City of Tukwila NPDES Permit 2019-2024 Compliance Support

Compliance Analysis Summary

Submitted to:
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Project No. 19340

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Section 1—Introduction

The City of Tukwila (City) is an existing permittee under the National Pollutant Discharge Elimination Systems (NPDES) Western Washington Phase II Municipal Separate Storm Sewer (MS4) Permit (Permit), issued by Washington Department of Ecology (Ecology). Ecology recently reissued the Permit, effective August 1, 2019, through July 31, 2024.

The reissued Permit includes several permit conditions which are new or have changed. The City has requested Otak's assistance in preparing to comply with the requirements of the 2019-2024 Permit.

Section 2—Method

Otak compared the City's 2019 Stormwater Management Program Plan and supporting documents with the Permit and looked for potential gaps in compliance focusing on the following permit conditions that are new or changed:

- S5.C.1, Stormwater Planning
- S5.C.4, MS4 Mapping and Documentation
- S5.C.6, Controlling Runoff from New Development, Redevelopment, and Construction Sites (including Appendices 1 and 10)
- S5.C.8, Source Control for Existing Development

Documents Reviewed

Otak submitted a detailed request for documents relevant to the Permit stormwater management program elements. The City provided documents specific to the existing Stormwater Management Program as well as numerous general City documents related to the new program requirements.

Overall

- 2019 Stormwater Management Program (SWMP) Plan
- 2018 NPDES Permit Annual Report answers

S5.C.1, Stormwater Planning

- City of Tukwila Comprehensive Plan 2015
- City of Tukwila Surface Water Comprehensive Plan 2013
- Green Tukwila 20-Year Stewardship Plan 2017
- 2019-2024 Financial Planning Model and Capital Improvement Program
- Transportation and Infrastructure Committee page, tukwilawa.gov

S5.C.4, MS4 Mapping and Documentation

- City of Tukwila GIS Database: Catch_basins, Drain_points, Pipes_and_Ditches, Storm_Clean_Out, Storm_Pump_Station, Storm_Vault_Lid, Stormwater_Detention_Water_Quality_Structure

S5.C.6, Controlling Runoff from New Development, Redevelopment, and Construction Sites (including Appendices 1 and 10)

- 2019 Stormwater Management Program (SWMP) Plan
- 2018 NPDES Permit Annual Report answers

S5.C.8, Source Control for Existing Development

- Tukwila Municipal Code - Title 14: Water and Sewers
- Informal Source Control Inspection Program Standard Operation Procedures (SOP)
- Historic Spill Kit Outreach and Source Control Business Inspections by ECOSS
- Private Stormwater Facility Inspections (Residential and Business/Commercial) by Public Works staff
- Source Control Inventories: Pools, Spas, Restaurants, Auto Lots
- Private Drainage Inspection list (spreadsheet entitled “NPDES Properties”)

Section 3—Program Review Summary

S5.C.1, Stormwater Planning

Requirements

Permit section S5.C.1., Stormwater Planning, is a new requirement for the 2019-2024 Permit term. The City will need to allocate additional effort to meet the new requirements. Some of the requirements may be met by modifying or expanding current activities. Upcoming long-term plan update efforts are applicable to the long-term planning requirements. Ongoing efforts to make Low Impact Development (LID) the preferred and commonly-used approach to site development under the Controlling Runoff from New Development, Redevelopment, and Construction Sites program now fall under this permit section.

C.1.a.	Convene an inter-disciplinary team to inform and assist in the development, progress, and influence of this program.
C.1.b.i.a.	On the 2021 NPDES Annual Report, respond to the Stormwater Planning questions to describe how anticipated stormwater impacts on water quality were addressed, if at all, during the 2013-2019 Permit term in updates to the Comprehensive Plan.
C.1.b.i.b.	On the 2023 NPDES Annual Report, respond to the Stormwater Planning questions to describe how anticipated stormwater impacts on water quality are informing the planning update process during the 2019-2024 Permit term.
C.1.c.	Continue to require LID principles and Best Management Practices (BMPs) to make LID the preferred and commonly-used approach to site development.
C.1.d.i.	Prepare a Receiving Water Assessment.
C.1.d.ii.	Prepare a Receiving Water Prioritization.
C.1.d.iii.	Develop a Stormwater Management Action Plan (SMAP) for at least one high priority catchment area.

Findings

Existing Activities

- City has a long-term planning process for stormwater: *Surface Water Comprehensive Plan*
- City has incorporated LID into the development code
- City’s Surface Water Comprehensive Plan includes information on basins within the City

Observed Gaps

- City needs to convene an inter-disciplinary team to inform stormwater planning
- City will need to include NPDES coordinator in upcoming long-term plan updates
- City will need to continue to assess and eliminate barriers to LID
- City will need to:
  - Prepare a Receiving Water Assessment, which could be addressed by updating basin information in the *Surface Water Comprehensive Plan*
  - Prepare a Receiving Water Prioritization
  - Develop an SMAP for at least one high priority catchment area

Recommendations

The City currently forms temporary working groups to address specific projects. The City should establish a standing committee to inform and assist development of the stormwater planning program. The committee should include members from Public Works divisions including Transportation, Development Services, Facility and Street Maintenance, and Surface Water, as well as departments outside Public Works including Community Development, Economic Development, and Parks and Recreation. The committee should advise on the City's *Surface Water Comprehensive Plan* and *Comprehensive Plan* updates and any other long-term planning efforts or surface water program changes. The committee should first convene by August of 2020. At a minimum, the team should meet at the beginning of each planning process to establish tasks and agree on priorities, and at the end to review deliverables. Establishing the committee through a policy from the City Administrator would assist with broad participation.

This effort may be addressed with existing staffing.

The NPDES coordinator will need to answer questions about how stormwater management needs and protection/improvement of receiving water health were (or were not) addressed in existing long-term plans on the 2021 NPDES Annual Report. The relevant long-term plans include:

- *2013 Surface Water Comprehensive Plan*
- *2015 City of Tukwila Comprehensive Plan*
- *2019 - 2024 Financial Planning Model and Capital Improvement Program*
- *2017 Green Tukwila 20-Year Stewardship Plan*

The NPDES Coordinator will need to review the Annual Report questions and collect the necessary information prior to March 31, 2021.

This effort may be addressed with existing staffing.

The NPDES Coordinator will also need to answer questions about how the how stormwater management needs and protection/improvement of receiving water health are (or are not) informing the planning update process and influencing policy and strategies on the 2023 Annual Report. The City's Surface Water Program Manager and NPDES Coordinator should be involved in the updates to the City's *Comprehensive Plan* and other long-term plans.

- The City's *Surface Water Comprehensive Plan* will be updated in 2021
- The City's *Comprehensive Plan* will be updated in 2023

This effort may be addressed with existing staffing.

The City will need to establish a process to continue to assess and consider any newly identified administrative or regulatory barriers to LID implementation. The process could be documented in the upcoming update to the *Surface Water Comprehensive Plan*, and the interdisciplinary stormwater committee could play a role in identifying and considering barriers.

This effort may be addressed with existing staffing.

The City will need to prepare a Receiving Water Assessment, Receiving Water Prioritization and develop an SMAP by March 2023 following a process similar to that described in Ecology's 2019 *Stormwater Management Action Planning Guidance*.

The basin descriptions in the City's current *Surface Water Comprehensive Plan* already contain much of the information needed for the Receiving Water Assessment, and the City may choose to include the whole process, including completing the SMAP, in the update of the *Surface Water Comprehensive Plan* planned for 2021.

Although this would accelerate the timeline required by the Permit, it would avoid duplication of effort and would include the SMAP in the planned effort.

This effort may be addressed with existing staffing with the support of professional services.

S5.C.4, MS4 Mapping and Documentation

Requirements

Permit section S5.C.4, MS4 Mapping and Documentation, was previously categorized under Illicit Discharge Detection and Elimination. As a result, the new section includes continuing effort as well as new requirements.

The following requirements represent continuing effort:

C.4.a.i.	Map the known MS4 outfalls and known MS4 discharge points.
C.4.a.ii.	Map receiving waters, other than groundwater.
C.4.a.iii.	Map stormwater treatment and flow control BMPs/facilities owned or operated by the permittee.
C.4.a.iv.	Map geographic areas served by the permittee's MS4 that do not discharge stormwater to surface waters.
C.4.a.v.	Map tributary conveyances to all known outfalls and discharge points with a 24-inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. Include the following features/attributes: tributary conveyance type, material, and size where known; associated drainage areas; and land use.
C.4.a.vi.	Map connections between the MS4 owned or operated by the permittee and other municipalities or public entities.
C.4.a.vii.	Map all connections to the MS4 authorized or allowed by the permittee after February 16, 2007. (Do not need to map residential connections for individual driveways, sump pumps, or roof downspouts).
C.4.d./e.	Upon request, and to the extent appropriate, the permittee shall provide mapping information to Ecology, federally-recognized Indian Tribes, municipalities, and other permittees.

The following requirements are new and will require additional effort by the City to meet the 2019-2024 Permit requirements:

C.4.b.i.	Begin to collect size and material for all known MS4 outfalls during normal course of business (e.g., during field screening, inspection, or maintenance) and update records.
C.4.b.ii.	Complete mapping of all known connections from the MS4 to a privately-owned stormwater system.
C.4.c.	Store all required mapping data in a GIS or CAD drawings and develop mapping standards.

Findings

The activities organized in the 2019-2024 Permit in the MS4 Mapping and Documentation section continue and expand on activities previously organized under the IDDE program. As a result, the City is already conducting many of the required activities. The Permit now requires electronic mapping of the MS4 in a GIS or in CAD with documented standards.

The City GIS Coordinator maintains a GIS database of the MS4 and receiving waters. Additional data is maintained by the NPDES Coordinator in KML files (Google Earth), and a list of outfalls used for IDDE inspections is maintained in Excel spreadsheets. Many MS4 assets are also tracked in Lucity with attributes such as material and size.

The City recently adopted a new GIS data dictionary. Implementing this data dictionary across the users of the City's GIS database will address the requirement to describe the City's electronic mapping standards.

Existing Activities

- The City has a GIS database which includes public stormwater infrastructure, receiving waters, and private stormwater facilities.
- The City has an inventory of outfalls used for dry weather inspections under the Illicit Discharge Detection and Elimination (IDDE) program; this outfall list likely conforms to the definition[1] of outfall in the Permit.
- As part of its IDDE inspection program, the City collects data such as pipe size and material of outfalls.
- The City has a newly adopted GIS data dictionary.
- The City has an asset management system, Lucity, which tracks many of the required attributes of the MS4 system, such as size and materials of outfalls.

Observed Gaps

Most or all of the required mapping elements (both existing and new) are already tracked by the City either in the GIS, in Excel, or in Lucity. However, some required mapped elements are not explicitly shown in the GIS, and elements and attributes that are tracked in a different data repository must be transferred or copied to the GIS.

- The GIS database does not have an "outfall" feature that conforms to the definition of outfall in the Permit. The dry weather inspection outfall inventory and map likely conform to the definition of "outfall" in the Permit, but they do not qualify under the new electronic mapping standard.
- The GIS database does not have a "discharge point" feature that conforms to the definition of discharge point in the Permit.
- The GIS database does not appear to have a way to distinguish connections between interconnected systems and connections between different elements of the same system.
- The attributes of stormwater assets such as pipes that are tracked within Lucity do not qualify under the new electronic mapping standard, and these attributes must be transferred to the GIS.
- City will need to collect and record size and materials of pipes to MS4 outfalls where such data are missing.
- City will need to establish mapping standards (see *Mapping Guidance for Municipal Stormwater Permittees*).

Recommendations

The City will need to perform some analyses of existing data and transfer information from other data repositories (e.g. Excel, Lucity) into the GIS to meet the following mapping requirements:

- Map geographic areas served by the permittee's MS4 that do not discharge stormwater to surface waters.
- Create an outfall feature type in the GIS and identify true outfalls from among the various "drain points" in the existing GIS. Attach attributes such as pipe size and materials.
- Create a discharge point feature type in the GIS and identify true discharge points from among the various "drain points" in the existing GIS.
- Create a system connection feature type in the GIS and identify connections between the City's storm sewer and storm sewers of adjacent
- Ensure that attributes of tributary conveyances to outfalls of 24-inches in diameter or greater that are tracked in another repository are incorporated into the GIS (where known).

The following new requirement may require field reconnaissance and manual entry of new data:

- Create a system connection point feature type in the GIS.

[1] Definitions are found beginning on page 49 of the 2019-2024 Phase II Permit.

- Map connections from the MS4 to private stormwater systems.

The City should include this work and updates to the GIS database in the existing GIS consultant contract. For a limited duration of six months to one year, this effort will require additional work by a staff member familiar with Permit definitions and with the City's MS4. Approximately 100 hours of staff time will be required to locate various source data (e.g. Lucity), coordinate the work of the contractor to ensure that the GIS updates conform to Permit requirements, and perform quality control checks on the resulting GIS data sets. Additional field reconnaissance that may be needed is not included in this estimate.

S5.C.6, Controlling Runoff from New Development, Redevelopment, and Construction Sites (including Appendices 1 and 10)

Requirements

Changes to Permit section S6.C.6, Controlling Runoff from New Development, Redevelopment, and Construction Sites, are relatively minor. The 2019-2024 Permit adopts Appendix 10, which is new, and which is referenced by this section and by Appendix 1.

The following requirements represent continuing effort and will see minor changes as a result of adopting the requirements of Appendix 10:

C.6.a.	Implement an ordinance or other enforceable mechanism to reduce pollutants in stormwater runoff to the MS4 from new development, redevelopment, and construction sites.
C.6.b.	Revise ordinance or other enforceable mechanism to meet the requirements of S5.C.6.b(i) through (iii).
C.6.c.i.	Review all stormwater site plans for proposed development activities.
C.6.c. ii.	Inspect, prior to clearing and construction, permitted development sites that have a high potential for sediment transport as determined through plan review based on definitions and requirements in Appendix 7 Determining Construction Site Sediment Damage Potential, or, alternatively, inspect all construction sites meeting the minimum thresholds adopted.
C.6.c.iii.	Inspect all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforce as necessary based on the inspection.
C.6.c.iv.	Manage maintenance activities to inspect all stormwater treatment and flow control BMPs/facilities, and catch basins, in new residential development every 6 months until 90% of the lots are constructed to identify maintenance needs and enforce compliance with maintenance standards as needed.
C.6.c.v.	Inspect all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities. Verify that a maintenance plan is completed and responsibility for maintenance is assigned for stormwater facilities.
C.6.c.vi.	Document compliance with the inspection requirements in S5.C.6.b.ii. through v. Compliance shall be determined by achieving at least 80% of the required inspections.
C.6.c.vii.	Implement a procedure for keeping records of inspection and enforcement actions, including inspection reports, warning letters, notices of violation, and other enforcement records. Keep records of maintenance inspections and activities.
C.6.c.viii.	Implement an enforcement strategy in cases of non-compliance.

C.6.d.	Make available the electronic links to Ecology's Construction Stormwater General Permit Notice of Intent (NOI) form and the Industrial Stormwater General Permit NOI form, as applicable, to representatives of new development and redevelopment.
C.6.e.	Train all staff responsible for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites (including permitting, plan review, construction site inspections, and enforcement) to conduct these activities. Keep training records.

The City will need to adopt the standards contained in Appendix 1 as part of the Controlling Runoff from New Development, Redevelopment, and Construction Sites.

Findings

The City has adopted the 2016 King County Surface Water Design Manual (KCSWDM) and King County Stormwater Pollution Prevention Manual, a Phase I program equivalent to Appendix 1, and the 2014 Stormwater Management Manual for Western Washington.

Existing Activities

- The City currently implements the thresholds, definitions, and minimum requirements of Appendix 1 under the 2013-2018 permit.

Observed Gaps

- The City will need to update its standards for controlling runoff from development and construction sites by June 30, 2022.

The City has several options to update its standards, including:

- Wait for King County to update its own manuals and program to comply with the analogous Phase I Permit requirement (due by July 1, 2021), and then adopt the updated King County manuals and program.
- Continue to enforce the 2016 King County manual and program, and adopt independent amendments or errata equivalent to Appendix 10.
- Adopt Ecology's 2019 Stormwater Management Manual for Western Washington.
- Develop an independent manual and program using the thresholds, definitions, and minimum requirements of the 2019-2024 Appendix 1.

Recommendations

The City of Tukwila plans to adopt the updated King County manuals and program prior to June 30, 2022. This recommendation assumes that King County will update its manuals and programs in accordance with Phase I Permit's Appendix 1 by summer of 2021.

This effort may be addressed with existing staffing.

S5.C.8, Source Control for Existing Development

Requirements

Permit section S5.C.8., Source Control for Existing Development, is a new requirement for the 2019-2024 Permit term. The City will need to allocate additional effort to meeting the new requirement. Some of the requirements may be met by modifying or expanding current activities.

C.8.b.i.	Adopt and make effective an ordinance(s), or other enforceable documents, requiring the application of source control.
C.8.b.ii.	Establish an inventory that identifies publicly and privately owned institutional, commercial, and industrial sites which have the potential to generate pollutants to the MS4.
C.8.b.iii.	Implement an inspection program for sites identified in C.8.b.ii.
C.8.b.iii.a	Provide information to those identified sites about activities that may generate pollutants and the source control requirements applicable to those activities.
C.8.b.iii.b	Complete the number of inspections equal to 20% of the businesses and/or sites listed in the source control inventory to assess BMP effectiveness and compliance with source control requirements. May count follow-up inspections at the same site towards meeting the 20% inspection rate.
C.8.b.iii.c/d	Inspect 100% of sites identified through credible complaints. Permittee may count inspections conducted based on complaints, or when the property owner denies entry, to the 20% inspection rate.
C.8.b.iv.a/b	Implement a progressive enforcement policy that requires sites to comply with stormwater requirements within a reasonable time period.
C.8.b.iv.c	Maintain records, including documentation of each site visit (including denied entries), inspection reports, warning letters, notices of violations, and other enforcement records to demonstrated efforts to bring sites into compliance.
C.8.b.iv.d	The City may refer non-emergency violation (NOV) to Ecology, provided the Permittee also makes a documented effort of progressive enforcement (i.e., documentation of inspections and warning letters or NOVs).
C.8.b.v.	Provide training to staff responsible for implementing the source control program, including follow-up training to address changes in procedures, techniques, requirements, or staffing. Keep training records.

Findings

Source Control for Existing Development is an entirely new Permit requirement for Phase II permittees. The City conducts elements of this requirement under existing programs for IDDE and Operations and Maintenance. However, the new requirement will require additional authority for inspection and enforcement.

Existing Activities

- As part of its IDDE program, existing stormwater facilities inspection program, and business licensing, the City maintains an inventory of commercial sites which it inspects for illicit discharges.
- As part of its IDDE program, the City enforces Tukwila Municipal Code - Title 14: Water and Sewers.
- City conducts source control inspections as part of the IDDE program and existing stormwater facilities inspection program, and the City contracts with ECOSS to conduct source control outreach and provide spill kits to businesses.
- The City conducts source tracing for complaints received as part of the IDDE program.
- The City conducts source control training for field staff who may encounter illicit discharges or pollutant sources during normal work activities.

Observed Gaps

- Title 14 of the existing code appears insufficient to authorize inspections on existing private property, which may or may not have a drainage system that was authorized by the City, for the purposes of observing preventative source control measures and requiring application of BMPs to prevent pollution of stormwater runoff in the absence of an observed illicit discharge.
- The City will need to adopt and implement a source control ordinance or other enforceable document that:
  - Applies to existing development
  - Authorizes entry

    - Establishes standards for sites to follow (adopt a source control BMP manual)
    - Develops or references enforcement procedures
- The City will need to compile and maintain an inventory of sites which require source control. The current inventory of sites, as referenced under existing activities, does not fully meet the new requirement.
- The City will need to implement a source control inspection program that is designed to conduct a number of inspections equal to 20% of the sites listed in the source control inventory.
- The City will need to maintain records of source control inspections and enforcement actions.
- The City will need to adopt and implement a progressive enforcement policy for sites which fail to implement source control.
- The City will need to maintain specific records of source control staff training.

Recommendations

The City attorney should review the Permit requirement and determine if the City needs to adopt an ordinance or other enforceable document to provide sufficient authority.

The City will need to compile and maintain an inventory of sites which require source control. Appendix 8 of the Permit contains a list of business types with North American Industry Classification System (NAICS) codes that are potential sources of pollutants. The City stopped licensing businesses in 2019, and the Washington State Department of Revenue took over licensing businesses. The Washington State Department of Revenue issues business licenses and maintains a database of businesses by NAICS available to the City through a partnership agreement. This database will allow the City to identify businesses in the City with NAICS codes included in Appendix 8 of the Permit. The City has approximately 6146 businesses licensed with the Department of Revenue.

We reviewed the last list of business licenses issued by the City of Tukwila in November 2018. Approximately 47% of these businesses have an NAICS code included in Appendix 8. Based on that ratio, 2917 of the 6146 businesses licensed in Tukwila may require inspection under the Source Control Program. Reviewing each business license and confirming the business has a location in the City of Tukwila that should be included on the inventory will take approximately two weeks initially, and a week each year to maintain.

Approximately 600 source control inspections will be required each year. Currently, the City is conducting source control-like inspections on approximately 500 sites each year as part of the City's stormwater Operations and Maintenance inspections. These inspections could qualify as source control inspections if some additional observations were made and recorded. These inspections require 0.25 full-time equivalent staff (FTE) each year. It is unknown how many of these sites may overlap the estimated 3,000-site source control inventory. Assuming that half the existing sites would qualify as a source control inspection (250 sites), then 350 additional source control inspections would be required each year to reach the annual 20% of inventory goal.

Considering the work to create and maintain the inventory, inspection of 350 additional sites, additional record-keeping and reporting, and the additional education requirement, an additional 0.25-0.30 FTE may be required to address this permit requirement.

Section 4—Summary of Recommendations and Implementation Schedule

The City will need to begin new activities in the first quarter of 2020, particularly for the Stormwater Planning requirement. The majority additional effort for Mapping and Documentation should fall into 2020 or 2021 to meet an August 2021 Permit deadline to map all required elements in a GIS or CAD system.

An additional 100 hours of staff time (one-time) outside of current FTE is recommended in 2020 to oversee consultant services for Mapping and Documentation. A total of 0.25-0.3 new ongoing FTE for Source Control beginning in 2021 is recommended.

Table 1—Permit Requirements Implementation Summary (New/Changed Requirements Only)

Permit Section	Requirement	Begin Date	Permit Due Date	Current Progress	Recommended Activities and Estimated Effort
S5.C.1, Stormwater Planning					
C.1.a.	Interdisciplinary stormwater planning team	March 2020	August 1, 2020 (begin)	Not started	▪ NPDES Coordinator to invite a representative from various departments to the interdisciplinary team. ▪ Team should plan to meet approximately twice a year.
C.1.b.i.a.	Existing long-term planning Annual Report	December 2020	March 31, 2021	Plans identified	NPDES Coordinator should review plans and Annual Report questions.
C.1.b.i.b.	New long-term planning Annual Report	March 31, 2022	March 31, 2022	Plans identified	NPDES Coordinator should be included on plan updates and prepare to answer report questions.
C.1.c.	Document policy for continuing to address barriers to LID when found; annually report on findings and resolutions	Immediately	Annually beginning March 31, 2020	Continuation of effort from 2013-2018 Permit	Include LID barrier assessment process in *Surface Water Comprehensive Plan* update.
C.1.d.i.	Receiving Water Assessment	Concurrently with the Surface Water Comprehensive Plan update	March 31, 2022	Build on *Surface Water Comprehensive Plan*	Include in *Surface Water Comprehensive Plan* update.
C.1.d.ii.	Receiving Water Prioritization	Concurrently with the Surface Water Comprehensive Plan update	June 30, 2022	Not started	Include in *Surface Water Comprehensive Plan* update.
C.1.d.iii.	Stormwater Management Action Plan (SMAP)	March 2022	March 31, 2023	Not started	Include in *Surface Water Comprehensive Plan* update.

Permit Section	Requirement	Begin Date	Permit Due Date	Current Progress	Recommended Activities and Estimated Effort
S5.C.4, MS4 Mapping and Documentation					
C.4.a.iv.	Map geographic areas served by the permittee's MS4 that do not discharge stormwater to surface waters	January 2020	August 1, 2021	Data available in the City's stormwater GIS database, but not explicitly mapped	▪ Analyze existing GIS data ▪ Include in existing GIS consultant contract work
C.4.a.v.	Map tributary conveyances to all known outfalls and discharge points with a 24-inch nominal diameter or larger	January 2020	August 1, 2021	Data available in the City's stormwater GIS database, but outfalls themselves are not explicitly mapped Some field data collection may be required.	▪ Analyze existing GIS data to identify outfalls to receiving waters ▪ Create outfall feature type ▪ Create discharge point feature type ▪ Assess whether tributary conveyances to outfalls and discharge points 24-inches diameter or greater are mapped ▪ Include in existing GIS consultant contract work ▪ Collect additional field data for mapping tributary conveyances, if needed
C.4.b.i.	Collect size and material for MS4 outfalls	January 2020	January 1, 2020 (Begin)	Data available in the City's stormwater GIS database	▪ Analyze existing GIS data ▪ Include in existing GIS consultant contract work
C.4.b.ii.	Map connections from the MS4 to a privately-owned stormwater system	Immediately (as part of existing stormwater facility inspection program)	August 1, 2023	Some data available in the City's stormwater GIS database	▪ Analyze existing GIS data ▪ Create system connection feature type ▪ Include in existing GIS consultant contract work ▪ Some field reconnaissance may be required
C.4.c.	Electronic format for mapping with fully described mapping standards	January 2020 (establish and implement standards)	August 1, 2021	The City has a stormwater GIS database	▪ Document mapping standards ▪ Include in existing GIS consultant contract work

Permit Section	Requirement	Begin Date	Permit Due Date	Current Progress	Recommended Activities and Estimated Effort
S5.C.6, Controlling Runoff from New Development, Redevelopment, and Construction Sites (including Appendices 1 and 10)					
Appendix 1, Appendix 10	Amend any enforceable documents to be functionally equivalent to Appendix 1 and the required portions of 2019 SWMMWW.	June 2021	June 30, 2022	Not started	Adopt updated King County program and manuals
S5.C.8, Source Control for Existing Development					
C.8.b.i.	Ordinance(s), or other enforceable documents, requiring the application of source control BMPs	August 2021	August 1, 2022	Not started	▪ City attorney should review permit requirements and determine if ordinance is required. ▪ If ordinance is required, the City may choose to prepare ordinance in house or hire consultant.
C.8.b.ii.	Inventory of publicly and privately owned institutional, commercial, and industrial sites which have the potential to generate pollutants to the MS4.	January 2022	August 1, 2022	City maintains partial inventories of sites as part of the IDDE program, existing stormwater facilities inspection program, and business permits	▪ Update inventory based on State business license database ▪ Approximately 0.05 FTE per year
C.8.b.iii.	Implement a source control inspection program.	July 2022	January 1, 2023	City conducts informal source control inspections as part of the existing stormwater facilities inspection program	▪ Conduct source control inspections of 20% of sites on the source control inventory ▪ Approximately 0.25-0.30 FTE additional per year

Permit Section	Requirement	Begin Date	Permit Due Date	Current Progress	Recommended Activities and Estimated Effort
C.8.b.iii.a.	Provide information to identified sites about source control requirements.	July 2022	January 1, 2023 (Begin)	City contracts with ECOSS (an environmental education, resources and technical assistance company) to provide information and spill kits to some businesses	▪ The City can expand its contract with ECOSS to include all sites on the source control inventory, or ▪ The City can obtain and distribute source control literature using City staff
C.8.b.iii.b.	Complete the number of inspections equal to 20% of the sites listed in the source control inventory	January 2023	Annually beginning January 1, 2023	City conducts some source control inspections as part of the	
C.8.b.iii.c/d.	Inspect 100% of sites identified through credible complaints.	January 2023	January 1, 2023 (Begin)	The City conducts inspections in response to complaints as part of the IDDE program	No additional effort above current IDDE complaint response
C.8.b.iv.(a/b)	Implement a progressive enforcement policy	January 2022	January 1, 2023	The City may modify the IDDE enforcement policy to include source control	The City should establish a source control enforcement policy and include this policy in the *Surface Water Comprehensive Plan* update
C.8.b.iv.(c)	Maintain records, including documentation of each site visit, inspection reports, warning letters, notices of violations, and other enforcement records	July 2022	January 1, 2023 (Begin)	Not started	▪ The City should prepare an inspection and enforcement documentation system prior to the start of inspections ▪ The City may be able to use Lucity to organize this documentation

Permit Section	Requirement	Begin Date	Permit Due Date	Current Progress	Recommended Activities and Estimated Effort
C.8.b.iv.(d)	May refer non-emergency violation to Ecology, provided, the Permittee also makes a documented effort of progressive enforcement	January 1, 2023	January 1, 2023	Not started	No additional effort beyond source control record keeping

Figure 1: Implementation Schedule (New/Changed Requirements Only)

Permit Element	2019	2020	2021	2022	2023	2024
Stormwater Planning						
Interdisciplinary stormwater planning team		■ ♦	□	□	□	□
Low impact development code	■	♦	♦	♦	♦	♦
Receiving water assessment		■	□	♦		
Receiving water prioritization		■	□	♦		
Stormwater Action Plan		■	□		♦	
Mapping and Documentation						
Ongoing mapping requirements	□	□	□	□	□	□
Map geographic areas not discharging to surface waters in GIS		■	♦			
Map tributary conveyances to outfalls and discharge points in GIS		■	♦			
Collect and map size and materials of outfalls (begin)*		■	♦	□	□	□
Map connections to privately-owned stormwater systems		■	□	□	♦	□
Establish & use fully described electronic mapping standards		■	♦	□	□	□
Runoff from Development, Redevelopment, & Construction Sites						
Enforce standards through plan review & inspection (ongoing)	□	□	□	□	□	□
Adopt updated standards			■	♦		
Source Control for Existing Development						
Adopt an ordinance requiring source control BMPs on existing sites			■	♦		
Inventory commercial and industrial properties				■ ♦		
Implement an inspection program and enforcement strategy				■	♦	□
Source control education for sites (begin)*				■	♦	□

* Note: some permit due dates are the date by which a new activity must begin. These are denoted with the word "begin" in the task.

Legend

Begin Date ■
Continue Effort □
Permit due date ♦

Appendix A

Appendix A: Gap Analysis Matrix

Gap Analysis - Selected Permit Section

2019-2024 Phase II Western Washington NPDES Municipal Stormwater Permit

Status as of: December 10, 2019

Permit Condition	Sub-Section	Permit Section	Permit Cross Reference	Compliance Action	Target Due Date	Status	Current Activities	Gap from 2019-2024 Permit
S5.	C.1.a.	Stormwater Planning	Appendix 3: Q5	Convene a team to inform and assist in the development, progress, and influence of stormwater planning program.	8/1/2020	Not started	New permit requirement.	The City will need to establish an inter-disciplinary team to inform the stormwater planning program. Team make-up should include representatives from the stormwater program, long-term planning, transportation, and parks and recreation. The purpose is to inform future planning requirements and coordinate across City departments. The Permit does not state how frequently the team should meet or the precise duties of the team. At a minimum the team should meet at the beginning of each planning process to establish tasks and agree on priorities and at the end to review deliverables. The NPDES Coordinator should be a member of this team.
S5.	C.1.b.i.a.	Stormwater Planning	Appendix 3: Q6, Q7, Q8, Q9, Q10, Q10a, Q11, Q11a, Q12, Q12a, Q12b, Q12c, Q13, Q14	Describe (via responses to annual reporting questions) how stormwater management needs and protection/improvement of receiving water health were (or are not) addressed during the planning update process and influencing policy and strategies (e.g., updates to Comprehensive Plan or other long-range land use plans used to accommodate growth or transportation).	3/31/2021	Not started	The relevant long-term plans include: - The City's 2013 Surface Water Comprehensive Plan - The 2015 City of Tukwila Comprehensive Plan - 2019 - 2024 Financial Planning Model and Capital Improvement Program - The 2017 Green Tukwila 20-Year Stewardship Plan	The NPDES Coordinator will need to review the Annual Report questions and collect the necessary information prior to March 31, 2021.
S5.	C.1.b.i.b.	Stormwater Planning	Appendix 3: Q6, Q7, Q8, Q9, Q10, Q10a, Q11, Q11a, Q12, Q12a, Q12b, Q12c, Q13, Q14	Describe (via a report) how stormwater management needs and protection/improvement of receiving water health are (or are not) informing the planning update process and influencing policy and strategies (e.g., updates to Comprehensive Plan or other long-range land use plans used to accommodate growth or transportation).	1/1/2023	Not started	Permit requirement refers to future planning efforts.	The City's Surface Water Program Manager and NPDES Coordinator should be involved in the updates to the City's Comprehensive Plan and other long-term plans. - The City's Surface Water Comprehensive Plan will be updated in 2021. - The City's Comprehensive Plan will be updated in 2023.
S5.	C.1.c.i.	Stormwater Planning	Appendix 3: Q15, Q16, Q16a; Appendix 1; Appendix 10	Continue to require LID Principles and BMPs when updating, revising, and developing new local development codes, rules, standards, and other enforceable documents. Make LID the preferred and commonly-used approach to site development.	Ongoing	Ongoing	The City assessed and updated development codes during the 2013-2018 permit under the Controlling Runoff from New Development, Redevelopment and Construction Sites program.	The purpose is to move this responsibility to staff responsible for long-term planning and continue progress toward making LID the preferred and commonly used approach during future updates to the development code and reduce barriers to implementing LID when they are newly identified.

Permit Condition	Sub-Section	Permit Section	Permit Cross Reference	Compliance Action	Target Due Date	Status	Current Activities	Gap from 2019-2024 Permit
S5.	C.1.c.i.a.	Stormwater Planning	Appendix 3: Q16, Q16a	Assess and document any newly identified admin or regulatory barriers to LID implementation. Describe (if any) mechanisms adopted to encourage or require implementation of LID principles or BMPs.	Annually	Not started	The City assessed and updated development codes during the 2013-2018 permit under the Controlling Runoff from New Development, Redevelopment and Construction Sites program.	Continue to evaluate the existing and new development code for barriers to the implementation of LID.
S5.	C.1.d.i.	Stormwater Planning	Appendix 3: Q17, Q17a	Receiving Water Assessment: Using a table format, document and assess existing info related to local receiving waters and contributing area conditions to identify receiving waters most likely to benefit from stormwater management planning.	3/31/2022	Additional work required	The City's 2013 Surface Water Comprehensive Plan (specifically Chapter 2 and Appendix B) describes and assesses the basins located in the City.	Review and update the basin information contained in the Surface Water Comprehensive Plan and place in table format.
S5.	C.1.d.ii.	Stormwater Planning	Appendix 3: Q18, Q18a	Receiving Water Prioritization: Develop and implement a prioritization method and process to determine which receiving waters will receive the most benefit from the retrofits, SWMP actions, and other land/development management actions. Document the prioritized and ranked list of receiving waters.	6/30/2022	Not started	Not yet started.	Using the Receiving Water Assessment, the City will need to produce a prioritized list of receiving waters based on the potential benefits from retrofits, SWMP actions, and other land/development management actions. Resources for this process include S*tormwater Management Action Planning Guidance Phase I and Western Washington Phase II Municipal Stormwater Permits* by the Washington State Department of Ecology and *Building Cities in the Rain: Watershed Prioritization for Stormwater Retrofits* by the Washington State Department of Commerce.
S5.	C.1.d.iii.	Stormwater Planning	Appendix 3: Q19, 19a	Develop a SMAP for at least one high priority catchment area that identifies: a) Stormwater facility retrofits needed,; b) Land management/development strategies and/or actions for water quality management; c) Targeted, enhanced, or customized implementation of stormwater actions related to S5; d) Changes needed to local long-range plans; e) Implementation schedule and budget for short-term and long-term actions; f) Process and schedule for future assessment and feedback to improve planning process and implementation of procedures or projects.	3/31/2023	Not started	Not yet started.	Select one watershed from the Receiving Water Prioritization to prepare a Stormwater Management Action Plan (SMAP). Ecology published the *Stormwater Management Action Planning Guidance Phase I and Western Washington Phase II Municipal Stormwater Permits* to assist with this process.
S5.	C.4.a.i.	MS4 Mapping and Documentation	Appendix 3: Q29	Map the known MS4 outfalls and known MS4 discharge points.	Ongoing	Ongoing	The City maintains a geographic (GIS) mapping program of its stormwater drainage system.The data base includes 1955 drain points. Of these, 586 are categorized as "Flows Out" and owned by the City of Tukwila. The database also includes 370 closed pipes categorized as flowing to an "Open Pipe End." The Public Works department maintains a list of outfalls as part of the IDDE dry weather inspection program.	The City may need to conduct a GIS map analysis and fieldwork to identify outfalls to receiving waters and eliminate geographic duplicates.

Permit Condition	Sub-Section	Permit Section	Permit Cross Reference	Compliance Action	Target Due Date	Status	Current Activities	Gap from 2019-2024 Permit
S5.	C.4.a.ii.	MS4 Mapping and Documentation	Appendix 3: Q29	Map receiving waters, other than groundwater.	Ongoing	Ongoing	The GIS data provided through the public records request did not include receiving water data. The data may be included in other GIS data.	The City's GIS data may need to be updated to include receiving waters or the receiving water data documented in stormwater mapping standards.
S5.	C.4.a.iii.	MS4 Mapping and Documentation	Appendix 3: Q29	Map stormwater treatment and flow control BMPs/facilities owned or operated by the permittee.	Ongoing	Ongoing	The City's GIS data base includes Stormwater Detention and Water Quality facilities	No gap identified.
S5.	C.4.a.iv.	MS4 Mapping and Documentation	Appendix 3: Q29	Map geographic areas served by the permittee's MS4 that do not discharge stormwater to surface waters.	Ongoing	Ongoing	The GIS data provided through the public records request did not specifically include parts of the MS4 that do not dishcarge to surface waters.	The City may need to conduct a GIS map analysis and fieldwork to identify areas of the City that do not outfall to receiving waters.
S5.	C.4.a.v.	MS4 Mapping and Documentation	Appendix 3: Q29	Map tributary conveyances to all known outfalls and discharge points with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. Include the following features/attributes: tributary conveyance type, material, and size where known; associated drainage areas; and land use.	Ongoing	Additional work required	Diameter and material is included in records for pipes.	The City may need to conduct additional analysis and fieldwork to map MS4 basins for outfalls with a 24-inch diameter and associate with land use.
S5.	C.4.a.vi.	MS4 Mapping and Documentation	Appendix 3: Q29	Map connections between the MS4 owned or operated by the permittee and other municipalities or public entities.	Ongoing	Additional work required	The City's GIS database includes some drain points with notes indicating connections to non-city of Tukwila facilities.	The City may need to conduct additional analysis and fieldwork to identify connections to the MS4 may be necessary.
S5.	C.4.a.vii.	MS4 Mapping and Documentation	Appendix 3: Q29	Map all connections to the MS4 authorized or allowed by the permittee after February 16, 2007. (Do not need to map residential connections for individual driveways, sump pumps, or roof downspouts).	Ongoing	Additional work required	In addition to city owned facilities, the City's GIS database includes some features categorized as owned by "King County" and "Private" or "null."	The City may need to conduct additional analysis and fieldwork may be required to identify all private connections to the MS4. 541 out of 1955 drain points are categorized as "null."
S5.	C.4.b.i.	MS4 Mapping and Documentation	Appendix 3: Q30, Q30a	Begin to collect size and material for all known MS4 outfalls during normal course of business (e.g., during field screening, inspection, or maintenance) and update records.	1/1/2020	Not started	The City's GIS database does not include size and material for drain points. Diameter and material is included in records for pipes.	The City may need to conduct additional analysis and fieldwork to associate this data with outfalls or collect additional data may be necessary.
S5.	C.4.b.ii.	MS4 Mapping and Documentation	Appendix 3: Q31	Complete mapping of all known connections from the MS4 to a privately owned stormwater system.	8/1/2023	Additional work required	The City's GIS database annotates some drain points with "From Private," "From Priv." or "From pvt."	The City should standardize the designation for private connections and additional analysis may be needed to identify all connection to or from privately owned storm systems.
S5.	C.4.c.	MS4 Mapping and Documentation	Appendix 3: Q32	Require electronic format for mapping with fully described mapping standards.	8/1/2021	Additional work required	The City has a GIS map of the surface water system.	The City may need to describe in a policy memo or other document the mapping standards to meet the "…fully described mapping standards." requirement. The City should review the *Mapping Guidance for Muncipal Stormwater Permittees* published by Ecology.
S5.	C.4.d./e.	MS4 Mapping and Documentation		Upon request, and to the extent appropriate, the permittee shall provide mapping information to Ecology, federally-recognized Indian Tribes, municipalities, and other permittees.	When triggered by an event	Complete	Available on request.	No gap identified.

Permit Condition	Sub-Section	Permit Section	Permit Cross Reference	Compliance Action	Target Due Date	Status	Current Activities	Gap from 2019-2024 Permit
S5.	C.6.a.	Controlling Runoff from New Development, Redevelopment, and Construction Sites	Appendix 3: Q43; Appendix 1; Appendix 10	Implement an ordinance or other enforceable mechanism to reduces pollutants in stormwater runoff to the MS4 from new development, redevelopment and construction sites.	Ongoing	Ongoing		Minor changes may be required to address updates to the minimum requirements in Appendix 1.
S5.	C.6.b.	Controlling Runoff from New Development, Redevelopment, and Construction Sites	Appendix 3: Q44, Q44a, Q45, Q46; Appendix 1; Appendix 10	Revise ordinance or other enforceable mechanism to meet the requirements of S5.C.6.b(i) through (iii).	6/30/2022	Update		See Otak's assessment of Appendix 10 on page 8.
S5.	C.6.c.i.	Controlling Runoff from New Development, Redevelopment, and Construction Sites	Appendix 3: Q47	Review all stormwater site plans for proposed development activities.	Ongoing	Ongoing		No gap identified.
S5.	C.6.c.ii.	Controlling Runoff from New Development, Redevelopment, and Construction Sites	Appendix 3: Q47, Q48, Q48a; Appendix 7	Inspect, prior to clearing and construction, permitted development sites that have a high potential for sediment transport as determined through plan review based on definitions and requirements in Appendix 7 *Determining Construction Site Sediment Damage Potential*; or, alternatively, inspect all construction sites meeting the minimum thresholds adopted.	Ongoing	Ongoing		No gap identified.
S5.	C.6.c.iii.	Controlling Runoff from New Development, Redevelopment, and Construction Sites	Appendix 3: Q49, Q49a; Appendix 1; Appendix 10	Inspect all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforce as necessary based on the inspection.	Ongoing	Ongoing		No gap identified.
S5.	C.6.c.iv.	Controlling Runoff from New Development, Redevelopment, and Construction Sites	Appendix 3: Q49b; Appendix 1; Appendix 10	Manage maintenance activities to inspect all stormwater treatment and flow control BMPs/facilities, and catch basins, in new residential development every 6 months, until 90% of the lots are constructed to identify maintenance needs and enforce compliance with maintenance standards as needed.	Ongoing	Ongoing		No gap identified.
S5.	C.6.c.v.	Controlling Runoff from New Development, Redevelopment, and Construction Sites	Appendix 3: Q50, Q51	Inspect all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities. Verify that a maintenance plan is completed and responsibility for maintenance is assigned for stormwater facilities.	Ongoing	Ongoing		No gap identified.
S5.	C.6.c.vi.	Controlling Runoff from New Development, Redevelopment, and Construction Sites	Appendix 3: Q52, Q53	Document compliance with the inspection requirements in S5.C.6.b.ii. through v. Compliance shall be determined by achieving at least 80% of the required inspections.	Ongoing	Ongoing		No gap identified.

Permit Condition	Sub-Section	Permit Section	Permit Cross Reference	Compliance Action	Target Due Date	Status	Current Activities	Gap from 2019-2024 Permit
S5.	C.6.c.vii.	Controlling Runoff from New Development, Redevelopment, and Construction Sites		Implement a procedure for keeping records of inspection and enforcement actions, including inspection reports, warning letters, notices of violation, and other enforcement records. Keep records of maintenance inspections and activities.	Ongoing	Ongoing		No gap identified.
S5.	C.6.c.viii.	Controlling Runoff from New Development, Redevelopment, and Construction Sites	Appendix 1; Appendix 10	Implement an enforcement strategy in cases of non-compliance.	When triggered by an event	As needed		No gap identified.
S5.	C.6.d.	Controlling Runoff from New Development, Redevelopment, and Construction Sites	Appendix 3: Q54	Make available the electronic links to Ecology's CSWGP NOI form and the ISWGP NOI form, as applicable, to representatives of new development and redevelopment.	Ongoing	Ongoing		No gap identified.
S5.	C.6.e.	Controlling Runoff from New Development, Redevelopment, and Construction Sites	S5.C.6.; Appendix 3: Q55	Train all staff responsible for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites (including permitting, plan review, construction site inspections, and enforcement) to conduct these activities. Keep training records.	Ongoing	Ongoing		Minor changes may be required to address updates to the minimum requirements in Appendix 1.
S5.	C.8.b.i.	Source Control Program for Existing Development	Appendix 3: Q73; Appendix 1; Appendix 10	Adopt and make effective an ordinance(s), or other enforceable documents, requiring the application of source control BMPs for pollutant generating sources using sources control BMPs in the SWMMWW or Ecology-approved Phase I Program. Require applicable operational source BMPs for all pollutant generating sources and structural source control BMPs if operational source control BMPs are inadequate.	8/1/2022	Not started	Not yet started.	The City does not currently have a source control ordinance.
S5.	C.8.b.ii.	Source Control Program for Existing Development	Appendix 3: Q74, Q74a	Establish an inventory that identifies publicly and privately owned institutional, commercial, and industrial sites which have the potential to generate pollutants to the MS4.	8/1/2022	Additional work required	The City currently maintains inventories of commercial, industrial, and residential sites which have the potential to generate pollutants to the MS4as part of the IDDE program and Controlling Runoff from New Development, Redevelopment, and Construction Sites private facility inspection programs.	The City's available source control inventories were collected for several purposes and may be incomplete. The City will need to collect data from these inventories, city and state business licenses, and compare the data to Appendix 8 of the permit to identify properties where businesses and activities with potential outdoor pollutant generating sources that discharge to the MS4. The database/inventory compiled should be formatted to allow the City to track inspections and inspection rate.
S5.	C.8.b.iii.	Source Control Program for Existing Development	Appendix 3: Q77, Q78	Implement an inspection program for sites identified in C.8.b.ii.	1/1/2023	Additional work required	The City currently conducts source tracing as part of the IDDE program and limited source control inspections Controlling Runoff from New Development, Redevelopment, and Construction Sites private facility inspection program.	Additional work will be required to create a program specifically to inspect for source control. The city's existing source control inspection procedures likely satisfy the permit requirements, and the City will need a comprehesive inventory and inspection tracking system.

Permit Condition	Sub-Section	Permit Section	Permit Cross Reference	Compliance Action	Target Due Date	Status	Current Activities	Gap from 2019-2024 Permit
S5.	C.8.b.iii.a.	Source Control Program for Existing Development	Appendix 3: Q75, Q77	Provide information to those identified sites about activities that may generate pollutants and the source control requirements applicable to those activities.	Beginning 1/1/2023	Additional work required	The City currently contracts with ECOSS to provide source control information and spill kits to businesses in the City.	The City will need to expand the information program to provide all identified sites with a business address information about activities that may generate pollutants and the source control requirements applicable to those activities at least once during the permit term.
S5.	C.8.b.iii.b.	Source Control Program for Existing Development	Appendix 3: Q78	Complete the number of inspections equal to 20% of the businesses and/or sites listed in the source control inventory to assess BMP effectiveness and compliance with source control requirements. May count follow-up inspections at the same site towards meeting the 20% inspection rate.	Annually beginning 1/1/2023	Not started	The City currently conducts limited source control inspections as part of other permit requirements.	The City will need to systematize and expand the inspections. As part of the formalization of the program, the City will need to establish a system for tracking inspections and inspection rates.
S5.	C.8.b.iii.c/d.	Source Control Program for Existing Development		Inspect 100% of sites identified through credible complaints. Permittee may count inspections conducted based on complaints, or when the property owner denies entry, to the 20% inspection rate.	Ongoing beginning 1/1/2023	Ongoing	The City currently conducts source tracing inspections stemming from complaints as part of the IDDE program.	No gap identified.
S5.	C.8.b.iv.(a/b)	Source Control Program for Existing Development	Appendix 3: Q76, Q77; Appendix 1; Appendix 10	Implement a progressive enforcement policy that requires sites to comply with stormwater requirements within a reasonable time period.	Ongoing beginning 1/1/2023	Not started	The City currently has an IDDE enforcement policy which addresses pollutant sources which result in an illicit discharge.	The City will need to write an enforcement policy referencing the municipal code for source control inspections. The enforcement policy will need to include a process for maintaining records documenting enforcement actions.
S5.	C.8.b.iv.(c)	Source Control Program for Existing Development	Appendix 3: Q76, Q77	Maintain records, including documentation of each site visit (including denied entries), inspection reports, warning letters, notices of violations, and other enforcement records to demonstrated efforts to bring sites into compliance.	Ongoing beginning 1/1/2023	Not started	The current source control records document inspection locations and dates, and outreach records from ECOSS include whether a voluntary inspection took place and whether a spill kit was accepted by the sites visited.	The City will need to establish a records and tracking system to track continuing engagement with sites to document site visits, inspections, reports and enforcement records that can be used to demonstrate efforts to bring sites into compliance over time.
S5.	C.8.b.iv.(d)	Source Control Program for Existing Development	Appendix 3: Q76, Q77	May refer non-emergency violation to Ecology, provided, the Permittee also makes a documented effort of progressive enforcement (i.e., documentation of inspections and warning letters or NOVs).	Ongoing beginning 1/1/2023	Not started	Not yet started.	The City will need to establish a records and tracking system to track continuing engagement with sites to document site visits, inspections, reports and enforcement records that can be used to demonstrate efforts to bring sites into compliance over time.
S5.	C.8.b.v.	Source Control Program for Existing Development	S5.C.8; Appendix 3: Q79	Provide training to staff responsible for implementing the source control program, including follow-up training to address changes in procedures, techniques, requirements, or staffing. Keep training records.	Ongoing beginning 1/1/2023	Additional work required	The City currently trains public works staff to observe source control measures during site visits.	The City will need to update and track this training as the City updates the municipal code, inspection requirements, and enforcement procedures.
Appendix 1		Minimum Technical Requirements for New Development & Redevelopment	Appendix 10	Identifies the exemptions, definitions related to the Minimum Requirements, applicability of the Minimum Requirements that need to included in the Ecology equivalent stormwater management manual.	Ongoing	Ongoing	The City currently follows Minimum Requirements in compliance with the 2013-2018 permit.	The City will need to adopt minor changes to the minimum requirements as part of appendix 1.

Permit Condition	Sub-Section	Permit Section	Permit Cross Reference	Compliance Action	Target Due Date	Status	Current Activities	Gap from 2019-2024 Permit
Appendix 10		Equivalent Programs for Runoff Controls for New and Redevelopment & Construction Sites	Appendix 1	Amend any enforceable documents to be functionally equivalent to Appendix 1 and the required portions of 2019 SWMMWW.	6/30/2022	Not started	The City currently follows Minimum Requirements in compliance with the 2013-2018 permit.	The City has several options to meet this new requirement. 1. Wait for King County to update the KCSWDM and adopt the updated manual 2. Adopt the 2019 SWMMWW 3. Write and adopt an addendum to the KCSWDM which includes the changes contained in Appendix 10