovery of the County's enforcement expenses either through manual invoicing or through the requirement for a reinspection fee.
5. Input an inspection request, a PALS+ task, or set up some other mechanism to remind you to follow up on or after the deadline.

If the applicant/proponent fails to comply, the inspector will consult the review engineer concerning what, if any, additional enforcement action should be taken.

Project Approval Processing: When a project passes the final site development construction inspection, the inspector will complete the following tasks in addition to all other normal inspection processing tasks;

1. The inspector will install a Pierce County lock on any fences around County facilities being accepted.
2. Check out the Development Engineering project file.
3. Enter the date of approval of the final inspection on the project status sheet (manual and/or electronic).
4. File all original inspection related documentation in the project file.
5. Flag the final inspection approval and turn the file over to the review engineer.

For formal plats, large lots and commercial projects, the inspector will continue to maintain his or her inspection file until the 18 month financial guarantee is released. When the original inspection packet is moved to the Development Engineering project file, the inspector may either make a copy for the inspection file, or print a complete inspection report from DCIS.

Suggestions/Revisions: To be fair to all applicants, inspection criteria must be applied uniformly throughout the County. Inspectors shall strive to be consistent with regard to the application of the criteria in this policy. Any difficulties interpreting or applying this policy, or any suggestions for improvements or changes should be brought to the attention of the Development Engineering Inspection Supervisor, or presented at an Inspectors' meeting.

APPENDIX H
Development Engineering Inspector Training Program

**Development Engineering Inspector Training Program
Training Outline**

RI-10 PALS+ Application Processing

Revised: **7 September
2006**

PALS+ is the information system which creates, stores and processes applications for the many various permits and approvals issued by our department. PALS+ is divided into several modules which correspond roughly with the major application processing functions. The major modules are:

- The Application Module – The application module is used to create new applications, accept fees and store and edit the basic information about applications. We sometimes use the application module to correct site addresses, update the expiration date of a permit or see who the application is assigned to for review.
- The Review Module – The review module is used to record application reviews and store comments, documents and other information that relates to application reviews. The review module is basically the heart of application processing.
- The Inspection Module – Inspection comments, documents and related entries are all entered through the Inspection Module. For permitted project inspectors this is the most important module to master and they can perform and/or get 90% of what they need from PALS+ through the Inspection Module.
- The Project Module - Since most projects require several types of permits and/or approvals, PALS+ also contains a Project module which contains basic information about the master project and ties together all of the applications related to the project.

Review Applications – Review Applications merely provide for the review and approval of a particular type of report or document such as a flood study or a geotech report. These never become issued permits or grant permission to build anything in and of themselves, but are often required prior to the issuance of the actual permits for a particular project. The life of a typical review application only progresses through two states. When the application materials are submitted and accepted and the required fee is paid at the Development Center, an application number and record are created in PALS+. The application will be in ‘Accepted’ status at this time. When the application is reviewed and the reviewer determines that all code requirements have been met, the reviewer will enter his approval in PALS+ and the status of the application will change to ‘Approved’. This is the ultimate and final status for review type applications.

Permit Applications - Permit applications can be thought of as formal requests for government permission to build something or to complete a particular aspect of construction. Every type of permit application has a ‘parent’ section who is primarily responsible for those types of applications. Development Engineering is the parent section for all types of site development and road construction permits. Additional sections may also have requirements that must be met for a particular type of application and when this is true, they are ‘stateded’ on the application in PALS+.

Permit Application Processing – When permit application materials are submitted and accepted and the required fee(s) are paid at the Development Center, an application number and record are created in PALS+. The application itself will be in ‘Accepted’ status at this time and a review status of XX will be created for the parent and all stateded sections. When a reviewer enters a review approving the application, the review status for his or her section changes to ‘Approved’. When the parent and each stateded section have approved the application, the application status itself will change to ‘Approved’. A batch process is run each working day which automatically issues permits for every approved application. This process actually converts the application to a permit in PALS+ with the application number becoming a permit number and the permit itself being in ‘Issued’ status. A copy of the permit is printed and mailed to the applicant.

Determining Application Status – As a PALS employee you will get phone calls inquiring into the status of an application. You can retrieve the status of an application by searching for it in the review, inspection or application modules. If the application is in accepted status, the caller will likely ask you why it hasn’t been issued yet. You will want to check the ‘Department Status’ tab in any of these modules where you can see which sections have approved the application and which have not. You may also want to go to the ‘Comments’ tab and read the most recent review comments from any section that has not yet approved the application. These three steps will give the most complete possible answer to any caller without speaking to the actual reviewer in question himself.

Development Engineering Inspector Training Program Training Outline

RI-11 PALS+ Inspection Module

Revised:

3 June 2016

As discussed in the previous outline, applications are managed/processed in the Application and Review modules of PALS+. Once the approved application becomes an issued permit, however, most processing occurs in the Inspection Module. Just as reviews can change the status of applications, inspections can change the status of permits.

There are several possible statuses for a permit to be in. These are;

- **Issued** – Permit is valid and active, proponent may proceed with work.
- **Suspended** – Permission to work is temporarily withdrawn, normally until some requirement is met. Applicant will not be able to request inspections until suspension is lifted. Permits are most commonly suspended when reinspection fees are assessed. Entering an inspection result code of ‘Stop Work’ will also change the permit status to ‘Suspended’.
- **Suspended for Fees** – Same as above, but permit will automatically revert to issued status when fees are paid. We do not use this status yet because it requires that the fees actually be posted as due in the system and once posted, only an accounting person can edit or remove them.
- **Final** – Entering a ‘Final’ inspection with the result code ‘Approved’ or an ‘Administrative Final’ entry with the result code ‘Approved’ will automatically change the permit status to ‘Final’. Once in ‘Final’ status a permit normally stays there forever and any additional work would require a new permit.
- **Expired** – If a permit is still in ‘Issued’ status when the expiration date is reached (three years after issuance for site development permits), the status of the permit will change to ‘Expired’ and the proponent will not be able to request inspections. County code allows us to grant one 1 year extension for site development permits and we do this commonly.
- **Cancelled** – It is fairly rare for issued permits to be cancelled, but it can happen if the applicant requests that a permit be cancelled so that they can apply for a refund, or if the County determines that the appropriate application fees have not been paid, or if the County determines that the proposal actually does not conform with code and can not be made to conform with code.

All inspections in PALS+ are associated with a particular application or permit. Some types of inspections/inspection entries (Preliminary Site, Miscellaneous Request, Erosion Control, Check Compliance, Bond Release, Review Inspection Materials, Comment & Message to Proponent) can be made on any site development application or permit in any status. Most construction type inspections, however, can only be entered on construction-type permits in ‘issued’ status. Attempting to enter an Earthwork or a Final inspection on a permit in ‘suspended’ status, for example, will result in an error message.

Inspection Requests – The Inspection Module includes a ‘Request’ function that will receive and track inspection requests from all sources (PASS, the Internet & direct entry) and automatically produce an inspection worksheet on the appropriate scheduled date. Almost all single family inspections are scheduled this way and the inspector’s reports are completed on the worksheets provided. If you receive a worksheet in the morning, it will normally be for an inspection scheduled for that day. It is important to complete the inspection within our timeliness standards for that type of project and insure that the results get input into PALS+. Otherwise the inspection will be counted as delinquent. Anyone can input an inspection request in the Request tab of the Inspection folder of PALS+. This can be a good tool to remind you to go back and check on a requirement that needs to be met within a particular time limit. If for some reason you receive an inspection worksheet and you know that the request is invalid and should be cancelled, inform the proponent and delete the request from PALS+.

Inspection Entries – It is the inspectors’ responsibility to insure that an inspection entry is made in PALS+ every time a project site is visited, whether or not significant progress has been made since the last visit. The inspection type codes provided in the Inspection module fall into two groups. These are actual inspections – which are only entered when an onsite inspection has actually been made, and administrative entries – which do not imply that an actual inspection has taken place, but do provide clarifying information and/or change the status of a permit. A brief explanation of the inspection entry types that we commonly use is provided below:

**Development Engineering Inspector Training Program
Training Outline**

Inspection Type Codes for Actual Inspections

Pre-Development/Review Support Inspections – The following inspections are normally completed prior to permit issuance and for the purpose of supporting our engineer’s review of the permit application.

Inspection Type	Code	Purpose/Explanation
Preliminary Site	PS	A detailed inspection at the sites of proposed General Site Development (GSD) projects completed prior to, and in support of the application review process. A standard form facilitates documentation of various site characteristics of engineering concern. The inspector also verifies accuracy & completeness of site conditions related on the preliminary plan and/or application documents.
Preliminary Residential	PR	An abbreviated Preliminary Site inspection for proposed Single Family (SF) project sites only.
Miscellaneous Request	MR	Used to document a variety of site related inspections of a limited scale. For example a reviewer may ask inspector to profile a particular length of road, or verify the existence of a seasonal drainage course or total relief of a critical slope.
Application Approve	AI	This is a unique inspection type that will change the status of an application to ‘approved’. We use this when we are the reviewer for a particular application, such as for a temporary logging permit or a stand alone residential driveway approach permit.
Approach Review	AR	This inspection type is used to record a preliminary inspection of a proposed driveway approach site when we are not the reviewers for the project. Used for most single family driveway approach applications because these are most commonly associated with a parent site development permit which someone else is reviewing. Allows us to put the specific instructions that will be printed on the permit in PALS+ without approving the permit itself.

Site Development Construction Inspections – The following are construction inspections associated with site development permits. These inspections are completed while the permit is in ‘Issued’ status.

Inspection Type	Code	Purpose/Explanation
Pre-Construction Meeting	PC	Used to document a meeting conducted by our inspector at GSD project sites, prior to or at the beginning of construction, in which he or she explains the inspection process and our expectations. This meeting is normally attended by at least the site superintendent, the erosion control lead and a representative of the private engineer.
Erosion Control	EC	Inspection of the initial installation of erosion and sediment control measures.
Completion of Clearing	CL	Inspection at the point when all clearing is complete and all organic material has been removed from future roadways, other impervious areas and embankments.
Driveway Drainage	DD	Used to document inspection of drainage galleries or other drainage provisions installed underneath driveways. Intended primarily to indicate inspection of the drainage gallery below pervious driveways, inspection to be completed prior to paving.
Earthwork	EW	Used to document inspection of all excavation, filling, grading and underground utility and storm drainage installation. For most GSD projects there are multiple Earthwork inspections as construction progresses.

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Residential Drainage	RD (DW)	Used to document the drainage inspection at a Single Family project. Normally used at SF sites in lieu of earthwork inspections.
Paving	PV	Used to document either Paving in Progress inspections (required for projects with future public improvements) or inspection of paved surfaces subsequent to the actual paving operation.

Site Development Construction Inspections (Continued)

Inspection Type	Code	Purpose/Explanation
Check Compliance	CC	Indicates an inspection to check on and/or address erosion, sediment control, water quality or other issues which may create an offsite impact related to a permitted project. Once a project passes its initial EC inspection, all subsequent inspection related to erosion control are normally classified as CC inspections.
Miscellaneous Construction	MC	Used to document a wide variety of construction type inspections which do not fall into the other categories and which are normally of a specific and limited scope. For example, a special trip to a project site to check only the configuration of a control assembly prior to installation would normally be classified as an MC inspection. The inspection comment should begin with a clear statement of what was inspected for these types of inspections.
Courtesy Inspection	CI	Used to document unscheduled and non-required inspections related to construction. Often used, for example, to document site visits made just to see if work has started on the given project.
Final	FN	The final site development construction inspection. ALL construction requirements must be satisfactorily completed before an 'Approved' final inspection may be entered as this inspection will change the status of the permit to 'Final' and there will be no more construction inspections.
Pre-Final	PF	Used to produce a punch list or document a final inspection without granting final inspection approval to a project. Pre-Final inspections are ONLY used when a final inspection can not be scheduled, normally because a 'Hold' has been placed on the final inspection in PALS+. Pre-Final inspections may only be scheduled internally by PALS staff.
Work in the Right of Way	WR	A rarely used inspection type to document miscellaneous inspections of work or issues contained in existing County Right of Way. An inspection for the purpose of verifying site distance clearing would be classified as a WR inspection for example.

Post Development Inspections – The following inspections are completed subsequent to final site development inspection approval and prior to the release of any Maintenance or Performance Monitoring financial guarantee (AKA 18 Month Bond or 42 Month Bond).

Inspection Type	Code	Purpose/Explanation
Performance Monitoring	PM (MI)	Any inspections made to monitor the condition, maintenance or functionality of approved site development projects during the course of the bonding phase are classified as Performance Monitoring inspections. These inspections are required by our NPDES permit to be completed semi-annually for all types of subdivisions and annually for all other GSD projects.

**Development Engineering Inspector Training Program
Training Outline**

Bond Release BR The inspection completed at the end of the Maintenance or Performance Monitoring period which identifies any deficiencies to be corrected or any maintenance to be performed prior to the release of the subject financial guarantee.

Inspection Type Codes for Administrative Entries – The following codes can be entered into the inspection track to document administrative actions related to inspection, but they do not indicate or count as actual inspections.

Inspection Type	Code	Purpose/Explanation
Review Inspection Materials	RV	Used to record reviews of various types of inspection related materials such as test results, Gate Operational Test Forms, Receipts for Materials, Requests for Reconsideration, Miscellaneous Certifications, etc.
Message to Proponent	MP	Used to log written communication sent to the applicant, builder, contractor or owner.
Comment	CO	Self Explanatory. Used to record all sorts of helpful information related to the inspection of the project, but should not be used if there is another inspection type that more closely fits the data to be recorded.
Communication	CM	Used to document any type of communication regarding a project. State who the communication was with, in what form and what was decided and/or required.
Meeting	MG	Used to document any type of meeting regarding the project EXCEPT for a Pre-Construction Meeting which has it's own inspection type. State who the meeting was with, when and where it was held and what was conveyed and/or decided.
Renew/Extend Expiration	RN	Used to extend the expiration of a permit. Can only be used with the result code 'Approved'. Comment must indicate why permit is being extended and what the new expiration date will be. When this inspection type is saved, user will be prompted to enter the new expiration date with the default being the current date.
Administrative Final	AF	Used to final a permit when it is determined that all requirements have been met without actually making a site visit. Administrative Final is normally only used when a partial approval has already been granted on a final inspection for the same permit. For example an inspector may complete a final inspection and grant partial approval indicating that all field requirements have been met, but a Performance Monitoring Permit application is required. When that application comes in, the inspector will administratively final the permit. Administrative Final can only be used with the result code 'Approved'.

You may find a couple of other codes in the inspection type dropdown list, but these are not generally used by Development Engineering.

Inspection Result Codes

A complete inspection entry includes five elements; 1. The date the inspection occurred. 2. The type of inspection (inspection type code). 3. The result of the inspection. 4. The inspector's name. AND 5. A narrative report of the inspection (comment). Some result codes are only valid with certain inspection types. Our primary inspection result codes are:

- Approved – The project passed inspection. All requirements relating to this particular inspection have been met.

Development Engineering Inspector Training Program Training Outline

- Partial Approved – Short of full approval. Most often used in conjunction with a final inspection when all on site requirements have been met, but some administrative requirement(s) remain, such as submission of an engineer's certification letter or a maintenance guarantee. Also commonly used in conjunction with residential drainage type inspections when the primary system or connection has been inspected and approved, however additional items such as the installation of gutters and downspouts remain.
- Incomplete – The project does not yet pass inspection. All requirements have not yet been met.
- Disapproved – Indicates final disapproval of the item reviewed or inspected. Normally used with the administrative inspection type 'RV' for items such as failing test results or requests for reconsideration which cannot be approved. The result code 'Incomplete' is much more commonly used with inspections as normally onsite corrections will be made to get the project through to inspection approval.
- Comment – Used only when the type of inspection does not involve passing judgment, such as when entering comments about a preliminary site inspection.
- Suspend – Will suspend the permit when used with any inspection type code. The inspector's comments must clearly indicate why the permit is being suspended and what must be done to get the suspension lifted.
- Stop Work – Denotes that a stop work order was posted or served, and also changes the status of the permit to 'suspended'.
- Remove Suspend – Will return the permit to issued status.

Documents

Every major module of PALS+ includes a 'Documents' tab where you can upload electronic files or documents relating to the Application, Permit, Parcel or Project. All electronic files of lasting value (letters, photomaps, etc) which relate to an application or permit in PALS+ should be uploaded so that they are available to all potential users. This function in PALS+ will only become more important as we move towards electronic record keeping and away from paper. When a member of the Inspection Team uploads a document, it is virtually always uploaded into the Documents tab of the Inspection folder, and can then be seen in all higher level folders. If you are uncertain how to upload a document into PALS+, see me when you have one ready.

Alerts

While alerts are not really a function of the inspection module, there is an alerts tab in the inspection folder. Alerts are actually associated with parcels, not applications or permits, but permits are associated with parcels and when you have selected a particular permit in the inspection folder and go to the alerts tab, you will see the alerts which are on the parcels that are associated with that particular permit.

We use alerts for three main reasons. The first is to insure that a property owner with unresolved site development violations can not get any other approvals from our department. The second is to keep track of gate codes in a way that will print them on the inspectors' worksheets for any permits for that parcel. For gate codes we use the 'Barrier' alert type and an entry that reads 'GC: XXXXXXXX' where the 'X's' indicate the actual code you must enter to open the gate. The third reason is to keep track of known safety hazards on the subject property such as a vicious dog or belligerent occupant. In general alerts are used to keep track of information about the subject parcel that you would want others in our department to know about if they were dealing with that particular property.

Holds

PALS+ includes a 'Hold' function that allows any reviewing section to place a 'Hold' on a particular inspection on any permit in the system. This helps to insure that valuable final approvals are not granted by one section when another section has unmet requirements pending. The holds function is accessed via the 'Holds' tab in the inspection folder. Development Engineering routinely places holds on the final inspection for the primary building permits associated with our projects. Once a hold has been activated, it can only be released by a staff member of the section placing the hold. It cannot be overridden, even by the parent section of the permit on which the hold is placed. When a routine hold for final site development inspection approval is placed on a single family building permit, it is the responsibility of the Development Engineering Inspection Team to release that hold. This is completed in conjunction with entering our final approval on the associated site development permit. Review engineers place any holds associated with General Site Development projects and it is their responsibility to release those holds when all Dev Eng requirements associated with the project have been met.

APPENDIX I
Structural Stormwater Control Project List (2014-2019)

Structural Stormwater Control Projects, Appendix 11 of NPDES Permit #WAR04-4022, 2014 through 2018 (as of Dec 31st)

Municipal SW Phase I General Permit

2018 MS4 Annual Permit

Question 34b. Updated list of planned, individual projects scheduled for implementation during this permit term.

Project Name	Type ¹	Start Year	Status ²	End Year	Cost Estimate ³	Funding (%)			WQ Benefit ⁴	Hydro Benefit ⁵	Hydro Benefit #	MR# 5 Incentive	MR# 6 Incentive	MR# 7 Incentive	Total Retrofit Incentive ⁶	Other Benefit	Monitoring Planned	Lat	Long	Receiving Water Body	Comments
						Local	State	Federal													
D413 - Rody Creek Filter Project Phase 1 - 59th Ave E.	2	2014	4	2015	\$ 122,624.33	25%	75%	0%	345.4	0%			6.60		6.60	3.14 acres	No	47.19	-122.35	Rody Creek	Used KC S8.D. data for HDR 137.5 lbs/acre/yr 80% effec.**
D416 -Phase 1 Rody Pond Retrofit	2	2014	4	2015	\$ 296,730.97	25%	75%	0%	2,794.0	0%			101.20		101.20	25.4 acres	No	47.17	-122.35	Rody Creek	Used KC S8.D. data for HDR 137.5 lbs/acre/yr 80% effec.**
D415 Phase 1 Spanaway Lake Park Filterra Retrofit	2	2014	4	2015	\$ 311,842.51	25%	75%	0%	546.8	100%	2	5.30			5.30	2.86 acres	No	47.12	-122.45	Spanaway Lake	Used KC S8.D data for comm 239lbs/acre/year. 80% effec. Filterra
D417 - Phase 2 - Spanaway Lake Park LID Retrofit	2	2014	4	2015	\$ 940,376.09	25%	75%	0%	634.8	60%	2	6.10			6.10	3.32 acres	No	47.12	-122.45	Spanaway Lake	Used KC S8.D data for comm 239lbs/acre/year. LID portion
D413 Phase 2 Boxless Filterra Project - 86th Street.	2	2015	4	2016	\$ 136,378.91	25%	75%	0%	451.0	0%			8.61		8.61	4.1 acres	No	47.18	-122.35	Rody Creek	Used KC S8.D. data for HDR 137.5 lbs/acre/yr 80% effec.**
D416 Rody Creek WQ Retrofit at 72nd Street	2	2015	4	2016	\$ 355,848.95	25%	75%	0%	1,320.0	0%			25.20		25.20	12 acres basic treatment	No	47.19	-122.36	Rody Creek	Used KC S8.D. data for HDR 137.5 lbs/acre/yr 80% effec.**
D419, Woodland Creek Water Quality Retrofit at 84th St. E & 72nd Ave. E.	2	2016	4	2017	\$ 549,548.64	100%			8,547.0				163.20		163.20	77.7 acre basin. Install Water Quality Vault on 72nd Ave. E. near 84th St. E.	Yes	47°09'42.89"N	122°20'09.98"W	Woodland Creek	The vault will use canister filters and a pretreatment device. Plans are currently at 90%. Project engineered to meet Basic Treatment Menu 137.5 lbs/acre/yr 80% effec.**
D442 - Brookdale Rd and N. Fork Clover Creek Outfall Retrofit	2	2016	2	2020	\$ 530,000.00	100%			819,550.0	0%			77.70		77.70	37 acres contributing basin	No	47.14	-122.42	North Fork Clover Creek	137.5 lbs/acre/yr 80% effec.**
D047 Sprinkler Parking Lot LID Retrofit Phase 3	2	2015	1	2018	\$ 740,000.00	100%										Sprinkler is a Regional Parks facility and project is retrofitting the existing parking lot with pervious driving surfaces and large rain gardens.	Yes	47.12	-122.44	Spanaway Creek	This project is in the initial design phase at time of this report. Therefore, WQ benefits, and hydro benefits, will be calculated in the future as additional data is collected.
D810, Diru Creek Water Quality Retrofit at 67th Ave. Ct. E.	2	2016	2	2018	\$ 173,105.00	25%	75%		1,408.0	0%			26.88		26.88	12.8 acre basin. Install Water Quality Vault on 67th Ave. E. between 104th St. E. and Pipeline Road.	Yes	47°09'48.54"N	122°20'24.53"W	Diru Creek	Design at 60%. Project engineered to meet Basic Treatment Menu Standards, 137.5 lbs/acre/yr 80% effec.**
D811, Diru Creek Water Quality Retrofit at 64th Ave. Ct. E.	2	2016	2	2018	\$ 119,134.00	100%			346.5	0%			3.15		3.15	1.5 acre basin. Install Water Quality Vault on 64th Ave. E. between 104th St. E. and Pipeline Road.	Yes	47°09'48.54"N	122°20'24.53"W	Diru Creek	Design at 60%. Project engineered to meet Basic Treatment Menu Standards, 137.5 lbs/acre/yr 80% effec.**

Structural Stormwater Control Projects, Appendix 11 of NPDES Permit #WAR04-4022, 2014 through 2018 (as of Dec 31st)

Municipal SW Phase I General Permit

2018 MS4 Annual Permit

Question 34b. Updated list of planned, individual projects scheduled for implementation during this permit term.

Project Name	Type ¹	Start Year	Status ²	End Year	Cost Estimate ³	Funding (%)			WQ Benefit ⁴	Hydro Benefit ⁵	Hydro Benefit #	MR# 5 Incentive	MR# 6 Incentive	MR# 7 Incentive	Total Retrofit Incentive ⁶	Other Benefit	Monitoring Planned	Lat	Long	Receiving Water Body	Comments
						Local	State	Federal													
D411, Woodland Creek 104th St. E. Stormwater Treatment System	2	2014	2	2019	\$ 1,726,587.00	25%	75%		49,027.0	0%	1		133.29		445.7 acre basin. Install cell wet pond south of 104th St. E., east of Woodland Ave	Yes	47o10'49.63"N	122020'11.62"W	Rody Creek	Project engineered to meet Basic Treatment Menu 137.5 lbs/acre/yr 80% effec.**	
D418, Phase 3 Spanaway Lake Park Retrofits	2	2016	4	2018	\$ 489,933.00	25%	75%		526.2	73%	2	4.82		4.82	2.75 acre basin. All LID features in Park.	No	47o12'N	122045'W	Spanaway Lake	Construction Completed in January 2018. Used KC S88D data for comm. 239lbs/acre/yr, 80% effec. **	
Sheriff East Precinct Impound Lot	2	2017	4	2018	\$ 150,000.00	100%			34.1	100%	1		0.54	0.54	0.31 acre basin. Pretreatment, oil/water separator, and infiltration.	No	47o06'41.11"N	122017'24.87"W	Clear/Clarks Creek	60% design. 137.5 lbs/acre/yr 80% effec.**	
Clover Watershed Drywells Retrofit	5	2015	2	2019	\$ 732,000.00	25%	75%	0%	3,945.7	100%	2		35.87	35.87		No	47.08	-122.39	Clover Creek	Used KC S8.D. data for HDR 137.5 lbs/acre/yr 80% effec.**. 125 drywells with averages of 12,500 sq ft average contributing area per location. Each project requires design and permitting as they are scheduled.	
112th St E Storm Pond Retrofit at Bob Findley Road (Old CMF building)	3		5												The existing storm pond receives road runoff from 112th St. E., treating for flow control but has no water quality treatment. It will be investigated how WQ treatment can be incorporated into pond.	Yes	47.15	-122.41	North Fork Clover Creek	Project canceled	
Pierce County Pond #161 Retrofits @ 112th St. E. & 26th Ave. E	3		5												The existing storm pond receives road runoff from 112th St. E., treating for flow control but the pond does not appear to be attenuating flow due inadequate draining down of pond after storm.	Yes	47.16	-122.39	Swan Creek	Project is on hold.	
Tacoma Narrows Airport Stormwater Outfall Modification	2		5												Project is Retrofitting the the stormwater system on the northern part of the airport to install a vault treatment system in the outfall pipe which drains to Puget Sound	No	47.26	-122.58	Puget Sound	Project is on hold.	
Status²	1. Planning 2. Design and permitting 3. Construction 4. Complete/Maintenance 5. Project Cancelled 6. Property acquisition																				
** Median TSS Unit Area Loading Rate (lbs/ac/yr) and Treatment Removal Efficiency for TSS (%) - Suggested Value Per Department of Ecology, Water Quality Section (Douglas C. Howie, P.E.)																					

APPENDIX J
SWM Water Quality Inspection Response
Procedures Flow Chart

INSPECTION UNIT SUPERVISOR

Distribution of Maintenance Connection (MC) Asset Work Orders to Inspectors by Zones or Facilities

Pierce County-Owned Facilities Inspections & Technical Assistance

Pursuant to the County's Phase 1 Municipal Stormwater Permit (2013-2018):

- Section 55.C.9.c.i: Each Permittee shall implement a program to annually inspect all permanent stormwater treatment and flow control BMPs / facilities owned or operated by the Permittee. Permittees shall implement appropriate maintenance action(s) in accordance with adopted maintenance standards;
- Section 55.C.7: The Permittee shall implement a program to reduce pollutants in runoff from areas that discharge to MS4s owned or operated by the Permittee

and additionally,

- any additional stormwater requirements of site-specific, custodial requirements of applicable Industrial Stormwater Permits or Sand & Gravel Stormwater Permits.

- | PERMIT TYPE | PIERCE COUNTY FACILITIES |
|---------------------------------|---------------------------------|
| P1 MUNICIPAL STORMWATER PERMIT | • ALL DEPARTMENTS |
| INDUSTRIAL STORMWATER PERMIT | • SEWERS
• AIRPORT/FERRIES |
| SAND & GRAVEL STORMWATER PERMIT | • SWM-QUARRY
• ROAD OPS PITS |

Inspect site at outfalls and discharge points for non-stormwater discharges

- Note discharges to:
 - MS4
 - surface
 - ground

Wet Season Inspection within October 1 to April 30

Dry Season Inspection within May 1 to September 30

UPDATE RECORDS

Complete and Certify Non-Stormwater Discharge Dry Weather Assessment Form in Facility Stormwater Pollution Prevention Plan (SWPPP)



Maintenance & Source Control Inspections & Technical Assistance

Pursuant to the County's Phase 1 Municipal Stormwater Permit (2013-2018):

- Section 55.C.7: The Permittee shall implement a program to reduce pollutants in runoff from areas that discharge to MS4s owned or operated by the Permittee
- Section 55.C.9.b.ii: Each Permittee shall implement an on-going inspection program to annually inspect all stormwater treatment and flow control BMPs/ facilities to enforce compliance with adopted maintenance standards as needed based on inspection. The inspection program is limited to facilities to which the Permittee can legally gain access, provided the Permittee shall seek access to all stormwater treatment and flow control BMPs/ facilities regulated by the Permittee;

Existing Asset?

NO: Create Asset File using:

- County View Web
- plans
- digital files
- Maintenance Connection
- NPDES Permit

YES: Review existing file, Plan inspection

Call to set up appointment or Schedule inspection in Outlook Calendar

Illicit Discharge?

YES: Evaluate with Supervisor the need for refer to IDDE Services (including escalation to enforcement)

NO: Inspect site, Evaluate Source and Operational BMPs

Note discharges to:

- MS4
- surface
- ground

Compare field notes with existing maps, plans and GIS records

Did site need GIS corrections or GPS?

YES: Create work order for GPS collection and or work order for GIS corrections

NO: END

Rate Site

Rated 5: Stormwater structures and features are significantly beyond Pierce County standards, such as:

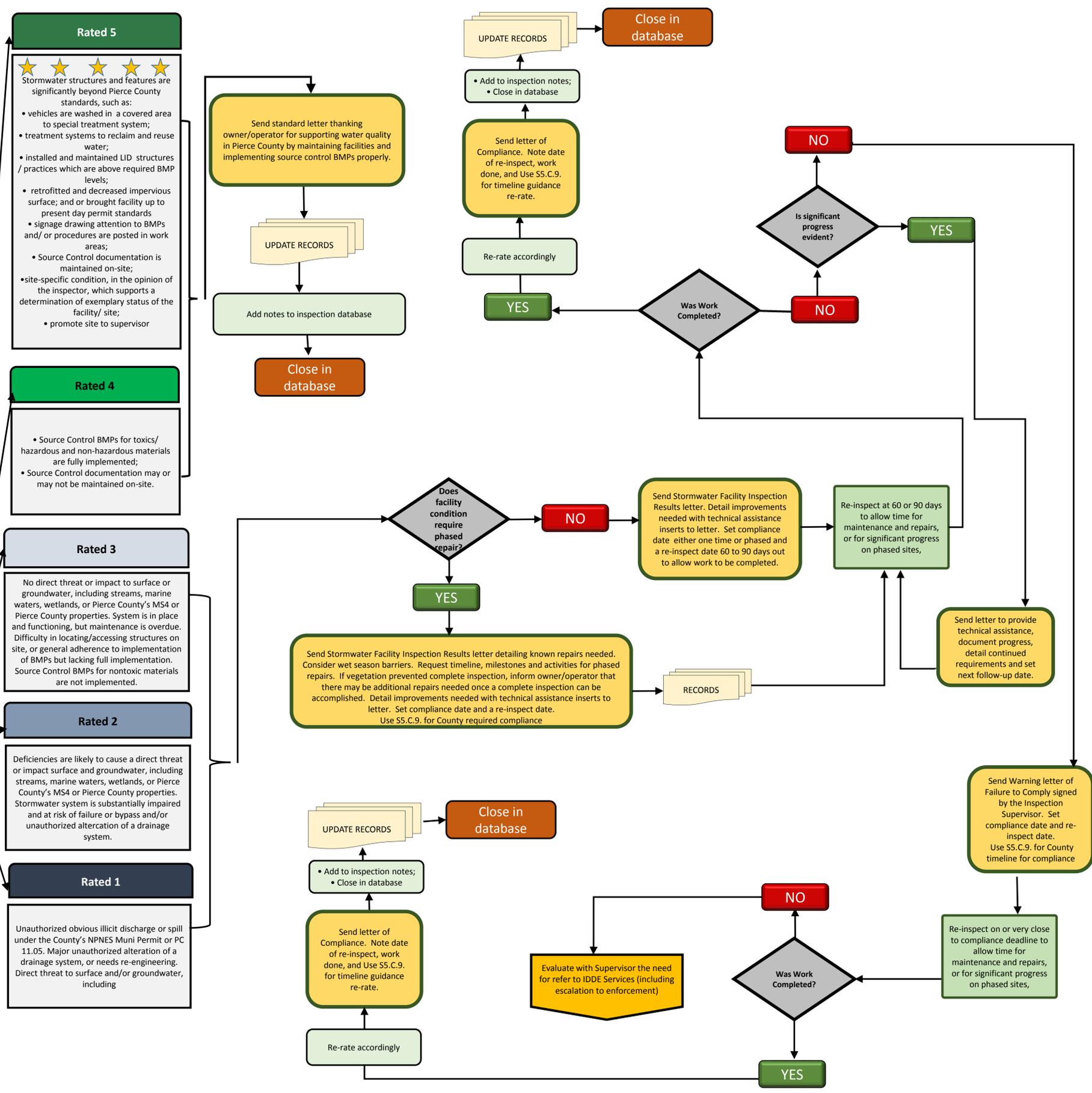
- vehicles are washed in a covered area to special treatment system;
- treatment systems to reclaim and reuse water;
- installed and maintained LID structures / practices which are above required BMP levels;
- retrofitted and decreased impervious surface; and or brought facility up to present day permit standards
- signage drawing attention to BMPs and/ or procedures are posted in work areas;
- Source Control documentation is maintained on-site;
- site-specific condition, in the opinion of the inspector, which supports a determination of exemplary status of the facility/ site;
- promote site to supervisor

Rated 4: Source Control BMPs for toxics/ hazardous and non-hazardous materials are fully implemented; Source Control documentation may or may not be maintained on-site.

Rated 3: No direct threat or impact to surface or groundwater, including streams, marine waters, wetlands, or Pierce County's MS4 or Pierce County properties. System is in place and functioning, but maintenance is overdue. Difficulty in locating/accessing structures on site, or general adherence to implementation of BMPs but lacking full implementation. Source Control BMPs for nontoxic materials are not implemented.

Rated 2: Deficiencies are likely to cause a direct threat or impact surface and groundwater, including streams, marine waters, wetlands, or Pierce County's MS4 or Pierce County properties. Stormwater system is substantially impaired and at risk of failure or bypass and/or unauthorized alteration of a drainage system.

Rated 1: Unauthorized obvious illicit discharge or spill under the County's NPDES Muni Permit or PC 11.05. Major unauthorized alteration of a drainage system, or needs re-engineering. Direct threat to surface and/or groundwater, including



APPENDIX K
SWM Water Quality IDDE Response
Procedures Flow Chart

PERMIT MANAGEMENT UNIT

ILLCIT DISCHARGE DETECTION & ELIMINATION (IDDE) INVESTIGATIONS

Pursuant to the County's Phase 1 Municipal Stormwater Permit section 55.C.8.iv, the following IDDE compliance timelines will be achieved for MS4-impacted discharges:

- All illicit discharges, including spills, which are determined to constitute a threat to human health, welfare, or the environment, will be immediately responded to;
- All reports, complaints, or monitoring information that indicate the potential of an illicit discharge will be investigated (or referred to the appropriate agency having the authority to act within seven (7) days, on average);
- All reports of suspected illicit connections will cause the initiation of an investigation to determine the source of the connection, the nature and volume of the discharge through the connection, and the party responsible for the connection;
- All illicit connections will be eliminated within six (6) months of confirmation.

PIERCE COUNTY FACILITIES TECHNICAL ASSISTANCE

FACILITIES SWPPP DEVELOPMENT

INDUSTRIAL STORMWATER PERMITS

SAND & GRAVEL STORMWATER PERMITS

STORMWATER PERMIT-REQUIRED TRAINING

The SWM Permit Management Unit coordinates, implements, tracks, and reports specific actions required by the NPDES Phase 1 Permit to other Pierce County Departments and Divisions per Executive Order No. 2012-1, "Concerning Effective Stormwater Management, Pierce County Washington". Additional Technical Assistance Services outside of NPDES Phase 1 permit, including but not limited to coordination with Tacoma Narrows Airport, SWM Rock Quarry, and Chambers Bay WWTP.

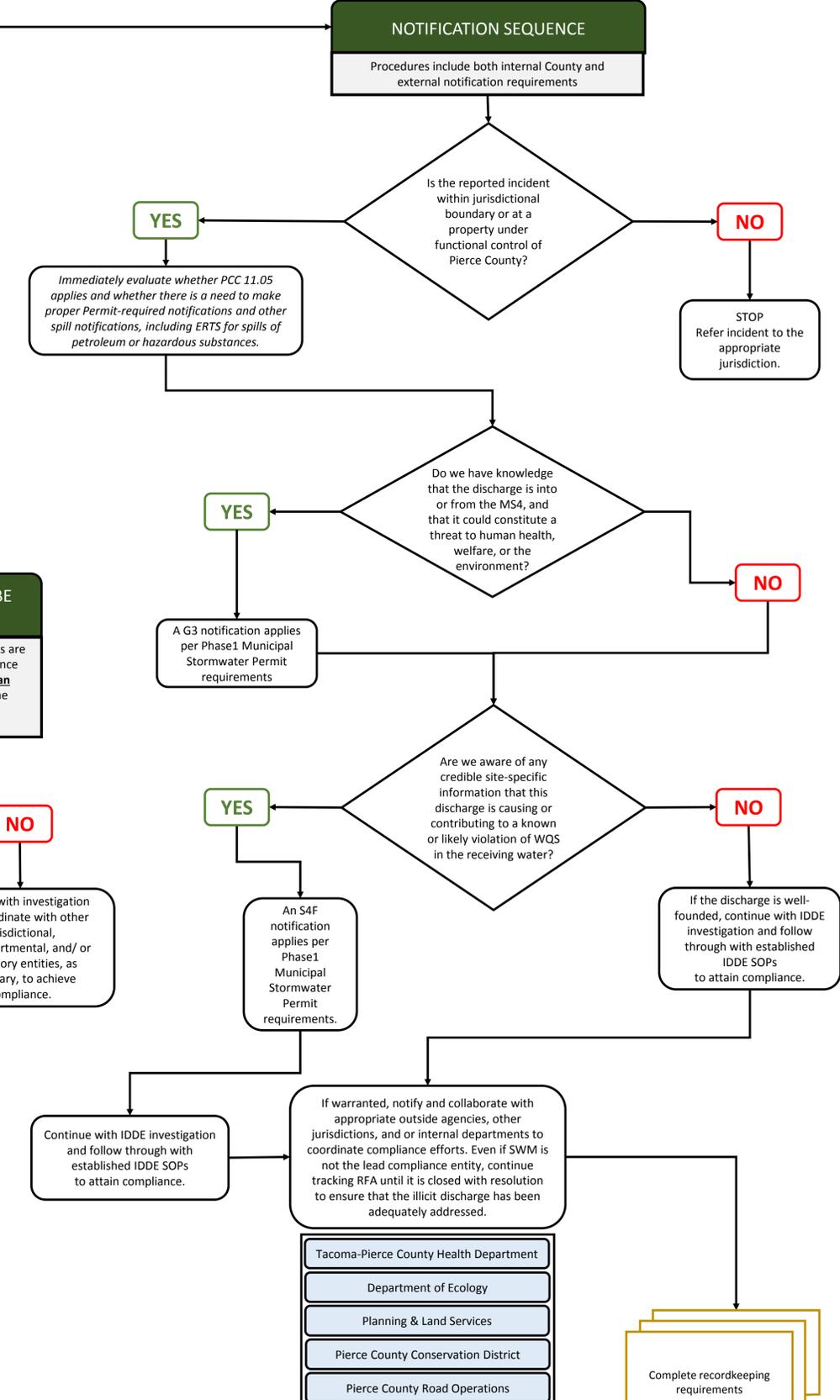
PERMIT MANAGEMENT SUPERVISOR

DOCUMENTED SOURCE OF SIGNIFICANT SOURCE OF POLLUTION

Violation poses a hazard to public health, safety, or welfare; endangers any property; or adversely affects the safety and operation of County right-of-way, utilities and/or other property owned or maintained by the County per PCC 11.05.

STORMWATER POLLUTION DOCUMENTED TO BE LESS THAN SIGNIFICANT

Less than significant amounts of non-hazardous stormwater pollutants are present (or deemed to have been previously present based on evidence gathered at the site). The situation indicates a potential for less than significant stormwater pollution. There is a high confidence that the discharge can be immediately eliminated through public education and technical assistance.



RECEIPT OF A REPORT CONCERNING AN ILLICIT DISCHARGE AS DEFINED BY PCC 11.05 (INTERNAL OR EXTERNAL REFERRAL)

Reports may be received from a number of sources: telephone (IDDE Hotline or direct call), email, internal County staff/ departmental communication (PALS, Roads, CIP, WQ Monitoring), after hours (PC Responds), RMS system, personal observation, field screening, outside agencies (ERTS, TPCHD, PCD, adjacent jurisdictions)

Initially review whether other Pierce County Departments will require separate notification to implement response efforts (Roads, O&M). Enter incident into RFA system, if appropriate.

Prepare for field investigation. Assemble necessary investigative tools and information (County View maps, safety equipment, sampling tools, etc.)

In the field, characterize the threat per written IDDE SOPs and determine proper avenue for corrective action. Characterization will be based in part upon permit requirements and qualitative field observations: composition, volume, frequency, duration, and/or evidence of past illicit discharges.

Unverified or unsubstantiated reports require no further investigative action

INSPECTION UNIT REFERRALS (Spills and Illicit Discharges)



Track enforcement action within Maintenance Connection database.

NOTICE OF VIOLATION AND ORDER TO CORRECT PCC 11.05.090B

Issued to the individuals who own or maintain the property where the violation occurred.

Civil penalties may be assessed to any person who fails to obtain a necessary permit for discharge into a drainage facility per PCC 11.05.090D.

If required, use authority to abate and recover costs per PCC 11.05.090E.

Close RFA if resolution is attained.

Complete recordkeeping requirements

Can the responsible party be identified?

YES: Proceed with investigation and coordinate with other jurisdictional, interdepartmental, and/or regulatory entities, as necessary, to achieve compliance.

NO: Proceed with investigation and coordinate with other jurisdictional, interdepartmental, and/or regulatory entities, as necessary, to achieve compliance.

Initiate Informal Compliance Assurance to eliminate the illicit discharge or illicit connection using primary effort of verbal or written warnings. See Pierce County IDDE Response Procedure (POL-2011-002).

PUBLIC EDUCATION & TECHNICAL ASSISTANCE

An Informal Compliance warning letter (written or verbal) will be issued to any person causing, allowing, or participating in the violation, including the property owner. The warning will outline proper implementation and maintenance of Best Management Practices (BMPs).

Warnings (verbal or written correspondence) will be modified on a case-by-case basis. The compliance process will be documented through the RFA system until the case is satisfactorily corrected.

Close RFA if resolution is attained.

APPENDIX L
SWM Source Control Policy
POL-2011-03

Public Works and Utilities Department

SURFACE WATER MANAGEMENT DIVISION

SOURCE CONTROL POLICY



Policy Number:	POL-2011-03
Title:	Source Control Policy
Effective Date:	June 15, 2011
Revised Date:	NA
Contact:	Rondi Felton, Acting Water Quality Specialist III
Management Sponsor:	Dan Wrye, Water Quality Manager
Related Documents:	Site Development Manual, Maintenance Manual
References:	NPDES Municipal Stormwater Permit, PCC 11.05

Purpose.

This document articulates Pierce County Surface Water Management policy regarding implementation of source control Best Management Practices for existing development. This standard shall be used by Surface Water Management Water Quality Specialists as the applicable standard to assess and achieve compliance with Pierce County Code 11.05 "Illicit Stormwater Discharges" and NPDES Phase I Municipal Stormwater Permit S5.C.7.

Applicable Best Management Practices.

- 1) **Operational Source Control BMP's.**
 - a. Plans and procedures to prevent spills and releases of materials that may contaminate stormwater. Operational BMPs may include maintenance and housekeeping practices, covering material stockpiles with a tarp, and other proper storage, handling, and disposal practices.
 - b. Training of personnel in the implementation of operational source control BMPs that are applicable to site specific potential pollutant generating sources and activities.
 - c. Visual inspections and regular monitoring of areas and operations that have the potential to generate pollutants.
 - d. Procedures and supplies for immediate containment, cleanup, reporting and other appropriate response actions regarding spills and releases of materials that may contaminate stormwater or groundwater.

Operational BMP requirements may be satisfied by implementation of a Stormwater Pollution Prevention Plan prepared in compliance with DOE guidance or other method approved by Pierce County Surface Water Management.

2) Structural Source Control BMP's

Physical measures taken to prevent pollutants from entering storm or surface water; for example, building a covered storage area or installing containment barriers or spill control sumps.

3) Treatment BMP's

BMP's intended to remove pollutants once they are already contained in stormwater. Examples of treatment BMP's include: oil/water separators, biofiltration swales and wet settling basins.

When to require BMP's

Operational source control BMPs are required for all existing discharges that drain directly or indirectly to storm drainage facilities.

Operational source control BMPs (e.g., personnel training, self inspections, maintenance practices, housekeeping practices) should be logged or otherwise documented, retained in the organization files, and made available for review by a Water Quality Specialist upon request if a site appears not to be implementing them. If documentation of operational BMPs is not available for review upon inspection and the site appears not to be implementing operational source control BMPs, the Water Quality Specialist will notify the owner/operator of the deficiency to implement operational BMPs.

Structural source control BMP's are required for pollutant generating sources if operational source control BMPs do not prevent illicit discharges or violations of surface water, ground water, or sediment management standards because of inadequate stormwater controls. When illicit discharges are observed or site specific information demonstrate that operational BMPs are inadequate to prevent offsite polluted runoff or illicit discharges structural source control BMPs will be required.

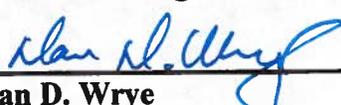
Treatment BMP's are required when implementation of operational and structural BMPs are insufficient to prevent illicit discharges as evidenced by site specific information, visual observation of the Inspector, or monitoring data.

Approved.



Harold Smelt

Division Manager, Surface Water Management Division



Dan D. Wrye

SWM Water Quality Manager

APPENDIX M
SWM Procedures for Documenting and Tracking
NPDES Stormwater Training, POL-2013-01

Public Works and Utilities Department
SURFACE WATER MANAGEMENT DIVISION
PROCEDURES FOR DOCUMENTING AND TRACKING
NPDES STORMWATER TRAINING



Policy Number: POL-2013-01
Title: NPDES Training Procedures
Revised Date: NA
Contact: Rob Dudra, Water Quality Specialist III,
NPDES Stormwater Training Coordinator
Management Sponsor: Dan Wrye, Water Quality Manager
Related Documents: References: NPDES Municipal Stormwater Permit,
Executive Order 2012-1

Purpose.

This document contains the standard operating procedures to be used to document and track NPDES Municipal Stormwater training of Pierce County staff or positions.

Role of County NPDES Stormwater Training Coordinator.

Pursuant to Executive Order 2012-1, the NPDES Stormwater Training Coordinator shall develop, deliver, evaluate, track, and report NPDES Stormwater permit related training for County staff and/or positions, and others as applicable.

Procedures.

1. **Annual Training Plan.** The NPDES Stormwater Permit Training Coordinator shall prepare an annual training plan each year. The annual NPDES Training Plan shall include type of training, purpose, objective, targeted audience, frequency and schedule for each training. The Training Plan shall contain all training required of Pierce County in the Stormwater Permit and may contain additional related spill or environmental response training opportunities.
 - a. The NPDES Stormwater Permit Training Coordinator shall create and distribute the annual training plan to custodial departments of the County.
 - b. Custodial departments are expected to provide department-specific Best Management Practice (BMP) trainings to meet Stormwater Permit requirements. The NPDES Training Coordinator shall coordinate development of an annual schedule of quarterly trainings with a department representative and/or facility Pollution Prevention Team. Copies of custodial department training materials and lists of attendees of each custodial department training

- Number of Requests for Action.

Approved.



Harold Smelt
Division Manager, Surface Water Management Division



Dan D. Wrye
SWM Water Quality Manager

APPENDIX N
SWM Spills Response Procedure, POL-2011-001A

SURFACE WATER MANAGEMENT DIVISION SPILLS RESPONSE PROCEDURE



Procedure Number: POL-2011-002A
Title: SWM Spills Response Procedure
Effective Date: June 29, 2011
Revised Date: September 15, 2015
Contact: Dan Wrye, Water Quality Manager,
Rob Dudra, Acting Water Quality Supervisor
Management Sponsor: Dan Wrye, Water Quality Manager

Related Documents: Attachment: Pierce County Public Works Surface Water Management Division Illicit Discharge/Spill Report & Response Form (06/11)

References: Phase I Muni SW Permit, PCSWM BMP Manual and SWMP, Ord. 11.05, PC, ROAD OPS Spills Policy, WSDOT CSE and Spill Control Manual, Ecology's *Spill Incident Types* document (2014)

1.0 Procedure:

It is intrinsic to Pierce County Public Works and Utilities Department, Surface Water Management Division (SWM) to prevent spills and illicit discharge of stormwater and pollutants into and out of Pierce County's MS4 system and surface waters and ground waters to the maximum extent practicable by outreach and education, technical assistance, inspecting stormwater management facilities, requiring implementation of source control Best Management Practices and by monitoring watershed health. When these measures are not successful and spills occur, the Surface Water Management Division will seek coordination in spill response with Washington Department of Ecology, Tacoma- Pierce County Health Department, Pierce County Road Operations Division, and other entities in order to eliminate the source of the spill, protect and restore public infrastructure affected by the spill, and ensure Pierce County's surface water resources are protected. Surface Water Management Division will ensure the County complies with the illicit spills and discharge provisions of the NPDES Phase I Municipal Stormwater Permit, Pierce County Code 11.05, and other applicable regulations.

The Water Quality Manager shall be responsible for determining compliance with the NPDES stormwater permit and Pierce County Code 11.05. Responsibility for determining the sufficiency of cleanup of spill-impacted, publicly-owned ponds shall reside with the SWM Operations and Maintenance Manager. The Roads Operations Manager will be responsible for determining the sufficiency of cleanup of spill-impacted drainage systems within the County's public right of way.

2.0 Purpose:

- (1) To ensure that the County fully complies with the illicit spills and discharge provisions of the NPDES Phase I Municipal Stormwater Permit and the provisions of Pierce County Code 11.05 and that those causing the spill are accountable for the environmental and economic costs of the spill.
- (2) To ensure that there is clarity and coordination between the exercise of (1) above, and the various County and non-county entities having responsibility for various aspects pertaining to spills and their cleanup. These include the Washington Department of Ecology, Spills Program; Washington Department of Ecology, Water Quality Program, Tacoma/Pierce County Health Department; Pierce County Road Operations Division; SWM Maintenance and Operations Section; and SWM Water Quality and Watersheds Section.

3.0 Applicability:

3.1 Scope

This document applies to all PC SWM employees who are involved in an emergency or accidental release of any hazardous material into the environment (except releases otherwise permitted under State or Federal Law). Contractors and consultants operating under contract to SWM shall conform to the procedures specified.

These guidelines are intended to address releases such as spills, leaks, venting discharges, escapes, leaching, dumping, or pouring of materials such as liquid, solid or gaseous chemicals, waste, raw materials, or products that pose a potential hazard to human health or to the environment *which are immediately poised to or already have entered the MS4 from: 1). a street or road surface, or 2). another discharge source.* Sewage releases are addressed separately under Sanitary Sewer Response Procedures by the Pierce County Sewer Utility.

The type of material discharged and the quantity will determine the nature of response and role(s) for PC SWM

This document will:

- Identify spill response activities to be conducted by PC SWM employees;
- Identify personnel responsible for those functions;
- Establish process guidelines and operating procedures;
- Establish a coordinated concept of operations with other responding entities.

3.2 Situation

Pierce County as a Phase I Municipal "Permittee" is mandated under its *NPDES* permit to:

- Investigate and respond to spills in the municipal separated storm water system.
- Develop a program to prioritize and investigate complaints/reports that indicates potential illicit discharges, including spills.
- Make required notifications.

- Track and maintain a record of all illicit discharges, including documentation of spill responses.

4.0 Collaboration: Summary of Roles and Responsibilities:

SWM Water Quality and Watersheds Section:

- Receives notification from Road Operations of reported spill
- Maintains SWM spills, IDDE and enforcement policies and procedure
- Ensure compliance with NPDES stormwater permit
- Responsible for submitting G3 reports to state
- Responsible for IDDE response and enforcement of PCC 11.05
- Provides coordination support
- Directs water quality sampling, laboratory work and analysis

SWM Maintenance and Operations Section:

- Receives notification from Road Operations of reported spill
- Dispatches maintenance personnel and/or contacts Water Quality and Watersheds
- Provides field support
- Determines sufficiency of mitigation to public ponds and associated County structures

Washington Department of Ecology, Spills Program:

- Stabilizes and directs spills containment
- Assigns Environmental Reporting and Tracking System case number
- Notifies County or TPCHD as appropriate
- Determines level of state oversight
- Determines referrals to DOE Water Quality Program
- Provides input into natural resource damage assessments

Road Operations Division:

- Receives notification from WSDOT or WDOE of reported spill
- Dispatches maintenance personnel and/or contacts SWM
- Provides field support
- Determines sufficiency of mitigation to public drainage and roadway facilities within the County ROW

Washington Department of Ecology, Water Quality Program:

- Receives and tracks G3 spills notifications.
- Receives and monitors IDDE response compliance from NPDES permit
- Determines County compliance with NPDES permit
- Provides input into natural resource damage assessments

Tacoma/Pierce County Health Department:

- Stabilizes and directs spills containment
- Notifies County or State as appropriate
- Directs and evaluates sampling
- Provides input into natural resource damage assessments
- Evaluates hazard potential to people and the environment

5.0 Standard Procedures:

5.1 Organization for SWM Spill Response

PC SWM spill response personnel will consist of:

- Surface Water Management Senior Spill Response Coordinator(s) (SWM-Senior SRC): Water Quality Manager position/person or Designee
- Surface Water Management Spill Response Coordinator(s) (SWM-SRC): Permit Management Unit Supervisor position/person or other IDDE Staff
- SWM Division Manager: position/person
- Other trained spill response PC SWM personnel and support personnel
- Spill response contractors.

The SWM-Senior SRC may delegate any spill response functions to SWM-SRC personnel. Any such delegation(s) will be logged during the event and included in the spill response final report.

a. The SWM-Senior SRC will:

- receive notification and status of a spill event directly (from PC-Road Ops or another source);
- assess the level of hazard and required response (Ecology Types 6-1)
- make required notifications, including, if applicable, G3 notification to Ecology for Phase I Muni SW Permit compliance;
- make initial and periodic reports to the SWM Manager;
- mobilize and commit SWM resources, as appropriate;
- oversee, collaborate with other responders, document the on-site activities, and procure a spill response contractor, if necessary. If the Fire Department or other agency establishes Incident Command (IC), the SWM-Senior SRC will mobilize and coordinate SWM resources (including contractors) at the direction of the Incident Commander;
- verify the completion of activities necessary to finalize a spill response event, including restoration and monitoring activities, debriefing, reporting, and fiscal reconciliation.
- The SWM-Senior SC will provide management and administration for SWM spill response activities.

b. The SWM-SRC will:

- assist the SWM-Senior SRC with their duties.

c. Other SWM personnel and Support staff will be deemed a resource to a spill event.

5.2 PC SWM /Contractor Operations

The spill response contractor, once summoned to the scene of a spill, is in charge of all activities dealing directly with stabilization and cleanup of the hazardous material impacting the MS4. These activities include: site security, worker safety, chemical substance categorization, decontamination, clean-up operations, and action summary reports.

The SWM-Senior SC is responsible for oversight of the spill scene operations, general safety precautions for site personnel, commitment of any PC SWM resources or personnel, regulatory reporting and coordination with other agencies/jurisdictions. The SWM-Senior SC will ensure that operations performed by the contractor conform to Pierce County policies and procedures and will act for PC SWM in managing clean-up operations. SWM-Senior SC is also responsible for ensuring the proper disposal of hazardous waste generated in the clean-up.

5.3 Response Process

Notification: includes initially receiving all pertinent information about the discharge/spill event and also, the responsibility making required notifications. Typical information would include the identification and quantity of the discharged contaminant; geographic location; when and how the spill occurred; information about party causing the spill and reporting party; proximity of the spill to the MS4 and “downstream” projected impacts; who has been notified and when; which responders are on-site. Significant to the response process is whether the contaminating substance is non-hazardous or hazardous, what quantity has been discharged, and is the substance in or about to be in the MS4.

Assessment: Information gathered about the size and character of the spill can be used to assign a “Category”.

Mobilization: Roles, resources and assignments are determined by the “Category” designation for potential on-site activities.

Post-Spill Management: Includes spill impact restoration; summary reporting; debriefing; cost recovery; and finalization of the spill event.

5.4 Assessment

Specific spill response and role at a discharge/spill incident will be determined by the **type and quantity** of the contaminant and **involvement** in the MS4.

PC SWM spill response actions will be based upon an initial assessment of the level of hazard (Type 6: Minor Incident – Type 1: Spill of National Significance) posed by the spill:

Spill Incident Types

Defining incidents results in a more standardized characterization of incidents and supports better decision making. For example, incident typing helps in making decisions about resource requirements and communication levels. Ecology's incident types are based on the following six levels of complexity. These types are derived from and compatible with FEMA Incident Types.

Criteria for incident types carry to the next type. As a result all activities included in a Type 6 are also relevant for a Type 5, etc.

Type 6 (Minor Incident)

- A minor incident in which the Responsible Party (RP) and/or local first responders manage the response.
- The quantity of material/substance released is small and/or contained quickly.
- Human health and environmental impacts are negligible.
- Ecology is notified and performs phone consultation/technical assistance and documents the incident and response actions in ERTS.
- Examples include minor vehicle accidents, dissipating mystery oil sheens, transformer spills to soil and neighbor complaints.

Type 5 (Short Duration)

- Some Command and General Staff positions (other than the Incident Commander) may be activated.
- An ICS Form 201 may be completed with a briefing conducted for all incoming resources.
- The incident is contained within the first operational period and often within an hour to a few hours after resources arrive on scene.
- Examples include a meth lab cleanup, a truck accident or a simple sunken vessel with very little fuel on board.

Type 4 (More staff than an Incident Type 5 and still short duration)

- Command staff and general staff functions are activated as needed.
- The incident is usually limited to one operational period in the emergency phase.

- The Regional Supervisor or Response Section Manager may be notified.
- An ICS Form 201 is required and a briefing will be completed for all incoming resources.
- The role of the SOSC includes establishing objectives, priorities and operational periods as needed.
- Examples include: interagency coordination, resources contracted/called out, spill of more than 25 gallons to water, more complex sunken vessel incidents, USCG Captain of the Port order for non-spill incident.

Type 3 (Significant incident with numerous resources deployed and lots of impacts may transition to a Type 2)

- CMT is activated and IMT positions are required.
- Some or all of the Command and General Staff positions are activated, as well as Division/Group Supervisor and/or Unit Leader level positions.
- A non-spill significant threat that is being monitored and the CMT is activated but no UC has been established.
- The incident may extend into multiple operational periods and Ecology's mobile command post may be deployed.
- An ICS 201 briefing form and a written IAP will be required for each operational period.
- Examples: Spill and HazMat incidents that last more than one day, significant vessel spill threat incidents and response tug activation for disabled vessels, train derailments with potential spill, tanker truck fires and releases to water bodies.

Type 2 (Large/Major incident of long duration, assistance from other agencies required)

- CMT and IMT activated and numerous positions need to be filled.
- Unified Command is established at an appropriate command post.
- Other Incident Management Teams may be activated- Industry, Federal, Local.
- This type of incident is expected to go into multiple operational periods.
- Significant product spilled and numerous sensitive sites threatened.
- May require cascading of resources from other states.
- Most or all of the Command and General Staff positions are filled.
- A written IAP is required for each operational period.
- Area Command may be established.
- Examples: Orphan spill to marine waters with significant impacts, heavy oil spills in marine waters, spill and HazMat incidents that last more than one day, HazMat incidents associated with natural disasters, spills to water from pipeline or regulated facility with significant impacts to the environment.

Type 1 (Spill of National Significance)

- CMT and IMT activated and most positions are filled.
- This type of incident is the most complex requiring national resources to safely and effectively manage.
- All Command and General Staff positions are activated.
- The Governor's Office and all high level Federal agency officials will be involved
- Area Command will be established.
- The NIC may be established.

- The Agency Administrator will be actively involved with the State and Federal Officials.
- Examples: any Spill of National Significance (SONS) - Deepwater Horizon.

5.5 Mobilization

The role of PC SWM personnel will be determined by the Response Category assigned to the incident, generally, as follows:

<u>Type 6:</u>	no direct involvement; procure and review the incident report.
<u>Type 5:</u>	respond to scene; take the a lead position for notifications, containment, clean-up, and restoration where an illicit discharge has entered the stormwater system; work collaboratively with other responders; conduct post-spill activities to completion; determine the need and help prepare an ICS Form, if necessary.
<u>Type 3,4:</u>	respond to scene; report to Incident Command (IC); provide technical assistance, as required and support IC; collaborate containment and clean-up with IC; document (including images) the event; take the lead in restoration of stormwater system when cleared by IC to do so: conduct post-spill activities to completion; collaborate with other responders; defer media requests to IC.
<u>Types 2,1:</u>	respond to scene; report to Incident Command (IC); provide technical assistance, as required and support IC; document (including images) the event; take the lead in restoration of stormwater system when cleared by IC to do so: conduct post-spill activities to completion; collaborate with other responders; defer media requests to IC.

5.6 Post-Spill Management

The SWM-Senior SRC will:

- follow the established procedures for notifying the regulatory agencies;
- ensure that spilled material is labeled, stored, manifested, and disposed correctly;
- debrief and evaluate the spill and the response procedures used;
- determine disposal options in consultation with the affected work unit supervisor and the disposal contractor.
- submit an after-action report of all activities conducted during the spill cleanup. The SWM-Senior SRC will compile all reports, invoices, cost recovery and other documentation regarding the spill and its resolution. Reports and supporting

documentation will be kept on file in accordance with the County document retention and/ or other pertinent policy.

- provide input opportunity from other responders to any cost recovery action pursuant to Pierce County Code 11.05.

5.7 Documentation

Spills of any category will require submission of a spill report. The SWM-Senior SRC will establish a log of all actions taken at the spill site until the spill is resolved and can request that the spill response contractor submit an after-action report of all activities conducted during the spill cleanup. Reports and supporting documentation will be kept on file in accordance with the County document retention and/or other policy.

5.8 Post Incident Critique and Assessment

As conditions warrant, the SWM-Senior SRC will conduct a thorough debriefing of all personnel involved in an incident response and will prepare a critique report of all incident circumstances and response activities. Information obtained and lessons learned through this critique process will be made available to all Spill Coordinators and will be incorporated into the spill response training program. The purpose of the critique is to:

- Identify and review all “decision points” in the incident process;
- Review and discuss the collaborative interaction with other responders;
- Determine if response plans and procedures were followed;
- Determine if any policies, plans, procedures require modification;
- Identify equipment deficiencies and requirements;
- Identify training deficiencies and requirements;
- Identify corrective actions to prevent future spills.

5.9 Plan Development

The senior SWM-Senior SRC is responsible for the development of all aspects of this document and for ensuring consistency with Federal, State, and County regulations. The SWM-Senior SRC will direct the production and distribution of all operating procedures, action checklists, alert rosters, and other attachments. This document is consistent and with Pierce County Public Works and Utilities Surface Water Management Division Policy POL-2011-001: Water Quality IDDE Response Policy (February 14, 2011).

5.10 Plan Review and Maintenance

The SWM-Senior SRCs and SWM-SRCs will review this document annually, or as conditions warrant, and update it to reflect any changes in organization, roles, and responsibilities; facilities or resources; and/or potential hazards. Lessons learned from actual spill responses and/or from drills and exercises will be incorporated into the structure and content of this document.

5.11 Training Requirements

SWM-Senior SRCs and SWM-SRCs to perform spill response activities under these guidelines will be trained to a level commensurate with their responsibilities and duties. Training will be coordinated and documented by the Surface Water Management Division. Spill response training will be in addition to required Hazard Communication training.

The SWM-Senior SRC and SWM-SRC will be trained and certified in the following areas:

- OSHA First Responder Awareness (FRA) and First Responder Operational (FRO)
- National Incident Command System (NIMS) ICS100 & ICS200

Additionally, they will be fully knowledgeable about the following:

- National Pollutant Discharge and Elimination System Discharge Permit (current issuance)
- Pierce County Code 11.05
- Pierce County SWM Water Quality IDDE Response Policy (POL-2011-001)
- Pierce County-SWM Emergency Response Management Plan
- Pierce County-Road Operations Hazardous Material Spill Response
- Tacoma-Pierce County Health Department Spill Response Narrative
- Pierce County- Sewer Utility Spill Response Plan
- Pierce County-SWM Spill Response Procedure (POL-2011-002A)
- Pierce County Stormwater Management and Site Development Manual:
Volume IV
- ICS Form 201

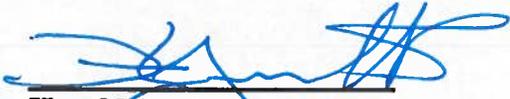
5.12 SWM personnel who may be expected to recognize and report hazardous materials spills and/or support spill response activities will be trained in the following areas (depending on their expected level of involvement):

- Illicit Discharge Detection and Elimination (IDDE) Awareness – Pierce County personnel whose duties require travel throughout Pierce County.
These personnel:
 - ✓ Are likely to witness or discover a illicit discharge
 - ✓ Are trained to initiate an emergency response by notifying the proper authorities of the discharge
 - ✓ Will take no further action beyond notifying the authorities

5.13 Pierce County Public Works and Utilities Surface Water Management Division Illicit Discharge/Spill Report & Response Form (06/11) is attached hereto as the current version of a field operational document. This form will be subject to periodic review and revision, as necessary.

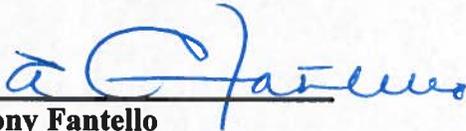
The above procedures are guidance only. Adaptive spill management must be handled on a case by case.

Approval:



Harold Smelt
Surface Water Management
Division Manager

9/16/15
Date



Tony Fantello
Surface Water Management
Operations and Maintenance Manager

9/28/15
Date



Dan D. Wrye
Surface Water Management
Water Quality Manager

9-15-15
Date



Hans Hunger, P.E.
Surface Water Management
CIP Manager

9/28/15
Date



Annette Pearson
Surface Water Management
Environmental Permitting Section

9-28-15
Date



Ann Marie Marshall-Dody
Surface Water Management
Planning and Programming Manager

9-28-15
Date



Pierce County Public Works and Utilities
Surface Water Management Division
Illicit Discharge/Spill Report & Response Form

ERTS# (Ecology)
RFA # (Pierce County)
SRS # (Pierce County)
Parcel #
Spill Assessment:
Type 6
Type 5
Type 4
Type 3
Type 2
Type 1

INITIAL NOTIFICATION:

SWM Person Initially Notified:

SWM Senior Spill Response Coordinator = SWM Senior SRC
(Water Quality Manager Position/Person or Designee)

Name

SWM Spill Response Coordinators = SWM SRC
(IDDE Staff Position/Person)

Name

Date: / / Time: (24 hr)

- Notified By: PC RoadOps, PC Sewers, Other Jurisdiction, TPCHealth Dept, PC PALS, SWM Hotline, Fire, Police, Other, Direct Observation or Citizen Caller

Has Been Notified: (on scene? = yes / no)

- Dept of Ecology, National Response Center, WA Emergency Mgmt, TacPierceCo Health Dept, Other Jurisdiction, PC Fire, PC Sheriff, PC Sewers, PC RoadOps, PC Emergency Mgmt, PC Risk Mgmt, PC SWM Maint, Other Jurisdiction

Needs To Be Notified:

- Dept of Ecology 1-360-407-6300, WA Emergency Mgmt 1-800-258-5990, TacPierceCo Health Dept 253-798-6470, PC SWM Maintenance 253-798-4132, PC Fire/ Sheriff/ Emergency Mgmt. 911, PC Risk Mgmt. 253-798-7462, Other Jurisdiction, National Response Center 1-800-424-8802, PC Sewers 253-565 3440, PC RoadOps 253-798-6000, Other Jurisdiction

Incident Information:

Occurred When: Date: ___/___/___ Time: _____ (24 hr)

Reported By:

Name: _____ Business: _____

Address: _____

City: _____ State: _____ Zip: _____ Email: _____

Phone: _____ ext.: _____ Confidential? YES NO

Additional Contact: _____ Phone: _____

Incident Scene/Location:

Address _____

Unincorporated or Incorporated Area? City of _____

Parcel # _____

Property Owner _____ Phone# _____

Facility/ Business Name _____

Manager/ Supervisor _____ Phone# _____

Weather Conditions _____ Rainfall (Last 72 hrs): <0.1 inch? yes no

Directions/ Landmarks (mile post, etc.)

Traffic Operations secured ? (y / n) Person in Charge _____

Incident Command established ? (y / n) Commander: _____

Have Injuries Occurred? (yes / no)

If "yes": - has 911 been called? (yes / no)

- how many injured and extent of injury?

- notify PC Risk Mgmt. 253-798-7462

Discharge/ Spill Information:

Material: Liquid Solid Gaseous

Petroleum Product Oil Gasoline Diesel

Known Product Name _____

Procure, review, proceed by **SDS** product information

Hazardous to people or environment: call Tac PC Health Dept. **253-798-6470**

Sanitary sewer effluence: call PC Sewers **253-565 3440** / Tac PC Health Dept.

Unknown Product (clear the area; call 911; let Hazmat/Fire secure the scene; call Tac PC Health)

Quantity Discharged (approx.) _____ unit of measure _____

Impact:

⇒ Extent spill has traveled: (describe)

⇒ Spill has / will enter(ed) the Storm Drain System (**MS4**) (y / n)

if yes: procure storm system maps (attach)

I.D. downstream outfalls (list)

Discharge/ Spill Information: (continued)

Impact: (continued)

I.D. downstream ponds (list) (if PC ponds, then notify PC SWM Maintenance)

determine and notify if spill will impact other jurisdictions (list)

⇒ Extent resource damage (i.e. dead fish, oiled fowl, etc): (describe)

⇒ List (owner, address, parcel #) and describe impact on private property:

Discharge/ Spill Information: (continued)

Cause/ Responsible Party:

Describe Cause of Spill:

Responsible Party:

Name: _____ Business: _____

Address: _____

City: _____ State: _____ Zip: _____ Email: _____

Phone: _____ ext.: _____

Additional Contact: _____ Phone: _____

Other Pertinent Information:

ASSESSMENT: from the information gathered, assign a category below to determine guidance for response mobilization to the incident scene.

- Type 6** a quantity of non-hazardous or petroleum product not affecting the MS4 or nearby water body; can be contained and cleaned up using available spill response materials.

- Type 5** a quantity of non-hazardous or petroleum product that poses a threat to people, environmentally-sensitive areas, or the MS4 or nearby water body, or materials that are time-sensitive; most likely a spill response contractor will be deployed to mitigate the spill. **DOE G3 Notification review by Water Quality Manager or designee within 24 hours of obtaining knowledge of the spill; copy to PC Prosecuting Attorney.**

- Type 4,3** a quantity of hazardous substance or large quantity of a petroleum product, or one with widespread environmental damage, or one involving injuries, or a known, extremely hazardous substance requiring a specialized response; a spill response contractor and/ or local emergency response agencies will be involved. **DOE G3 Notification review by Water Quality Manager or designee within 24 hours of obtaining knowledge of the spill; copy to PC Prosecuting Attorney.**

- Type 2,1** a catastrophic spill/release that requires multi-agency or multi-jurisdictional response will be handled under the Pierce County Department of Emergency Response Plan. **DOE G3 Notification review by Water Quality Manager or designee within 24 hours of obtaining knowledge of the spill; copy to PC Prosecuting Attorney.**

MOBILIZATION:

The role of PC SWM personnel will be determined by the Response Category assigned to the incident, generally, as follows:

- | | |
|-----------|--|
| Type 6: | no direct involvement; procure and review the incident report. |
| Type 5: | respond to scene; take the a lead position for notifications, containment, clean-up, and restoration where an illicit discharge has entered the stormwater system; work collaboratively with other responders; conduct post-spill activities to completion; determine the need and help prepare an ICS Form, if necessary. |
| Type 3,4: | respond to scene; report to Incident Command (IC); provide technical assistance, as required and support IC; collaborate containment and clean-up with IC; document (including images) the event; take the lead in restoration of stormwater system when cleared by IC to do so: conduct post-spill activities to completion; collaborate with other responders; |

Types 2,1:

defer media requests to IC.

respond to scene; report to Incident Command (IC); provide technical assistance, as required and support IC; document (including images) the event; take the lead in restoration of stormwater system when cleared by IC to do so: conduct post-spill activities to completion; collaborate with other responders; defer media requests to IC.

Collaborative Guidelines : Summary of Roles and Responsibilities

SWM Water Quality and Watersheds Section:

- Receives notification from Road Operations of reported spill
- Maintains SWM spills, IDDE and enforcement policies and procedure
- Ensure compliance with NPDES stormwater permit
- Responsible for submitting G3 reports to state
- Responsible for IDDE response and enforcement of PCC 11.05
- Provides coordination support
- Directs water quality sampling, laboratory work and analysis

SWM Maintenance and Operations Section:

- Receives notification from Road Operations of reported spill
- Dispatches maintenance personnel and/or contacts Water Quality and Watersheds
- Provides field support
- Determines sufficiency of mitigation to public ponds and associated County structures

Washington Department of Ecology, Spills Program:

- Stabilizes and directs spills containment
- Assigns Environmental Reporting and Tracking System case number
- Notifies County or TPCHD as appropriate
- Determines level of state oversight
- Determines referrals to DOE Water Quality Program
- Provides input into natural resource damage assessments

Road Operations Division:

- Receives notification from WSDOT or WDOE of reported spill
- Dispatches maintenance personnel and/or contacts SWM
- Provides field support
- Determines sufficiency of mitigation to public drainage and roadway facilities within the County ROW

Washington Department of Ecology, Water Quality Program:

- Receives and tracks G3 spills notifications.
- Receives and monitors IDDE response compliance from NPDES permit
- Determines County compliance with NPDES permit
- Provides input into natural resource damage assessments

Tacoma/Pierce County Health Department:

- Stabilizes and directs spills containment

POST-SPILL MANAGEMENT: this aspect of the process encompasses spill impact restoration; summary reporting; debriefing; fiscal summarization; and finalization of the spill event.

- Type 6,5** copy of on-site incident report to Surface Water Management-Water Quality

 - Type 4,3,2,1** may request that Spill Response Contractor submit an after-action report of all activities conducted during the spill clean-up; compile all reports, invoices, cost recovery and other documentation regarding the spill and its resolution; reports and supporting documentation will be kept on file in accordance with the County document retention and/or pertinent policy.
-

Additional Notes:

APPENDIX O
SWM Significant Storm Event Procedure,
POL-2015-001A

Public Works Department

SURFACE WATER MANAGEMENT DIVISION

SIGNIFICANT STORM EVENT PROCEDURE



Procedure Number:	POL-2015-001A
Title:	Significant Storm Event Procedure
Effective Date:	May 22, 2015
Revised Date:	January 1, 2016
Contact:	Dan Smith, Permit Management Unit Supervisor
Management Sponsor:	Dan Wrye, Water Quality Manager
Related Documents:	2015 Pierce County Stormwater Manual
References:	NPDES Municipal Stormwater Permit WAR04002

Purpose:

Per requirements specified in Pierce County's Phase I Municipal Stormwater Permit (section S5.C.9.c.ii), this document establishes procedures to spot check potentially damaged permanent stormwater treatment and flow control Best Management Practices (BMPs)/facilities following major storm events (24-hour storm event with a 10-year or greater recurrence interval).

Procedure Overview:

Precipitation data records will be retrieved and downloaded from Pierce County's Weather Station webpage:

<https://www.piercecountywa.org/weather>

Precipitation data used for this purpose will represent atmospheric conditions occurring across the County, and as a result, will include information collected at four distinct regional weather stations:

1. Purdy Road Shop (representing the northern Pierce County region in Gig Harbor).
2. Longbranch (representing the Key Peninsula region).
3. Puyallup at Thun Field (representing Pierce County/Tacoma/Puyallup region).
4. South Prairie Fire Station (representing Pierce County/Tacoma/Puyallup region).

A major storm event is defined as a 24-hour storm event with a 10-year or greater recurrence interval. Pursuant to Pierce County's Phase I Municipal Stormwater Permit, section S5.C.9.c.ii, spot checks are triggered based on the following design storm precipitation values calculated for each individual weather station:

Design Storm Precipitation Values

Return Frequency 24-Hour Storm Event (Years)	NORTHERN PIERCE COUNTY REGION IN GIG HARBOR	KEY PENINSULA REGION	PIERCE COUNTY/TACOMA/PUYALLUP REGION	
	Purdy Road Shop	Longbranch	Puyallup at Thun Field	South Prairie Fire Station
10	3.5 inches	4.3 inches	3.0 inches	3.0 inches

Reference: 2015 Pierce County Stormwater Management and Site Development Manual, Volume III (Western Washington Isoplethial 10-year, 24-hour)

Procedural Steps:

1. Pierce County maintains a series of Onset © HOBO U30 and RX3000 data loggers (or equivalent) that enable remote access to real-time, continuous (15-minute interval) rainfall data.
2. The SWM Permit Management Unit Supervisor (or designee) will be responsible for monitoring conditions during wet weather, and shall retrieve and analyze data associated with weather system periods that are predicted to produce heavy rainfall.
3. These significant storm event data, recorded at each of the four distinct regional weather stations, will be downloaded and analyzed to determine whether the 10-year, 24-hour storm criteria (specified above for any of the three distinct regions) has been exceeded. If one or more of the four stations listed above is unavailable or out-of-order, data obtained from the nearest operating rainfall logger(s) will be substituted for the evaluation.
4. Microsoft Excel (or an equivalent software application) will be used to perform mathematical calculations of the selected data that summarizes rainfall values into 24-hour sliding increments. Running 24-hour totals update with each 15-minute logger reading.
5. If data analysis indicates that the 10-year, 24-hour storm criteria has been exceeded, the SWM Permit Management Unit Supervisor (or designee) will contact Surface Water Management, Maintenance and Operations, and Road Operations Divisions indicating where and when the significant storm occurred. Spot checks of potentially damaged permanent stormwater treatment and flow control Best Management Practices (BMPs)/facilities will be required as soon as practicable if the data analysis indicates an exceedance of the 10-year, 24-hour storm criteria specified above for any of the three distinct regions. When this requirement is triggered, Surface Water Management, Maintenance and Operations and Road Operations Divisions will select

a subset (5-10 minimum) of stormwater management facilities (treatment or flow control) within each affected region for inspection. Records of these inspections will be maintained in the department's asset management system.

6. If spot checks indicate widespread damage and or maintenance needs, all stormwater treatment and flow control BMPs/facilities will be inspected within that affected region. Necessary repairs and or appropriate maintenance actions (if present) will be conducted in accordance Pierce County's Phase I Municipal Stormwater Permit, section S5.C.9.a.
7. Records of significant storm event spot checks and follow up inspections will be maintained in the department's asset management system.

APPENDIX P
Education and Outreach Program
Matrix Spreadsheet

10. Education and Outreach Program		Topics / Reference																					
		a.i 1 and 2 Build Awareness										a.ii Behavior Change							b Stewardship		c. Measure effectiveness		
		General public (including school age children), and businesses (including home-based and mobile businesses)					Engineers, contractors, developers and land use planners					General public (may include children) and businesses (include home based and mobile)			Residents, landscapers and property managers/owners								
		General impacts of stormwater on surface waters.	Impacts of impervious Surfaces	Impacts of illicit discharges and how to report them.	LID principles and BMPs	Opportunities to become involved in stewardship activities	Technical standards for stormwater site and erosion control plans	LID principles and BMPs	Stormwater treatment and flow control BMPs/facilities.	Use and storage auto chemicals, cleaning supplies, carwash soaps, hazardous materials	Equipment maintenance	Prevention of illicit discharges	Yard Care	Use and storage of pesticides/fertilizers and other household chemicals	Carpet cleaning and auto repair and maintenance	Vehicle, equipment and home/building maintenance	Pet waste management and disposal	LID principles and LID BMPs	Stormwater facility maintenance	Dumpster and trash compactor maintenance	Each permittee shall create stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities.	Measure the understanding and adoption of the targeted behaviors for at least on targeted audience in at least one subject area.	No later than Feb. 2, 2018, use the resulting measurements to direct education and outreach resources most effectively as well as to evaluate changes in adoption of the targeted behaviors.
Program Name and Manager	Program Overview	a.i.1	a.i.1	a.i.1	a.i.1	a.i.1	a.i.2	a.i.2	a.i.2	a.ii.1	a.ii.	a.ii.1	b.i.	b.i.3	b.i.3	b.i.3	b.i.3	b.i.3	b.i.3	b.i.3	b.i.4	b.ii	b.iii
Hazardous Waste management program, Sheryl Rheinart	Pierce County Public Works Sustainable Resources division household hazardous waste program promotes alternatives to the use of hazardous chemicals and the proper storage and disposal of these materials. They maintain a website and conduct outreach at fairs and other events. The Tacoma-Pierce County Health Department has a hazardous waste hotline for Pierce County residents. For more information: www.piercecountywa.org/hhw			X						X		X			X								
Don't Drip and Drive, Mike Halliday	Pierce County has participated in the development and implementation of the Don't Drip and Drive program since its inception in 2012. An outreach effectiveness study was completed for the Don't Drip and Drive program, and a report was completed Feb. 2, 2016. Throughout 2016, Pierce County participated on the Don't Drip and Drive steering committee and managed elements of the Don't Drip and Drive grant program on behalf of STORM. The program launched in 2017, and it is based on recommendations from the project effectiveness study. For more information go to www.fixcarleaks.org , for partner toolkit, go to www.piercecountywa.org/dontdripanddrive	X	X			X				X	X	X			X	X					X	X	X

10. Education and Outreach Program		Topics / Reference																					
		a.i 1 and 2Build Awareness										a.ii Behavior Change							b Stewardship		c. Measure effectiveness		
		General public (including school age children), and businesses (including home-based and mobile businesses)					Engineers, contractors, developers and land use planners					General public (may include children) and businesses (include home based and mobile)			Residents, landscapers and property managers/owners								
		General Impacts of stormwater on surface waters.	Impacts of Impervious Surfaces	Impacts of illicit discharges and how to report them.	LID principles and BMPs	Opportunities to become involved in stewardship activities	Technical standards for stormwater site and erosion control plans	LID principles and BMPs	Stormwater treatment and flow control BMPs/facilities.	Use and storage auto chemicals, cleaning supplies, carwash soaps, hazardous materials	Equipment maintenance	Prevention of illicit discharges	Yard Care	Use and storage of pesticides/fertilizers and other household chemicals	Carpet cleaning and auto repair and maintenance	Vehicle, equipment and home/building maintenance	Pet waste management and disposal	LID principles and LID BMPs	Stormwater facility maintenance	Dumpster and trash compactor maintenance	Each permittee shall create stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities.	Measure the understanding and adoption of the targeted behaviors for at least on targeted audience in at least one subject area.	No later than Feb. 2, 2018, use the resulting measurements to direct education and outreach resources most effectively as well as to evaluate changes in adoption of the targeted behaviors.
Program Name and Manager	Program Overview	a.i.1	a.i.1	a.i.1	a.i.1	a.i.1	a.i.2	a.i.2	a.i.2	a.ii.1	a.ii.	a.ii.1	b.i.	b.i.3	b.i.3	b.i.3	b.i.3	b.i.3	b.i.3	b.i.3	b.i.4	b.ii	b.iii
Tree Workshops and Sales, Mike Halliday	Pierce County partners with the Pierce Conservation District and City of Tacoma on a tree workshop and sale program and a discount tree coupon program. The program provides free workshops and discounts on trees. Workshops emphasize maintenance of existing trees, proper planting and care for trees. In addition, the workshop connects residents to the master gardener program, which includes arborists available to answer resident questions about tree care. A workshop was held in 2017 with 282 trees purchased. A coupon program partnering with multiple local nurseries is also available by request. The coupon provides a \$15 per tree discount on up to five trees. Funding for this program comes from the Puyallup Watershed Initiative. For more information go to www.treesareamazing.org		X		X	X					X	X											X
Car wash kit check-out and giveaway, Mike Halliday	Pierce County maintains a fundraising car wash webpage with links to alternative fundraising programs. Pierce County promotes the use of alternatives to fundraising car washes for fundraisers, such as sale of car wash coupons or renting a bay at a commercial car wash to do fundraising. For fundraising groups holding multiple car washes in a year, Pierce County has distributed free car wash kits for their use. For more information: www.piercecountywa.org/carwash	X	X	X						X	X				X	X							

APPENDIX A
Pierce County Code (PCC) 11.05, Illicit Stormwater Discharges

Chapter 11.05 ILLCIT STORMWATER DISCHARGES

Sections:

- 11.05.010 Purpose.**
- 11.05.020 Authority.**
- 11.05.030 Definitions.**
- 11.05.040 Stormwater Discharges.**
- 11.05.050 Stormwater Management and Site Development Manual.**
- 11.05.060 Administration.**
- 11.05.080 Enforcement.**
- 11.05.090 Penalties.**
- 11.05.100 Records Retention.**
- 11.05.110 Construction – Intent.**
- 11.05.120 Severability.**

11.05.010 Purpose.

The purpose of this Chapter is to protect Pierce County's surface and ground water quality by providing minimum requirements for reducing and controlling the discharge of pollutants to stormwater conveyance systems owned and maintained by Pierce County. The County recognizes that water quality degradation can result either directly from one discharge or through the collective impact of many small discharges. Therefore, this Chapter prohibits the discharge of pollutants into drainage facilities and outlines preventive measures to restrict pollutants from entering such facilities. These measures include the implementation of Best Management Practices (BMPs) by the property owners of Pierce County.

The County finds this Chapter is necessary to protect the health, safety, and welfare of the residents of Pierce County and the integrity of the County's water resources for the benefit of all by: minimizing or eliminating water quality degradation; preserving and enhancing the suitability of waters for recreation, fishing, and other beneficial uses; and preserving and enhancing the aesthetic quality and biotic integrity of the water.

Implementation of this Chapter is required under the Federal Clean Water Act, [33 U.S.C. 1251](#) et seq. In meeting the intent of the Clean Water Act by these provisions, the County also recognizes the importance of maintaining economic viability while providing necessary environmental protection.

(Ord. [2010-106s](#) § 1 (part), 2011; Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.020 Authority.

Under the provisions of the Federal Clean Water Act, [33 U.S.C. 1251](#) et seq., Pierce County is required to establish rules and regulations to control the discharge of pollutants into Pierce County's separate storm sewer system and to prevent and control the impacts of runoff. The County recognizes that clean water enhances the quality of life and has long-term economic benefits. The County intends to protect environmentally-sensitive areas, and the public benefits derived from clean water, and to implement the goals of the Clean Water Act, the state Water Pollution Control Act (Chapter [90.48](#) RCW), the Puget Sound Water Quality Protection Act (Chapter [90.71](#) RCW), the Growth Management Act (Chapter [36.70A](#) RCW), and the County's Comprehensive Plan. Because water quality issues cannot be resolved by independent jurisdictions, the County Council requests that the County Executive work on these issues on a regional basis. The County also recognizes that by enacting this Chapter, the County will avoid the severe financial penalties established in the Clean Water Act. (Ord. [2010-106s](#) § 1 (part), 2011; Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.030 Definitions. Revised 6/15

The following definitions shall apply in the interpretation and enforcement of this Chapter:

- A. "Act" means the Federal Clean Water Act, [33 U.S.C. 1251](#), et seq, as amended.
- B. "Best Management Practices" or "BMPs" mean the best available and reasonable physical, structural, managerial, or behavioral activities, that when used singly, or in combination, eliminate or reduce the contamination of surface and/or ground waters of the County.
- C. "Chapter" means this Chapter.
- D. "Clean Water Act" means [33 U.S.C. 1251](#) et. seq., as amended.
- E. "County" shall mean Pierce County, Washington, or as indicated by the context, County Executive, Director, or authorized designee.
- F. "Dangerous Waste" means any solid, liquid, or mixed waste defined according to WAC [173-303-080](#) through -110, as amended.
- G. "Director" means the Director of the Pierce County Public Works Department or any duly authorized representatives of the Director.
- H. "Discharge" means to throw, drain, release, dump, spill, empty, emit, or pour forth any matter or to cause or allow matter to flow, run, or seep from land to be thrown, drained, released, dumped, spilled, emptied, emitted, or poured into water.
- I. "Drainage Facility" means the system that collects, conveys, and stores surface and stormwater runoff. Drainage facilities shall include, but not be limited to, all surface and stormwater conveyance and containment facilities owned or operated by Pierce County included pipelines, channels, ditches, infiltration facilities, retention/detention facilities, erosion/sedimentation control facilities, and other drainage structures and appurtenances, and natural systems including rivers, streams, swamps, lakes,

wetlands, marine waters, closed depressions, and groundwater flooding areas within unincorporated Pierce County.

J. "Ecology" means the Washington State Department of Ecology.

K. "Farm Management Plan" means a comprehensive site-specific plan developed by the farm owner in cooperation with the Pierce County Conservation District and the Conservation Districts of the State of Washington, that takes into consideration the land owner's objectives while protecting water quality and related natural resources.

L. "Forest Practices" means any activity conducted on or directly pertaining to forest land and relating to growing, harvesting, or processing timber, as defined in Chapter [222-16](#) of the Washington Administrative Code.

M. "Ground Water" means all waters that exist beneath the land surface or beneath the bed of any stream, lake, or reservoir, or other body of surface water, whatever may be the geological formation or structure in which such water stands or flows, percolates, or otherwise moves.

N. "Hazardous material" means any material potentially harmful to life and/or property.

O. "Illicit Discharge" means the discharges defined by Section [11.05.040](#).

P. "May"/"Shall" -- "May" is permissive, "Shall" is mandatory.

Q. "Manual" means the current Pierce County Stormwater Management and Site Development Manual.

R. "National Pollutant Discharge Elimination System" or "NPDES" means the national program for controlling pollutants from non-point and point source discharges directly into waters of the United States under the Clean Water Act.

S. "National Pollutant Discharge Elimination System Permit" means an authorization, license, or equivalent control document issued by the Environmental Protection Agency or the Washington State Department of Ecology to implement the requirements of the NPDES program.

T. "Owner of Record" means a property owner, as reflected in the public title records.

U. "Person" means an individual, their agents or assigns; municipality; political subdivision; government agency; partnership; corporation; business; or any other entity.

V. "Pierce County Stormwater Management and Site Development Manual" means the latest version of the manual describing design, maintenance, best management practices, procedures, guidance for stormwater systems for new development and redevelopment, and guidance for preventing or treating pollutants in stormwater, to be utilized by businesses, industries and private residences, which has been approved by the Pierce County Council.

W. "Pollutant/Pollution" means such contamination, or other alteration of the physical, chemical, or biological properties, of any waters of the County, State or United States, including change in temperature, taste, color turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters as will or is likely to create a nuisance or render such waters harmful, detrimental, or injurious to the public health, safety, or welfare, or to domestic,

commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish, or other aquatic life.

X. "Sewage" means water-carried human waste or a combination of water-carried wastes from residences, business buildings, institutions, and industrial establishments, together with such ground, surface, storm, or other waters that may inadvertently enter the sanitary sewer system.

Y. "Shall"/"May" -- "Shall" is mandatory; "May" is permissive.

Z. "Source Control" means a BMP intended to prevent pollutants from entering surface and storm water and/or ground water including the modification of processes to eliminate the production or use of pollutants. Source control BMPs can be either structural or non-structural. Structural source control BMPs involve the construction of a physical structure on site, or other type of physical modification to a site; for example, building a covered storage area. A non-structural source control BMP involves the modification or addition of managerial or behavioral practices; for example, using less toxic alternatives to current products or sweeping vehicle parking lots.

AA. "State", when used as a noun, means the State of Washington.

BB. "State Waste Discharge Permit" means an authorization, license, or equivalent control document issued by the Washington State Department of Ecology in accordance with Chapter [173-216](#) of the Washington Administrative Code.

CC. "Surface and Stormwater" means water originating from rainfall and other precipitation that is found in drainage facilities, rivers, streams, springs, seeps, ponds, lakes, and wetlands, as well as shallow ground water.

DD. "Treatment" means the reduction or elimination of pollutants in stormwater prior to or in lieu of discharging or otherwise introducing such pollutants into the stormwater system.

EE. "Treatment BMP" means a BMP intended to remove pollutants once they are already contained in stormwater. Examples of treatment BMPs include: oil/water separators, biofiltration swales, and wet-settling basins.

FF. "Toxic Pollutants" means those pollutants, or combination of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the Director, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including reproductive malfunctions), or physical deformations in such organisms or their offsprings.

GG. "Waters of the State/Waters of the United States" means:

1. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters, including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect interstate or foreign commerce, including any such waters:
 - a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - c. Which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs 1. through 6. of this definition;
6. The territorial sea;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs 1. through 6. of this definition;
8. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (other than cooling ponds as defined in [40 CFR 423.11\(m\)](#) which also meet the criteria of this definition), are not waters of the United States;
9. The following guidelines can also help determine the status of a particular drainage conveyance:
 - a. If flow is year-round and of natural origin, it is a Water of the United States.
 - b. If the flow is intermittent but flows seasonally (not just during storm events), it is a Water of the United States.
 - c. If Federal or State in-stream water quality standards apply, it is a Water of the United States.
 - d. Naturally occurring drainage ditches are considered tributaries thereof to Waters of the United States.
10. Waters of the State shall include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and watercourses within the jurisdiction of the state of Washington.

(Ord. [2015-25s](#) § 2 (part), 2015; Ord. [2010-106s](#) § 1 (part), 2011; Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.040 Stormwater Discharges. Revised 6/15

A. **Illicit discharges.** It is unlawful for any person to discharge any pollutants into drainage facilities.

Pollutants include, but are not limited, to the following:

1. trash or debris;
2. solid waste;
3. construction materials;
4. petroleum products including but not limited to oil, gasoline, grease, fuel oil, heating oil;
5. antifreeze and other automotive products;
6. fixed and mobile vehicle washes, including home car washing;
7. metals in either particulate or dissolved form, in excess of naturally occurring amounts;
8. flammable or explosive materials;
9. radioactive materials;
10. batteries;
11. acids, alkalis, or bases;
12. paints, stains, resins, lacquers, or varnishes;
13. degreasers and/or solvents;
14. drain cleaners;
15. commercial and household cleaning materials;
16. carpet cleaning wastes;
17. pesticides, herbicides, or fertilizers;
18. steam cleaning wastes;
19. laundry waste;
20. soaps, detergents, or ammonia;
21. swimming pool backwash (diatomaceous earth);
22. chlorine, bromine, and other disinfectants;
23. heated water;
24. chlorinated swimming pool or hot tub water greater than 0.1 ppm chlorine;
25. human and animal wastes;
26. domestic or sanitary sewage;
27. recreational vehicle waste;
28. animal carcasses;
29. food and food wastes;
30. yard waste;
31. bark and other fibrous materials; does not include large woody debris (LWD) in approved restoration projects;
32. collected lawn clippings, leaves, or branches;

33. wastes associated with building construction;
34. concrete and concrete by-products;
35. silt, sediment, including dirt, sand, and gravel;
36. dyes and ink (except as stated in subsection C.1. of this Section);
37. chemicals, not normally found in uncontaminated water;
38. runoff from lawn/landscaping watering;
39. practice firefighting activities;
40. any hazardous material or waste not listed above.

B. Illicit Connections. Any connection identified by the Director that could convey anything not composed entirely of surface and stormwater directly into drainage facilities is considered an illicit connection and is prohibited with the following exceptions: connections conveying allowable discharges, or connections conveying discharges pursuant to an NPDES permit or a State Waste Discharge Permit. When the Director has reason to believe that an illicit connection is resulting in an illicit discharge, the Director may sample and analyze the discharge and recover the costs from a person in an enforcement proceeding. When the discharge is likely to contain illicit discharges on a recurring basis, the Director may conduct, or may require the person to conduct ongoing monitoring (including sampling and testing) at the person's expense. Illicit connections must be removed or obtain permits at the discretion of the Director.

C. Requirements for Discharges and Land Uses. For all existing discharges that drain directly or indirectly to a drainage facility, persons shall implement and maintain non-structural and, if necessary, structural BMP's, to comply with Pierce County's Municipal NPDES permit requirements and this Chapter. Non-structural BMP's shall include, but not be limited to, maintenance and housekeeping practices, sweeping of parking lots, storing oil barrels and other contaminant sources out of the rain, covering material stockpiles, and proper use and storage of hazardous materials. Structural BMP's include, but shall not be limited to, constructed facilities such as detention tanks, wet ponds, oil/water separators, grassed swales, roofing and berms for container storage areas, and revised piping systems.

All commercial and industrial facilities with a potential to pollute shall take measures to prevent spills or other accidental introduction of illicit discharges into a drainage facility. Such measures shall include:

1. Establishment and implementation of plans and procedures to prevent spills and accidental releases of materials that may contaminate stormwater;
2. Implementation of procedures for immediate containment and other appropriate action regarding spills and other accidental releases to prevent contamination of stormwater;
3. Provision of necessary containment and response equipment on-site, and training of personnel regarding the procedures and equipment to be used.

The provisions of this subsection may be satisfied by a Stormwater Pollution Prevention Plan prepared in compliance with a NPDES industrial stormwater permit for the site. The persons shall make the plan and procedures required by this subsection available to the Director when requested.

A person must, at the earliest possible time, but in any case within 24 hours of discovery, report to the Director a spill, release, dumping, or other situation that has contributed or is likely to contribute pollutants into waters discharged to a drainage facility. This reporting requirement is in addition to, and not instead of, any other reporting requirements under federal, state, or local laws.

D. **Allowable Discharges.** The following types of discharges shall not be considered illicit discharges for the purpose of this Chapter unless the Director determines that the type of discharge, whether singly or in combination with others, is causing significant contamination of drainage facilities and is causing or contributing to a violation of the County's NPDES stormwater permit:

1. potable water;
2. potable water line flushing, provided the water is not chlorinated in excess of 0.1 ppm total chlorine and will have no detectable total chlorine residual upon reaching waters of the State or United States;
3. uncontaminated water from crawl space pumps or footing drains;
4. dechlorinated swimming pool water; however, Pierce County Surface Water Management must be notified in advance to ensure release is not in excess of drainage system capacity;
5. materials placed as part of a County approved habitat restoration or bank stabilization project;
6. natural uncontaminated surface water or ground water;
7. flows from riparian habitats and wetlands; and
8. other uncontaminated water as determined by the Director.

When BMPs are outlined for these activities in the Manual, said BMPs, or BMPs of equivalent effectiveness, shall be followed.

E. **Exceptions to Illicit Discharges.**

1. Dye testing is allowable but requires verbal notification to the Pierce County Public Works Storm Drainage and Surface Water Management Utility at least one working day prior to the date of the test. The Tacoma-Pierce County Health Department is exempt from this requirement.
2. If a person can demonstrate that there are no additional pollutants being discharged from the site above the background conditions of the water entering the site, that person shall not be in violation of subsection A. of this Section.
3. Emergency response activities or other actions that must be undertaken immediately or within a time too short to allow full compliance with this Chapter to avoid an imminent threat to public health or safety, shall be exempt from this Section. The person responsible for emergency response activities should take steps to ensure that the discharges resulting from such activities are minimized to the greatest extent possible. In addition, the person shall evaluate BMPs and the site plan, where applicable, to prevent reoccurrence.

(Ord. [2015-25s](#) § 2 (part), 2015; Ord. [2010-106s](#) § 1 (part), 2011; Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.050 Stormwater Management and Site Development Manual. Revised 6/15

A. **General.** The Pierce County Stormwater Management and Site Development Manual contains requirements and guidelines to assist persons discharging into municipal drainage systems to stay in compliance with this Chapter. The Manual shall present best management practices, procedures and guidance for existing facilities and activities and for new development activities. The Manual is available for inspection and sale through Pierce County Public Works. In addition, the Pierce County Public Works Storm Drainage and Surface Water Management Utility will provide, upon reasonable request, available technical assistance materials and information, and information on outside financial assistance options to persons required to comply with this Chapter.

B. **Exemptions.** Persons implementing BMPs through other federal, state, or local programs will not be required to implement the BMPs prescribed in the Manual, unless the Director determines that the alternative BMPs are ineffective in reducing the discharge of pollutants. If another program requires the development of a plan, the person shall make their plan available to Pierce County Public Works Storm Drainage and Surface Water Management Utility upon request. Persons who qualify for exemptions include, but are not limited to, those:

1. Required to obtain or permitted under a general or individual NPDES permit for stormwater discharges from the Washington State Department of Ecology or Environmental Protection Agency;
2. Implementing and maintaining, as scheduled, a farm management plan approved by a Conservation District;
3. Engaged in forest practices, with the exception of Class IV, and Class IVA Special general forest practices. This Section will apply to Class IV general forest practices on lands platted after January 1, 1960, or on lands being converted to another use, or where the activity is taking place in areas designated by the Washington State Department of Natural Resources as lands with a likelihood of future conversion.

(Ord. [2015-25s](#) § 2 (part), 2015; Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.060 Administration.

A. **General.** The Director is authorized to implement and enforce the provisions of this Chapter. The Director will coordinate the implementation and enforcement of this Chapter with other departments of Pierce County government.

B. **Treatment BMPs.** In the event that a person discharges stormwater into a Municipal Drainage Facility that is not of a quality that complies with County, State, and Federal technology-based requirements, or where determined necessary, water quality-based requirements, the person shall provide necessary source control/stormwater treatment BMPs as required to comply with these requirements. The Manual shall be used to select acceptable technologies. Any facility required to treat stormwater to an acceptable level shall be provided and shall be properly operated and maintained at the

user's expense. Detailed engineering plans and specifications showing the treatment facilities shall be submitted to the County for review, and must be acceptable to the County before construction of the facility. The person shall obtain all necessary construction/operating permits from the County. Depending upon size and complexity of the treatment facility, the County may find it necessary to require that the facility be run by a qualified operator. Necessary qualifications shall be determined by the County in each individual case. The review of such plans shall in no way relieve the person from the responsibility of modifying its facility as necessary to produce a stormwater effluent acceptable to the County under the provisions of this Chapter. Upon completion of the treatment facility, the person shall furnish its operations and maintenance procedures to the County for review and approval. Any subsequent significant changes in the treatment facilities or operation and maintenance procedures shall be reported to and be accepted by the County prior to the person's initiation of the changes.

C. Inspection and Sampling. The County may inspect the facilities of any person to determine compliance with the requirements of these regulations. The person shall allow the County to enter upon the premises of the person at all reasonable hours for the purposes of inspection, sampling, or records examination. The County shall have the right to inspect and copy any of the person's records that are required by, or that relate to, compliance with the terms and conditions of these regulations. The County shall have the right to set up on the person's property such devices as are necessary to conduct sampling, inspection, compliance monitoring, and/or metering operations.

D. Confidential Information. Information and data furnished to the County with respect to the nature and frequency of discharge into the stormwater system shall be available to the public or to other governmental agencies without restriction unless the person specifically requests and is able to demonstrate to the satisfaction of the Director that the release of such information would divulge information, processes, or methods of production entitled to protection as trade secrets or proprietary information of the person. When requested by a person furnishing a report, the portions of a report or other information which may disclose trade secrets or secret processes shall not be made available for inspection by the public but shall be made available upon written request to governmental agencies for uses related to these regulations, NPDES Permit and/or other programs as amended; however such portions of a report or other information shall be available for use by the County, the State, or any other public agency in enforcement proceedings involving the person furnishing the report. The constituents and characteristics of the stormwater will not be recognized as confidential information. Information accepted by the County as confidential shall not be transmitted to any governmental agency or to the general public by the Director until and unless a ten day notification is given to the person.

(Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.080 Enforcement.

A. **Authorization.** The Director is authorized to enforce this Chapter and any permit, order or approval issued pursuant to this Chapter, against any violation or threatened violation thereof. Violations of this Chapter shall constitute a public nuisance. The Director is authorized to take enforcement actions against persons responsible for illicit discharges and connections, as well as dumping as described in this Chapter.

B. **Compliance.** The Director shall attain compliance with this Chapter by requiring the implementation of BMPs and maintenance of BMPs. The Director shall initially rely on education and informational assistance to gain compliance with this Chapter, unless the Director determines a violation poses a hazard to public health, safety, or welfare, endangers any property, or adversely affects the safety and operation of County right-of-way, utilities and/or other property owned or maintained by the County, that should be addressed through immediate penalties. The Director may demand immediate cessation of discharges and assess penalties for violations that are an imminent or substantial danger to the health or welfare of persons or danger to the environment.

(Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.090 Penalties. Revised 6/15

A. **Enforcement Actions.** The County shall be responsible for enforcing this Title. The County is authorized to issue violation notices, orders, levy fines, recover costs, issue notices of civil infraction, and/or institute both civil and criminal actions in the court. Recourse to any single remedy shall not preclude recourse to any other remedies available to the County.

B. **Notice and Order to Correct.** The County is authorized to issue a Notice of Violation and Order to Correct for violations of this Chapter to the individuals who own or maintain the property where the violation occurred. The order shall include the following:

1. **Description of Violation.** The Notice of Violation and Order to Correct shall describe the violation and shall order appropriate corrective action(s) to be taken within a specified time period.
2. **Compliance.** Every order shall require appropriate corrective action(s) to be completed within a specified time period.
3. **Service.** The Notice and Order shall be served by any one or combination of the following methods:
 - a. by both first class and certified mail with a return receipt requested; or
 - b. by posting the order in a prominent location on the property where the violation occurred, or
 - c. by personal service.
4. **Appeals.** Appeals of written orders shall proceed according to PCC [1.22.090](#), Pierce County Hearing Examiner Code, as an appeal of an administrative decision. The notice of the appeal shall be submitted at the Pierce County Development Center along with payment of the required appeal fee within 14 days

of the date of the order. After hearing said matter, the Examiner shall issue a decision upholding, revoking, or modifying the order.

C. **Civil Infraction.** Failure to comply with the terms of a written order shall constitute a class 1 civil infraction to be prosecuted in accordance with Chapter [1.16](#) PCC. Each day that a person fails to comply with the terms of a written order issued under this Chapter shall constitute a separate violation.

D. **Civil Penalty.** The provisions of this Section are in addition to and not in lieu of any other penalty, sanction or right of action provided by law. The purpose of this penalty is to encourage compliance with this Chapter and to obtain redress for ecological, recreational, and economic values lost or damaged due to the unlawful action. Any person who fails to obtain a necessary permit for discharge into a drainage facility shall be assessed a civil penalty as follows:

1. The Director may assess the violator a civil penalty not to exceed \$1,000.00 for each violation. Each violation or each day of continued unlawful activity shall constitute a separate violation.
2. Any person who, through an act of commission or omission, aids in a violation shall be considered to have committed the violation for purposes of the civil penalty.
3. The penalty provided for in this Section shall be imposed by the Director in writing, either by certified mail with return receipt requested or by personal service, to the person incurring the penalty, describing the violation with reasonable particularity and ordering appropriate corrective action to be taken within a specified time.
4. Within 30 days after the notice of penalty is received, the person incurring the penalty may apply in writing to the Director for remission or mitigation of such penalty. Upon receipt of the application, the Director may remit or mitigate the penalty upon whatever terms is deemed proper to bring about compliance with this Chapter.
5. Any decision(s) regarding remission or mitigation of the penalties imposed pursuant to this subsection may be appealed to the Pierce County Hearing Examiner under Chapter [1.22](#) PCC as an appeal of an administrative decision. The appellant shall submit a notice of appeal at the Pierce County Development Center along with payment of the required appeal fee within 14 days of the date of the decision.
6. If the penalty is not appealed, the violator will have up to 30 days after receipt of notice for payment of the penalty, unless a written request is made to the Director and granted for a longer payment period.
7. All civil penalties recovered during the enforcement of this Section shall be deposited into a fund of the division taking the enforcement action and shall be used for the protection of surface and stormwater or groundwater as set forth in this Chapter.

E. **Recovery of Costs Incurred by the County.** Any person violating any of the provisions of this Chapter, who discharges or causes a discharge which violates the County's NPDES permit and/or produces a deposit or obstruction or causes damage to or impairs a drainage facility, or causes damage to physical, chemical, or biological systems, of waters of the State or waters of the United States, shall be

liable to the County for any expense, loss, or damage caused by such violation or discharge, including the costs for bringing the County back into compliance with its NPDES permit associated with the violation of these regulations, and any fines levied for violations of the County's NPDES permit.

F. Appeal Rights of Recovery of Cost Assessments. A Billing Statement issued by the Director or designee is appealable within 14 days from the date of the letter. Appeals may be filed by submitting a \$300.00 appeal fee along with written statement identifying the basis for disputing County claim to the Public Works Department.

G. Violators Punishable by Fine and Imprisonment. Any person who, without authorization, discharges pollutants into a drainage facility, uses an unapproved connection to discharge into a drainage facility, submits false information in permitting and reporting requirements, violates the terms and conditions of a permit, fails to comply with an order issued by the Director or designee, fails to pay a civil penalty or cost recovery assessment, or obstructs or damages a drainage facility shall be deemed guilty of a misdemeanor, and shall be punished by fine not to exceed \$1,000.00 or by imprisonment not to exceed 90 days, or by both such a fine and imprisonment. Each person found guilty of a violation shall be deemed guilty of a separate offense for every day during any portion of which the violation is committed, continued, or permitted by such person and shall be punishable as provided for in this Chapter. Any person who, through an act of commission or omission, procures, aids, or abets in violation shall be considered to have committed a violation for the purpose of this Section.

H. Injunction and other Civil Remedies. In addition to any other penalty or method of enforcement, the prosecuting attorney may bring civil actions and suits for damages, injunctive relief and/or for other civil remedies as necessary. Any violation of this Chapter shall constitute a public nuisance, and may be enjoined as provided by the Statutes of the State of Washington.

(Ord. [2015-25s](#) § 2 (part), 2015; Ord. [2010-106s](#) § 1 (part), 2011; Ord. [2008-59s](#) § 1 (part), 2008; Ord. [96-47](#) § 1 (part), 1997)

11.05.100 Records Retention.

All Persons subject to these regulations shall retain and preserve for no less than three years any records, books, documents, memoranda, reports, correspondence, and any and all summaries thereof, relating to operation, maintenance, monitoring, sampling, and chemical analysis made by or on behalf of a person in connection with its discharge. All records which pertain to matters which are the subject of Administrative Adjustment or any other enforcement or litigation activities brought by the Director pursuant to this Chapter shall be retained and preserved by the Person until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired. (Ord. [96-47](#) § 1 (part), 1997)

11.05.110 Construction – Intent.

This Chapter is enacted as an exercise of the County's power to protect and preserve the public health, safety, and welfare. Its provisions shall be liberally construed to give full effect to the objectives and purposes for which it was enacted. This Chapter is not enacted to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefitted by the terms of this Chapter.

The primary obligation of compliance with this Chapter is placed upon the person holding title to the property. Nothing contained in this Chapter is intended to be or shall be construed to create or form a basis for liability for the County, the Department, its officers, employees or agents for any injury or damage resulting from the failure of the person holding title to the property (owner of record) to comply with the provisions of this Chapter, or by reason or in consequence of any act or omission to act in connection with the implementation or enforcement of this Chapter by the County, the Department, its officers, employees, or agents.

(Ord. [96-47](#) § 1 (part), 1997)

11.05.120 Severability.

If any Section, clause, or provision of this Chapter is declared invalid by the courts, the same shall not affect the validity of the Chapter as a whole or any part thereof, other than the part declared invalid. (Ord. [96-47](#) § 1 (part), 1997)

APPENDIX B
Pierce County Executive Order EO 2017-01



EXECUTIVE ORDER NO. 2017-01,
Concerning Effective Stormwater Management
Pierce County, Washington

This Order requires and empowers Pierce County Departments to fully implement all applicable provisions of the NPDES Phase I Municipal Stormwater Permit issued to Pierce County. It is the intent of this Order that Pierce County departments coordinate, implement, track, and report specific actions required by the Permit. It is further the intent of this Order that Pierce County exercises its role in reducing polluted runoff into and out of County drainage systems, facilities and properties to the maximum extent practicable to protect Pierce County's surface and ground water resources and to continue to be a leader for water quality in the Puget Sound Region.

WHEREAS, polluted runoff is a leading cause of impairment of Pierce County's waterbodies; and

WHEREAS, waterbody impairment negatively affects beneficial uses of surface waters, including people, fish, shellfish, and wildlife, and hinder sustainable and livable communities; and

WHEREAS, effective control and reduction of polluted runoff is essential for ecological and economic health; and

WHEREAS, Pierce County has operated under a federal Clean Water Act, National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Stormwater Permit since 1995 which requires a program to reduce negative effects of polluted runoff; and

WHEREAS, Pierce County invests millions of dollars annually towards implementation of the NPDES Permit and implements other local programs aimed at improving water quality; and

WHEREAS, Pierce County intends to fully meet its NPDES Stormwater Permit responsibilities and immediately take actions to enhance its implementation as needed;

NOW THEREFORE, I, Bruce Dammeier, Pierce County Executive, do hereby order and direct all Pierce County departments to implement the following to ensure Pierce County's full and continuing compliance with its municipal stormwater permit, to prevent or reduce polluted runoff into and out of County drainage systems, facilities, and properties, and to continue to be a leader for water quality in the Puget Sound Region:

1. Organization

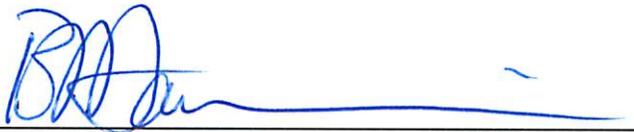
- a. The Surface Water Management Division of Planning and Public Works shall be County policy and administrative lead on the NPDES Stormwater Permit and shall also be responsible for reporting, including the County's overall annual report to the Department of Ecology, and evaluating permit compliance as well as lead for monitoring, inspections, training, outreach, internal technical assistance, maintenance and development standards, illicit stormwater discharge response, and intra- and inter-jurisdictional coordination.
- b. Each affected department of the County that owns assets or conducts actions regulated under the Permit or whose activities or programs could support its water quality goals shall be responsible for understanding and fully implementing the requirements of the municipal stormwater Permit and for integrating compliance activities into departmental programs and plans.
- c. Each department engaging in any activity or program that may be subject to or could support the municipal stormwater Permit shall designate a municipal Permit lead who will assist Surface Water Management in analyzing the Permit for its applicability to the department's programs and activities.
- d. Each department having assets or activities regulated by the Permit shall fully comply with all applicable Permit requirements, including, but not limited to, site development, construction oversight, source control, record keeping, tracking and reporting, and staff training.
- e. Each department having assets or activities regulated by the Permit shall fully coordinate and respond to reports, records, policies and procedural inquiries conducted by Surface Water Management in fulfilling its duties as County Permit lead.

2. Oversight of County Construction Projects

- a. Every County department or division that conducts construction activities regulated under the NPDES Phase I Municipal Stormwater Permit or under the NPDES Construction Sites Permit shall continue to fully implement all applicable requirements for onsite Erosion and Sedimentation Control (ESC) lead designation and Stormwater Pollution Prevention Plan development, training, onsite inspection, and monitoring report requirements.
- b. Each County department or division that conducts construction activities regulated under the NPDES Phase I Municipal Stormwater Permit or under the NPDES Construction Sites Permit shall exercise provision 1-09.9 (page 1-94, WSDOT 2012 Standard Contract Specifications), or equivalent, to withhold payment in the event the contractor fails to fully meet terms of the NPDES Phase I Municipal Stormwater Permit or the NPDES Construction Sites Permit for the County's construction project.

3. Pollution Prevention and Source Control
 - a. Every County department or division that owns lands, structures or portions of the County's municipal separate stormwater sewer system shall implement pollution prevention and operational source control best management practices and if necessary, structural source control best management practices.
4. Designation of County NPDES Stormwater Permit Training Coordinator
 - a. There is hereby designated a full time NPDES Stormwater Permit Training Coordinator in Surface Water Management Division. The duties of the Training Coordinator shall be to develop, deliver, evaluate, track, and report NPDES Stormwater Permit related training for County staff, tenants of County facilities, and others as applicable.
5. This Executive Order supersedes EO 2008-01 and EO 2012-01

Effective Date: July 13, 2017



Bruce F. Dammeier, Pierce County Executive

APPENDIX C
Pierce County Code (PCC) 2015 48S

1 Sponsored by: Councilmembers Connie Ladenburg and Derek Young
2 Requested by: County Executive/Public Works Department
3
4
5

6 **ORDINANCE NO. 2015-48s**

7
8
9

10 **An Ordinance of the Pierce County Council Amending Pierce County Code**
11 **Title 17A, "Construction and Infrastructure Regulations –**
12 **Site Development and Stormwater Drainage," and Title 17B,**
13 **"Construction and Infrastructure Regulations – Road and**
14 **Bridge Design and Construction Standards"; Repealing the**
15 **"Pierce County Stormwater Management and Site**
16 **Development Manual" Adopted Pursuant to Ordinance No.**
17 **2008-59s, as Amended; Adopting a New Manual Titled**
18 **"Pierce County Stormwater Management and Site**
19 **Development Manual"; Amending Pierce County Code**
20 **Chapter 2.05, "Planning and Land Services and Assessor-**
21 **Treasurer Development Review, Inspection and Application/**
22 **Processing Fees," and Chapter 18.25, "Definitions"; and**
23 **Setting an Effective Date.**
24

25 **Whereas**, Pierce County is a Phase 1 National Pollutant Discharge Elimination
26 System (NPDES) permittee operating a municipal separate storm sewer system under a
27 permit (hereinafter referred to as the "Phase 1 MS4 General Permit") issued by the
28 Washington State Department of Ecology (Ecology) as directed by the Federal Clean
29 Water Act (CWA) and the State Water Pollution Control Law (Chapter 90.48 RCW); and
30

31 **Whereas**, in accordance with schedules mandating periodic approval of Phase 1
32 MS4 General Permits, a new NPDES Permit for Pierce County was issued on August 1,
33 2012, with an effective date of August 1, 2013, and subsequently modified on
34 January 16, 2015, by Ecology; and
35

36 **Whereas**, a requirement of the Phase 1 MS4 General Permit is that Pierce
37 County adopt a Stormwater Manual which has been determined by Ecology to be
38 equivalent to the Ecology "Stormwater Management Manual for Western Washington"
39 for controlling the quantity and quality of stormwater runoff; and
40

41 **Whereas**, the Pierce County Council recognizes that stormwater is an important
42 part of the hydrologic cycle and directly impacts streams, wetlands, lakes, creeks,
43 potholes, groundwater, the Puget Sound, and is a primary component responsible for
44 aquifer recharge; and
45
46



1 **Whereas**, the Pierce County Council recognizes that appropriate controls for
2 stormwater are necessary to protect public and private property from the impacts of
3 runoff such as flooding, erosion, and sedimentation due to runoff from development,
4 redevelopment, and land disturbing activities; and

5
6 **Whereas**, the adoption of an Ecology equivalent Stormwater Manual will add an
7 incremental level of complexity to the permit process, will require initial procedural
8 development, also additional staff time to review an application, and continued training
9 to assure that development activity is reviewed consistently and correctly; **Now**

10 **Therefore,**

11
12 **BE IT ORDAINED by the Council of Pierce County:**

13
14 Section 1. Title 17A of the Pierce County Code, "Construction and Infrastructure
15 Regulations – Site Development and Stormwater Drainage," is hereby amended as
16 shown in Exhibit A attached hereto and incorporated herein by reference.

17
18 Section 2. Title 17B of the Pierce County Code, "Construction and Infrastructure
19 Regulations – Road and Bridge Design and Construction Standards," is hereby
20 amended as shown in Exhibit B attached hereto and incorporated herein by reference.

21
22 Section 3. The Pierce County Council hereby repeals updates "Pierce County
23 Stormwater Management and Site Development Manual" adopted pursuant to Ord.
24 2008-59s, as amended, and adopts a new manual titled "Pierce County Stormwater
25 Management and Site Development Manual", attached hereto as Exhibit C and
26 incorporated herein by reference.

27
28 Section 4. Chapter 2.05 of the Pierce County Code, "Planning and Land
29 Services and Assessor-Treasurer Development Review, Inspection and Application/
30 Processing Fees," is hereby amended as shown in Exhibit D, which is attached hereto
31 and incorporated herein by reference.

32
33 Section 5. Chapter 18.25 of the Pierce County Code, "Definitions," is hereby
34 amended as shown in Exhibit E, which is attached hereto and incorporated herein by
35 reference.

36
37 Section 6. The Pierce County Council hereby directs the Department of Public
38 Works and the Planning and Land Services Department to create procedural
39 development aides along with appropriate training to implement the new Manual.

40
41 Section 7. The Council recognizes that formatting, numbering, and citation
42 modifications to Exhibit C may be necessary as a result of amendments made during
43 the legislative process. To this extent, the Clerk of the Council is hereby authorized to
44 modify Exhibit C prior to final printing so that any Council amendments are accurately
45 reflected throughout the document and formatting, numbering, and citations are
46 correctly shown. The Clerk of the Council is also authorized to correct spelling and
47 punctuation errors as necessary.



1 Section 8. This Ordinance shall become effective on December 5, 2015.
2
3

4 PASSED this 28th day of October, 2015.
5

6 ATTEST:

7 **PIERCE COUNTY COUNCIL**
8 Pierce County, Washington

9 Denise D. Johnson
10
11 **Denise D. Johnson**
12 Clerk of the Council

13 Dan Roach
14
15 **Dan Roach**
16 Council Chair

17 Pat McCarthy
18 **Pat McCarthy**
19 Pierce County Executive
20 Approved Vetoed , this
21 9 day of November,
22 2015.

23 Date of Publication of
24 Notice of Public Hearing: October 14, 2015

25 Effective Date of Ordinance: December 5, 2015
26
27
28
29
30
31
32



APPENDIX D
PALS DE Performance Monitoring Inspection Process
DE-POL-5100

PIERCE COUNTY

Planning and Land Services

Development Engineering

Effective Date: April 26, 2012

Supersedes: NA – First Edition

POLICY

DE POL 5100 Performance Monitoring Inspection Process

Prepared By: Scott Murdock, Inspection Supervisor *SM*

Approved By: Mitchell Brells, P.E., Development Engineering Manager *MAB*

See Also:

- 2007 Phase I Municipal Stormwater Permit Section S5.C.9.b.ii (3)&(4)
- Development Engineering Inspectors' Meeting Notes
- Dev Eng Industry Notice 4 – Performance Phase Monitoring Fees
- Maintenance Checklists, PC Stormwater Mgmt & Site Development Manual, Appendix 1B

Applicability: Prescribes the Performance Monitoring Inspection Process applicable to all permitted site development projects of sufficient scale to require any form of Maintenance Guarantee (aka Maintenance & Defect Guarantee, 18 month bond, 24 Month Bond, 42 Month Bond, etc.). This policy will describe the process and procedures for scheduling, completing, tracking and administering all inspections required throughout the Maintenance Bonding Period. These will typically include Performance Monitoring Inspections conducted throughout, and Bond Release Inspections conducted at the end of, the Maintenance Bonding Period.

Purpose: The Performance Monitoring Inspection Process is intended to insure that;

- Permitted storm drainage systems continue to function properly throughout the Maintenance and Defect bonding period.
- That the responsible party is completing necessary maintenance or repairs in a timely manner.
- That the system is properly protected from adverse impacts related to ongoing development activities (i.e. home building in plats).
- That any necessary maintenance or corrective work is completed and all known issues resolved prior to the release of any form of Maintenance Guarantee associated with the project.

This is the process by which Development Engineering meets our NPDES Permit obligation to conduct ongoing monitoring of permitted development projects from the time of final construction approval until the last financial guarantee associated with the project is released or forfeited. Once the last financial guarantee is released or forfeited, the project has finished the development process and the responsibility for any ongoing inspections transitions to the Surface Water Management Division of the Public Works and Utilities

DE POL 5100 Performance Monitoring Inspection Process

Department.

Process: Effective January 1st, 2010 all general site development projects seeking final approval, and of sufficient scale to require any form of Maintenance Guarantee, have been required to obtain a Performance Monitoring Permit. This permit is used to establish responsible party contact information, to schedule and track all inspections and follow up activities required throughout the maintenance bonding period, and to fund the Performance Monitoring Inspection Process.

The Development Engineering Inspection Supervisor is responsible for managing this process. Performance Monitoring Inspections will be conducted semi-annually for subdivisions and annually for all other projects. Additional Performance Monitoring Inspections will be scheduled and completed as necessary when and/or if the Inspection Team has any reason to believe there may be a maintenance, design or performance related issue affecting any project in the maintenance bonding phase.

Routine periodic Performance Monitoring Inspections will be scheduled using the Permit Monitoring Report in PALS+. Performance Monitoring Inspections will be scheduled in PALS+ for projects returned on the report as being due for inspection. The report will be run and inspections scheduled on or about the 1st of every month. The assigned inspector will subsequently receive an inspection worksheet and will be expected to complete the required inspection within 21 days of the request.

Performance Monitoring Inspections – When a project has been properly constructed and is being properly maintained, Performance Monitoring Inspections should be relatively brief inspection visits. The Inspector will complete these inspections keeping the objectives listed in the 'Purpose' section above in mind. The following specific items will be checked:

1. Overall cleanliness of the storm drainage system. The underground storm drainage system will be spot checked starting with the roadway catch basin(s) first upstream from the primary drainage facility.
2. Physical integrity of the required road and storm drainage improvements. Have any defects developed or any damage occurred that is not directly attributable to another permitted project?
3. Site Stability/Erosion and Sediment Protection. Are there exposed or disturbed areas either within this project or adjacent to it which drain to the project's storm drainage system? If so, have adequate measures been put in place to protect the storm drainage system?
4. Operational effectiveness. Does the water level in the wet, detention and/or infiltration facilities appear reasonable considering recent weather conditions? Is there any visible evidence of overflowing or uncontrolled discharge? Does the control structure remain in place and intact and is the clean out gate closed? Does the storm drainage system appear to be functioning properly as far as you can tell?
5. Water Quality. What is the condition/clarity of the water in the primary drainage facilities? What is the condition/clarity of any water being discharged from the site?

DE POL 5100 Performance Monitoring Inspection Process

6. **Vegetation Management.** Is there undesirable vegetation taking hold in open drainage facilities? Are bioswales being properly mowed & maintained? Is required vegetation in wet ponds and/or rain gardens intact and alive?
7. **Safety Concerns.** Are fences, trash racks and other required safety measures still in place and intact? Are there any obvious or known safety concerns on site?

Extensive guidance on inspecting various types of drainage systems and passing judgment on their condition is available in the Maintenance Checklists of the Pierce County Stormwater Management and Site Development Manual.

Once the inspector has completed the inspection, he or she will need to classify any deficiencies into one of two categories. The first category would be items or deficiencies that require immediate attention. Correction of any actual or potential off site water quality impact or safety concern, and routine maintenance that should be ongoing, will all normally fall in this category. A 30 day deadline and follow up inspection will be scheduled for these items. The second category would be items that have been noted and must be corrected or resolved prior to release of the maintenance guarantee. Care should be taken when relating these items to be clear that they should not be interpreted as a Bond Release punch list.

The inspectors Performance Monitoring Inspection Report should include the following elements:

- A statement concerning the overall condition of the project.
- For plats, a statement concerning the built out status (i.e. 'Homes have been constructed and appear complete on ~30% of the lots').
- A list of items to be completed within 30 days (or a shorter period for safety or more significant concerns) and an explicitly stated deadline.
- A list of items to be completed or resolved prior to bond release and a statement that this is not a bond release punch list.

Therefore, a typical Performance Monitoring Inspection Report might read as follows;

Date: **1 Jan 2012** Inspection Type: **Performance Monitoring** Result: **Incomplete**

The roads and storm drainage improvements associated with Project X are relatively clean and appear to be functioning properly. There was approximately six inches of water in the pond at the time of my visit. Homes have been built and appear complete on ~50% of the lots.

The following deficiencies were noted and must be corrected within 30 days:

- 1. The insert in CB39 is nearly full and must be serviced.**
- 2. Excessively long grass and invasive weeds were noted in the bioswale. The**

DE POL 5100 Performance Monitoring Inspection Process

bioswale must be mowed & weeds removed.

The following deficiency was noted and must be corrected prior to release of the Maintenance Guarantee:

1. Graffiti has been painted over the pond facility sign. It must be removed, or the sign must be replaced.

Note: It is important to contact your inspector and make appropriate arrangements if the requirements listed can not be completed by the established due dates in order to avoid reinspection fees and other enforcement action. The items listed above should not be interpreted as a bond release punch list as the bonding period has not yet concluded and a Bond Release inspection has not yet been completed. It is important to keep records of your own inspections and maintenance activities as you will be asked to submit these at the end of the maintenance bonding period.

A predefined inspection comment has been set up in PALS+ to facilitate this reporting format.

It is the principal's responsibility to request a Bond Release Inspection at the end of the maintenance bonding period. Upon receiving a Bond Release Inspection request, the inspector will verify;

- That any outstanding fees associated with the Performance Monitoring Permit have been paid.
- That any build out requirements have been met.
- That the project is actually due for Bond Release Inspection based on the maintenance bonding period applicable to that particular project.
- That the principal has submitted the required maintenance and inspection records.
- That County inspection records show that the proponent has adequately responded to inspection requirements identified throughout the maintenance bonding period.
- That any known outstanding issues have been resolved.

If all of the above requirements have been met, the Inspector will accept the Bond Release Inspection request and work it into his or her existing workload on a first come/first serve basis.

Maintenance and Defect Bond Release Inspections – Bond Release inspections conducted at the end of the Maintenance Bonding Period are more thorough and time consuming than routine Performance Monitoring Inspections. These inspections are the County's last opportunity to insure that appropriate maintenance is completed and corrections are made to protect the Homeowners' Association, the future owners or the taxpayers from the undue burden of having to correct development related impacts or problems. The following specific items will be checked:

DE POL 5100 Performance Monitoring Inspection Process

1. Have all known issues/deficiencies associated with this project been properly corrected or resolved? Did any of these issues warrant extending the maintenance guarantee period, and if so, has the extension run out?
2. Cleanliness of the project storm drainage system. The entire underground storm drainage system will normally be checked with the exception that if an initial sampling reveals more than a couple isolated basins with significant sediment accumulation, the inspector may require that the entire underground storm system be cleaned. Storm drainage systems associated with public road projects are always expected to be thoroughly cleaned immediately prior to bond release.
3. Temporary Erosion Measures. Have all CB inserts, silt fences and other temporary erosion control measures not directly associated with another permitted project been removed?
4. Physical integrity of the required road and storm drainage improvements. Are the required improvements intact and remain free of defects and/or damage? Are all required fixtures (control assemblies, ladders, trash racks, fences, etc.) still in place and properly configured?
5. Operational effectiveness. Does the storm drainage system still appear to be functioning properly?
6. Water Quality. What is the condition/clarity of the water in the primary drainage facilities? What is the condition/clarity of any water being discharged from the site?
7. Vegetation Management. Is there undesirable vegetation in open drainage facilities? Are bioswales being properly mowed & maintained? Is required vegetation in wet ponds and/or rain gardens intact and alive?
8. Other Issues. Are there any other obvious issues which should be corrected or addressed prior to release of the maintenance guarantee?

If deficiencies are noted during the bond release inspection, the report will be entered into PALS+ with a clear and complete punch list and a copy will be provided to the Development Engineering OA in charge of Financial Guarantees. The punch list will be incorporated in the Maintenance Bond Deficiency Letter produced by the Development Engineering OA, and the inspector will be cc'd on this letter. Upon receipt of this letter, the inspector will schedule a follow up bond release inspection for the day after the deadline stated in the letter.

If deficiencies are not noted and the project passes the Bond Release inspection, the inspector will enter his report into PALS+ and conclude his report with a statement in the form 'I recommend release of the Maintenance & Defect Guarantee for the (specify Public Or Private) (specify Onsite or Offsite) Improvements associated with Project X'. The inspector will then add an Administrative Final – Approved entry to the Performance Monitoring Permit in order to close it out.

Bond Release Punch Lists – Once a Bond Release Punch list has been established and communicated to the principle, items may only be added to the punch list under the

DE POL 5100 Performance Monitoring Inspection Process

following circumstances;

1. An issue or deficiency is discovered which constitutes a safety hazard.
2. An issue or deficiency is discovered which constitutes a significant water quality or property damage hazard.
3. In the course of completing existing punch list work, a significant additional deficiency is exposed or discovered which could not reasonably have been observed at the time when the original bond release inspection was completed and the original punch list developed.
4. The principle leaves a punch list outstanding for so long (i.e. a year or more) that additional problems or deficiencies develop which did not exist at the time of the original bond release inspection.

Penalties & Enforcement – Reinspection Fees will be assessed and immediately posted to the permit whenever any of the following occurs:

1. An inspector visits a project site and finds that a failure to complete routine maintenance has resulted in obvious impacts to downstream drainage features, offsite properties or to required improvements associated with the project.
2. An inspector finds that a required correction has not been completed by the established deadline.
3. Whenever a second or subsequent reinspection of the same type is conducted and the inspector finds that punch list items established during the first inspection have not yet been completed.

If corrections have not been completed or satisfactory arrangements made within 30 days of the assessment of the first reinspection fee, the inspector will assess and post a second reinspection fee and initiate collection of the maintenance guarantee.

If corrections have not been completed, or satisfactory arrangements made, within 60 days of the first financial guarantee collection letter, the inspector will assess and post a third reinspection fee and consult with the Development Engineering Inspection Supervisor concerning what additional enforcement steps (if any) are appropriate given the nature, scale and potential impact of the outstanding requirements.

Suggestions/Revisions: To be fair to all applicants, inspection criteria must be applied uniformly throughout the County. Inspectors shall strive to be consistent with regard to the application of the criteria in this policy. Any difficulties interpreting or applying this policy, or any suggestions for improvements or changes should be brought to the attention of the Development Engineering Inspection Supervisor, or presented at an Inspectors' meeting.

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APPENDIX E
PALS DE Enforcement Strategy for Permitted Projects
DE-POL-5200

PIERCE COUNTY

Planning and Land Services

Development Engineering

Effective Date: May 1, 2012

Supersedes: NA – First Edition

POLICY

DE POL 5200 Enforcement Strategy for Permitted Projects

Prepared By: Scott Murdock, Inspection Supervisor *SM*

Approved By: Mitchell Brells, P.E., Development Engineering Manager *MAB*

- See Also:**
- 2007 Phase I Municipal Stormwater Permit Section **S5.C.5.b.vi**
 - Pierce County Code Chapter 18 Development Regulations – General Provisions, Section 140 Compliance.
 - DE POL 5001 General Site Development Construction Inspection Process.
 - DE POL 5301 Residential Site Development Inspection Process
 - Development Engineering Inspectors' Meeting Notes

Applicability: The strategies and mechanisms described in this policy will be utilized as necessary with respect to any permitted site development project which is found to be in non-compliance with the terms and conditions of the project permit(s), their parent regulations or the approved plans associated with the project. For the purposes of this policy a project is considered to be a 'permitted project' when there is a valid site development application or permit for the project which has not been withdrawn, cancelled, revoked or finalled. In addition, projects with finalled or expired permits for which Development Engineering is still holding active financial guarantees may also be treated as 'permitted projects' under this policy.

Purpose: This Enforcement Strategy is intended to;

- Encourage and facilitate compliance with development regulations, permit conditions and approved plan specifications as inspected & administered by Development Engineering.
- To help protect adjacent property owners and downstream drainage features from undue impacts related to permitted development activity.
- To insure that transgressions or deviations are addressed & resolved quickly and effectively and therefore at the lowest possible cost for all parties involved.
- To insure that Pierce County Development Engineering meets our obligations as a local jurisdiction permitting agency with regard to overseeing the projects we permit and enforcing the regulations we administer.

This process is intended to provide a number of tools, or progressive enforcement steps,

DE POL 5200 Enforcement Strategy for Permitted Projects

which the Development Engineering inspector may utilize in order to obtain compliance on his or her project sites. The individual tools selected and the extent of enforcement action taken may vary somewhat from project to project based on a variety of factors including; the scale of the infraction or deviation, the presence or potential for offsite impacts, the presence or potential for any safety impacts, the responsiveness of the proponent, etc.

Process: Most site development permits are associated with a parent project application such as a building permit or subdivision. Our review staff are responsible to insure that site development permits are properly tied to the parent project application in PALS+ and that holds are placed on the final approvals of the parent project until all Development Engineering Requirements are met. Review staff are also responsible to insure that reclamation guarantees (and other applicable financial guarantees) are collected from the applicant prior to issuing site development permits for general projects. These two tools are generally sufficient to insure ultimate compliance on the part of the applicant. Therefore enforcement action against a permitted project, beyond the initial steps listed below is seldom necessary.

This being said, however, it is impossible to predict what cases will ultimately comply using the initial enforcement steps and which will require further enforcement action. Therefore documentation is important at every step in the enforcement process. Clear, complete inspection reports and good photos that convey the issue at hand should be provided every time a reinspection fee is imposed or any subsequent enforcement step taken.

Initial Enforcement Steps:

1. Deadline and Automatic Reinspection – The mildest of our enforcement steps to be used for minor transgressions or omissions when corrective work is required and must be completed expeditiously, however punitive action is not yet warranted. The inspector will explicitly state the deadline/scheduled reinspection date in his or her report. Deadlines will normally be established at 5 working days for active construction sites or 30 days for idle sites or sites in the performance monitoring phase. Shorter deadlines may be imposed for more critical corrections.

2. Reinspection Fees - Reinspection Fees will be assessed whenever any of the following occurs:

- An inspector visits a project site and finds that while significant land disturbing activities have commenced, the proponent has failed to make a reasonable attempt to install the necessary erosion and/or sediment control measures.
- An inspector visits a project site and finds it to be causing visually obvious erosion, sediment or water quality related impacts which the proponent is not aggressively working to correct.
- An inspector visits a project site and finds that erosion control measures have been removed or fallen into significant, obvious disrepair without the proponent taking reasonable action to maintain them and before the site has been permanently stabilized.
- An inspector visits a project site and finds that a required correction has not been

DE POL 5200 Enforcement Strategy for Permitted Projects

completed by the established deadline.

- And inspector completes a second or subsequent requested reinspection of the same type and finds that punch list items established during the first inspection have not yet been completed.

When an inspector imposes a reinspection fee, the inspector will always state in his or her report;

- That a reinspection fee has been assessed.
- The reasons why it was assessed.
- The total now due.
- The subsequent deadline for corrective work/scheduled reinspection date.

If corrections have not been completed or satisfactory arrangements made by the established deadline, the inspector will assess and post an additional reinspection fee and establish another deadline.

3. Suspension of the Site Development Permit – This step is always taken in conjunction with assessing a reinspection fee and serves to insure that the proponent can not obtain inspections or approvals on the site development permit until the inspection fees have been paid and/or the underlying issues resolved. An inspector may also suspend the permit without imposing a reinspection fee if he or she wishes to stop progress on a particular project until an issue is resolved, but does not feel that a reinspection fee is warranted.

4. Imposing a Stop Work/Cease and Desist Order – This action should be taken whenever necessary to prevent additional damage, impacts or hazards until the review engineer has an opportunity to look at the situation, require and obtain whatever plans and/or documentation is needed, and identify the appropriate course of corrective action. Posting a Stop Work Order may also be used to refocus a contractor or developer on site stability or erosion control requirements when the above listed measures have not succeeded in securing compliance.

5. Suspension of the Parent Building Permit – Development Engineering Inspection Support OAs (or the inspector if he or she is doing his or her own input) will automatically suspend the parent building permit whenever a third unpaid reinspection fee is assessed. When taking this step, the Inspection Support OA should also click on the 'Holds' tab while in the inspection folder for the Building Permit and verify that a Development Engineering Hold for Final Site Development Inspection has been properly activated on the Building Permit.

Follow Up Enforcement Steps: While these steps are rarely necessary they are important tools for use when full utilization of the above steps does not result in compliance. Some of these steps will not be applicable to every project. Please see the Inspection Supervisor or the project review engineer when the next appropriate step is unclear. Warnings and deadlines for compliance should always be issued before taking these steps as the warning may result in compliance which is the preferred outcome.

DE POL 5200 Enforcement Strategy for Permitted Projects

1. Collecting Financial Guarantees – Initiating collection of financial guarantees can be an effective motivating step for the proponent. Reclamation guarantees are required for all General Site Development Projects except those being constructed by a public agency. Construction or maintenance guarantees may also be available. The object in initiating collection on a financial guarantee is not to actually collect the money, but rather to motivate compliance.

2. Direct Billing of Unpaid Fees & Enforcement Costs – An inspector may refer individual cases to PALS Accounting for collection of unpaid fees already posted to the permit as well as excess enforcement costs not posted to the permit but itemized for Accounting by the inspector. Once an applicant has been billed by PALS, Pierce County Budget & Finance will continue to bill them monthly until the bill is paid, and if necessary, refer the account to collections.

3. Assessment of Civil Penalties – A person who fails to comply with a valid, written order may be assessed a civil penalty up to \$1000.00 per violation. Each day of continued unlawful activity constitutes a separate violation. Civil penalties may be imposed by sending written notice, either by certified mail or personal service. See PCC 18.140.050 B. for specific guidance concerning civil penalties. Civil penalties are assessed by the Director, or the Director's designee.

4. Complete Building RFA to Suspend, Revoke or Condition the Building Permit – This step requires completing the Building Request for Action form. It is different from the 'Suspend the Parent Building Permit' listed in the above section in that it does not automatically get lifted when fees are paid. Documentation of previous enforcement action must be attached to the form.

5. Canceling the Site Development Permit – When it appears unlikely that an applicant will ever bring the site into conformance with applicable permit or regulatory requirements, the site development permit should be cancelled. This step will make it apparent that there is an unresolved issue on site, it should insure that the applicant has to submit a whole new permit application and fees to move forward AND it will make it clear that any continuing work on site is unpermitted, which will make other enforcement mechanisms available. The applicant must be informed of this step (and any additional anticipated enforcement steps) by certified letter, a copy of which must be uploaded into PALS+.

6. Activate an Alert on the Parcel(s) – When the above steps have not achieved compliance and the site remains in a physically non-conforming condition, a Site Development Violation Alert shall be activated on the parcel in PALS+. The Alert Comment shall include language to the following effect: 'Please status Development Engineering on any and all applications concerning this parcel. A site development violation remains unresolved on this site. Subsequent applications will not be approved until violation is resolved. Reference cancelled Site Development Permit No. XXXXXX, PCDE File XX-XXX and/or contact Inspector X at 253-798-XXXX for more information.'

7. Report Environmental Violations to DOE – Unresolved site development violations which are causing verifiable offsite environmental or water quality impacts will be reported to the Washington State Department of Ecology using their Environmental Incident Report Form

DE POL 5200 Enforcement Strategy for Permitted Projects

located here;

http://www.ecy.wa.gov/programs/spills/forms/nerts_online/SWRO_nerts_online.html

Final Enforcement Steps

1. Recording a Notice of Non-Compliance – For most cases the recording of a Notice of Non-Compliance will be the last step taken in the enforcement process. When a Residential Site Development Permit is properly tied to a Building Permit, a Building Notice of Non-Compliance will automatically be recorded when the proponent fails to obtain final approval on his building permit and the building permit expires. In these cases it is not necessary to record a separate Notice of Non Compliance for Development Engineering. For all other cases the Site Development Inspector will request, and the Inspection Support OA will prepare and have recorded a Certificate of Notice of Non-Compliance. A copy of the recorded notice will be uploaded into PALS+ and another will be mailed to the applicant.

2. Referral for Prosecution – When all other efforts to secure compliance have failed and the violation in question is causing or will cause a significant offsite environmental, water quality or safety related impact, the case may be referred to the Prosecuting Attorney's office for formal charging. The inspector must consult with the Development Engineering Inspection Supervisor and one of our Prosecuting Attorney representatives before formally referring a case for prosecution.

Suggestions/Revisions: Any difficulties interpreting or applying this policy, or any suggestions for improvements or changes should be brought to the attention of the Development Engineering Inspection Supervisor, or presented at an Inspectors' meeting.

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APPENDIX F
PALS DE Residential Site Development Inspection Process
DE-POL-5301

PIERCE COUNTY

Planning and Land Services

Development Engineering

Effective Date: January 2, 2006

Supercedes: v. March 9, 2005

POLICY

DE POL 5301 Residential Site Development Inspection Process

Approved By: Scott Murdock, Inspection Supervisor

See Also: Ordinance 2004-56S, PCC Title 17A, Section 17A.10.140 Inspections, Right of Entry, Access.

Applicability: Prescribes the site development inspection procedures pertaining to single family construction projects in Pierce County.

Permit Requirement: A separate Site Development Permit shall be required for every single family residential building site unless exempt per section 17A.10.050. Generally this could only occur if the project would expose less than 6000 square feet of the earth's surface and displace (excavate, fill and/or grade) less than 50 cubic yards of material. Only projects of an extremely limited scale, such as the replacement of an existing mobile home or the construction of a small detached garage or shed, would meet these criteria. The fees for all required inspections would be paid on the application for this permit. Projects proposing one or more new access(es) to a public road would require an additional driveway approach permit for each proposed access.

Application/Permit Process: Applicants will be required to apply for a Residential Site Development Inspection Permit at the time of application for their building permit. A Hold will be placed in PALS+ on the final inspection of any associated building permit(s) to insure that builders are required to comply with the Single Family Site Development inspection requirements. If a Development Engineer determines that additional requirements must be met before the final inspection a particular site, additional Holds will be entered on the appropriate permit(s).

Inspection Process: A minimum of two site development inspections, Erosion Control & Final, are required for all single family construction projects. Most will also require a Drainage inspection. The specific drainage construction and inspection requirement is determined at the time of application, and explanatory documents will be provided to the applicant and routed with the inspection packet.

The Erosion Control inspection will be scheduled automatically by PALS+ when the first building inspection is requested. The builder will be responsible to request Drainage and Final inspections at the appropriate points in construction. The inspector will receive printed inspection requests, and will be expected to complete inspections on the scheduled date to the extent that workload allows. When workload will prevent completion of all inspections on the scheduled date, Final and Residential Drainage inspection requests will

Residential Site Development Inspection Process (Continued)

be given priority. The inspector may complete additional 'in progress' or 'check compliance' inspections as his or her workload allows.

Inspection Criteria: The chart below lists the standard criteria to be employed with regard to each inspection. The inspector may find that more stringent criteria must be imposed at some sites in order to meet the intent of the parent regulations.

Inspection	Inspection Criteria
Erosion Control	<p>If a specific erosion control plan has been approved for the subject site, all measures specified on the approved plan have been properly installed and appear adequate. OTHERWISE</p> <ol style="list-style-type: none"> 1. Construction approach installed unless native material is free of fines and poses no erosion danger (extremely unusual). See standard detail. 2. Access limited to construction approach. The preferred method is a fence of standard orange construction netting with support posts at 4 foot maximum spacing. Tape barriers or other fragile methods which are unlikely to survive for the duration of construction will not be accepted. 3. Some form of sediment barrier properly installed unless site is a pothole and poses no erosion/sedimentation danger (extremely unusual). 4. Silt fence, if employed (even as access barrier only), substantially conforms to the detail approved by Pierce County. Silt fences must be securely keyed into the ground and supported by 2 x 2 (min) wooden stakes at 3 foot (max) spacing. Unreinforced prefabricated silt fence products are normally not adequate. Silt fence should be installed at the cut/fill slope setback line. See standard detail. 5. Effective inlet protection (normally a CB insert) has been provided for drainage structures on, adjacent to, or immediately downstream of the project site. 6. Any known buffers on the project site are properly posted (see applicable handout). 7. There is no visible evidence of significant erosion or sedimentation leaving the project site at the time of the inspector's visit. <p>See Detail No. 1 for an example of erosion control placement. Inspectors may eliminate the requirement for a sediment barrier at their discretion when it is reasonably expected all construction activity will take place during the dry season (May 1st to September 30th).</p>
Residential Drainage	<ol style="list-style-type: none"> 1. Individual lot drainage system/measures have been provided per the approved plan and/or Storm Drainage Requirement form. Specific elements to be checked include capacity, sump structure, setbacks, driveway basin connection, tightlines, splash blocks, miscellaneous fixtures, and any required grading. 2. Individual lot drainage system appears to be functioning as designed (infiltration systems not flooded). When splash blocks are allowed, particular attention will be paid to the intended destination for runoff (i.e. for a requirement that reads 'splash block & retain on site' it must be visibly obvious that runoff will be contained on site.) 3. Drainage is not routed in a manner which is likely to cause a significant nuisance or safety hazard, such as by creating a point discharge at the back side of a sidewalk.

Residential Site Development Inspection Process (Continued)

Inspection	Inspection Criteria
Final	<ol style="list-style-type: none"> 1. Ground surface around structures slopes away at 5% for 10' or to a point of positive drainage. 2. Permanent stabilization has been achieved – no unprotected, erosive surfaces are draining directly offsite. This measure is not intended to specifically require permanent landscaping except where absolutely necessary to prevent erosion. Measures which are obviously temporary and likely to be immediately removed by the purchaser are not an acceptable substitute for permanent stabilization. 3. Driveway has been poured or paved (unless served by a private or gravel road). 4. EV Access (when required) is constructed as depicted on the site plan and does not exceed a grade of 12% with a gravel surface, or 15% if paved. 5. Driveway culvert, if required, is the correct size and material and installed correctly. 6. Stormwater from driveway captured, routed, or tightlined as required by drainage plan (if applicable). 7. Gutters in place and downspouts routed or tightlined as required by drainage plan (if applicable). 8. Any construction materials stockpiled on the street and/or sidewalk in front of the subject lot have been removed. 9. Inlet protection has been removed from adjacent or downstream drainage structures IF this was the last exposed lot draining to the structure. 10. There is no evidence of exposed aggregate concrete slurry in project, adjacent and/or immediately downstream drainage facilities/structures. 11. Any impacts to County required improvements such as sidewalks, shoulders, bioswales, drainage systems, etc., have been corrected. 12. Any obvious impacts to adjacent properties have been corrected or resolved. 13. Site remains in compliance with cut and fill setback and slope requirements (2' min setback to PL for any cut or fill, ½ the height for cuts or fills greater than 5' w/max setback of 10') (Cut slopes ≤ 2:1, Fill slopes ≤ 1.5:1) 14. Any retaining walls on site over 4 feet in height, or retaining a surcharge, have been properly permitted. 15. Any Development Engineering administrative requirements (Private engineer certification, elevation certificate, etc) applying to this particular project and listed on the inspection worksheet have been met. If all construction requirements are met, but administrative requirements remain, only partial approval will be granted and building permit final will not be released.

Documentation, Reinspections & Enforcement: Whenever possible, written inspection results will be prepared on standard County 2-part inspection forms and a copy will be left at the project site. If the inspection result was not 'Approved', the inspector will clearly convey what work needs to be completed (numbered lists are preferred) prior to the next inspection. Development Engineering will normally allow one re-inspection (per permit)

Residential Site Development Inspection Process (Continued)

without penalty as long as the builder or proponent has made some effort to conform with the appropriate requirements. If for some reason a written copy of the inspection report can not be left at the project site, the inspector will be responsible to insure that the builder or proponent receives the results.

In the event that a builder does not pass an erosion control inspection, or an erosion control problem is noted during another inspection, the inspector will list the corrections required and the time permitted to make the corrections (normally allowing 3 full working days). The inspector will explicitly state on the inspection report the 'on or after' date when the site will be reinspected. The inspector or the inspection support OA will automatically schedule the reinspection when entering the inspection report.

If the site does not pass this reinspection, the permit will be immediately suspended and a reinspection fee will be assessed and a subsequent reinspection will be scheduled. This cycle will continue until compliance is achieved. Whenever two or more unpaid reinspection fees accrue on a given site, the building permit will be suspended also until all fees are paid. If at any point three or more reinspection fees have accrued and it is not clear that the builder is aware of the failed inspections and associated requirements, the inspector will contact the builder by phone.

If an owner or builder fails to respond to the measures above, the following additional procedures will be followed;

1. The inspector will post and photograph a stop work notice on the subject site.
2. The inspector will stamp both copies of the inspection report with the 'Site Development Enforcement Notice to Correct' stamp, insure that the form specifies the corrective action to be completed and a deadline for this action to be completed by.
3. Accurately and clearly document the violation on the inspection report and with photos.
4. The inspector will submit a Building Division Request for Action form requesting suspension or revocation of the associated building permits.
5. The inspector will send a certified letter to the property owner and applicant informing them of the action taken against the projects permits, the specific corrective action that is required and the deadline for these actions to be completed.
6. Input an inspection request or set up some other mechanism to remind you to follow up on or after the deadline.
7. If significant unreimbursed costs have been incurred in attempting to obtain compliance, the inspector will inform the Accounting Section of the specific costs (in time & materials) and request that the applicant be invoiced. The subsequent invoice must be paid before any permit suspensions can be lifted.

Each inspector is responsible to insure that his or her inspection reports are clear and complete and that any significant issues are properly documented and resolved prior to final

Residential Site Development Inspection Process (Continued)

inspection approval. Inspectors are also responsible to insure that any project specific understandings or agreements both conform with policy, and are clearly documented in the inspection comments for the subject permit in PALS+.

Suggestions/Revisions: To be fair to all applicants, inspection criteria must be applied uniformly throughout the County. Inspectors shall strive to be consistent with regard to the application of the criteria in this policy. Any difficulties interpreting or applying this policy, or any suggestions for improvements or changes should be brought to the attention of the Development Engineering Inspection Supervisor, or presented at an Inspectors' meeting.

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APPENDIX G
PALS General Site Development Construction Inspection Process

SUBJECT: General Site Development Construction Inspection Process

Applicable Codes/Regulations

- Title 17A PCC Construction and Infrastructure Regulations – Site Development & Storm Drainage
- Title 17B PCC Construction and Infrastructure Regulations – Road & Bridge Design & Construction Standards
- WSDOT Standard Specifications for Road, Bridge and Municipal Construction

Effective Date: January 18, 2002

Revised:

By: Scott Murdock
Development Engineering
Inspection Supervisor

Applicability: Prescribes the site development construction inspection procedures pertaining to all permitted site development projects EXCEPT for those permitted as single family residential projects.

Inspection Authority: Title 17A PCC Section 10.140 and Section 10.070 E.5.d.(6). Title 17B PCC Section 30.050 A. and Sections 30.050 D. 3., 4. & 6.

Inspection Files: Inspectors will maintain inspection files for their projects in an organized and generally consistent manner. Inspection files for projects with private improvements will be set up and maintained in yellow file folders. Files for projects with public improvements will be set up and maintained in red file folders. File folders will be labeled in the following basic manner;

File No.	Project Name	App/Permit No.	S/T/R & Sub Area
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Where there is no file number, the project name will shift to the far left position. The use of a 'P' in front of a permit number will differentiate it from the application number listed alone when the permit has not yet been issued. At the far right corner, the inspector may add his or her own brief 'sub area' indicator to help sort inspections geographically.

Inspection files will normally be organized with documents relating to the project approval, permit and plans filed on the right side. A copy of the site development permit will be the bottommost document and the approved plans with any changes will normally be filed on top. All inspection related documents will be filed on the left hand side, in chronological order with the most recent document on top. All documents will actually be punched and bound in the file.

Inspection Process: Project proponents are expected to arrange a preconstruction meeting with the assigned inspector after the site development permit is issued and prior to beginning construction. The preconstruction meeting may be held on site, or in a mutually agreeable office environment. At a minimum, the following persons will participate; the project proponent/developer, the private engineer, the contractor's superintendent or foreman and the erosion control lead (when applicable). For projects of any significant scale, the assigned inspector will conduct the meeting using the current, approved preconstruction meeting notes form.

A minimum of four site development inspections are required for most projects. These inspections are; Erosion Control, Completion of Clearing, Completion of Earthwork and Final. Public road projects also require a Paving in Progress inspection. Several visits to larger projects may be required to complete a single inspection. In this case, the inspector will use the inspection status code "Incomplete" and note the progress made in body of the report until the entire project covered by the permit in question meets the criteria to pass the subject inspection. Additional inspections may be required if necessary to insure compliance with the parent regulations.

The inspector will be expected to complete requested inspections within 5 working days. The inspector may complete additional 'in progress' inspections as his or her workload allows.

The inspector is responsible to provide a written copy of the inspection results to the project proponent for every recorded inspection. This copy may be provided, posted or left on the project site if it is reasonable to expect that the proponent will receive it. If not, the inspector will fax, or have the report mailed, to the proponent. Project engineers will be provided courtesy

General Site Development Inspection Process (Continued)

copies of inspection reports on request, or anytime a report identifies an issue that the inspector believes the private engineer needs to know about. The inspector is also responsible to insure that all inspection reports are entered into DCIS in a timely manner, normally the following morning. All inspection reports are to be clearly written and self explanatory. The inspection report form must be completely filled out and it must be signed and dated. The inspector's name and phone number will be clearly printed on the report for any inspection not passed.

Inspection Criteria: The chart below lists the standard criteria to be employed with regard to each inspection. The inspector may find that more stringent criteria must be imposed at some sites in order to meet the intent of the parent regulations. If any of the criteria listed in this procedure are found to conflict with a specific note or detail on the approved plans, the approved plans shall govern. If any of the criteria listed in this procedure are found to conflict with any portion of County or State regulations, the actual regulation shall govern.

Inspection Type	Type Code	Criteria
Erosion Control	EC	<ol style="list-style-type: none"> 1. A trained E.C. Lead has been appointed in writing (except abbreviated plan projects) (SMSDM 4.4). 2. All measures depicted on the approved plan have been properly installed and appear adequate. The inspector may approve reasonable and appropriate adjustments to the E.C. plan provided these adjustments do not conflict with the intent of the ordinance or any other part of this policy. 3. Silt fence substantially conforms with the detail approved by Pierce County. Unreinforced prefabricated silt fence products are normally not adequate. Silt fence should be installed outside any cut/fill slope setback. 4. Any buffers and/or clearing limits are adequately marked. 5. Effective inlet protection has been provided for drainage structures on, adjacent to or immediately downstream of the project site (SMSDM 8.10.1). 6. There is no visible evidence of significant erosion or sedimentation leaving the project site at the time of the inspector's visit. 7. Contractor has adequate E.C. materials on site to immediately stabilize all disturbed areas OR contractor has provided Action Plan to be implemented during inclement weather (SMSDM 8.5.1 – 8.5.3). 8. The issued permit is posted in a prominent location, accessible to the general public.
Completion of Clearing	CL	<ol style="list-style-type: none"> 1. Proponent has not exceeded the clearing limits depicted on the approved plans. 2. During the dry season (May 1 – Sep 30), the contractor has not cleared more area than he has the capacity to stabilize by September 30. During the wet season (Oct 1 – Apr 30), the contractor has not cleared more area than he has the capacity to stabilize within 24 hours (SMSDM 8.5.1 & 8.5.2). 3. Future impervious areas have been thoroughly stripped of organic material. 4. EC measures remain adequate and are properly maintained. 5. ESC Lead's inspection reports submitted or available for review.
Completion of Earthwork	EW	<p>The inspector will normally begin inspecting earthwork when the contractor begins grading, or installing the storm drainage system, whichever activity begins first. The earthwork inspection will normally be passed/approved when the crushed rock is prepared, but prior to paving, and when the following criteria are met;</p> <ol style="list-style-type: none"> 1. All indicated excavation, cutting and filling is complete and finished grades appear to comply with the approved plans. 2. All storm drainage pipes are bedded per the detail on the approved plans, or per PC detail PC.B9 or WSDOT Standard Plan B-11 in that order of preference. Pipe bedding material shall be 5/8" minus CSTC, or shall strictly conform with WaSS 9-03.16 for plastic pipes or 9-03.15 for rigid pipes. 3. Required cut & fill setbacks are maintained. 4. The top two feet of constructed embankments compacted to 95%, remainder compacted to 90% (WaSS 2-03.3(14)C). 5. Adequate grade control staking has been provided for regulated roads and accesses. This normally means that hubs will be set at the surface elevation of the crushed rock along the centerline and at both outside edges of asphalt, at 50 foot intervals in straight road sections and lesser intervals in curves, and at the beginning, end and sag points of vertical curves (WaSS 1-05.4) 6. Prepared road sections appear to conform with respect to materials, dimensions, slopes, compaction (top 6 inches compacted to 95% WaSS 2-06.3(1)6.), etc. 7. There are no protruding utilities or obstacles in any part of any regulated road section (outside of shoulder to outside of shoulder) (17B.30.020 G.2. & MoAU 5-5.1.2)

General Site Development Inspection Process (Continued)

		<ol style="list-style-type: none"> 8. All storm drainage pipes and structures are in place. 9. Methods and materials used in construction conform with the approved plans OR changes appear acceptable AND proponent has submitted a written request for approval of changes. 10. Failing or irregular existing paved edges are sawcut at new approaches and intersections to provide smooth and structurally sound transitions. 11. Any required testing results or materials acceptance lists relating to earthwork have been submitted to and approved by the County (17B.30.050 E. & F.) 12. Proponent has presented evidence of earthwork approval by the private engineer. 13. EC Measures remain adequate and are properly maintained. 14. ESC Lead's inspection reports submitted or available for review.
Paving in Progress	MR	<p>A paving in progress inspection is required for projects with public improvements and recommended for all projects with regulated roads (17B.30.050 D.4.)</p> <ol style="list-style-type: none"> 1. Road sections to be paved remain properly prepared as required above. 2. The surface temperature must be at least 45 degrees for a two inch surface course of asphalt, 35 degrees for a two inch sub surface course of asphalt or 55 degrees for a one inch asphalt overlay (WaSS 5-04.3(16)). 3. Asphalt concrete shall not be placed on any visibly wet surface (WaSS 5-04.3(16)). The inspector may exercise some judgement during intermittent periods of light rain, however in no case will paving over standing water be permitted. 4. Asphalt must be compacted to at least 91% and must not be compacted with a vibratory roller at temperatures less than 175 degrees (WaSS 5-04.3(10) A & B). Compaction must be accomplished with a pneumatic tired roller between October 1 and April 1 (WaSS 5-04.3(10)A). 5. The asphalt surface conforms with respect to compacted depth, width and crown/slope. 6. Any raised edges or other significant features conform with respect to dimensions called out on the approved plans. 7. The completed surface is of uniform texture, smooth (does not vary more than ¼inch from the bottom edge of a 10 foot straight edge) and free from defects of all kinds (WaSS 5-04.3(13)). <p>When the inspector approves the Paving in Progress inspection, but is not available to remain on site for the duration of paving, the report will specifically note that the paving conforms "to this point".</p>
Paving in Progress (Continued)		
Final	FN	<ol style="list-style-type: none"> 1. Project roads, parking areas, sidewalks, paths and other impervious areas have been paved and/or surfaced per the approved plans. 2. Any remaining ladders, fixtures and/or assemblies have been installed in the drainage structures as required. Note – Arrangements will be made with contractor to verify configuration of control assemblies before they are installed. Inspector will check all orifice and connecting pipe sizes and relative elevations. 3. All pipe joints or other openings through the walls of drainage structures are grouted and watertight (WaSS 7-05.3) 4. All storm drainage structures are exposed and available for maintenance. 5. Frames are permanently affixed to structures outside the project roads. 6. Required shoulders are properly graded, compacted, surfaced and free of protruding utilities or obstacles. 7. All required signs and/or traffic controls are in place. 8. All required fences and monuments are in place. 9. The storm drainage system is clean and appears to be functioning correctly. 10. Bioswales and/or filters strictly conform with regard to dimensions, slope, and surface smoothness and are thoroughly vegetated. 11. Project approaches conform with the appropriate detail. 12. Gutters in place and downspouts routed or tightlined as required by drainage plan (if applicable). 13. Any offsite improvements permitted under the same application are complete and have been accepted. 14. Site remains in compliance with cut & fill setback & slope requirements. 15. Permanent stabilization has been achieved – no unprotected, erosive surfaces are draining directly offsite or into the project storm drainage system – this measure is not intended to specifically require permanent landscaping except where absolutely necessary to prevent erosion. 16. Any impacts to County R/W or required improvements such as sidewalks, shoulders, bioswales, drainage systems, etc. have been corrected. 17. Approval has been granted for all noted changes.

Pre-Acceptance Reviews: In the case of projects with proposed public improvements, the inspector is responsible to invite a representative of Pierce County Maintenance Engineering to participate in a Pre-Acceptance Review prior to issuing a final punch list of any sort. The purpose of the Pre-Acceptance Review is to allow those who will be responsible for maintaining these improvements to have input into the final punch list. The invitation will be extended by e-mail, using the standard format provided by the inspection supervisor. The invitation will ask the recipient to respond in a specified period, normally 7 – 10 days. If a response is not received in the specified period, the inspector will note this fact on the original invitation, complete the final site development inspection and approve it or issue the final punch list. If the inspector does receive a timely response, he or she will meet the representative of Maintenance Engineering at the project site, complete a final inspection and discuss the final punch list. The meeting will be documented on a Pierce County Public Improvements Inspection Report Form. The Development Engineering Inspector will consider all input received, but will make the final determination concerning the items to be incorporated into the final project punch list.

Reinspections & Enforcement: General Site Development projects will normally be allowed as many site development inspections as the scale of the project warrants. Reinspection fees or other cost recovery mechanisms will only be employed if a proponent fails to meet a deadline to conform with a County Code requirement, or if the proponent requests a final inspection for which previously established punch list items have not yet been completed.

In the event that a project does not pass an erosion control inspection, or an erosion control, safety or potential offsite impact problem is noted during another inspection, the inspector will list the corrections required and the time permitted to make the corrections (normally 2-3 working days). The inspector will explicitly state on the inspection report the 'on or after' date when the site will be reinspected. The inspector will then automatically reinspect the site as soon as possible after the time allowed for corrections expires. If the site does not pass this reinspection, and in the inspector's judgement, the proponent is not making a reasonable effort to comply, the following procedures will be followed;

1. The inspector will stamp both copies of the inspection report with the 'Site Development Enforcement Notice to Correct' stamp, insure that the form specifies the corrective action to be completed and a deadline for this action to be completed by.
2. Accurately and clearly document the violation on the inspection report and with photos.
3. Suspend the family of permits associated with the project.
4. Provide for the recovery of the County's enforcement expenses either through manual invoicing or through the requirement for a reinspection fee.
5. Input an inspection request, a PALS+ task, or set up some other mechanism to remind you to follow up on or after the deadline.

If the applicant/proponent fails to comply, the inspector will consult the review engineer concerning what, if any, additional enforcement action should be taken.

Project Approval Processing: When a project passes the final site development construction inspection, the inspector will complete the following tasks in addition to all other normal inspection processing tasks;

1. The inspector will install a Pierce County lock on any fences around County facilities being accepted.
2. Check out the Development Engineering project file.
3. Enter the date of approval of the final inspection on the project status sheet (manual and/or electronic).
4. File all original inspection related documentation in the project file.
5. Flag the final inspection approval and turn the file over to the review engineer.

For formal plats, large lots and commercial projects, the inspector will continue to maintain his or her inspection file until the 18 month financial guarantee is released. When the original inspection packet is moved to the Development Engineering project file, the inspector may either make a copy for the inspection file, or print a complete inspection report from DCIS.

Suggestions/Revisions: To be fair to all applicants, inspection criteria must be applied uniformly throughout the County. Inspectors shall strive to be consistent with regard to the application of the criteria in this policy. Any difficulties interpreting or applying this policy, or any suggestions for improvements or changes should be brought to the attention of the Development Engineering Inspection Supervisor, or presented at an Inspectors' meeting.

APPENDIX H
Development Engineering Inspector Training Program

**Development Engineering Inspector Training Program
Training Outline**

RI-10 PALS+ Application Processing

Revised: **7 September
2006**

PALS+ is the information system which creates, stores and processes applications for the many various permits and approvals issued by our department. PALS+ is divided into several modules which correspond roughly with the major application processing functions. The major modules are:

- The Application Module – The application module is used to create new applications, accept fees and store and edit the basic information about applications. We sometimes use the application module to correct site addresses, update the expiration date of a permit or see who the application is assigned to for review.
- The Review Module – The review module is used to record application reviews and store comments, documents and other information that relates to application reviews. The review module is basically the heart of application processing.
- The Inspection Module – Inspection comments, documents and related entries are all entered through the Inspection Module. For permitted project inspectors this is the most important module to master and they can perform and/or get 90% of what they need from PALS+ through the Inspection Module.
- The Project Module - Since most projects require several types of permits and/or approvals, PALS+ also contains a Project module which contains basic information about the master project and ties together all of the applications related to the project.

Review Applications – Review Applications merely provide for the review and approval of a particular type of report or document such as a flood study or a geotech report. These never become issued permits or grant permission to build anything in and of themselves, but are often required prior to the issuance of the actual permits for a particular project. The life of a typical review application only progresses through two states. When the application materials are submitted and accepted and the required fee is paid at the Development Center, an application number and record are created in PALS+. The application will be in ‘Accepted’ status at this time. When the application is reviewed and the reviewer determines that all code requirements have been met, the reviewer will enter his approval in PALS+ and the status of the application will change to ‘Approved’. This is the ultimate and final status for review type applications.

Permit Applications - Permit applications can be thought of as formal requests for government permission to build something or to complete a particular aspect of construction. Every type of permit application has a ‘parent’ section who is primarily responsible for those types of applications. Development Engineering is the parent section for all types of site development and road construction permits. Additional sections may also have requirements that must be met for a particular type of application and when this is true, they are ‘stateded’ on the application in PALS+.

Permit Application Processing – When permit application materials are submitted and accepted and the required fee(s) are paid at the Development Center, an application number and record are created in PALS+. The application itself will be in ‘Accepted’ status at this time and a review status of XX will be created for the parent and all stateded sections. When a reviewer enters a review approving the application, the review status for his or her section changes to ‘Approved’. When the parent and each stateded section have approved the application, the application status itself will change to ‘Approved’. A batch process is run each working day which automatically issues permits for every approved application. This process actually converts the application to a permit in PALS+ with the application number becoming a permit number and the permit itself being in ‘Issued’ status. A copy of the permit is printed and mailed to the applicant.

Determining Application Status – As a PALS employee you will get phone calls inquiring into the status of an application. You can retrieve the status of an application by searching for it in the review, inspection or application modules. If the application is in accepted status, the caller will likely ask you why it hasn’t been issued yet. You will want to check the ‘Department Status’ tab in any of these modules where you can see which sections have approved the application and which have not. You may also want to go to the ‘Comments’ tab and read the most recent review comments from any section that has not yet approved the application. These three steps will give the most complete possible answer to any caller without speaking to the actual reviewer in question himself.

Development Engineering Inspector Training Program Training Outline

RI-11 PALS+ Inspection Module

Revised:

3 June 2016

As discussed in the previous outline, applications are managed/processed in the Application and Review modules of PALS+. Once the approved application becomes an issued permit, however, most processing occurs in the Inspection Module. Just as reviews can change the status of applications, inspections can change the status of permits.

There are several possible statuses for a permit to be in. These are;

- **Issued** – Permit is valid and active, proponent may proceed with work.
- **Suspended** – Permission to work is temporarily withdrawn, normally until some requirement is met. Applicant will not be able to request inspections until suspension is lifted. Permits are most commonly suspended when reinspection fees are assessed. Entering an inspection result code of ‘Stop Work’ will also change the permit status to ‘Suspended’.
- **Suspended for Fees** – Same as above, but permit will automatically revert to issued status when fees are paid. We do not use this status yet because it requires that the fees actually be posted as due in the system and once posted, only an accounting person can edit or remove them.
- **Final** – Entering a ‘Final’ inspection with the result code ‘Approved’ or an ‘Administrative Final’ entry with the result code ‘Approved’ will automatically change the permit status to ‘Final’. Once in ‘Final’ status a permit normally stays there forever and any additional work would require a new permit.
- **Expired** – If a permit is still in ‘Issued’ status when the expiration date is reached (three years after issuance for site development permits), the status of the permit will change to ‘Expired’ and the proponent will not be able to request inspections. County code allows us to grant one 1 year extension for site development permits and we do this commonly.
- **Cancelled** – It is fairly rare for issued permits to be cancelled, but it can happen if the applicant requests that a permit be cancelled so that they can apply for a refund, or if the County determines that the appropriate application fees have not been paid, or if the County determines that the proposal actually does not conform with code and can not be made to conform with code.

All inspections in PALS+ are associated with a particular application or permit. Some types of inspections/inspection entries (Preliminary Site, Miscellaneous Request, Erosion Control, Check Compliance, Bond Release, Review Inspection Materials, Comment & Message to Proponent) can be made on any site development application or permit in any status. Most construction type inspections, however, can only be entered on construction-type permits in ‘issued’ status. Attempting to enter an Earthwork or a Final inspection on a permit in ‘suspended’ status, for example, will result in an error message.

Inspection Requests – The Inspection Module includes a ‘Request’ function that will receive and track inspection requests from all sources (PASS, the Internet & direct entry) and automatically produce an inspection worksheet on the appropriate scheduled date. Almost all single family inspections are scheduled this way and the inspector’s reports are completed on the worksheets provided. If you receive a worksheet in the morning, it will normally be for an inspection scheduled for that day. It is important to complete the inspection within our timeliness standards for that type of project and insure that the results get input into PALS+. Otherwise the inspection will be counted as delinquent. Anyone can input an inspection request in the Request tab of the Inspection folder of PALS+. This can be a good tool to remind you to go back and check on a requirement that needs to be met within a particular time limit. If for some reason you receive an inspection worksheet and you know that the request is invalid and should be cancelled, inform the proponent and delete the request from PALS+.

Inspection Entries – It is the inspectors’ responsibility to insure that an inspection entry is made in PALS+ every time a project site is visited, whether or not significant progress has been made since the last visit. The inspection type codes provided in the Inspection module fall into two groups. These are actual inspections – which are only entered when an onsite inspection has actually been made, and administrative entries – which do not imply that an actual inspection has taken place, but do provide clarifying information and/or change the status of a permit. A brief explanation of the inspection entry types that we commonly use is provided below:

**Development Engineering Inspector Training Program
Training Outline**

Inspection Type Codes for Actual Inspections

Pre-Development/Review Support Inspections – The following inspections are normally completed prior to permit issuance and for the purpose of supporting our engineer’s review of the permit application.

Inspection Type	Code	Purpose/Explanation
Preliminary Site	PS	A detailed inspection at the sites of proposed General Site Development (GSD) projects completed prior to, and in support of the application review process. A standard form facilitates documentation of various site characteristics of engineering concern. The inspector also verifies accuracy & completeness of site conditions related on the preliminary plan and/or application documents.
Preliminary Residential	PR	An abbreviated Preliminary Site inspection for proposed Single Family (SF) project sites only.
Miscellaneous Request	MR	Used to document a variety of site related inspections of a limited scale. For example a reviewer may ask inspector to profile a particular length of road, or verify the existence of a seasonal drainage course or total relief of a critical slope.
Application Approve	AI	This is a unique inspection type that will change the status of an application to ‘approved’. We use this when we are the reviewer for a particular application, such as for a temporary logging permit or a stand alone residential driveway approach permit.
Approach Review	AR	This inspection type is used to record a preliminary inspection of a proposed driveway approach site when we are not the reviewers for the project. Used for most single family driveway approach applications because these are most commonly associated with a parent site development permit which someone else is reviewing. Allows us to put the specific instructions that will be printed on the permit in PALS+ without approving the permit itself.

Site Development Construction Inspections – The following are construction inspections associated with site development permits. These inspections are completed while the permit is in ‘Issued’ status.

Inspection Type	Code	Purpose/Explanation
Pre-Construction Meeting	PC	Used to document a meeting conducted by our inspector at GSD project sites, prior to or at the beginning of construction, in which he or she explains the inspection process and our expectations. This meeting is normally attended by at least the site superintendent, the erosion control lead and a representative of the private engineer.
Erosion Control	EC	Inspection of the initial installation of erosion and sediment control measures.
Completion of Clearing	CL	Inspection at the point when all clearing is complete and all organic material has been removed from future roadways, other impervious areas and embankments.
Driveway Drainage	DD	Used to document inspection of drainage galleries or other drainage provisions installed underneath driveways. Intended primarily to indicate inspection of the drainage gallery below pervious driveways, inspection to be completed prior to paving.
Earthwork	EW	Used to document inspection of all excavation, filling, grading and underground utility and storm drainage installation. For most GSD projects there are multiple Earthwork inspections as construction progresses.

**Development Engineering Inspector Training Program
Training Outline**

Residential Drainage	RD (DW)	Used to document the drainage inspection at a Single Family project. Normally used at SF sites in lieu of earthwork inspections.
Paving	PV	Used to document either Paving in Progress inspections (required for projects with future public improvements) or inspection of paved surfaces subsequent to the actual paving operation.

Site Development Construction Inspections (Continued)

Inspection Type	Code	Purpose/Explanation
Check Compliance	CC	Indicates an inspection to check on and/or address erosion, sediment control, water quality or other issues which may create an offsite impact related to a permitted project. Once a project passes its initial EC inspection, all subsequent inspection related to erosion control are normally classified as CC inspections.
Miscellaneous Construction	MC	Used to document a wide variety of construction type inspections which do not fall into the other categories and which are normally of a specific and limited scope. For example, a special trip to a project site to check only the configuration of a control assembly prior to installation would normally be classified as an MC inspection. The inspection comment should begin with a clear statement of what was inspected for these types of inspections.
Courtesy Inspection	CI	Used to document unscheduled and non-required inspections related to construction. Often used, for example, to document site visits made just to see if work has started on the given project.
Final	FN	The final site development construction inspection. ALL construction requirements must be satisfactorily completed before an 'Approved' final inspection may be entered as this inspection will change the status of the permit to 'Final' and there will be no more construction inspections.
Pre-Final	PF	Used to produce a punch list or document a final inspection without granting final inspection approval to a project. Pre-Final inspections are ONLY used when a final inspection can not be scheduled, normally because a 'Hold' has been placed on the final inspection in PALS+. Pre-Final inspections may only be scheduled internally by PALS staff.
Work in the Right of Way	WR	A rarely used inspection type to document miscellaneous inspections of work or issues contained in existing County Right of Way. An inspection for the purpose of verifying site distance clearing would be classified as a WR inspection for example.

Post Development Inspections – The following inspections are completed subsequent to final site development inspection approval and prior to the release of any Maintenance or Performance Monitoring financial guarantee (AKA 18 Month Bond or 42 Month Bond).

Inspection Type	Code	Purpose/Explanation
Performance Monitoring	PM (MI)	Any inspections made to monitor the condition, maintenance or functionality of approved site development projects during the course of the bonding phase are classified as Performance Monitoring inspections. These inspections are required by our NPDES permit to be completed semi-annually for all types of subdivisions and annually for all other GSD projects.

**Development Engineering Inspector Training Program
Training Outline**

Bond Release BR The inspection completed at the end of the Maintenance or Performance Monitoring period which identifies any deficiencies to be corrected or any maintenance to be performed prior to the release of the subject financial guarantee.

Inspection Type Codes for Administrative Entries – The following codes can be entered into the inspection track to document administrative actions related to inspection, but they do not indicate or count as actual inspections.

Inspection Type	Code	Purpose/Explanation
Review Inspection Materials	RV	Used to record reviews of various types of inspection related materials such as test results, Gate Operational Test Forms, Receipts for Materials, Requests for Reconsideration, Miscellaneous Certifications, etc.
Message to Proponent	MP	Used to log written communication sent to the applicant, builder, contractor or owner.
Comment	CO	Self Explanatory. Used to record all sorts of helpful information related to the inspection of the project, but should not be used if there is another inspection type that more closely fits the data to be recorded.
Communication	CM	Used to document any type of communication regarding a project. State who the communication was with, in what form and what was decided and/or required.
Meeting	MG	Used to document any type of meeting regarding the project EXCEPT for a Pre-Construction Meeting which has it's own inspection type. State who the meeting was with, when and where it was held and what was conveyed and/or decided.
Renew/Extend Expiration	RN	Used to extend the expiration of a permit. Can only be used with the result code 'Approved'. Comment must indicate why permit is being extended and what the new expiration date will be. When this inspection type is saved, user will be prompted to enter the new expiration date with the default being the current date.
Administrative Final	AF	Used to final a permit when it is determined that all requirements have been met without actually making a site visit. Administrative Final is normally only used when a partial approval has already been granted on a final inspection for the same permit. For example an inspector may complete a final inspection and grant partial approval indicating that all field requirements have been met, but a Performance Monitoring Permit application is required. When that application comes in, the inspector will administratively final the permit. Administrative Final can only be used with the result code 'Approved'.

You may find a couple of other codes in the inspection type dropdown list, but these are not generally used by Development Engineering.

Inspection Result Codes

A complete inspection entry includes five elements; 1. The date the inspection occurred. 2. The type of inspection (inspection type code). 3. The result of the inspection. 4. The inspector's name. AND 5. A narrative report of the inspection (comment). Some result codes are only valid with certain inspection types. Our primary inspection result codes are:

- Approved – The project passed inspection. All requirements relating to this particular inspection have been met.

Development Engineering Inspector Training Program Training Outline

- Partial Approved – Short of full approval. Most often used in conjunction with a final inspection when all on site requirements have been met, but some administrative requirement(s) remain, such as submission of an engineer's certification letter or a maintenance guarantee. Also commonly used in conjunction with residential drainage type inspections when the primary system or connection has been inspected and approved, however additional items such as the installation of gutters and downspouts remain.
- Incomplete – The project does not yet pass inspection. All requirements have not yet been met.
- Disapproved – Indicates final disapproval of the item reviewed or inspected. Normally used with the administrative inspection type 'RV' for items such as failing test results or requests for reconsideration which cannot be approved. The result code 'Incomplete' is much more commonly used with inspections as normally onsite corrections will be made to get the project through to inspection approval.
- Comment – Used only when the type of inspection does not involve passing judgment, such as when entering comments about a preliminary site inspection.
- Suspend – Will suspend the permit when used with any inspection type code. The inspector's comments must clearly indicate why the permit is being suspended and what must be done to get the suspension lifted.
- Stop Work – Denotes that a stop work order was posted or served, and also changes the status of the permit to 'suspended'.
- Remove Suspend – Will return the permit to issued status.

Documents

Every major module of PALS+ includes a 'Documents' tab where you can upload electronic files or documents relating to the Application, Permit, Parcel or Project. All electronic files of lasting value (letters, photomaps, etc) which relate to an application or permit in PALS+ should be uploaded so that they are available to all potential users. This function in PALS+ will only become more important as we move towards electronic record keeping and away from paper. When a member of the Inspection Team uploads a document, it is virtually always uploaded into the Documents tab of the Inspection folder, and can then be seen in all higher level folders. If you are uncertain how to upload a document into PALS+, see me when you have one ready.

Alerts

While alerts are not really a function of the inspection module, there is an alerts tab in the inspection folder. Alerts are actually associated with parcels, not applications or permits, but permits are associated with parcels and when you have selected a particular permit in the inspection folder and go to the alerts tab, you will see the alerts which are on the parcels that are associated with that particular permit.

We use alerts for three main reasons. The first is to insure that a property owner with unresolved site development violations can not get any other approvals from our department. The second is to keep track of gate codes in a way that will print them on the inspectors' worksheets for any permits for that parcel. For gate codes we use the 'Barrier' alert type and an entry that reads 'GC: XXXXXXXX' where the 'X's' indicate the actual code you must enter to open the gate. The third reason is to keep track of known safety hazards on the subject property such as a vicious dog or belligerent occupant. In general alerts are used to keep track of information about the subject parcel that you would want others in our department to know about if they were dealing with that particular property.

Holds

PALS+ includes a 'Hold' function that allows any reviewing section to place a 'Hold' on a particular inspection on any permit in the system. This helps to insure that valuable final approvals are not granted by one section when another section has unmet requirements pending. The holds function is accessed via the 'Holds' tab in the inspection folder. Development Engineering routinely places holds on the final inspection for the primary building permits associated with our projects. Once a hold has been activated, it can only be released by a staff member of the section placing the hold. It cannot be overridden, even by the parent section of the permit on which the hold is placed. When a routine hold for final site development inspection approval is placed on a single family building permit, it is the responsibility of the Development Engineering Inspection Team to release that hold. This is completed in conjunction with entering our final approval on the associated site development permit. Review engineers place any holds associated with General Site Development projects and it is their responsibility to release those holds when all Dev Eng requirements associated with the project have been met.

APPENDIX I
Structural Stormwater Control Project List (2014-2018)

Structural Stormwater Control Projects, Appendix 11 of NPDES Permit #WAR04-4022, 2014 through 2018 (as of Dec 31st)

Municipal SW Phase I General Permit

2018 MS4 Annual Permit

Question 34b. Updated list of planned, individual projects scheduled for implementation during this permit term.

Project Name	Type ¹	Start Year	Status ²	End Year	Cost Estimate ³	Funding (%)			WQ Benefit ⁴	Hydro Benefit ⁵	Hydro Benefit #	MR# 5 Incentive	MR# 6 Incentive	MR# 7 Incentive	Total Retrofit Incentive ⁶	Other Benefit	Monitoring Planned	Lat	Long	Receiving Water Body	Comments
						Local	State	Federal													
D413 - Rody Creek Filter Project Phase 1 - 59th Ave E.	2	2014	4	2015	\$ 122,624.33	25%	75%	0%	345.4	0%			6.60		6.60	3.14 acres	No	47.19	-122.35	Rody Creek	Used KC S8.D. data for HDR 137.5 lbs/acre/yr 80% effec.**
D416 -Phase 1 Rody Pond Retrofit	2	2014	4	2015	\$ 296,730.97	25%	75%	0%	2,794.0	0%			101.20		101.20	25.4 acres	No	47.17	-122.35	Rody Creek	Used KC S8.D. data for HDR 137.5 lbs/acre/yr 80% effec.**
D415 Phase 1 Spanaway Lake Park Filterra Retrofit	2	2014	4	2015	\$ 311,842.51	25%	75%	0%	546.8	100%	2	5.30			5.30	2.86 acres	No	47.12	-122.45	Spanaway Lake	Used KC S8.D data for comm 239lbs/acre/year. 80% effec. Filterra
D417 - Phase 2 - Spanaway Lake Park LID Retrofit	2	2014	4	2015	\$ 940,376.09	25%	75%	0%	634.8	60%	2	6.10			6.10	3.32 acres	No	47.12	-122.45	Spanaway Lake	Used KC S8.D data for comm 239lbs/acre/year. LID portion
D413 Phase 2 Boxless Filterra Project - 86th Street.	2	2015	4	2016	\$ 136,378.91	25%	75%	0%	451.0	0%			8.61		8.61	4.1 acres	No	47.18	-122.35	Rody Creek	Used KC S8.D. data for HDR 137.5 lbs/acre/yr 80% effec.**
D416 Rody Creek WQ Retrofit at 72nd Street	2	2015	4	2016	\$ 355,848.95	25%	75%	0%	1,320.0	0%			25.20		25.20	12 acres basic treatment	No	47.19	-122.36	Rody Creek	Used KC S8.D. data for HDR 137.5 lbs/acre/yr 80% effec.**
D419, Woodland Creek Water Quality Retrofit at 84th St. E & 72nd Ave. E.	2	2016	4	2017	\$ 549,548.64	100%			8,547.0				163.20		163.20	77.7 acre basin. Install Water Quality Vault on 72nd Ave. E. near 84th St. E.	Yes	47°09'42.89"N	122°20'09.98"W	Woodland Creek	The vault will use canister filters and a pretreatment device. Plans are currently at 90%. Project engineered to meet Basic Treatment Menu 137.5 lbs/acre/yr 80% effec.**
D442 - Brookdale Rd and N. Fork Clover Creek Outfall Retrofit	2	2016	2	2020	\$ 530,000.00	100%			819,550.0	0%			77.70		77.70	37 acres contributing basin	No	47.14	-122.42	North Fork Clover Creek	137.5 lbs/acre/yr 80% effec.**
D047 Sprinkler Parking Lot LID Retrofit Phase 3	2	2015	1	2018	\$ 740,000.00	100%										Sprinkler is a Regional Parks facility and project is retrofitting the existing parking lot with pervious driving surfaces and large rain gardens.	Yes	47.12	-122.44	Spanaway Creek	This project is in the initial design phase at time of this report. Therefore, WQ benefits, and hydro benefits, will be calculated in the future as additional data is collected.
D810, Diru Creek Water Quality Retrofit at 67th Ave. Ct. E.	2	2016	2	2018	\$ 173,105.00	25%	75%		1,408.0	0%			26.88		26.88	12.8 acre basin. Install Water Quality Vault on 67th Ave. E. between 104th St. E. and Pipeline Road.	Yes	47°09'48.54"N	122°20'24.53"W	Diru Creek	Design at 60%. Project engineered to meet Basic Treatment Menu Standards, 137.5 lbs/acre/yr 80% effec.**
D811, Diru Creek Water Quality Retrofit at 64th Ave. Ct. E.	2	2016	2	2018	\$ 119,134.00	100%			346.5	0%			3.15		3.15	1.5 acre basin. Install Water Quality Vault on 64th Ave. E. between 104th St. E. and Pipeline Road.	Yes	47°09'48.54"N	122°20'24.53"W	Diru Creek	Design at 60%. Project engineered to meet Basic Treatment Menu Standards, 137.5 lbs/acre/yr 80% effec.**

Structural Stormwater Control Projects, Appendix 11 of NPDES Permit #WAR04-4022, 2014 through 2018 (as of Dec 31st)

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Project Name	Type ¹	Start Year	Status ²	End Year	Cost Estimate ³	Funding (%)			WQ Benefit ⁴	Hydro Benefit ⁵	Hydro Benefit #	MR# 5 Incentive	MR# 6 Incentive	MR# 7 Incentive	Total Retrofit Incentive ⁶	Other Benefit	Monitoring Planned	Lat	Long	Receiving Water Body	Comments
						Local	State	Federal													
D411, Woodland Creek 104th St. E. Stormwater Treatment System	2	2014	2	2019	\$ 1,726,587.00	25%	75%		49,027.0	0%	1		133.29		445.7 acre basin. Install cell wet pond south of 104th St. E., east of Woodland Ave	Yes	47o10'49.63"N	122020'11.62"W	Rody Creek	Project engineered to meet Basic Treatment Menu 137.5 lbs/acre/yr 80% effec.**	
D418, Phase 3 Spanaway Lake Park Retrofits	2	2016	4	2018	\$ 489,933.00	25%	75%		526.2	73%	2	4.82		4.82	2.75 acre basin. All LID features in Park.	No	47o12'N	122045'W	Spanaway Lake	Construction Completed in January 2018. Used KC S88D data for comm. 239lbs/acre/yr, 80% effec. **	
Sheriff East Precinct Impound Lot	2	2017	4	2018	\$ 150,000.00	100%			34.1	100%	1		0.54	0.54	0.31 acre basin. Pretreatment, oil/water separator, and infiltration.	No	47o06'41.11"N	122017'24.87"W	Clear/Clarks Creek	60% design. 137.5 lbs/acre/yr 80% effec.**	
Clover Watershed Drywells Retrofit	5	2015	2	2019	\$ 732,000.00	25%	75%	0%	3,945.7	100%	2		35.87	35.87		No	47.08	-122.39	Clover Creek	Used KC S8.D. data for HDR 137.5 lbs/acre/yr 80% effec.**. 125 drywells with averages of 12,500 sq ft average contributing area per location. Each project requires design and permitting as they are scheduled.	
112th St E Storm Pond Retrofit at Bob Findley Road (Old CMF building)	3		5												The existing storm pond receives road runoff from 112th St. E., treating for flow control but has no water quality treatment. It will be investigated how WQ treatment can be incorporated into pond.	Yes	47.15	-122.41	North Fork Clover Creek	Project canceled	
Pierce County Pond #161 Retrofits @ 112th St. E. & 26th Ave. E	3		5												The existing storm pond receives road runoff from 112th St. E., treating for flow control but the pond does not appear to be attenuating flow due inadequate draining down of pond after storm.	Yes	47.16	-122.39	Swan Creek	Project is on hold.	
Tacoma Narrows Airport Stormwater Outfall Modification	2		5												Project is Retrofitting the the stormwater system on the northern part of the airport to install a vault treatment system in the outfall pipe which drains to Puget Sound	No	47.26	-122.58	Puget Sound	Project is on hold.	
Status²	1. Planning 2. Design and permitting 3. Construction 4. Complete/Maintenance 5. Project Cancelled 6. Property acquisition																				
** Median TSS Unit Area Loading Rate (lbs/ac/yr) and Treatment Removal Efficiency for TSS (%) - Suggested Value Per Department of Ecology, Water Quality Section (Douglas C. Howie, P.E.)																					

APPENDIX J
SWM Water Quality Inspection Response
Procedures Flow Chart

INSPECTION UNIT SUPERVISOR

Distribution of Maintenance Connection (MC) Asset Work Orders to Inspectors by Zones or Facilities

Pierce County-Owned Facilities Inspections & Technical Assistance

Pursuant to the County's Phase 1 Municipal Stormwater Permit (2013-2018):

- Section 55.C.9.c.i: Each Permittee shall implement a program to annually inspect all permanent stormwater treatment and flow control BMPs / facilities owned or operated by the Permittee. Permittees shall implement appropriate maintenance action(s) in accordance with adopted maintenance standards;
- Section 55.C.7: The Permittee shall implement a program to reduce pollutants in runoff from areas that discharge to MS4s owned or operated by the Permittee

and additionally,

- any additional stormwater requirements of site-specific, custodial requirements of applicable Industrial Stormwater Permits or Sand & Gravel Stormwater Permits.

- | PERMIT TYPE | PIERCE COUNTY FACILITIES |
|---------------------------------|---------------------------------|
| P1 MUNICIPAL STORMWATER PERMIT | • ALL DEPARTMENTS |
| INDUSTRIAL STORMWATER PERMIT | • SEWERS
• AIRPORT/FERRIES |
| SAND & GRAVEL STORMWATER PERMIT | • SWM-QUARRY
• ROAD OPS PITS |

Inspect site at outfalls and discharge points for non-stormwater discharges

- Note discharges to:
 - MS4
 - surface
 - ground

Wet Season Inspection within October 1 to April 30

Dry Season Inspection within May 1 to September 30

UPDATE RECORDS

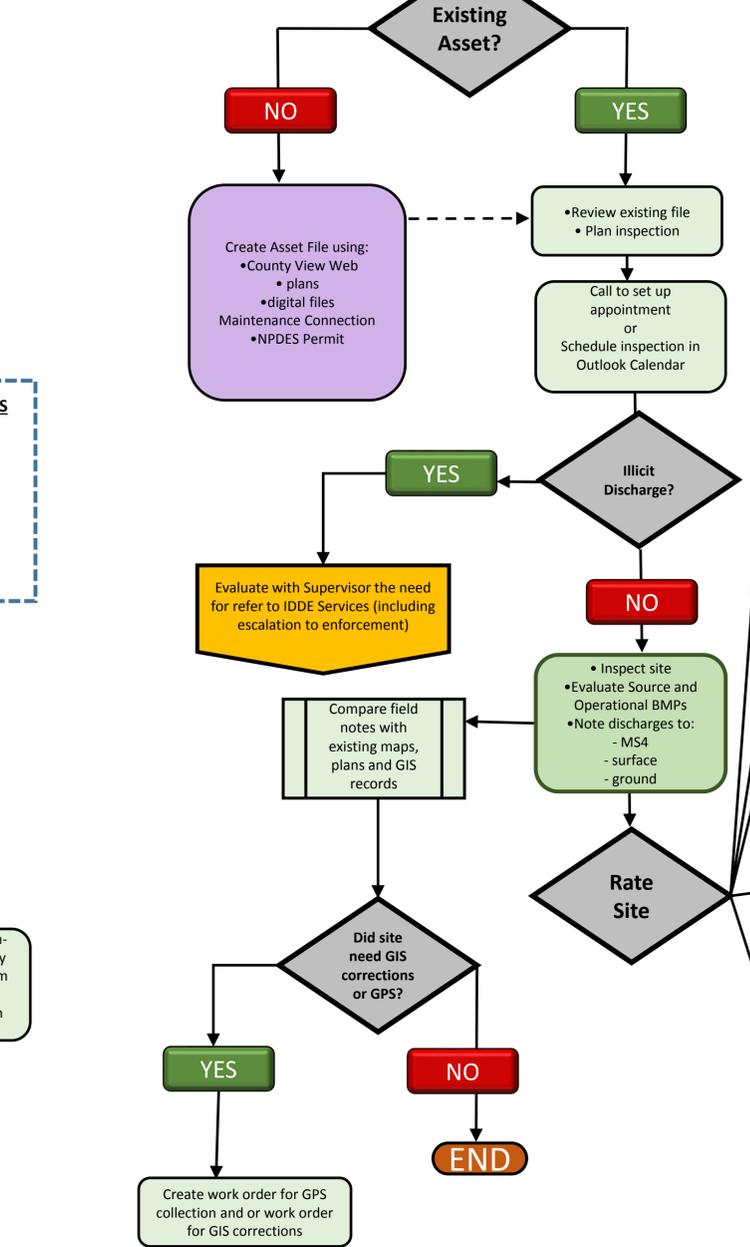
Complete and Certify Non-Stormwater Discharge Dry Weather Assessment Form in Facility Stormwater Pollution Prevention Plan (SWPPP)



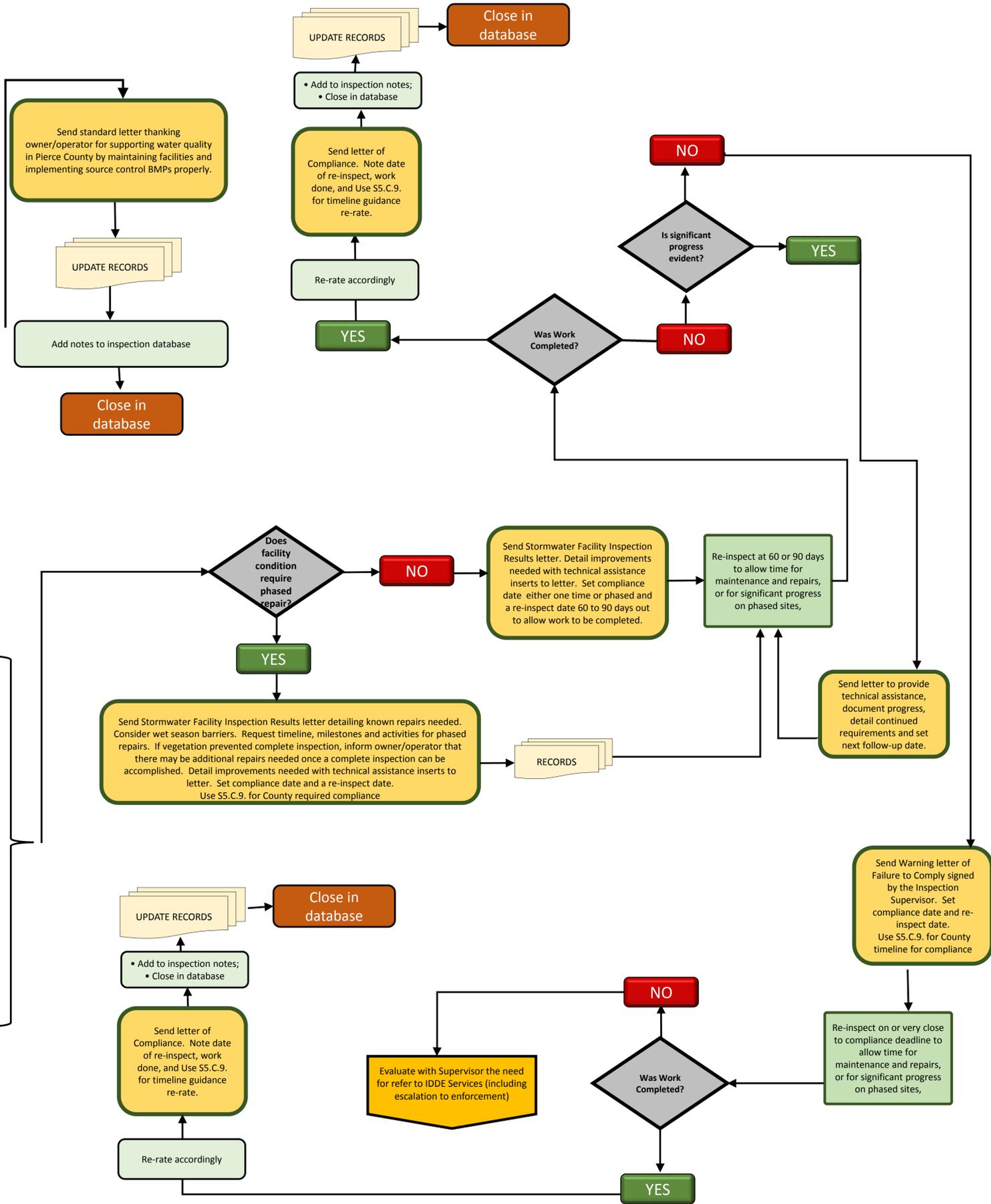
Maintenance & Source Control Inspections & Technical Assistance

Pursuant to the County's Phase 1 Municipal Stormwater Permit (2013-2018):

- Section 55.C.7: The Permittee shall implement a program to reduce pollutants in runoff from areas that discharge to MS4s owned or operated by the Permittee
- Section 55.C.9.b.ii: Each Permittee shall implement an on-going inspection program to annually inspect all stormwater treatment and flow control BMPs/ facilities to enforce compliance with adopted maintenance standards as needed based on inspection. The inspection program is limited to facilities to which the Permittee can legally gain access, provided the Permittee shall seek access to all stormwater treatment and flow control BMPs/ facilities regulated by the Permittee;



- Rated 5**
 - Stormwater structures and features are significantly beyond Pierce County standards, such as:
 - vehicles are washed in a covered area to special treatment system;
 - treatment systems to reclaim and reuse water;
 - installed and maintained LID structures / practices which are above required BMP levels;
 - retrofitted and decreased impervious surface; and or brought facility up to present day permit standards
 - signage drawing attention to BMPs and/ or procedures are posted in work areas;
 - Source Control documentation is maintained on-site;
 - site-specific condition, in the opinion of the inspector, which supports a determination of exemplary status of the facility/ site;
 - promote site to supervisor
- Rated 4**
 - Source Control BMPs for toxics/ hazardous and non-hazardous materials are fully implemented;
 - Source Control documentation may or may not be maintained on-site.
- Rated 3**
 - No direct threat or impact to surface or groundwater, including streams, marine waters, wetlands, or Pierce County's MS4 or Pierce County properties. System is in place and functioning, but maintenance is overdue. Difficulty in locating/accessing structures on site, or general adherence to implementation of BMPs but lacking full implementation. Source Control BMPs for nontoxic materials are not implemented.
- Rated 2**
 - Deficiencies are likely to cause a direct threat or impact surface and groundwater, including streams, marine waters, wetlands, or Pierce County's MS4 or Pierce County properties. Stormwater system is substantially impaired and at risk of failure or bypass and/or unauthorized alteration of a drainage system.
- Rated 1**
 - Unauthorized obvious illicit discharge or spill under the County's NPDES Muni Permit or PC 11.05. Major unauthorized alteration of a drainage system, or needs re-engineering. Direct threat to surface and/or groundwater, including



APPENDIX K
SWM Water Quality IDDE Response
Procedures Flow Chart

PERMIT MANAGEMENT UNIT

ILLCIT DISCHARGE DETECTION & ELIMINATION (IDDE) INVESTIGATIONS

Pursuant to the County's Phase 1 Municipal Stormwater Permit section 55.C.8.iv, the following IDDE compliance timelines will be achieved for MS4-impacted discharges:

- All illicit discharges, including spills, which are determined to constitute a threat to human health, welfare, or the environment, will be immediately responded to;
- All reports, complaints, or monitoring information that indicate the potential of an illicit discharge will be investigated (or referred to the appropriate agency having the authority to act within seven (7) days, on average);
- All reports of suspected illicit connections will cause the initiation of an investigation to determine the source of the connection, the nature and volume of the discharge through the connection, and the party responsible for the connection;
- All illicit connections will be eliminated within six (6) months of confirmation.

PIERCE COUNTY FACILITIES TECHNICAL ASSISTANCE

FACILITIES SWPPP DEVELOPMENT

INDUSTRIAL STORMWATER PERMITS

SAND & GRAVEL STORMWATER PERMITS

STORMWATER PERMIT-REQUIRED TRAINING

The SWM Permit Management Unit coordinates, implements, tracks, and reports specific actions required by the NPDES Phase 1 Permit to other Pierce County Departments and Divisions per Executive Order No. 2012-1, "Concerning Effective Stormwater Management, Pierce County Washington". Additional Technical Assistance Services outside of NPDES Phase 1 permit, including but not limited to coordination with Tacoma Narrows Airport, SWM Rock Quarry, and Chambers Bay WWTP.

PERMIT MANAGEMENT SUPERVISOR

DOCUMENTED SOURCE OF SIGNIFICANT SOURCE OF POLLUTION

Violation poses a hazard to public health, safety, or welfare; endangers any property; or adversely affects the safety and operation of County right-of-way, utilities and/or other property owned or maintained by the County per PCC 11.05.

STORMWATER POLLUTION DOCUMENTED TO BE LESS THAN SIGNIFICANT

Less than significant amounts of non-hazardous stormwater pollutants are present (or deemed to have been previously present based on evidence gathered at the site). The situation indicates a potential for less than significant stormwater pollution. There is a high confidence that the discharge can be immediately eliminated through public education and technical assistance.

NOTIFICATION SEQUENCE

Procedures include both internal County and external notification requirements

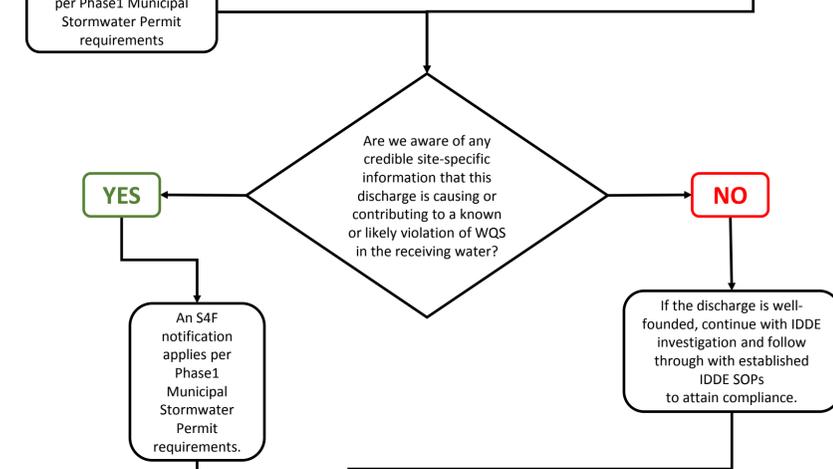
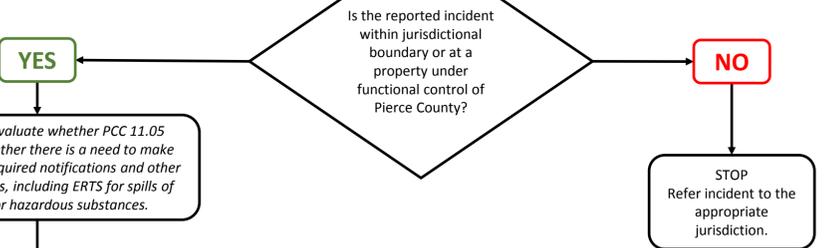
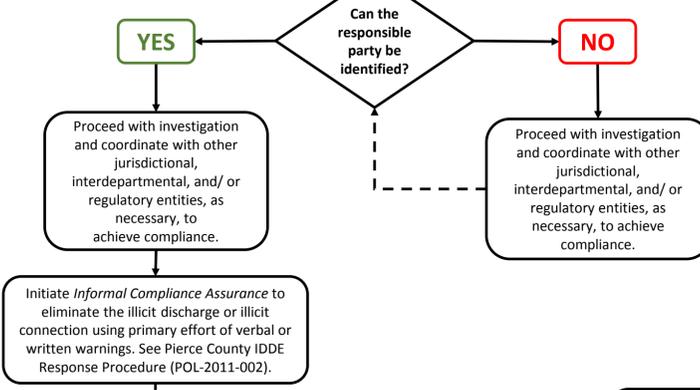
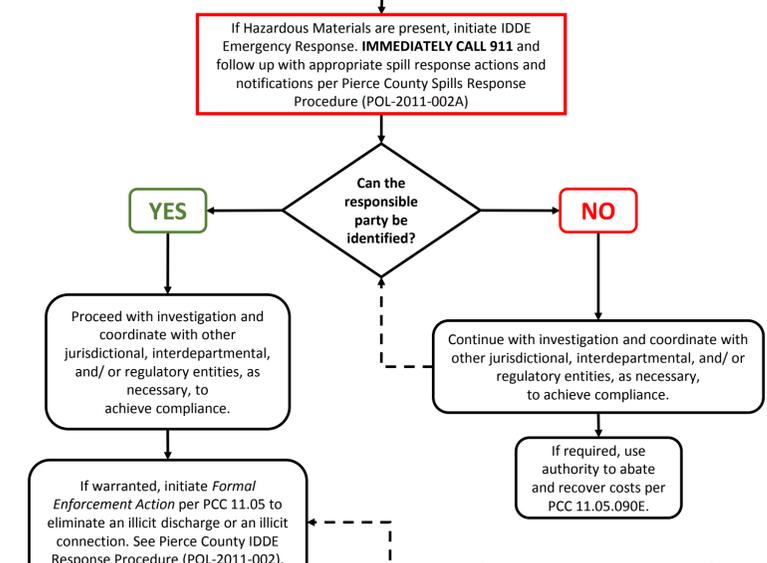
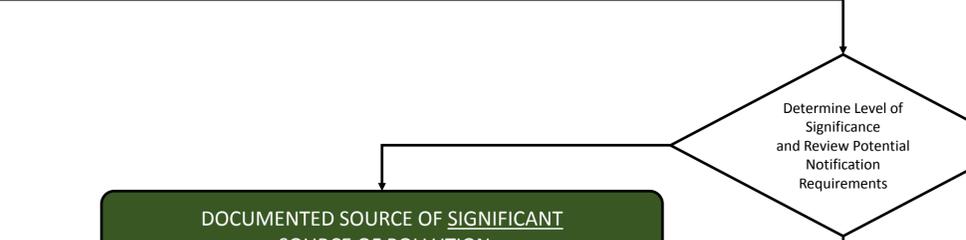
RECEIPT OF A REPORT CONCERNING AN ILLICIT DISCHARGE AS DEFINED BY PCC 11.05 (INTERNAL OR EXTERNAL REFERRAL)

Reports may be received from a number of sources: telephone (IDDE Hotline or direct call), email, internal County staff/ departmental communication (PALS, Roads, CIP, WQ Monitoring), after hours (PC Responds), RMS system, personal observation, field screening, outside agencies (ERTS, TPCHD, PCD, adjacent jurisdictions)

Initially review whether other Pierce County Departments will require separate notification to implement response efforts (Roads, O&M). Enter incident into RFA system, if appropriate.

Prepare for field investigation. Assemble necessary investigative tools and information (County View maps, safety equipment, sampling tools, etc.)

In the field, characterize the threat per written IDDE SOPs and determine proper avenue for corrective action. Characterization will be based in part upon permit requirements and qualitative field observations: composition, volume, frequency, duration, and /or evidence of past illicit discharges.



- If warranted, notify and collaborate with appropriate outside agencies, other jurisdictions, and/or internal departments to coordinate compliance efforts. Even if SWM is not the lead compliance entity, continue tracking RFA until it is closed with resolution to ensure that the illicit discharge has been adequately addressed.
- Tacoma-Pierce County Health Department
 - Department of Ecology
 - Planning & Land Services
 - Pierce County Conservation District
 - Pierce County Road Operations

Unverified or unsubstantiated reports require no further investigative action

INSPECTION UNIT REFERRALS (Spills and Illicit Discharges)



Track enforcement action within Maintenance Connection database.

NOTICE OF VIOLATION AND ORDER TO CORRECT PCC 11.05.090B

Issued to the individuals who own or maintain the property where the violation occurred.

Civil penalties may be assessed to any person who fails to obtain a necessary permit for discharge into a drainage facility per PCC 11.05.090D.

If required, use authority to abate and recover costs per PCC 11.05.090E.

Close RFA if resolution is attained.

Complete recordkeeping requirements

PUBLIC EDUCATION & TECHNICAL ASSISTANCE

An Informal Compliance warning letter (written or verbal) will be issued to any person causing, allowing, or participating in the violation, including the property owner. The warning will outline proper implementation and maintenance of Best Management Practices (BMPs).

Warnings (verbal or written correspondence) will be modified on a case-by-case basis. The compliance process will be documented through the RFA system until the case is satisfactorily corrected.

Close RFA if resolution is attained.

Complete recordkeeping requirements

APPENDIX L
SWM Source Control Policy
POL-2011-03

Public Works and Utilities Department

SURFACE WATER MANAGEMENT DIVISION

SOURCE CONTROL POLICY



Policy Number:	POL-2011-03
Title:	Source Control Policy
Effective Date:	June 15, 2011
Revised Date:	NA
Contact:	Rondi Felton, Acting Water Quality Specialist III
Management Sponsor:	Dan Wrye, Water Quality Manager
Related Documents:	Site Development Manual, Maintenance Manual
References:	NPDES Municipal Stormwater Permit, PCC 11.05

Purpose.

This document articulates Pierce County Surface Water Management policy regarding implementation of source control Best Management Practices for existing development. This standard shall be used by Surface Water Management Water Quality Specialists as the applicable standard to assess and achieve compliance with Pierce County Code 11.05 "Illicit Stormwater Discharges" and NPDES Phase I Municipal Stormwater Permit S5.C.7.

Applicable Best Management Practices.

- 1) **Operational Source Control BMP's.**
 - a. Plans and procedures to prevent spills and releases of materials that may contaminate stormwater. Operational BMPs may include maintenance and housekeeping practices, covering material stockpiles with a tarp, and other proper storage, handling, and disposal practices.
 - b. Training of personnel in the implementation of operational source control BMPs that are applicable to site specific potential pollutant generating sources and activities.
 - c. Visual inspections and regular monitoring of areas and operations that have the potential to generate pollutants.
 - d. Procedures and supplies for immediate containment, cleanup, reporting and other appropriate response actions regarding spills and releases of materials that may contaminate stormwater or groundwater.

Operational BMP requirements may be satisfied by implementation of a Stormwater Pollution Prevention Plan prepared in compliance with DOE guidance or other method approved by Pierce County Surface Water Management.

2) Structural Source Control BMP's

Physical measures taken to prevent pollutants from entering storm or surface water; for example, building a covered storage area or installing containment barriers or spill control sumps.

3) Treatment BMP's

BMP's intended to remove pollutants once they are already contained in stormwater. Examples of treatment BMP's include: oil/water separators, biofiltration swales and wet settling basins.

When to require BMP's

Operational source control BMPs are required for all existing discharges that drain directly or indirectly to storm drainage facilities.

Operational source control BMPs (e.g., personnel training, self inspections, maintenance practices, housekeeping practices) should be logged or otherwise documented, retained in the organization files, and made available for review by a Water Quality Specialist upon request if a site appears not to be implementing them. If documentation of operational BMPs is not available for review upon inspection and the site appears not to be implementing operational source control BMPs, the Water Quality Specialist will notify the owner/operator of the deficiency to implement operational BMPs.

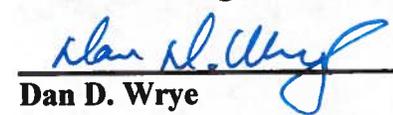
Structural source control BMP's are required for pollutant generating sources if operational source control BMPs do not prevent illicit discharges or violations of surface water, ground water, or sediment management standards because of inadequate stormwater controls. When illicit discharges are observed or site specific information demonstrate that operational BMPs are inadequate to prevent offsite polluted runoff or illicit discharges structural source control BMPs will be required.

Treatment BMP's are required when implementation of operational and structural BMPs are insufficient to prevent illicit discharges as evidenced by site specific information, visual observation of the Inspector, or monitoring data.

Approved.



Harold Smelt
Division Manager, Surface Water Management Division



Dan D. Wrye
SWM Water Quality Manager

APPENDIX M
SWM Procedures for Documenting and Tracking
NPDES Stormwater Training, POL-2013-01

Public Works and Utilities Department
SURFACE WATER MANAGEMENT DIVISION
PROCEDURES FOR DOCUMENTING AND TRACKING
NPDES STORMWATER TRAINING



Policy Number: POL-2013-01
Title: NPDES Training Procedures
Revised Date: NA
Contact: Rob Dudra, Water Quality Specialist III,
NPDES Stormwater Training Coordinator
Management Sponsor: Dan Wrye, Water Quality Manager
Related Documents: References: NPDES Municipal Stormwater Permit,
Executive Order 2012-1

Purpose.

This document contains the standard operating procedures to be used to document and track NPDES Municipal Stormwater training of Pierce County staff or positions.

Role of County NPDES Stormwater Training Coordinator.

Pursuant to Executive Order 2012-1, the NPDES Stormwater Training Coordinator shall develop, deliver, evaluate, track, and report NPDES Stormwater permit related training for County staff and/or positions, and others as applicable.

Procedures.

1. **Annual Training Plan.** The NPDES Stormwater Permit Training Coordinator shall prepare an annual training plan each year. The annual NPDES Training Plan shall include type of training, purpose, objective, targeted audience, frequency and schedule for each training. The Training Plan shall contain all training required of Pierce County in the Stormwater Permit and may contain additional related spill or environmental response training opportunities.
 - a. The NPDES Stormwater Permit Training Coordinator shall create and distribute the annual training plan to custodial departments of the County.
 - b. Custodial departments are expected to provide department-specific Best Management Practice (BMP) trainings to meet Stormwater Permit requirements. The NPDES Training Coordinator shall coordinate development of an annual schedule of quarterly trainings with a department representative and/or facility Pollution Prevention Team. Copies of custodial department training materials and lists of attendees of each custodial department training

- Number of Requests for Action.

Approved.



Harold Smelt
Division Manager, Surface Water Management Division



Dan D. Wrye
SWM Water Quality Manager

APPENDIX N
SWM Spills Response Procedure, POL-2011-001A

SURFACE WATER MANAGEMENT DIVISION SPILLS RESPONSE PROCEDURE



Procedure Number: POL-2011-002A
Title: SWM Spills Response Procedure
Effective Date: June 29, 2011
Revised Date: September 15, 2015
Contact: Dan Wrye, Water Quality Manager,
Rob Dudra, Acting Water Quality Supervisor
Management Sponsor: Dan Wrye, Water Quality Manager

Related Documents: Attachment: Pierce County Public Works Surface Water Management Division Illicit Discharge/Spill Report & Response Form (06/11)

References: Phase I Muni SW Permit, PCSWM BMP Manual and SWMP, Ord. 11.05, PC, ROAD OPS Spills Policy, WSDOT CSE and Spill Control Manual, Ecology's *Spill Incident Types* document (2014)

1.0 Procedure:

It is intrinsic to Pierce County Public Works and Utilities Department, Surface Water Management Division (SWM) to prevent spills and illicit discharge of stormwater and pollutants into and out of Pierce County's MS4 system and surface waters and ground waters to the maximum extent practicable by outreach and education, technical assistance, inspecting stormwater management facilities, requiring implementation of source control Best Management Practices and by monitoring watershed health. When these measures are not successful and spills occur, the Surface Water Management Division will seek coordination in spill response with Washington Department of Ecology, Tacoma- Pierce County Health Department, Pierce County Road Operations Division, and other entities in order to eliminate the source of the spill, protect and restore public infrastructure affected by the spill, and ensure Pierce County's surface water resources are protected. Surface Water Management Division will ensure the County complies with the illicit spills and discharge provisions of the NPDES Phase I Municipal Stormwater Permit, Pierce County Code 11.05, and other applicable regulations.

The Water Quality Manager shall be responsible for determining compliance with the NPDES stormwater permit and Pierce County Code 11.05. Responsibility for determining the sufficiency of cleanup of spill-impacted, publicly-owned ponds shall reside with the SWM Operations and Maintenance Manager. The Roads Operations Manager will be responsible for determining the sufficiency of cleanup of spill-impacted drainage systems within the County's public right of way.

2.0 Purpose:

- (1) To ensure that the County fully complies with the illicit spills and discharge provisions of the NPDES Phase I Municipal Stormwater Permit and the provisions of Pierce County Code 11.05 and that those causing the spill are accountable for the environmental and economic costs of the spill.
- (2) To ensure that there is clarity and coordination between the exercise of (1) above, and the various County and non-county entities having responsibility for various aspects pertaining to spills and their cleanup. These include the Washington Department of Ecology, Spills Program; Washington Department of Ecology, Water Quality Program, Tacoma/Pierce County Health Department; Pierce County Road Operations Division; SWM Maintenance and Operations Section; and SWM Water Quality and Watersheds Section.

3.0 Applicability:

3.1 Scope

This document applies to all PC SWM employees who are involved in an emergency or accidental release of any hazardous material into the environment (except releases otherwise permitted under State or Federal Law). Contractors and consultants operating under contract to SWM shall conform to the procedures specified.

These guidelines are intended to address releases such as spills, leaks, venting discharges, escapes, leaching, dumping, or pouring of materials such as liquid, solid or gaseous chemicals, waste, raw materials, or products that pose a potential hazard to human health or to the environment *which are immediately poised to or already have entered the MS4 from: 1). a street or road surface, or 2). another discharge source.* Sewage releases are addressed separately under Sanitary Sewer Response Procedures by the Pierce County Sewer Utility.

The type of material discharged and the quantity will determine the nature of response and role(s) for PC SWM

This document will:

- Identify spill response activities to be conducted by PC SWM employees;
- Identify personnel responsible for those functions;
- Establish process guidelines and operating procedures;
- Establish a coordinated concept of operations with other responding entities.

3.2 Situation

Pierce County as a Phase I Municipal "Permittee" is mandated under its *NPDES* permit to:

- Investigate and respond to spills in the municipal separated storm water system.
- Develop a program to prioritize and investigate complaints/reports that indicates potential illicit discharges, including spills.
- Make required notifications.

- Track and maintain a record of all illicit discharges, including documentation of spill responses.

4.0 Collaboration: Summary of Roles and Responsibilities:

SWM Water Quality and Watersheds Section:

- Receives notification from Road Operations of reported spill
- Maintains SWM spills, IDDE and enforcement policies and procedure
- Ensure compliance with NPDES stormwater permit
- Responsible for submitting G3 reports to state
- Responsible for IDDE response and enforcement of PCC 11.05
- Provides coordination support
- Directs water quality sampling, laboratory work and analysis

SWM Maintenance and Operations Section:

- Receives notification from Road Operations of reported spill
- Dispatches maintenance personnel and/or contacts Water Quality and Watersheds
- Provides field support
- Determines sufficiency of mitigation to public ponds and associated County structures

Washington Department of Ecology, Spills Program:

- Stabilizes and directs spills containment
- Assigns Environmental Reporting and Tracking System case number
- Notifies County or TPCHD as appropriate
- Determines level of state oversight
- Determines referrals to DOE Water Quality Program
- Provides input into natural resource damage assessments

Road Operations Division:

- Receives notification from WSDOT or WDOE of reported spill
- Dispatches maintenance personnel and/or contacts SWM
- Provides field support
- Determines sufficiency of mitigation to public drainage and roadway facilities within the County ROW

Washington Department of Ecology, Water Quality Program:

- Receives and tracks G3 spills notifications.
- Receives and monitors IDDE response compliance from NPDES permit
- Determines County compliance with NPDES permit
- Provides input into natural resource damage assessments

Tacoma/Pierce County Health Department:

- Stabilizes and directs spills containment
- Notifies County or State as appropriate
- Directs and evaluates sampling
- Provides input into natural resource damage assessments
- Evaluates hazard potential to people and the environment

5.0 Standard Procedures:

5.1 Organization for SWM Spill Response

PC SWM spill response personnel will consist of:

- Surface Water Management Senior Spill Response Coordinator(s) (SWM-Senior SRC): Water Quality Manager position/person or Designee
- Surface Water Management Spill Response Coordinator(s) (SWM-SRC): Permit Management Unit Supervisor position/person or other IDDE Staff
- SWM Division Manager: position/person
- Other trained spill response PC SWM personnel and support personnel
- Spill response contractors.

The SWM-Senior SRC may delegate any spill response functions to SWM-SRC personnel. Any such delegation(s) will be logged during the event and included in the spill response final report.

a. The SWM-Senior SRC will:

- receive notification and status of a spill event directly (from PC-Road Ops or another source);
- assess the level of hazard and required response (Ecology Types 6-1)
- make required notifications, including, if applicable, G3 notification to Ecology for Phase I Muni SW Permit compliance;
- make initial and periodic reports to the SWM Manager;
- mobilize and commit SWM resources, as appropriate;
- oversee, collaborate with other responders, document the on-site activities, and procure a spill response contractor, if necessary. If the Fire Department or other agency establishes Incident Command (IC), the SWM-Senior SRC will mobilize and coordinate SWM resources (including contractors) at the direction of the Incident Commander;
- verify the completion of activities necessary to finalize a spill response event, including restoration and monitoring activities, debriefing, reporting, and fiscal reconciliation.
- The SWM-Senior SC will provide management and administration for SWM spill response activities.

b. The SWM-SRC will:

- assist the SWM-Senior SRC with their duties.

c. Other SWM personnel and Support staff will be deemed a resource to a spill event.

5.2 PC SWM /Contractor Operations

The spill response contractor, once summoned to the scene of a spill, is in charge of all activities dealing directly with stabilization and cleanup of the hazardous material impacting the MS4. These activities include: site security, worker safety, chemical substance categorization, decontamination, clean-up operations, and action summary reports.

The SWM-Senior SC is responsible for oversight of the spill scene operations, general safety precautions for site personnel, commitment of any PC SWM resources or personnel, regulatory reporting and coordination with other agencies/jurisdictions. The SWM-Senior SC will ensure that operations performed by the contractor conform to Pierce County policies and procedures and will act for PC SWM in managing clean-up operations. SWM-Senior SC is also responsible for ensuring the proper disposal of hazardous waste generated in the clean-up.

5.3 Response Process

Notification: includes initially receiving all pertinent information about the discharge/spill event and also, the responsibility making required notifications. Typical information would include the identification and quantity of the discharged contaminant; geographic location; when and how the spill occurred; information about party causing the spill and reporting party; proximity of the spill to the MS4 and “downstream” projected impacts; who has been notified and when; which responders are on-site. Significant to the response process is whether the contaminating substance is non-hazardous or hazardous, what quantity has been discharged, and is the substance in or about to be in the MS4.

Assessment: Information gathered about the size and character of the spill can be used to assign a “Category”.

Mobilization: Roles, resources and assignments are determined by the “Category” designation for potential on-site activities.

Post-Spill Management: Includes spill impact restoration; summary reporting; debriefing; cost recovery; and finalization of the spill event.

5.4 Assessment

Specific spill response and role at a discharge/spill incident will be determined by the **type and quantity** of the contaminant and **involvement** in the MS4.

PC SWM spill response actions will be based upon an initial assessment of the level of hazard (Type 6: Minor Incident – Type 1: Spill of National Significance) posed by the spill:

Spill Incident Types

Defining incidents results in a more standardized characterization of incidents and supports better decision making. For example, incident typing helps in making decisions about resource requirements and communication levels. Ecology's incident types are based on the following six levels of complexity. These types are derived from and compatible with FEMA Incident Types.

Criteria for incident types carry to the next type. As a result all activities included in a Type 6 are also relevant for a Type 5, etc.

Type 6 (Minor Incident)

- A minor incident in which the Responsible Party (RP) and/or local first responders manage the response.
- The quantity of material/substance released is small and/or contained quickly.
- Human health and environmental impacts are negligible.
- Ecology is notified and performs phone consultation/technical assistance and documents the incident and response actions in ERTS.
- Examples include minor vehicle accidents, dissipating mystery oil sheens, transformer spills to soil and neighbor complaints.

Type 5 (Short Duration)

- Some Command and General Staff positions (other than the Incident Commander) may be activated.
- An ICS Form 201 may be completed with a briefing conducted for all incoming resources.
- The incident is contained within the first operational period and often within an hour to a few hours after resources arrive on scene.
- Examples include a meth lab cleanup, a truck accident or a simple sunken vessel with very little fuel on board.

Type 4 (More staff than an Incident Type 5 and still short duration)

- Command staff and general staff functions are activated as needed.
- The incident is usually limited to one operational period in the emergency phase.

- The Regional Supervisor or Response Section Manager may be notified.
- An ICS Form 201 is required and a briefing will be completed for all incoming resources.
- The role of the SOSC includes establishing objectives, priorities and operational periods as needed.
- Examples include: interagency coordination, resources contracted/called out, spill of more than 25 gallons to water, more complex sunken vessel incidents, USCG Captain of the Port order for non-spill incident.

Type 3 (Significant incident with numerous resources deployed and lots of impacts may transition to a Type 2)

- CMT is activated and IMT positions are required.
- Some or all of the Command and General Staff positions are activated, as well as Division/Group Supervisor and/or Unit Leader level positions.
- A non-spill significant threat that is being monitored and the CMT is activated but no UC has been established.
- The incident may extend into multiple operational periods and Ecology's mobile command post may be deployed.
- An ICS 201 briefing form and a written IAP will be required for each operational period.
- Examples: Spill and HazMat incidents that last more than one day, significant vessel spill threat incidents and response tug activation for disabled vessels, train derailments with potential spill, tanker truck fires and releases to water bodies.

Type 2 (Large/Major incident of long duration, assistance from other agencies required)

- CMT and IMT activated and numerous positions need to be filled.
- Unified Command is established at an appropriate command post.
- Other Incident Management Teams may be activated- Industry, Federal, Local.
- This type of incident is expected to go into multiple operational periods.
- Significant product spilled and numerous sensitive sites threatened.
- May require cascading of resources from other states.
- Most or all of the Command and General Staff positions are filled.
- A written IAP is required for each operational period.
- Area Command may be established.
- Examples: Orphan spill to marine waters with significant impacts, heavy oil spills in marine waters, spill and HazMat incidents that last more than one day, HazMat incidents associated with natural disasters, spills to water from pipeline or regulated facility with significant impacts to the environment.

Type 1 (Spill of National Significance)

- CMT and IMT activated and most positions are filled.
- This type of incident is the most complex requiring national resources to safely and effectively manage.
- All Command and General Staff positions are activated.
- The Governor's Office and all high level Federal agency officials will be involved.
- Area Command will be established.
- The NIC may be established.

- The Agency Administrator will be actively involved with the State and Federal Officials.
- Examples: any Spill of National Significance (SONS) - Deepwater Horizon.

5.5 Mobilization

The role of PC SWM personnel will be determined by the Response Category assigned to the incident, generally, as follows:

- Type 6: no direct involvement; procure and review the incident report.
- Type 5: respond to scene; take the a lead position for notifications, containment, clean-up, and restoration where an illicit discharge has entered the stormwater system; work collaboratively with other responders; conduct post-spill activities to completion; determine the need and help prepare an ICS Form, if necessary.
- Type 3,4: respond to scene; report to Incident Command (IC); provide technical assistance, as required and support IC; collaborate containment and clean-up with IC; document (including images) the event; take the lead in restoration of stormwater system when cleared by IC to do so: conduct post-spill activities to completion; collaborate with other responders; defer media requests to IC.
- Types 2,1: respond to scene; report to Incident Command (IC); provide technical assistance, as required and support IC; document (including images) the event; take the lead in restoration of stormwater system when cleared by IC to do so: conduct post-spill activities to completion; collaborate with other responders; defer media requests to IC.

5.6 Post-Spill Management

The SWM-Senior SRC will:

- follow the established procedures for notifying the regulatory agencies;
- ensure that spilled material is labeled, stored, manifested, and disposed correctly;
- debrief and evaluate the spill and the response procedures used;
- determine disposal options in consultation with the affected work unit supervisor and the disposal contractor.
- submit an after-action report of all activities conducted during the spill cleanup. The SWM-Senior SRC will compile all reports, invoices, cost recovery and other documentation regarding the spill and its resolution. Reports and supporting

documentation will be kept on file in accordance with the County document retention and/ or other pertinent policy.

- provide input opportunity from other responders to any cost recovery action pursuant to Pierce County Code 11.05.

5.7 Documentation

Spills of any category will require submission of a spill report. The SWM-Senior SRC will establish a log of all actions taken at the spill site until the spill is resolved and can request that the spill response contractor submit an after-action report of all activities conducted during the spill cleanup. Reports and supporting documentation will be kept on file in accordance with the County document retention and/or other policy.

5.8 Post Incident Critique and Assessment

As conditions warrant, the SWM-Senior SRC will conduct a thorough debriefing of all personnel involved in an incident response and will prepare a critique report of all incident circumstances and response activities. Information obtained and lessons learned through this critique process will be made available to all Spill Coordinators and will be incorporated into the spill response training program. The purpose of the critique is to:

- Identify and review all “decision points” in the incident process;
- Review and discuss the collaborative interaction with other responders;
- Determine if response plans and procedures were followed;
- Determine if any policies, plans, procedures require modification;
- Identify equipment deficiencies and requirements;
- Identify training deficiencies and requirements;
- Identify corrective actions to prevent future spills.

5.9 Plan Development

The senior SWM-Senior SRC is responsible for the development of all aspects of this document and for ensuring consistency with Federal, State, and County regulations. The SWM-Senior SRC will direct the production and distribution of all operating procedures, action checklists, alert rosters, and other attachments. This document is consistent and with Pierce County Public Works and Utilities Surface Water Management Division Policy POL-2011-001: Water Quality IDDE Response Policy (February 14, 2011).

5.10 Plan Review and Maintenance

The SWM-Senior SRCs and SWM-SRCs will review this document annually, or as conditions warrant, and update it to reflect any changes in organization, roles, and responsibilities; facilities or resources; and/or potential hazards. Lessons learned from actual spill responses and/or from drills and exercises will be incorporated into the structure and content of this document.

5.11 Training Requirements

SWM-Senior SRCs and SWM-SRCs to perform spill response activities under these guidelines will be trained to a level commensurate with their responsibilities and duties. Training will be coordinated and documented by the Surface Water Management Division. Spill response training will be in addition to required Hazard Communication training.

The SWM-Senior SRC and SWM-SRC will be trained and certified in the following areas:

- OSHA First Responder Awareness (FRA) and First Responder Operational (FRO)
- National Incident Command System (NIMS) ICS100 & ICS200

Additionally, they will be fully knowledgeable about the following:

- National Pollutant Discharge and Elimination System Discharge Permit (current issuance)
- Pierce County Code 11.05
- Pierce County SWM Water Quality IDDE Response Policy (POL-2011-001)
- Pierce County-SWM Emergency Response Management Plan
- Pierce County-Road Operations Hazardous Material Spill Response
- Tacoma-Pierce County Health Department Spill Response Narrative
- Pierce County- Sewer Utility Spill Response Plan
- Pierce County-SWM Spill Response Procedure (POL-2011-002A)
- Pierce County Stormwater Management and Site Development Manual:
Volume IV
- ICS Form 201

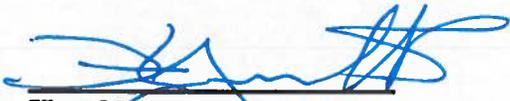
5.12 SWM personnel who may be expected to recognize and report hazardous materials spills and/or support spill response activities will be trained in the following areas (depending on their expected level of involvement):

- Illicit Discharge Detection and Elimination (IDDE) Awareness – Pierce County personnel whose duties require travel throughout Pierce County.
These personnel:
 - ✓ Are likely to witness or discover a illicit discharge
 - ✓ Are trained to initiate an emergency response by notifying the proper authorities of the discharge
 - ✓ Will take no further action beyond notifying the authorities

5.13 Pierce County Public Works and Utilities Surface Water Management Division Illicit Discharge/Spill Report & Response Form (06/11) is attached hereto as the current version of a field operational document. This form will be subject to periodic review and revision, as necessary.

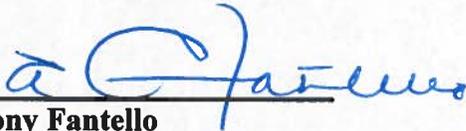
The above procedures are guidance only. Adaptive spill management must be handled on a case by case.

Approval:



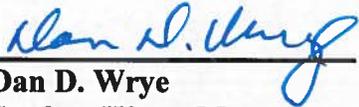
Harold Smelt
Surface Water Management
Division Manager

9/16/15
Date



Tony Fantello
Surface Water Management
Operations and Maintenance Manager

9/28/15
Date



Dan D. Wrye
Surface Water Management
Water Quality Manager

9-15-15
Date



Hans Hunger, P.E.
Surface Water Management
CIP Manager

9/28/15
Date



Annette Pearson
Surface Water Management
Environmental Permitting Section

9-28-15
Date



Ann Marie Marshall-Dody
Surface Water Management
Planning and Programming Manager

9-28-15
Date



Pierce County Public Works and Utilities
Surface Water Management Division
Illicit Discharge/Spill Report & Response Form

ERTS# (Ecology)
RFA # (Pierce County)
SRS # (Pierce County)
Parcel #
Spill Assessment:
Type 6
Type 5
Type 4
Type 3
Type 2
Type 1

INITIAL NOTIFICATION:

SWM Person Initially Notified:

SWM Senior Spill Response Coordinator = SWM Senior SRC
(Water Quality Manager Position/Person or Designee)

Name

SWM Spill Response Coordinators = SWM SRC
(IDDE Staff Position/Person)

Name

Date: / / Time: (24 hr)

- Notified By: PC RoadOps, PC Sewers, Other Jurisdiction, TPCHealth Dept, PC PALS, SWM Hotline, Fire, Police, Other, Direct Observation or Citizen Caller

Has Been Notified: (on scene? = yes / no)

- Dept of Ecology, National Response Center, WA Emergency Mgmt, TacPierceCo Health Dept, Other Jurisdiction, PC Fire, PC Sheriff, PC Sewers, PC RoadOps, PC Emergency Mgmt, PC Risk Mgmt, PC SWM Maint, Other Jurisdiction

Needs To Be Notified:

- Dept of Ecology 1-360-407-6300, WA Emergency Mgmt 1-800-258-5990, TacPierceCo Health Dept 253-798-6470, PC SWM Maintenance 253-798-4132, PC Fire/ Sheriff/ Emergency Mgmt. 911, PC Risk Mgmt. 253-798-7462, Other Jurisdiction, National Response Center 1-800-424-8802, PC Sewers 253-565 3440, PC RoadOps 253-798-6000, Other Jurisdiction

Incident Information:

Occurred When: Date: ___/___/___ Time: _____ (24 hr)

Reported By:

Name: _____ Business: _____

Address: _____

City: _____ State: _____ Zip: _____ Email: _____

Phone: _____ ext.: _____ Confidential? YES NO

Additional Contact: _____ Phone: _____

Incident Scene/Location:

Address _____

Unincorporated or Incorporated Area? City of _____

Parcel # _____

Property Owner _____ Phone# _____

Facility/ Business Name _____

Manager/ Supervisor _____ Phone# _____

Weather Conditions _____ Rainfall (Last 72 hrs): <0.1 inch? yes no

Directions/ Landmarks (mile post, etc.)

Traffic Operations secured ? (y / n) Person in Charge _____

Incident Command established ? (y / n) Commander: _____

Have Injuries Occurred? (yes / no)

If "yes": - has **911** been called? (yes / no)

- how many injured and extent of injury?

- notify **PC Risk Mgmt. 253-798-7462**

Discharge/ Spill Information:

Material: Liquid Solid Gaseous

Petroleum Product Oil Gasoline Diesel

Known Product Name _____

Procure, review, proceed by **SDS** product information

Hazardous to people or environment: call Tac PC Health Dept. **253-798-6470**

Sanitary sewer effluence: call PC Sewers **253-565 3440** / Tac PC Health Dept.

Unknown Product (clear the area; call 911; let Hazmat/Fire secure the scene; call Tac PC Health)

Quantity Discharged (approx.) _____ unit of measure _____

Impact:

⇒ Extent spill has traveled: (describe)

⇒ Spill has / will enter(ed) the Storm Drain System (**MS4**) (y / n)

if yes: procure storm system maps (attach)

I.D. downstream outfalls (list)

Discharge/ Spill Information: (continued)

Impact: (continued)

I.D. downstream ponds (list) (if PC ponds, then notify PC SWM Maintenance)

determine and notify if spill will impact other jurisdictions (list)

⇒ Extent resource damage (i.e. dead fish, oiled fowl, etc): (describe)

⇒ List (owner, address, parcel #) and describe impact on private property:

Discharge/ Spill Information: (continued)

Cause/ Responsible Party:

Describe Cause of Spill:

Responsible Party:

Name: _____ Business: _____

Address: _____

City: _____ State: _____ Zip: _____ Email: _____

Phone: _____ ext.: _____

Additional Contact: _____ Phone: _____

Other Pertinent Information:

ASSESSMENT: from the information gathered, assign a category below to determine guidance for response mobilization to the incident scene.

- Type 6** a quantity of non-hazardous or petroleum product not affecting the MS4 or nearby water body; can be contained and cleaned up using available spill response materials.

- Type 5** a quantity of non-hazardous or petroleum product that poses a threat to people, environmentally-sensitive areas, or the MS4 or nearby water body, or materials that are time-sensitive; most likely a spill response contractor will be deployed to mitigate the spill. **DOE G3 Notification review by Water Quality Manager or designee within 24 hours of obtaining knowledge of the spill; copy to PC Prosecuting Attorney.**

- Type 4,3** a quantity of hazardous substance or large quantity of a petroleum product, or one with widespread environmental damage, or one involving injuries, or a known, extremely hazardous substance requiring a specialized response; a spill response contractor and/ or local emergency response agencies will be involved. **DOE G3 Notification review by Water Quality Manager or designee within 24 hours of obtaining knowledge of the spill; copy to PC Prosecuting Attorney.**

- Type 2,1** a catastrophic spill/release that requires multi-agency or multi-jurisdictional response will be handled under the Pierce County Department of Emergency Response Plan. **DOE G3 Notification review by Water Quality Manager or designee within 24 hours of obtaining knowledge of the spill; copy to PC Prosecuting Attorney.**

MOBILIZATION:

The role of PC SWM personnel will be determined by the Response Category assigned to the incident, generally, as follows:

- | | |
|-----------|--|
| Type 6: | no direct involvement; procure and review the incident report. |
| Type 5: | respond to scene; take the a lead position for notifications, containment, clean-up, and restoration where an illicit discharge has entered the stormwater system; work collaboratively with other responders; conduct post-spill activities to completion; determine the need and help prepare an ICS Form, if necessary. |
| Type 3,4: | respond to scene; report to Incident Command (IC); provide technical assistance, as required and support IC; collaborate containment and clean-up with IC; document (including images) the event; take the lead in restoration of stormwater system when cleared by IC to do so: conduct post-spill activities to completion; collaborate with other responders; |

Types 2,1:

defer media requests to IC.

respond to scene; report to Incident Command (IC); provide technical assistance, as required and support IC; document (including images) the event; take the lead in restoration of stormwater system when cleared by IC to do so: conduct post-spill activities to completion; collaborate with other responders; defer media requests to IC.

Collaborative Guidelines : Summary of Roles and Responsibilities

SWM Water Quality and Watersheds Section:

- Receives notification from Road Operations of reported spill
- Maintains SWM spills, IDDE and enforcement policies and procedure
- Ensure compliance with NPDES stormwater permit
- Responsible for submitting G3 reports to state
- Responsible for IDDE response and enforcement of PCC 11.05
- Provides coordination support
- Directs water quality sampling, laboratory work and analysis

SWM Maintenance and Operations Section:

- Receives notification from Road Operations of reported spill
- Dispatches maintenance personnel and/or contacts Water Quality and Watersheds
- Provides field support
- Determines sufficiency of mitigation to public ponds and associated County structures

Washington Department of Ecology, Spills Program:

- Stabilizes and directs spills containment
- Assigns Environmental Reporting and Tracking System case number
- Notifies County or TPCHD as appropriate
- Determines level of state oversight
- Determines referrals to DOE Water Quality Program
- Provides input into natural resource damage assessments

Road Operations Division:

- Receives notification from WSDOT or WDOE of reported spill
- Dispatches maintenance personnel and/or contacts SWM
- Provides field support
- Determines sufficiency of mitigation to public drainage and roadway facilities within the County ROW

Washington Department of Ecology, Water Quality Program:

- Receives and tracks G3 spills notifications.
- Receives and monitors IDDE response compliance from NPDES permit
- Determines County compliance with NPDES permit
- Provides input into natural resource damage assessments

Tacoma/Pierce County Health Department:

- Stabilizes and directs spills containment

POST-SPILL MANAGEMENT: this aspect of the process encompasses spill impact restoration; summary reporting; debriefing; fiscal summarization; and finalization of the spill event.

- Type 6,5** copy of on-site incident report to Surface Water Management-Water Quality

 - Type 4,3,2,1** may request that Spill Response Contractor submit an after-action report of all activities conducted during the spill clean-up; compile all reports, invoices, cost recovery and other documentation regarding the spill and its resolution; reports and supporting documentation will be kept on file in accordance with the County document retention and/or pertinent policy.
-

Additional Notes:

APPENDIX O
SWM Significant Storm Event Procedure,
POL-2015-001A

Public Works Department

SURFACE WATER MANAGEMENT DIVISION

SIGNIFICANT STORM EVENT PROCEDURE



Procedure Number:	POL-2015-001A
Title:	Significant Storm Event Procedure
Effective Date:	May 22, 2015
Revised Date:	January 1, 2016
Contact:	Dan Smith, Permit Management Unit Supervisor
Management Sponsor:	Dan Wrye, Water Quality Manager
Related Documents:	2015 Pierce County Stormwater Manual
References:	NPDES Municipal Stormwater Permit WAR04002

Purpose:

Per requirements specified in Pierce County's Phase I Municipal Stormwater Permit (section S5.C.9.c.ii), this document establishes procedures to spot check potentially damaged permanent stormwater treatment and flow control Best Management Practices (BMPs)/facilities following major storm events (24-hour storm event with a 10-year or greater recurrence interval).

Procedure Overview:

Precipitation data records will be retrieved and downloaded from Pierce County's Weather Station webpage:

<https://www.piercecountywa.org/weather>

Precipitation data used for this purpose will represent atmospheric conditions occurring across the County, and as a result, will include information collected at four distinct regional weather stations:

1. Purdy Road Shop (representing the northern Pierce County region in Gig Harbor).
2. Longbranch (representing the Key Peninsula region).
3. Puyallup at Thun Field (representing Pierce County/Tacoma/Puyallup region).
4. South Prairie Fire Station (representing Pierce County/Tacoma/Puyallup region).

A major storm event is defined as a 24-hour storm event with a 10-year or greater recurrence interval. Pursuant to Pierce County's Phase I Municipal Stormwater Permit, section S5.C.9.c.ii, spot checks are triggered based on the following design storm precipitation values calculated for each individual weather station:

Design Storm Precipitation Values

Return Frequency 24-Hour Storm Event (Years)	NORTHERN PIERCE COUNTY REGION IN GIG HARBOR	KEY PENINSULA REGION	PIERCE COUNTY/TACOMA/PUYALLUP REGION	
	Purdy Road Shop	Longbranch	Puyallup at Thun Field	South Prairie Fire Station
10	3.5 inches	4.3 inches	3.0 inches	3.0 inches

Reference: 2015 Pierce County Stormwater Management and Site Development Manual, Volume III (Western Washington Isoplethial 10-year, 24-hour)

Procedural Steps:

1. Pierce County maintains a series of Onset © HOBO U30 and RX3000 data loggers (or equivalent) that enable remote access to real-time, continuous (15-minute interval) rainfall data.
2. The SWM Permit Management Unit Supervisor (or designee) will be responsible for monitoring conditions during wet weather, and shall retrieve and analyze data associated with weather system periods that are predicted to produce heavy rainfall.
3. These significant storm event data, recorded at each of the four distinct regional weather stations, will be downloaded and analyzed to determine whether the 10-year, 24-hour storm criteria (specified above for any of the three distinct regions) has been exceeded. If one or more of the four stations listed above is unavailable or out-of-order, data obtained from the nearest operating rainfall logger(s) will be substituted for the evaluation.
4. Microsoft Excel (or an equivalent software application) will be used to perform mathematical calculations of the selected data that summarizes rainfall values into 24-hour sliding increments. Running 24-hour totals update with each 15-minute logger reading.
5. If data analysis indicates that the 10-year, 24-hour storm criteria has been exceeded, the SWM Permit Management Unit Supervisor (or designee) will contact Surface Water Management, Maintenance and Operations, and Road Operations Divisions indicating where and when the significant storm occurred. Spot checks of potentially damaged permanent stormwater treatment and flow control Best Management Practices (BMPs)/facilities will be required as soon as practicable if the data analysis indicates an exceedance of the 10-year, 24-hour storm criteria specified above for any of the three distinct regions. When this requirement is triggered, Surface Water Management, Maintenance and Operations and Road Operations Divisions will select

a subset (5-10 minimum) of stormwater management facilities (treatment or flow control) within each affected region for inspection. Records of these inspections will be maintained in the department's asset management system.

6. If spot checks indicate widespread damage and or maintenance needs, all stormwater treatment and flow control BMPs/facilities will be inspected within that affected region. Necessary repairs and or appropriate maintenance actions (if present) will be conducted in accordance Pierce County's Phase I Municipal Stormwater Permit, section S5.C.9.a.
7. Records of significant storm event spot checks and follow up inspections will be maintained in the department's asset management system.

APPENDIX P
Education and Outreach Program
Matrix Spreadsheet

10. Education and Outreach Program		Topics / Reference																						
		a.i 1 and 2 Build Awareness										a.ii Behavior Change										b Stewardship	c. Measure effectiveness	
		General public (including school age children), and businesses (including home-based and mobile businesses)					Engineers, contractors, developers and land use planners					General public (may include children) and businesses (include home based and mobile)					Residents, landscapers and property managers/owners							
		General impacts of stormwater on surface waters.	Impacts of impervious Surfaces	Impacts of illicit discharges and how to report them.	LID principles and BMPs	Opportunities to become involved in stewardship activities	Technical standards for stormwater site and erosion control plans	LID principles and BMPs	Stormwater treatment and flow control BMPs/facilities.	Use and storage auto chemicals, cleaning supplies, carwash soaps, hazardous materials	Equipment maintenance	Prevention of illicit discharges	Yard Care	Use and storage of pesticides/fertilizers and other household chemicals	Carpet cleaning and auto repair and maintenance	Vehicle, equipment and home/building maintenance	Pet waste management and disposal	LID principles and LID BMPs	Stormwater facility maintenance	Dumpster and trash compactor maintenance	Each permittee shall create stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities.	Measure the understanding and adoption of the targeted behaviors for at least on targeted audience in at least one subject area.	No later than Feb. 2, 2018, use the resulting measurements to direct education and outreach resources most effectively as well as to evaluate changes in adoption of the targeted behaviors.	
Program Name and Manager	Program Overview	a.i.1	a.i.1	a.i.1	a.i.1	a.i.1	a.i.2	a.i.2	a.i.2	a.ii.1	a.ii.	a.ii.1	b.i.	b.i.3	b.i.3	b.i.3	b.i.3	b.i.3	b.i.3	b.i.3	b.i.4	b.ii	b.iii	
Hazardous Waste management program, Sheryl Rheinart	Pierce County Public Works Sustainable Resources division household hazardous waste program promotes alternatives to the use of hazardous chemicals and the proper storage and disposal of these materials. They maintain a website and conduct outreach at fairs and other events. The Tacoma-Pierce County Health Department has a hazardous waste hotline for Pierce County residents. For more information: www.piercecountywa.org/hhw			X						X		X			X									
Don't Drip and Drive, Mike Halliday	Pierce County has participated in the development and implementation of the Don't Drip and Drive program since its inception in 2012. An outreach effectiveness study was completed for the Don't Drip and Drive program, and a report was completed Feb. 2, 2016. Throughout 2016, Pierce County participated on the Don't Drip and Drive steering committee and managed elements of the Don't Drip and Drive grant program on behalf of STORM. The program launched in 2017, and it is based on recommendations from the project effectiveness study. For more information go to www.fixcarleaks.org , for partner toolkit, go to www.piercecountywa.org/dontdripanddrive	X	X			X				X	X	X			X	X					X	X	X	

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Tree Workshops and Sales, Mike Halliday	Pierce County partners with the Pierce Conservation District and City of Tacoma on a tree workshop and sale program and a discount tree coupon program. The program provides free workshops and discounts on trees. Workshops emphasize maintenance of existing trees, proper planting and care for trees. In addition, the workshop connects residents to the master gardener program, which includes arborists available to answer resident questions about tree care. A workshop was held in 2017 with 282 trees purchased. A coupon program partnering with multiple local nurseries is also available by request. The coupon provides a \$15 per tree discount on up to five trees. Funding for this program comes from the Puyallup Watershed Initiative. For more information go to www.treesareamazing.org		X		X	X					X	X											X
Car wash kit check-out and giveaway, Mike Halliday	Pierce County maintains a fundraising car wash webpage with links to alternative fundraising programs. Pierce County promotes the use of alternatives to fundraising car washes for fundraisers, such as sale of car wash coupons or renting a bay at a commercial car wash to do fundraising. For fundraising groups holding multiple car washes in a year, Pierce County has distributed free car wash kits for their use. For more information: www.piercecountywa.org/carwash	X	X	X						X	X				X	X							

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Residential car wash program	Pierce County maintains a "fish friendly car wash" webpage which encourages residents to use greener car wash products, wash cars on pervious surfaces, or take them to a commercial car wash to reduce car wash water discharges to stormwater. Car wash publications are provided to homeowners by water quality inspectors on an as-needed basis. For more information: www.piercecountywa.org/carwash	x	x	x						x		x			x	x									
Water Quality Report Card and Online Water Quality Data Portal, Carla Vincent	Pierce County's water quality monitoring program annually monitors more than 30 streams and produces the Surface Water Health Report Card to educate residents about local water quality. Pierce County also maintains an online portal that provides access to water quality monitoring data, shellfish beach monitoring data, and weather station data. For more information go to www.piercecountywa.org/watershedhealthdata	x	x	x								x													
Watershed Council Coordination, Tom Kantz	Pierce County provides support to the four watershed council's located in the County: Puyallup River, Nisqually River, Chambers-Clover, and Key Peninsula-Gig Harbor-Islands. Watershed councils provide a public forum for watershed based issues, network of professionals and private citizens working on watershed issues, and stewardship opportunities. For more information: www.piercecountywa.org/watersheds	x	x	x								x													



Thank you!